

SOCIAL IMPACT ASSESSMENT STUDY

Report on SIA Study for Acquisition of 0.1000 acres of Private Land from Koida village under Koida Tahasil of Sundargarh District for "Construction of Koida Bypass Road from 0/00 Km to 8/00 Km" under DMF fund in the district of Sundargarh for the year 2018-19 (ToR-123-00001)



Draft Report on SIA Study for Acquisition of 0.1000 acres of Private Land from Koida village under Koida Tahasil of Sundargarh District for "Construction of Koida Bypass Road from 0/00 Km to 8/00 Km under DMF fund in the district of Sundargarh for the year 2018-19 (ToR 123-00001)"

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Abbreviation

BPL	Below Poverty Line
CHC	Community Health Centre
CPR	Common Property Resource
CSR	Corporate Social Responsibility
EMP	Environmental Management Plan
FGD	Focus Group Discussion
GP	Gram Panchayat
HH	House Hold
ITI	Industrial Training Institute
NCDS	Nabakrushna Chowdhury Centre for Development Studies
NTFP	Non-Timber Forest Produce
OBC	Other Backward Caste
PAF	Project Affected Family
PAP	Project Affected People
PHC	Primary Health Centre
PRA	Participatory Rural Appraisal
RFTLAR&R	Right to Fair Compensation & Transparency in Land Acquisition, Rehabilitation & Resettlement
RICOR	Research & Information Centre for Orissa
ROR	Record of Right
SC	Scheduled Caste
SIA	Social Impact Assessment
SIMP	Social Impact Management Plan
SSI	Semi Structured Interviews
ST	Scheduled Tribe
WHH	Women Headed Household

Executive Summary

1. Name of the Project **SIA Study for Acquisition of 0.1000 acres of Private Land from Koida village under Koida Tahasil of Sundargarh District for "Construction of Koida Bypass Road from 0/00 Km to 8/00 Km under DMF fund in the district of Sundargarh for the year**

1.1 Introduction

Koida tehsil, located in Sundargarh district of Odisha, represents a strategically significant region owing to its mineral resources, industrial activities, and role as a transport corridor. The settlement core of Koida presently experiences high vehicular density, particularly from heavy mineral-laden trucks moving through the area. This has resulted in traffic congestion, deterioration of road safety, and adverse environmental impacts on local habitations. In view of these challenges, the construction of the Koida bypass road has been proposed as a measure to divert through traffic away from the settlement area. The proposed bypass is anticipated to ease congestion, reduce risks to pedestrians and residents, and improve overall transport efficiency while mitigating the social and environmental pressures currently borne by the tehsil.

2. Public Purpose of Project:

The proposed acquisition of 0.1000 acres of private land from Koida village under Koida Tahasil of Sundargarh District is intended for the “Construction of the Koida Bypass Road from 0/00 Km to 8/00 Km under the District Mineral Foundation (DMF) fund. The primary public purpose of this project is to provide an efficient, safe, and sustainable road network that enhances regional connectivity, reduces traffic congestion within Koida, and improves accessibility to nearby economic hubs.

Koida is a mining-intensive region with substantial vehicular movement, including heavy trucks transporting minerals. The existing road alignment passes through the congested village area, causing road safety concerns, delays in transport, and increased wear and tear of village infrastructure. The bypass road will effectively address these concerns by rerouting heavy traffic outside the settlement area, thereby ensures:

- Minimizing the risk of accidents, especially involving pedestrians, school-going children, and local commuters.
- Facilitating faster movement of goods and people, which is critical for the mining sector and local businesses.
- By diverting heavy vehicular movement away from densely populated areas.
- Strengthening connectivity to industrial zones, markets, and service facilities, thereby contributing to local and regional economic growth.
- Enabling quicker movement of emergency services, public transportation, and administrative access to remote areas.

3. Project Location

The proposed Koida Bypass Road is planned to divert traffic around the main township of Koida (Koirā) in Koida Tehsil, Sundargarh District, Odisha. Koida is a prominent mining and commercial hub that faces significant traffic and safety concerns due to the movement of mineral-laden heavy vehicles through densely populated areas. It is situated at an elevation of approximately 590 meters above sea level, experiences frequent traffic congestion the town's existing road network. The bypass is a roadway constructed to avoid or skirt around built-up areas, enabling through-traffic to bypass the town. Such roads are commonly developed to reduce congestion in the town center, improve safety, and facilitate the smoother flow of vehicles that do not require entry into the settlement.

4. Area of the Project

As per 4(1) notification issued by the Revenue & Disasters Management department, Govt. of Odisha), the total area of the road is 0.00 km to 8.00 km which requires 0.1000 acre of private land required to be acquired.

5. Alternatives Considered

Prior to finalizing the alignment, the implementing agency carefully evaluated multiple route options by considering technical feasibility, environmental sensitivity, and social impact. The option of widening the existing road through Koida village was rejected due to the high displacement it would cause, potential safety risks, and significant disruption to existing businesses and residential areas. Similarly, an alternative bypass alignment that required the acquisition of larger forest areas was set aside to avoid ecological disturbance and protect sensitive habitats.

The present bypass alignment was selected as the most viable option, requiring minimal land acquisition of only 0.1000 acres of private land while primarily utilizing government land. This alignment offers the least social and environmental impact compared to other options and ensures the highest level of cost-effectiveness. By minimizing displacement and avoiding major ecological damage, the chosen route strikes a balance between infrastructure development and the protection of community and environmental interests.

6. Social Impacts Assessment

The proposed acquisition of 0.1000 acres of private land from the village of Koida in Koida Tehsil of Sundargarh District, for the construction of Koida Bypass Road (0.00 km to 8.00 km) will have notable social impacts on the local community. Key social impacts identified are as follows:

6.1 Impact on Community Health

Construction and establishment activities associated with the Koida Bypass Project will generate dust, emissions, and noise. These are likely to cause temporary air and noise pollution, which may inconvenience households living close to the project alignment. In particular, air pollution can potentially lead to respiratory problems and other health issues among local residents.

Proposed Mitigation Measures

- Create alternative access routes for vehicles transporting construction materials to reduce traffic through residential areas.
- Regulate and monitor the speed of construction vehicles with proper road signage and markings.
- Undertake regular water sprinkling on construction sites and material stockpiles to suppress dust emissions.

6.2 Impact on Livelihood & Culture

The Project Affected Families (PAFs) in Koida derive their livelihoods from diverse sources, primarily wage labour and service. Land acquisition for the bypass project will reduce average landholding size, thereby affecting agricultural output and, indirectly, wage employment in agriculture. However, agriculture is not the primary livelihood for most households; many youth are already shifting towards industrial and service sectors.

At the same time, the project is expected to stimulate new business opportunities by improving connectivity. Local people may gain direct employment during construction and indirect livelihood opportunities through shops, eateries, transport services, and other small businesses that can emerge along the bypass corridor. Over time, these may evolve into sustainable economic activities.

Proposed Mitigation Measures

- Provide preferential employment to local people in project-related activities.
- Establish training programmes to upgrade the skills of local youth, enabling them to access industrial and non-farm employment.
- Facilitate the transition of workers from traditional farm-based activities to non-farm sectors.
- Support local entrepreneurs with vocational skills to establish ancillary industries and small businesses, ensuring multiplier benefits for the local economy.

6.3 Impact on Project Affected Land Owners

Most of the 0.1000 acres of private land to be acquired is agricultural or barren land. Compensation will be paid in line with the provisions of the RFCTLARR Act, 2013, with amounts higher than the prevailing market value. This compensation package provides an opportunity for landowners to reinvest in land, housing, education, healthcare, or business. However, the long-term impact on livelihoods will depend on how effectively the compensation is utilized. If used constructively (for land purchase, skill training, or small business investment), the standard of living may improve. Misuse of compensation, however, could lead to economic vulnerability.

Proposed Mitigation Measures

- Provide cash compensation at or above replacement cost, with 100% solatium as per RFCTLARR provisions.
- Acquire entire unviable land patches to avoid leaving fragmented, unusable holdings.
- Introduce livelihood restoration programmes tailored to the specific needs of affected households.
- Prioritize skilled and qualified PAF members in employment opportunities created by the project.

6.4 Loss of Land of SC/ST Families

While the direct impact on livelihood is minimal, the symbolic and social significance of land as an asset may be affected.

Proposed Mitigation Measures

- Provide land-for-land compensation or alternative productive assets of permanent value, as per the family's preference.
- Ensure preferential access for SC/ST households in employment and benefit-sharing opportunities.
- Identify these households as target groups for Corporate Social Responsibility (CSR) interventions, with emphasis on training, infrastructure support, and social development schemes.

6.5 Impact on Sharecroppers and Agricultural Labourers

Although sharecropping is common in the area, specific data on sharecroppers was not available, as landowners were reluctant to share such information. Sharecroppers, being temporary and unregistered, remain a vulnerable group. Agricultural labourers, who mostly belong to landless or marginal households, are also at risk due to limited and uncertain income sources.

While land acquisition may not directly displace them, reduced agricultural activity may affect their employment. However, new opportunities may arise through construction-related work and ancillary businesses.

Proposed Mitigation Measures

- Provide project-related jobs to sharecroppers and agricultural labourers wherever feasible.
- Conduct skill development and vocational training programmes to diversify their livelihood base.
- Facilitate access to credit and entrepreneurship support for small-scale enterprises.
- Ensure targeted inclusion of these groups in livelihood restoration schemes.

6.6 Impact on Vulnerable Groups

Vulnerable groups such as BPL households, SCs, STs, and women-headed families are more prone to economic hardship from land acquisition, given their limited asset base and lack of access to formal credit. Without adequate support, they may fall deeper into poverty.

Proposed Mitigation Measures

- Identify all vulnerable families and prioritise them for benefits under CSR and social welfare schemes.
- Provide preferential employment opportunities to individuals from these groups.
- Train eligible members for skill development to access higher-income jobs.
- Ensure advance compensation to prevent livelihood disruptions.
- Guarantee social security and livelihood support, particularly for women and tribals, enabling them to lead dignified lives.

6.7 Tribal Issues

The tribal population in Koida relies heavily on social cohesion and community-based livelihood systems. Land acquisition may disturb this fabric. Welfare schemes of both state and central governments need to be integrated with the project's rehabilitation and resettlement framework, ensuring that tribals are left better off after implementation.

Proposed Mitigation Measures

- Design compensation packages that combine monetary benefits with access to government welfare schemes.
- Provide targeted infrastructure, livelihood, and training programmes tailored to tribal communities.
- Safeguard tribal cultural and social practices through community-level consultations and participatory planning.

6.8 Gender Issues

The project has the potential to positively impact women by improving mobility, reducing travel time, and enhancing market access. This may increase women's income-generating opportunities, enabling greater participation in household decision-making and strengthening their social status.

Proposed Mitigation Measures

- Target women-headed households for CSR and credit-based interventions.
- Offer preferential employment to women in project-related activities.
- Provide skill training for women to enhance employability and entrepreneurship.

- Ensure timely compensation to avoid livelihood disruption.
- Promote women's social security and participation in community-level decision-making.

6.9 Impact on Transportation and Traffic System

During construction, movement of heavy vehicles carrying materials and equipment will increase significantly. This may lead to congestion, safety risks, and inconvenience for local commuters.

Proposed Mitigation Measures

- Schedule vehicle movement during non-peak hours.
- Deploy traffic marshals and signage to regulate movement.
- Ensure strict compliance with road safety standards for construction vehicles.

6.10 Impact on Livestock

Focus group discussions revealed concerns about reduced grazing land due to project activities. This may affect livestock-dependent households.

Proposed Mitigation Measures

- Identify and develop alternative grazing spaces.
- Provide veterinary support and fodder supply schemes for affected households.
- Facilitate livelihood diversification for households highly dependent on livestock.

7. Legal Framework

The Social Impact Assessment (SIA) Study for the proposed acquisition of 0.1000 acres of private land from village Koida in Koida Tahasil of Sundargarh district for the proposed project "Construction of Bypass Road (0.00 – 8.00 Km)" is governed by a framework of relevant laws, policies, and guidelines. The primary legislation applicable to this land acquisition process is:

- **The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013)**

In addition, the following rules and policies are also applicable:

- Odisha Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2016
- Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA)
- PESA Act, 1996 (Panchayats (Extension to Scheduled Areas) Act): Environment (Protection) Act, 1986 and Forest (Conservation) Act, 1980 (if forest land is involved)
- Odisha Rehabilitation and Resettlement Policy, 2006 (if applicable)

The application and enforcement of these legislations and policies aim to safeguard the rights of affected persons, promote informed consent, and ensure a balanced approach to development and social justice in the land acquisition process.

8. Land Assessment

Land acquisition is going to inflict pain on those who lose land, it is more if one loses a substantial portion of cultivated land as it affects his/her livelihoods. The proposed project involves the acquisition of 0.1000 acres of private land from Koida village under Koida Tahasil of Sundargarh District for the construction of an 8 km Koida Bypass Road under the DMF Fund. The Chapter-3 of this report outlines the land assessment covering the extent, nature, and characteristics of land to be acquired, possible alternatives, and the likely social and environmental implications.

9. Socio-Economic Profile

Household is the basic unit in any socio-economic analysis and hence the importance of its economics. Income, expenditure, saving, indebtedness, etc. are decided at the household level. Information regarding household expenditure and indebtedness of the respondents is presented in Chapter-5 (Table-5.11, 5.12, 5.13 & 5.14) of this report.

Information related to demographic, social, and economic characteristics, infrastructure, employment conditions, community resources, and other aspects such as awareness and perceptions about the project was also collected and placed in Chapter-5 of this report.

10. Education

Education is the bedrock of human capital. It enables a person to participate in the process of economic growth. Therefore, information about the education level of the project affected population is important for drawing up economic rehabilitation plan for them. The educational attainment of the PAPs has been given in chapter-5 of this report (Table 5.19).

11. Livelihood

Information about livelihoods of the PAPs is important to assess their skill level and prepare alternative rehabilitation plan for them in the post-project implementation period. PAPs earn their livelihoods from both farm and non-farm occupations. The farm based occupations primarily relate to agriculture and allied activities, and the non-farm occupations include salaried occupation, wage labour, enterprises, craft, services, etc. The details on Livelihoods of the projected affected people are given in Chapter-5 (Sub-title No.5.15).

12. Family Income & Expenditure

The income and expenditure pattern of project affected households in Koida village presents a clear picture of their economic standing. The details of income and expenditure details of PAFs are given in Chapter-5 (5.23 & 5.24).

13. Health

It is revealed from the survey report that expenditure of the PAFs on healthcare is not substantial mostly because they do not suffer from serious health problem. All affected households have health problems and all the sick were treated in government hospitals / PHC / CHC. The details of health status and treatment in the area are indicated in Chapter-5 (Table 5.17) in this report.

14. Vulnerability

It is noticed that in the project affected village, there are all 6 PAFs are belonging to ST category and as such they are coming under Vulnerable Groups.

15. Land Utilisation

the land utilization pattern of Koida Tehsil reflects a predominantly forest-based landscape. Nearly 51.10 percent of the total geographical area (4,96,000 ha) is under forest cover, highlighting the ecological richness of the region. Agricultural land, represented by the net sown area of 2,84,000 ha (29.2 percent), constitutes the second-largest category, indicating that farming still holds a significant place in the local economy..

16. Perception of PAFs

Project Affected Families (PAFs) expressed deep concerns about losing their traditional sources of livelihood such as farming, grazing, and small businesses, coupled with fears of disrupted community ties, family conflicts, and misuse of compensation money. They worry about increased social unrest, crime, health risks from pollution and accidents, and a temporary decline in the local economy due to displacement and loss of land. Many anticipate higher medical expenses and stress-related disputes within and between families. At the same time, while some acknowledge potential indirect benefits such as improved roads and services, they remain cautious about unequal distribution of compensation and demand proper rehabilitation and resettlement measures.

Non-Affected People (NAPs), on the other hand, hold a more optimistic outlook. They believe the bypass road will generate new livelihood opportunities, enhance connectivity, and

stimulate trade and services in the long run. Although they share concerns about the possible misuse of compensation funds and the risk of rising crime due to in-migration, they generally perceive the stresses as temporary, expecting families to remain connected and the local economy to strengthen over time. Many anticipate better healthcare access, improved business prospects, and a balance between the short-term difficulties and the long-term developmental benefits of the project.

17. Awareness and Support

The villagers were found to be aware of the project. They were of the view that individuals would benefit from the project by way of land compensation, employment and better business opportunity. Almost all support the project and are willing to part with their land for it and spare water during construction of the project. They expect employment in the project through skill up-gradation and higher compensation.

18. Critical Issues

Environmental problems like air, water and noise pollution associated with construction and implementation of the project is very critical from both short-term and long-term perspective. In addition, felling of trees will disturb the eco-system and bio-diversity in the locality. Social disturbances due to increased addiction to intoxicants may aggravate the situation.

19. Social Impact Management Plan (SIMP)

An attempt has been made to make the Social Impact Management Plan (SIMP) flexible such that it can adapt itself to the changing environment for being relevant throughout the project life.

The proposed project in Koida Tehsil of Sundargarh district requires 0.1000 acres of private land to be acquired on payment of compensation. Compensations for land acquisition are to be made as per the relevant Acts and Rules while taking care of losses of PAFs as well as PAPs and addressing the social issues. Various mitigation measures and a tentative estimate of outlays have been incorporated in the SIMP.

20. Social Measures

- Any dispute between the stakeholders should be resolved and it should be ensured that compensation is given to the legal owner.
- Municipality should be helped to prepare programmes for meaningful and productive participation of the elderly in village life so that they don't feel left out and unwanted during the project implementation period and thereafter.

- Excess land acquired for the project, if any, should be handed over to the original land owner.
- Effort should be made for up-liftment of women and marginalized sections of the community by ensuring their participation in decision making and enhancing their traditional skills / developing new skills.
- Project affected persons have requested for compensation at 4 times the market value about Rs.3,00,000 per dec. and job for their family members.

21. Outlay for SIMP Implementation

An outlay plan has been prepared on the basis of SIMP outlined above and presented below. It is a tentative plan as compensation against land loss is to be decided by the Authorities concerned as per Act and Rules.

SIMP Outlays					
Sl. No	Description	Unit	Quantity	Rate (Rs in lakh)	Amount (Rs. in lakh)
1.	Monetary Compensation for loss of land to affected households.	Acre	0.10 Ac	30,00,000.00	3.00
2.	Training for skill development for livelihood restoration.	Person	100 Persons	3000.00	3.00
3.	Compensatory afforestation	Acre	3.00 Ac	1,00,000	3.00
4.	Water & Sanitation	Village	1 Village	L.S.	1.00
5.	Other development works in villages	Village	1 Village	L.S.	2.00
Total					12.00

Chapter 1

Description of the Project

1. Introduction – Background of the Project

1.1 Introduction

Koida, located in Koida Tahasil of Sundargarh District, Odisha, is a notable mining and industrial hub renowned for its deposits of iron ore, manganese, and limestone. Historically, the region formed part of the tribal-dominated areas of Sundargarh, inhabited primarily by indigenous communities such as the Munda, Oraon, and Kharia, who have preserved their rich cultural heritage through traditional festivals, music, and dance forms like Karma and Paika. Over the years, the influx of mining activities has brought significant economic development, while also transforming the social and occupational landscape of the area. The weekly local market (haat) remains an important center of trade and community interaction, blending traditional lifestyles with modern industrial influences.

The existing road through Koida is burdened with heavy mineral transportation trucks and local traffic, resulting in severe congestion. Besides, movement of large vehicles through the densely populated market and residential areas increases the risk of accidents, particularly for pedestrians, cyclists, and schoolchildren.

1.2 Project Background

The proposed acquisition of 0.1000 acres of private land from Koida village, Koida Tahasil, Sundargarh District, Odisha, for the Construction of the Koida Bypass Road from 0/00 Km to 8/00 Km under District Mineral Foundation (DMF) funding.

The bypass aims to ease traffic congestion within Koida, improve road safety, and enhance connectivity to nearby mining, industrial, and market centers. The SIA assesses potential social impacts of the land acquisition, examines socio-economic conditions of the affected households, and proposes mitigation measures to safeguard livelihoods and promote equitable benefits.

The study is based on field surveys, stakeholder consultations, and participatory assessments, ensuring transparency and community involvement in the decision-making process.

1.3 Location of the Project

The proposed Koida Bypass Road is planned to divert traffic around the main township of Koida (Koirā) in Koida Tehsil, Sundargarh District, Odisha. Koida is a prominent mining and commercial hub that faces significant traffic and safety concerns due to the movement of mineral-laden heavy vehicles through densely populated areas. It is situated at an elevation of approximately 590 meters above sea level, experiences frequent traffic congestion the town's existing road network. The bypass is a roadway constructed to avoid or skirt around built-up areas, enabling through-traffic to bypass the town. Such roads are commonly developed to reduce congestion in the town center, improve safety, and facilitate the smoother flow of vehicles that do not require entry into the settlement.



Fig-1.1: Location of the Proposed Project

1.4 Rationale for the Project

The primary rationale for constructing the Koida Bypass Road includes:

- Reducing heavy traffic congestion in Koida village.
- Ensuring safe and uninterrupted movement of goods and passengers.

- Preventing road accidents and improving pedestrian safety.
- Minimizing environmental and noise pollution within settlement areas.
- Strengthening the regional road network to facilitate economic growth, particularly in the mining sector.

1.5 Public Purpose of the Project

The proposed acquisition of 0.1000 acres of private land from Koida village under Koida Tahasil of Sundargarh District is intended for the “Construction of the Koida Bypass Road from 0/00 Km to 8/00 Km under the District Mineral Foundation (DMF) fund. The primary public purpose of this project is to provide an efficient, safe, and sustainable road network that enhances regional connectivity, reduces traffic congestion within Koida, and improves accessibility to nearby economic hubs.

Koida is a mining-intensive region with substantial vehicular movement, including heavy trucks transporting minerals. The existing road alignment passes through the congested village area, causing road safety concerns, delays in transport, and increased wear and tear of village infrastructure. The bypass road will effectively address these concerns by rerouting heavy traffic outside the settlement area, thereby ensures:

- Minimizing the risk of accidents, especially involving pedestrians, school-going children, and local commuters.
- Facilitating faster movement of goods and people, which is critical for the mining sector and local businesses.
- By diverting heavy vehicular movement away from densely populated areas.
- Strengthening connectivity to industrial zones, markets, and service facilities, thereby contributing to local and regional economic growth.
- Enabling quicker movement of emergency services, public transportation, and administrative access to remote areas.

The project aligns with the objectives of the DMF fund, which is dedicated to improving infrastructure and public welfare in mining-affected regions. It serves a collective public interest, ensuring that the benefits of mineral resource extraction are reinvested into community development and long-term sustainability.

Thus, the Koida Bypass Road is not merely a transportation project but a strategic infrastructure intervention aimed at improving the quality of life, fostering economic opportunities, and ensuring safer and more efficient mobility for residents, workers, and transport operators in the region.

1.6 Examination of Alternatives

Prior to finalizing the alignment, the implementing agency carefully evaluated multiple route options by considering technical feasibility, environmental sensitivity, and social impact. The option of widening the existing road through Koida village was rejected due to the high displacement it would cause, potential safety risks, and significant disruption to existing businesses and residential areas. Similarly, an alternative bypass alignment that required the acquisition of larger forest areas was set aside to avoid ecological disturbance and protect sensitive habitats.

The present bypass alignment was selected as the most viable option, requiring minimal land acquisition of only 0.1000 acres of private land while primarily utilizing government land. This alignment offers the least social and environmental impact compared to other options and ensures the highest level of cost-effectiveness. By minimizing displacement and avoiding major ecological damage, the chosen route strikes a balance between infrastructure development and the protection of community and environmental interests.

1.7 Developer's Background and Governance

The project is being undertaken by the Rural Works Department (RWD), Government of Odisha, as the implementing agency, with funding support from the District Mineral Foundation (DMF), Sundargarh. The DMF operates under the provisions of the Odisha District Mineral Foundation Rules, 2015, ensuring that mining-affected areas and communities benefit from infrastructure development, environmental protection, and social welfare schemes.

1.8 Management Structure

As per 4(1) Notification No. RDF/LAC-SUN-0002-2025-27080/R&DM, dt.21.07.2025 of Revenue and Disasters Management Department, Govt. of Odisha, the project is being developed and implemented under the leadership of the Executive Engineer, Works Department, Rourkela Division, who serves as the project developer and primary technical authority. The management structure for planning, execution, and monitoring is as follows:

Executive Engineer, Works Department, Rourkela:- Project developer and overall technical and administrative head, responsible for project planning, execution, and quality control.

District Magistrate & Collector, Sundargarh:- Nodal authority for land acquisition, coordination among departments, and ensuring compliance with the RFCTLARR Act, 2013.

Tahasil Office, Koida:- Responsible for land acquisition processing, ownership verification, and documentation.

1.9 Phases of Project Construction

The construction work of the proposed bypass road was decided to be carried out in sequential phases:

- Phase 1 – Site Preparation: Land clearance, removal of obstructions, and site grading.
- Phase 2 – Earthwork and Sub-base Formation: Laying of embankments, compaction, and preparation of the road foundation.
- Phase 3 – Pavement Construction: Placement of granular sub-base, base course, and bituminous surfacing.
- Phase 4 – Installation of Ancillary Structures: Construction of drainage systems, culverts, and protective works.
- Phase 5 – Safety and Finishing Works: Road markings, signage, guardrails, and landscaping where applicable.
- Phase 6 – Final Inspection and Handover: Quality checks, rectification of defects, and official commissioning.

1.10 Core Design Features and Facilities

The proposed project involves the construction of the Koida Bypass Road from 0/00 Km to 8/00 Km under DMF funding. The core design features include a two-lane carriageway with proper shoulders, adequate drainage facilities, road signage, and safety measures such as guardrails and pedestrian crossings where necessary. The design ensures smooth vehicular movement, minimizes accident risks, and incorporates road geometry suitable for both heavy and light vehicles. Key facilities will include culverts, small bridges where required, and designated entry and exit points to connect with existing road networks.

1.11 Ancillary Infrastructure Requirements

Ancillary infrastructure will be essential to support both construction and long-term operation of the bypass. This will include temporary site offices, material storage yards, access roads to construction sites, and utility connections such as water and electricity supply. Additional facilities will include temporary labour camps (if required), vehicle parking areas for construction

machinery, and waste disposal arrangements. In the operational stage, maintenance facilities, drainage systems, and safety installations will form part of the ancillary infrastructure.

1.12 Workforce Requirements

The project will require both skilled and unskilled manpower at different stages of construction. Skilled workers will include engineers, surveyors, heavy machinery operators, and quality control personnel, while unskilled workers will be engaged for manual labour, site clearance, and material handling. At peak construction activity, the workforce is expected to range between 50–70 personnel on site. Priority will be given to hiring local labour wherever possible to generate livelihood opportunities.

1.13 Previous SIA or Technical Feasibility Studies

Preliminary technical assessments and route alignment studies were undertaken by the Works Department prior to finalizing the alignment. These studies examined multiple route options considering technical feasibility, environmental sensitivity, and social impacts. While no detailed Social Impact Assessment has been conducted earlier for this alignment, relevant findings from feasibility studies have been integrated into the present SIA process to ensure minimal displacement and reduced ecological disturbance.

1.14 Applicable Legislations and Policies

The Social Impact Assessment (SIA) Study for the proposed acquisition of 0.1000 acres of private land from village Koida in Koida Tahasil of Sundargarh district for the proposed project “Construction of Bypass Road (0.00 – 8.00 Km)” is governed by a framework of relevant laws, policies, and guidelines. The primary legislation applicable to this land acquisition process is:

- **The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013):** This is the principal legal framework that mandates a comprehensive assessment of social impacts before any land acquisition for public purposes. It ensures fair compensation, adequate rehabilitation, and transparent processes.

In addition, the following rules and policies are also applicable:

- **Odisha Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2016:** These state-specific rules provide

procedural guidelines for implementing the central RFCTLARR Act within the jurisdiction of Odisha.

- **Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA):** Given the tribal population in the project area, this Act ensures recognition of the forest rights of indigenous communities and requires consent procedures and compliance in forest land diversion, where applicable.
- **PESA Act, 1996 (Panchayats (Extension to Scheduled Areas) Act):** As the project area falls under a Scheduled District, the PESA Act mandates consultation with Gram Sabhas before acquisition of land and use of natural resources, thereby upholding the rights of tribal communities.
- **Environment (Protection) Act, 1986 and Forest (Conservation) Act, 1980 (if forest land is involved):** These Acts govern environmental clearances and conservation measures.
- **Odisha Rehabilitation and Resettlement Policy, 2006 (if applicable):** Provides additional guidelines for compensation, resettlement, and livelihood restoration in project-affected areas.

The application and enforcement of these legislations and policies aim to safeguard the rights of affected persons, promote informed consent, and ensure a balanced approach to development and social justice in the land acquisition process.

Chapter 2

Team Composition, Approach, Methodology and Schedule of the SIA

2.1 Description and Rationale for the Methodology and Tools Used

This chapter illustrates the approach and methodology adopted for undertaking the social impact assessment and gives an overview of the SIA unit and activity schedule of the study. The aim of SIA is to ensure that all stakeholders interested in a proposed project including project beneficiaries and the general public in the vicinity of the proposed project be identified and their opinion considered during project planning, design, construction, operation and decommission phase.

In order to carry out a detailed analysis of socio-economic data to present a background to the construction of the project, the team collected and analyzed secondary and primary data. Using data from two sources allows data analysis and precise identification of effect sizes. Next, there is molecular level information collected from secondary sources and finally, primary data collected through surveys, consultations and interviews are presented.

The methodology for conducting the Social Impact Assessment (SIA) of the proposed acquisition of 0.1000 acres of private land from Koida village under Koida Tahasil, Sundargarh District, has been designed to ensure that the process is participatory, transparent, and evidence-based. The approach adopted integrates both quantitative and qualitative research tools to capture the socio-economic, cultural, and environmental dimensions of the project's potential impacts on affected families and the community at large.

2.2 The SIA Team

A study team (Table-2.1) comprising professionals with previous experience in socio-economic studies was constituted for the purpose.

Table-2.1:Members of SIA Team				
Sl. No.	Position	Name	Qualification	Responsibility
1	Project Director/ Team Leader	Dr.A.K.Behera	Ph.D (Management)	Overall supervision, collection of secondary data, stakeholder consultation, data interpretation and report preparation
2	Addl. Project Director	Sri B.Maharana	M.Sc(Ag)	Assisting PD in the process of carrying out the assignment, designing of questionnaire & their field testing, Facilitating FGD/PRA in villages, data validation
3	Addl. Project Director	Sri Pradeep Ku. Paikray	M.Tech.	
4	Supervisor / Field Coordinator	Sri Satyabrata Behera//Santosh Kumar Pradhan	M.Sc	
5	Field Investigator	Sri Ramakant Mishra	BA	Data collection from fields, PRA, FGD, stakeholder consultation
6	-do-	Sri Sunil Kr Behera	BA	
7	-do-	Ms. Ankita Bhabani	M.Com	
8	Computer Operator	Ms Monali Manideepa Das	MBA	
9	-do-	Sri Bhudev Pattnaik	BA	Data entry, data analysis, and typing of report

The present SIA was conducted in Koida village of Koida Tehsil of Sundargarh district to assess social impact with respect to the land acquisition for construction of the proposed project **“Construction of Koida Bypass Road (0.00–8.00 Km)”**. The SIA team assessed the information on the impacts on social, cultural, economic and health of these development activities that influence the living conditions of the affected people with a focus on understanding the social dynamics both directly and indirectly. The mixed method approach was used to assess both qualitative and quantitative data during the Social Impact Assessment (SIA) study.

2.3. Methodology and Tools used to collect information for the SIA

2.3.1 Approach

Social impact assessment involves knowledge of the present situation as well as likely changes to be brought about by implementation of the proposed project. Since implementation of the project involves land acquisition and displacement of people, a Resettlement Action Plan is in order. The

study is based on both secondary and primary data collected through census household survey, community level survey by using participatory techniques and desktop exercises. Secondary data were helpful in validating the findings at the field level.

The study provides the following information:

- Baseline data on socio-economic condition of the people (affected and Non affected) in the project area;
- Potential impact of the project on both affected and non affected people;
- Perceptions of the affected and non affected people about the impact of the project;
- Potential mitigation measures to minimize the adverse impact;
- Institutional capacity to implement mitigation measures.

2.3.2 Methodology

The methodology has been outlined keeping in view the objectives and scope of the study and provisions of law. The following steps have been followed (fig 2.1).

2.4 Sampling Methodology Used

2.4.1 Schedules of the SIA

For collection of required data, the following questionnaires / formats were designed and finalised in consultation with NCDS.

1. Questionnaire for household data
2. Format-I: For data on General Infrastructure
3. Format-II: For data on Socio-economic & Cultural Infrastructures
4. Format-III: For Focus Group Discussion

Here is given one figure relating to the steps of Methodology.(Fig-2.1)





Fig.-2.1 – Steps of Methodology

Household survey was undertaken in 6 (six) HHs consisting 27 family members in the village Kantarkela (Koida) of Koida tehsil. Apart from this, a sample survey of 10 non-affected households carrying 37 family members was made. In addition to HH survey, PRA tools like resource mapping, FGD, Key Informants Interview (KII), and Semi-structured Interviews (SSI) were also used to get the response of the PAPs on resettlement, rehabilitation and compensation as per prevailing Act.

2.4.2 Tools for data collection

A mix of qualitative and quantitative methods was used for the SIA study. These methods helped in understanding the profile of the village, socio-economic profile of PAFs, the potential impacts of the proposed project and mitigation measures that can be adopted to minimize the negative impacts of the project. The following methods and tools were adopted for the SIA study:

- **Surveys and Questionnaires:** Design structured surveys or questionnaires to gather quantitative data from individuals or communities affected by the project. These can be administered in person, via phone interviews, or online.
- **Interviews:** Conduct qualitative interviews with stakeholders, including project beneficiaries, local leaders, government officials, and experts. These interviews provide in-depth insights into the social impacts of the project.
- **Focus Group Discussions (FGDs):** Organize FGDs with groups of stakeholders to facilitate discussions on specific topics related to the project's social impact. FGDs encourage interaction and uncover diverse perspectives.
- **Document Review:** Analyze existing documents such as project reports, environmental impact assessments, community profiles, and government records to understand the context and potential social impacts.
- **Mapping and Geographic Information Systems (GIS):** Used GIS technology to map out project areas, demographics, and resources. Spatial analysis helps visualize the distribution of social impacts and identify vulnerable populations.
- **Key Informant Interviews:** Identified and interviewed key informants such as community leaders, NGOs, or academics who have specialized knowledge on the project's social impact.
- **Participatory Methods:** Participatory Rural Appraisal (PRA) methodology was followed to identify and assess social life conditions, problems and opportunities of stakeholders.

2.5 Overview of Information or Data sources used

The design, tools used and methods followed for the study have been described above and they appear to be in line with the earlier works. Field level difficulties stood in the way of perfecting the work. Special efforts were made by the study team to overcome these problems; but still there remained something to be desired. The limitations of the study are the following:

- The actual impact may be at variance with the potential ones as the real world cannot be correctly anticipated.
- Comprehensive secondary data were not available to cross-check primary data collected from the field. Hence, the possibility of marginal errors in analysis and interpretation cannot be ruled out.

- The land information collected is old. There may be changes over the time. Hence, certain variation in the records is anticipated.

In spite of all these, every effort has been made for making the study realistic as far as possible.

The following activities were carried out for preparation of the SIA report.

(a) Desk Research and Reconnaissance Survey

Desk research was conducted to review relevant documents, RORs, reports, project area baseline information, legal policies, institutional framework governing the proposed project, etc. Census Data of 2011 were also used to triangulate the field data.

(b) Data Collection

The study envisaged collection of both secondary and primary data about the socio-economic condition of project affected and unaffected people.

(i) Primary Data

The sources of primary data included field visits, household survey, Focus Group Discussions (FGDs), PRAs and interviews with key informants / stakeholders. Primary data were collected through door-to-door census survey of both project affected and sample non-affected households using structured questionnaires to elicit information about their livelihood status, socio-economic profile, general infrastructure and socio-economic status of villages in the area. Besides, Focus Group Discussions (FGDs) were organized to capture the response of the PAFs/PAPs and non-affected families about the possible impact of the project, losses of assets and infrastructure including compensation package, etc. Key informants, field level government functionaries of line departments and other local people also were interviewed.

Four separate sets of questionnaires / schedules were used;

- Household questionnaires
- General Information schedule
- Social and cultural information schedule
- Format for Focus Group Discussions

The questionnaires were prepared in consultation with the State SIA Unit and in compliance with RFTLARR Act 2013 and Odisha RFTLARR Rules 2016.

(ii) Secondary Data

The sources of secondary data were reports about the project and areas affected by it. Information was also garnered through internet and web-pages. The other sources of information were Census Reports, relevant records of Odisha Government etc. The documents required for collection of secondary data included (i) land schedule, (ii) demography of the project affected villages, (iii) map of the project area and project details, (iii) relevant Acts and policy guidelines, (iv) District Statistical Handbook, and (v) other study reports.

(c) Site Visits and Information Dissemination:

Identification of the area in village Kantarkela (Koida) under Koida Tehsil of Sundargarh district to be impacted by the project was the beginning of this activity. The SIA team procured a map of the district and schedule of land to be acquired for the project. The team undertook initial field visits to explore the project area for an understanding of its geography, topography, social infrastructure, and project affected people and their socio-cultural life. The team consulted different stakeholders in the project area and organized meetings with them to generate awareness about the project.

(d) Baseline Survey through Census Method

Personal interviews were conducted on census basis using structured questionnaire. Well before the commencement of field survey, the questionnaires were pre-tested and field investigators were given necessary training. The questionnaires covered matters relating to identification of project affected persons, their social profile, family details, occupation, source of income, family expenditure and household assets, information on affected structure, commercial / self-employment activities, employment pattern, and views on resettlement and rehabilitation. The questionnaires contained a few open-ended questions like opinions and views of persons.

Data collection in household survey was not restricted to the questions enlisted in the questionnaires. Queries of the affected people were taken care of as far as possible. This helped getting a better insight into the issues, gaining the confidence of the people and facilitating data collection. Field level data were being regularly monitored and cross checked.

Baseline survey was carried out to describe the socio-economic profile of the project affected area and assess impact of the project on the affected families.

(e) Data Compilation and Analysis for Report Writing:

Data collected were consolidated to create a database. The same was subjected to analysis for generalised observations to be used in writing of the draft report.

(f) Social Impact Mitigation and Management Plan (SIMMP) Preparation:

To complete the SIA process, a Social Impact Mitigation and Management Plan (SIMMP) was prepared. Objective of the SIMMP is to minimise hardship of the households in the project affected area and compensate all the affected households for the adverse impact sustained on account of the project. This is a major contribution of the SIA study. The SIMMP will help enhance the standard of living and quality of life of people in the project area.

(g) Public Hearing

As a part of the process, the draft project report in regional language has been prepared and is being shared with the stakeholders, key persons, opinion leaders and officials concerned of the affected area. One Public hearing is to be organized in the affected village to obtain people's views about the social impacts of the project and their suggestions to mitigate the potential adverse effects. Various sections of the affected people including women and underprivileged groups will be involved in the consultation process. During public hearing, issues relating to land acquisition, compensation, income restoration, employment generation, grievance redressal, safety, role of administration etc. are to be discussed.

(h) Final Report

The final report will be prepared after incorporating the views expressed in the public hearings in the draft report.

2.7.2 Schedule of consultations with public Representatives and key stakeholders

Discussions and Interviews

Extensive discussions were held with the stakeholders including project affected and un-affected persons, opinion makers and PRI representatives. Interactions at group level were carried out to assess the validity of field level data and have an overview of the situation. These discussions were organized by following qualitative research techniques.

- **Focus Group Discussions (FGDs):**

The participants in the FGD included men, women, youth and vulnerable groups. A typical FGD lasted 1-2 hours and comprised 10-15 persons. It covered a range of topics relating to the socio-economic impact of the project based on a check list.

- **Key Informant Interviews:**

These interviews were held with the community leaders, professionals, government officials with first-hand knowledge about the community as well as project. These interviews gave a perspective on the likely impact of the project.

2.7 Public Hearing on SIA Report

2.7.1 Introduction

According to RFCTLARR Act, 2013, SIA report is prepared to assess the losses of land losers and affected families of the area due to land acquisition for government projects. This Act provides for public hearing to know the views of the land losers about compensation, rehabilitation and re-settlement. The views of the affected persons on social impact assessment study are obtained during public hearing and are incorporated in the final report. This makes the land acquisition process transparent leaving no occasion for suspicion.

With the operation of the project, the economic, social and physical environment of the area is affected. Traditional economic and social status gets disturbed and environment deteriorates. Appropriate remedial measures are in order for overall development of the project affected area. Views of the general public are important in this connection. They very well know their conveniences and welfare; hence the importance of their views. Scope for this is created at the time of Public hearing.

Considering above, Sundargarh district administration arranged public hearings as per the Act. For the project "Construction of Koida Bypass Road from 0/00 Km to 8/00 Km under DMF fund in the district of Sundargarh" by issuance of notification in the affected area i.e. village Koida of Koida Tahasil. Accordingly, public hearings were held to know the views of the affected people on the findings of draft SIA report.

2.7.3 Objectives of Public Hearing

The main objectives of public hearing are as follows:

- To make the findings of the Social Impact Assessment study transparent and make it known among the affected people.
- To put together the reactions of the affected people on the main findings of SIA study as well as their other views about land acquisition.
- To make the affected people aware of their dues as per RFCTLARR Act, 2013 and in different development projects of the Government.
- To rectify wrong ideas of the affected households and public on land acquisition.
- To analyze the views of project affected people at the time of public hearing and incorporate the same in the SIA Report.

2.7.4 The Process Followed

After preparing the draft report on Social Impact Assessment for “**Construction of Koida Bypass Road from 0/00 Km to 8/00 Km under DMF fund in the district of Sundargarh**” Project, by the study team of M/s. Research and Information Centre for Orissa (RICOR), Bhubaneswar, the same in English and Odia versions was submitted to the State SIA Unit, NCDS, Bhubaneswar. Then the State SIA Unit submitted the copies of the report to the Collector and District Magistrate, Sundargarh for the purpose of public hearing.

During the public hearings, people were informed about the findings of the SIA report, provisions of RFCTLARR Act, 2013 on compensation to land losers and proposals for overall development of the project affected area. After this, views and demands of the people were invited and were documented along with video recording.

Details of Public Hearing

Date	Time	Venue	Name of GP	Villages included
14.11.2025	10.30 AM	Koida Panchayat Hall, Koida	Koida	Koida

List of Participants

Sl. No.	Name	Position/Affiliation
1	Sri Pratik Priyadarshi Das	Executive Engineer, R & B Sub-Division Banai
2	Sri Nirmal Biswal,	Tahasildar, Koida
3	Sri Santosh Kumar Kar	O.R.S, Koida
4	Sri Hrusikesh Dehuri	Sarpanch, Koida
5	Sri Srikant Kumar Prusti	Revenue Supervisor, Koida
6	Sri Niraj Kumar Gupta	Revenue Supervisor, Sundargarh
7	Sri Rajanikanta Mahant	Asst.Engineer, R & B Division, Sundargarh.
8	Sri Sambhunath Munda	P.E.O., Koida
9	Sri Ramakanta Mishra	Representative, RICOR, Bhubaneswar
10	14 Inhabitants	From Koida village

Findings of Public Hearing

The public hearing started at 10.30 AM with a welcome note by Sri Ramakanta Mishra, Representative from RICOR. Sri Mishra introduced the persons on the dais, and presented the main findings of the SIA report.

Sri Nirmal Biswal, Tahasildar, Koida spoke on the objectives and need for public hearing. He threw light on the legal provisions relating to land acquisition Act. 2013. He also made people aware about their rights and also discussed about the compensation package and its process of release. Then the question answer session commenced.

Questioner's name

Sri. Sadhu Nayak, Sri. Basant Nayak, Smt. Mithawat Nayak, Smt. Sabita Phaduka, Smt. Phulmani Nayak, Sri. Nath Nayak,

Question and opinion

All of them had one opinion and demanded that we be given appropriate compensation for the land acquisition.

Answer:

Sri Niraj Kumar Gupta, Revenue Supervisor, Sundargarh: Explained the provisions of RFCTLARR Act, 2013 and how these provisions were better than those under earlier Land Acquisition Act, 1894. He also explained the rules for calculation of compensation. It would be (1) market value of land + 12% of the market value + additional value on the basis of distance from the town + value of assets on the land + trees on the plot + 100% of compensation value. Carrying on the discussion, he pointed out that there is no provision for employment on account of land acquisition, but compensation will be paid as per Act, 2013. Mutual distribution of compensation among the brothers would be given importance, but all brothers would be liable to put their signature on the documents. In absence of Patta, compensation would be given on the basis of Kabala, even not mutated, but as per land Kisam. He again stated that there was no provision under Act, 2013 for land in lieu of land acquired





The meeting came to an end after proposing vote of thanks by Sri Ramakanta Mishra to all present.

Chapter -3

Land Assessment

3.1 Introduction

Land is the most important resource for construction of the project. The proposed project involves the acquisition of 0.1000 acres of private land from Koida village under Koida Tahasil of Sundargarh District for the construction of an 8 km Koida Bypass Road under the DMF Fund. This chapter outlines the land assessment covering the extent, nature, and characteristics of land to be acquired, possible alternatives, and the likely social and environmental implications.

3.2. Area of Impact under the Proposed Project

Map of the area of impact under the project: The Map showing area of impact under the project is given hereunder.(Fig-3.1)

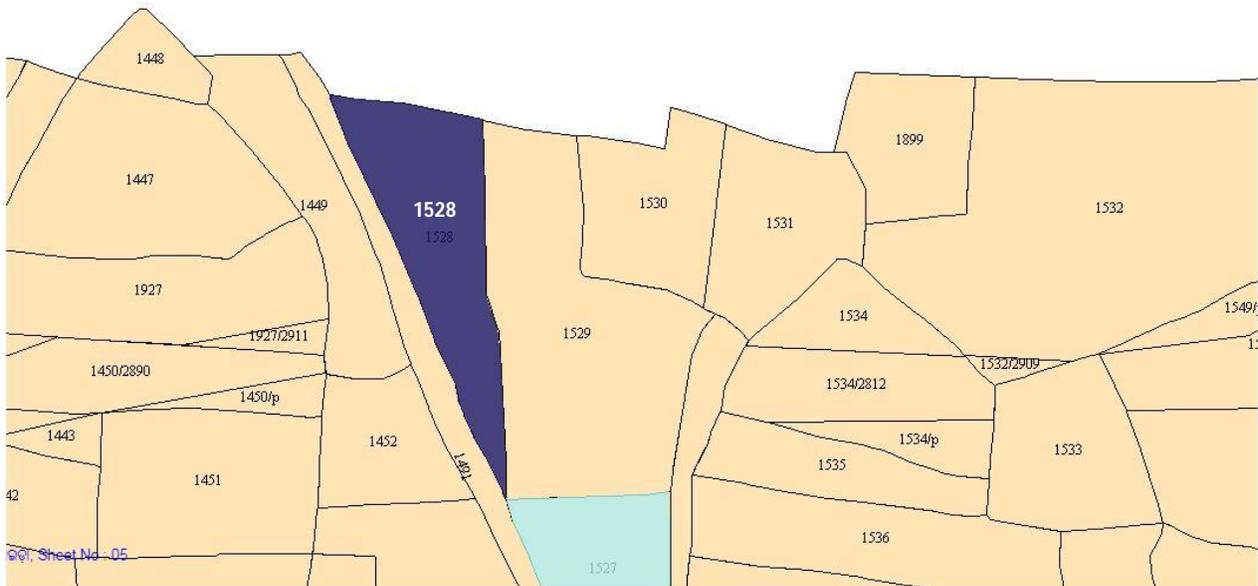


Fig-3.1: Map of the area of impact under the project in village Koida under Koida Tehsil

The impacted area includes the specific land parcel proposed for acquisition as well as adjoining areas that may experience secondary impacts such as changes in traffic flow, environmental adjustments, or temporary disturbances during construction.

3.3 Extent and Location of Land Proposed to be acquired

The extent of land required for this project is limited to 0.1000 acres, situated within Koida village. The land has been identified based on technical feasibility and road alignment requirements. The details of land to be acquired as given below.(Table-3.1)

Table 3.1 : Nos. of households and quantum of land to be acquired.

Name of the village	Name of the GP/ULB	Tehsil	Total affected HHs	Total land owned (Ac)	Total affected Area (Ac)	Area to be acquired (Ac)
Koida	Koida	Koida	06	9.32	0.10	0.10

3.4 Bare Minimum Requirement of Land

The 0.1000 acres identified is the bare minimum land required for the bypass road alignment. No additional or surplus land is being acquired beyond the essential requirement.

3.5 Possible Alternative Sites and Feasibility

The bypass alignment has been finalized after due consideration of technical feasibility and minimum social impact. No other alternative sites were found to be viable without either increasing displacement or adversely affecting project efficiency.

3.6 Acquisition in Scheduled Area as a Last Resort

The proposed land is part of a scheduled area. The acquisition has been considered only as a demonstrable last resort, after ensuring that no suitable government or unused land was available for the project.

3.7 Land Already Acquired, Alienated, or Leased Land

None of the land proposed under this acquisition has been previously purchased, alienated, or leased for this project. The identified land parcel is specifically intended for the bypass construction.

3.8 Scope of Using Public or Unutilized Land

A preliminary verification was conducted to identify any suitable public or unutilized land. However, no such land was available or free from occupation, and therefore private land acquisition became necessary.

3.9 Nature, Classification, and Current Use of Land

The land is classified as private barren land. It is not under agricultural use and has no irrigation coverage or crop production. Thus, the acquisition does not affect food production or livelihood based on farming. (Table-3.2)

Table-3.2: Use Pattern of Land holdings of PAFs (Area in acre)	
Name of Village	Koida
Agriculture	9.0 (96.56)
Orchard	0.00 (0.00)
Residential	0.32 (3.44)
Commercial	0.00 (0.00)
Others (Forest)	0 (0.00)
Barren	0.00 (0.00)
Total	9.32 (100.00)

3.10 Food Security Concerns

As the acquired land is not agricultural or cultivable land, there is no adverse impact on food security. The special provisions under the RFCTLARR Act with respect to food security are therefore fully adhered to.

3.11 Landholding Size, Ownership Patterns, and Infrastructure

The affected land belongs to a single recorded private owner with small holdings, consisting of 6 households. No residential houses, homesteads, or community infrastructure fall within the acquisition area.

3.11.1 Change in Landholdings

The land ownership pattern will change after the land acquisition (Table 3.3.).

Village	Holding Sizes of Project affected HHs (in acre)	Before Project		After Land Acquisition	
		No. of PAFs	% of Total	No. of PAFs	% of Total
Koida	0.001 to 0.499	0	-	0	-
	0.500 to 0.999	0	-	0	-
	1.000 to 1.999	0	-	0	-
	2.000 to 4.999	0	-	0	-
	5.000 to 9.999	06	100.00	06	100.00
	More than 10.000	0	-	0	-
	Total	06	100.00	06	100.00

(Source: Field Survey)

The land acquisition for the proposed project is expected to alter the ownership and distribution of land among the Project Affected Families (PAFs) of Koida village. As shown in Table 3.3, all six affected households fall under the holding size category of 5.000 to 9.999 acre, constituting 100% of the affected population..

It is important to note that all six households share a common plot (Khata No. 92, Plot No. 1528), which indicates fragmented ownership of a single small parcel of land. After the acquisition, the situation of landholding remains within the same marginal bracket of 5.000 to 9.999 acre, reflecting the limited nature of holdings. However, the acquisition further reduces their already meagre access to land, thereby intensifying their economic vulnerability.

This clearly demonstrates that the project exclusively affects marginal landholders with very small shares of a single plot, and no medium or large landholders are involved. The impact therefore falls disproportionately on households that already possess limited resources, highlighting the need for suitable rehabilitation, compensation, and livelihood restoration measures to safeguard their socio-economic well-being.

3.11.2 Land distribution of PAFs

The caste-wise distribution of land loss shows that only one Project Affected Family (PAF) belonging to the Scheduled Tribe (ST) category has incurred any loss, while no impact is reported among Scheduled Caste (SC), Other Backward Classes (OBC), or General caste groups. The affected household owns 9.32 acres of land, of which only 0.10 acre amounting to 1.07% of the total holding, has been acquired. Although the extent of loss is quantitatively small, the fact that it pertains to a tribal family makes the impact socially significant and calls for sensitive consideration in rehabilitation measures. The caste-wise distribution of land of project affected families is narrated in Table-3.4.

Table-3.4: Caste-wise Distribution of Land Loss of PAFs

Caste	PAFs	Total land owned (In Acre)	Total land loss (In Acre)	Land loss as % of land owned	Average land loss (In Acre)
SC	0	-	-	-	-
ST	1	9.32	0.10	1.07	0.10
OBC	0	-	-	-	-
General	0	-	-	-	-
Total	1	9.32	0.10	1.07	0.10

(Source: Field Survey)

3.11.3 Status of Village Infrastructure & Services

The details of infrastructures available in the project affected villages are given in Table-3.5.

Table-3.5: Availability of Infrastructure in Project Affected Villages

Village	Infrastructure	Total available	
Koida	Roads	Kuccha	1
		Pucca	6
		Semi-pucca	1
	Water Sources	Dugwell	0
		Tubewell	4
		Hand Pump	0
		Pipeline	0
		Other (Borewell)	0
	Others	Electricity	Yes
		Cremation ground	0
		Brickyard	0
		Market	0
		Cattle Market	0
		Village industry	0
		Community Hall	1
	Prayer Hall	0	

(Source: Field Survey)

3.11.4 Village Level Institutions

Various village level institutions like AWC, school, and PDS shop are available in project affected villages and there is no possibility of dislocation of such institutions. The village level availability of institutions are given in Table 3.6.

Village	Institutions	Total available	
Koida	Village Institutions	AWC	1
		Panchayat Ghar	0
		Post Office	0
		Police Outpost	0
		Bank	0
		Cooperative Society	0
		PDS shop	0
	Educational Institutions	Primary School	1
		Secondary/High School	0
		Tech/College	0
	Healthcare Services	PHC	0
		Sub-centre	0
		ANM	0
		Dispensary	0
Veterinary Clinic		0	

(Source: Field Survey)

3.11.5 Sales and Service Centres

Sale & Service centres available in project affected villages are indicated in Table 3.7.

Village	Services	Total Available	
Koida	Shops	Textile shops	0
		Grocery	1
		Medicine	0
		Hardware	0
		Food shops	0
	Service Centres	Flour mill	0
		Tractor repairing garage	0
		Cycle repair shop	0
	Servicemen	Barber	0
		Carpenter	0
		Black smith	0
		Gold Smith	0
		Tailor/Cobbler	1
		Potter/Mason	3
Washer man	0		

(Source: Field Survey)

3.12 Land Prices and Ownership Changes

The value of land in Koida has shown steady appreciation in the past three years, influenced mainly by mining activities and infrastructural developments. However, no significant recent transfers or speculative ownership changes have been observed for the concerned plot.

Chapter -4

Estimation and Enumeration of Affected Families & Assets

4.1 Introduction

In conducting a comprehensive Social Impact Assessment (SIA), the estimation and enumeration of affected families and assets stand as fundamental components. This crucial stage of the assessment process seeks to meticulously identify and quantify the likely impact resulting from proposed development project. By meticulously cataloguing affected households and assets, this aspect of the SIA aims to provide stakeholders and decision-makers with a clear understanding of the potential socio-economic ramifications. Through robust data collection methodologies and analytical frameworks, the estimation and enumeration phase serve as a cornerstone in facilitating informed decision-making processes, fostering community engagement, and ultimately, ensuring the sustainable development.

4.2 Enumeration of the families:

The enumeration of affected families has been undertaken in the village Koida through a **detailed household survey**, key informant interviews, and verification with **village revenue records** of the proposed area under acquisition. The objective is to identify the diverse categories of directly and indirectly affected families and the inventory of assets that may be impacted by the project.

a) **Details of the families whose land or other immovable properties are to be acquired.**

The affected land identified for acquisition belonged to a single recorded private owner with small holdings, consisting of six households. No residential houses, homesteads, or community infrastructure fell within the acquisition area.

b) **Land under occupation of tenants**

During the field survey, it has been observed that the total land to be acquired for the proposed project, are mostly non-irrigated agriculture land and hence, no such land found under occupation of tenants.

c) Families of the Scheduled Tribes and other traditional forest Dwellers, who have lost any of the forest rights.

No forest land is going to be acquired for the proposed project. Hence, no one is going to lose any forest rights.

d) Families of agricultural labourers, tenants or holding of usufruct right, share-croppers or artisans or who may be working in the affected area for three years prior to the acquisition of the land.

The affected land identified for acquisition belonged to a single recorded private owner with small holdings, consisting of six households. No residential houses, homesteads, or community infrastructure fell within the acquisition area.

e) Families who have been assigned land by the State Government or the Central Government under any of its schemes.

No such families are there as observed during the field survey.

f) Families who have been residing on any land in the urban areas for preceding three years or more prior to the acquisition of the land.

No such families are there, as observed from the field data collected.

g) Families indirectly impacted by the project (Gatherers or forest produce, hunters, fisher folk, boat men etc.

No such families are there, as observed from the field survey.

h) Inventory of productive assets and significant lands

No information available.

Chapter -5

Socio-Economic and Cultural Profile

5.1 Introduction

Baseline survey aims at documenting information about demographic and socio-economic conditions, land use pattern, and social and cultural values of the project affected area. It also gives information about the existing bio-physical, environmental, economic and social situation of the area to evaluate the current socio-economic situation. This survey helps assessing the likely changes after land acquisition in the context of the existing situation and environment. For this purpose, study of the latest demographic profile and overall community wellbeing in the area was imperative.

A socio-economic survey was conducted in the project-affected village on a census basis. Information related to demographic, social, and economic characteristics, infrastructure, employment conditions, community resources, and other aspects such as awareness and perceptions about the project was collected. As per the 4(1) Notification of the Revenue & Disaster Management Department, Government of Odisha, the survey was to be conducted in Koida village of Koida Tehsil, for 1 household (titleholder). However, in reality, 6 affected households were surveyed on a census basis. Additionally, 10 non-affected sample households from the same village were surveyed as a control group. The socio-economic profile of the surveyed families is presented in this chapter.

5.2 Demographic details of the Project Area

Demographic features like size, age group, and sex composition etc. of a population are important indicators of a community's level of development and its attitudes towards life. Sex ratio speaks of the social health of a society. It conveys a great deal about the state of gender relations and how a society treats nearly one-half of its population, the women folk.

The proposed project requires land acquisition in one village of Koida Tahsil in Sundargarh district. The demographic profile of the project affected Tahasil (Koida) is indicated in Table-5.1.

Table-5.1: Demographic Profile of Koida Tehsil, Sundargarh district	
Description	Tehsil: Koida
Year	2011
Population	40,824
Male	20,810
Female	20,014
Area Sq. Km	343.64
Sex Ratio (Per 1000)	961
Total Child population (0-6 Yrs)	7,662
Male Child (0-6 Yrs)	3,787
Female Child (0-6 Yrs)	3,875
Average Literacy	46.13
Total Literate	18,831
Male Literacy	11,802
Female Literacy	7029

Source: Census 2011

As per Census 2011, Koida Tehsil of Sundargarh district has a total population of 40,824, out of which 20,810 are males and 20,014 are females. The Tehsil covers a geographical area of 343.64 sq. km. The sex ratio of the region stands at 961 females per 1,000 males, which is slightly below the state average, reflecting a moderate gender balance in the population.

The child population (0–6 years) in Koida Tehsil is 7,662, comprising 3,787 male children and 3,875 female children. The child sex ratio, therefore, indicates a relatively better balance in the younger age group as compared to the overall sex ratio.

With regard to educational status, the total number of literates in the Tehsil is 18,831, resulting in an average literacy rate of 46.13%, which is lower than both the state and national averages. Out of the total literates, 11,802 are males and 7,029 are females, indicating a wide gender gap in

literacy levels. Male literacy is considerably higher than female literacy, which highlights the need for targeted interventions in female education and awareness programs.

Overall, the demographic profile of Koida Tehsil reveals a population dominated by a younger age group, moderate gender balance, but low literacy levels with significant disparities between men and women. This socio-economic background needs to be considered carefully while planning development projects, livelihood strategies, and welfare interventions in the region.

5.2.1 Project Affected Households and Population

Total 6 project affected households with a total family members of 27 in the affected village Koida of Koida Tahsil have been surveyed. These households are going to lose a portion of their landed property and other assets.

5.2.2 Size and Sex-Ratio of PAFs

Size and sex ratio of project affected families across village is given in Table 5.2. The pattern of demographic composition is almost the same in all the villages. The sex ratio of the project affected HHs is 800, lower than the district average figure of 961. The average family size of the project affected PAFs is 4.5.

Table-5.2: Size and Sex Ratio of Project Affected Families

Name of village	Sl. No	Particulars	Collected data
Koida	1	PAFs Surveyed (No)	6
	2	PAPs of Surveyed Families (No)	27
	3	Male	12
	4	Female	15
	5	Sex Ratio	800
	6	Average family size	4.5

(Source: Field Survey)

5.2.3 Age Composition and Marital Status of PAPs

The study of age composition of people is helpful as it gives an idea about the proportion of potential workers in the total population. According to Census 2011, people in the age group of 18-60 constitute the working population and others, children and elderly persons are considered dependent. The number of working population is an indicator of the economic status of a household. Age wise gender distribution of PAPs along with their marital status is presented in Table-5.4.

Table-5.3: Age-wise Male-Female with marital status among the PAPs Surveyed

Village	Total PAPs	Distribution in age group								Marital status	
		0-6 yrs		7-17 yrs		18-60 yrs		Above 60 yrs		Married	Un-married
		M	F	M	F	M	F	M	F		
Koida	27	1	2	2	6	8	7	1	0	11	16

(Source: Field Survey)

It is revealed from the Table-5.3 above that the population under the working age group of 18 to 60 yrs is 15 (55.55%) of total PAPs. Married persons outnumber unmarried persons (40.74%) of total PAPs) in the surveyed village.

5.3 Religion of PAFs

The religious belief of a person influences his/her socio-cultural behaviour. It determines his/her attitude towards life, work and ambitions. It also helps understand his/her preferences, which is a prerequisite for rehabilitation of the project affected people and their families. The household survey revealed that all the surveyed families are Hindu (100%).-Table-5.4

Table-5.4: Religion-wise Distribution of the PAFs

Name of village	Sl. No.	Religion	Total (nos.)
Koida	1	Hindu	6 (100.00)
	2	Muslim	0 (0.00)
	3	Christian	0 (0.00)
	4	Others	0 (0.00)
Total			6 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

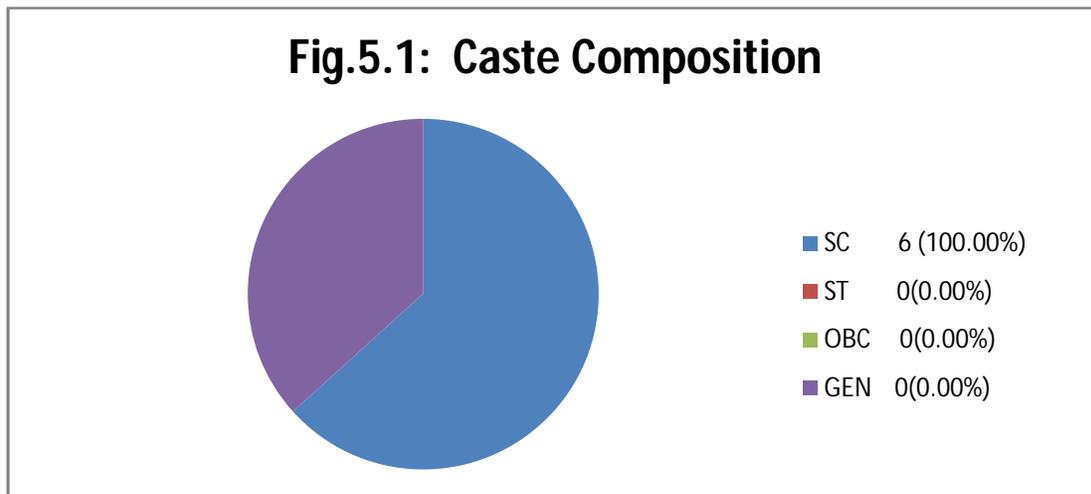
5.4 Castes of PAFs

A traditional society is divided into various castes. Caste plays a key role in determining the choices of a person and his/her welfare level. Higher caste people are generally well-off and have a wide inter-linked network by exploiting other caste people by way of appropriating maximum social gains. On the contrary, the SCs and STs are weak, vulnerable and deprived. They fail to assert their rights and access the benefits meant for them, and reconcile to whatever little comes to them by way of seepage. They deserve particular attention in the misery mitigation programmes of the project. However, from the SIA survey in the village Koida, it was found that all 6

households are of ST category. The caste composition among the surveyed households are given in Table 5.5.

Table-5.5: Caste-wise Distribution of the PAFs			
Name of village	Sl. No.	Caste	Total (nos.)
Koida	1	SC	0 (0.00)
	2	ST	6 (100.00)
	3	OBC	0 (0.00)
	4	GEN	0 (0.00)
Total PAFs			6 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)



5.5 Household Characteristics

Pattern and size of a family determine attachment level among the family members. At the same time, it also reflects how the economic structure in the family is inter-woven. The characteristics of the PAFs are discussed below.

5.5.1 Family Size

The average family size of the project affected households is 4.5 as already indicated previously. Family size of the surveyed PAFs varied between 2 and 15 members (Table 5.6). About 50.00% of the project affected families in the village have 4-6 members; followed by 33.33% with 1-3 members, 16.67% families with 7-9 members and number of families of more than 10 members is Nil.

Table-5.6: Family Size of PAFs

Name of village	Sl. No.	Family size	Total (nos.)
Koida	1	1-3	2 (33.33)
	2	4-6	3 (50.00)
	3	7-9	1 (16.67)
	4	>10	0 (0.00)
Total			6 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

Three types of families can be discerned in the project affected area, namely, individual, nuclear and joint families. Households with more than 7 members are joint and extended families. There are two or more brothers in these households and share the same hearth even after marriage. They live in the household with their parents, siblings and other dependents.

Variations in family types of the PAFs surveyed are given in **Table 5.8**. It is observed from the table that 5 (88.33%) surveyed families are Nucleus Families followed by 1 (16.67%) Joint Families.

Table 5.7: Family Type

Village	Total PAFs	Type of Family (in nos.)		
		Joint	Nucleus	Individual
Koida	6	1 (16.67)	5 (83.33)	0

(Source: Field Survey) (Figures in parentheses are percentages)

5.5.2 Heads of the Households

The distribution of heads of the project affected households in Koida village has been categorized into three major age groups, namely below 45 years, between 45–60 years, and above 60 years, with a further distinction made between women heads (WH) and men heads (MH).

From the data, it is observed that in the age group below 45 years, only one household is headed by a male, while no female-headed household is reported. This indicates that younger household heads are relatively few among the affected families.

In the 45–60 years category, which is generally considered the economically active and socially responsible age group, there are four male-headed households. No female-headed households are

recorded in this age bracket. This suggests that the majority of affected households are managed by men in their middle age, reflecting the dominant household leadership pattern.

In the age group of above 60 years, one household is headed by a male, whereas no female-headed households are reported. This highlights the presence of elderly male household heads who may be more vulnerable in terms of livelihood and economic resilience due to their age.

Overall, out of the total affected households in Koida village, six are male-headed, and none are female-headed. The pattern clearly indicates a male-dominated household headship structure, with the highest concentration of heads falling in the 45–60 years age group. This demographic composition underlines that the project-affected families are primarily led by middle-aged men, with negligible representation of women as household heads.

Table-5.8: Heads of the Project Affected Households										
Sl. No.	Village	Age Group (Yrs)								
		< 45			45-60			> 60		
		WH	MH	Total	WH	MH	Total	WH	MH	Total
1	Koida	0	1	1	0	4	4	0	1	1

(Source: Field Survey)

5.6 Educational Level

Education is the bedrock of human capital. It enables a person to participate in the process of economic growth. Therefore, information about the education level of the project affected population is important for drawing up economic rehabilitation plan for them. The educational attainment of the PAPs has been given in Table 5.19.



Table-5.9: Educational Level of Project Affected Persons				
Name of village: Koida, Tehsil: Koida				
Sl. No.	Level of Education	Male	Female	Total
1	Illiterate	01	02	3 (15.00)
2	Up to primary	04	05	09 (45.00)
3	Secondary	02	01	03 (15.00)
4	+ 2 / Intermediate	02	02	04 (20.00)
5	Graduation & above	0	0	0 (0.00)
6	Technical Degree/Diploma	0	0	0 (0.00)
7	ITI / Prof. Degree	01	0	01 (5.00)
Total		10 (50.00)	10 (50.00)	20

(Source: Field Survey) (Figures in parentheses are percentages)

The table indicates that out of a total population of 27 project-affected people, 3 (15.00%) were found as illiterate. Of 85.00% literate, 9 (45.00%) have read up to primary class, 3 (15.00%) up to secondary level, 4 (20.00%) up to Intermediate, and 01 (5.00%) have received ITI / professional degree. The educational level of project affected families is better than the overall educational level of the district as a whole.

5.7 Income and Poverty Levels.

5.7.1 Occupational Pattern

The economic condition of a family depends on its members' occupational pattern, employment and number of earners in the family. Occupation of the head of a project affected family influences that of its other members. Keeping the local conditions in view, the main occupations of the PAPs have been divided into seven categories, namely, agriculture, agricultural labour, daily wage, service, business / trade, craft and others.

Table 5.10 presents the primary sources of livelihood for individuals from the project-affected families. The largest share of the affected population (37.93%) is engaged as agricultural labourers, indicating a high dependence on wage-based agricultural activities for sustenance.

About 20.68% of the affected households are engaged in cultivation/agriculture, reflecting the continued importance of farming as a livelihood source. Another 17.24% are salaried employees, signifying the presence of people in relatively stable income-generating jobs.

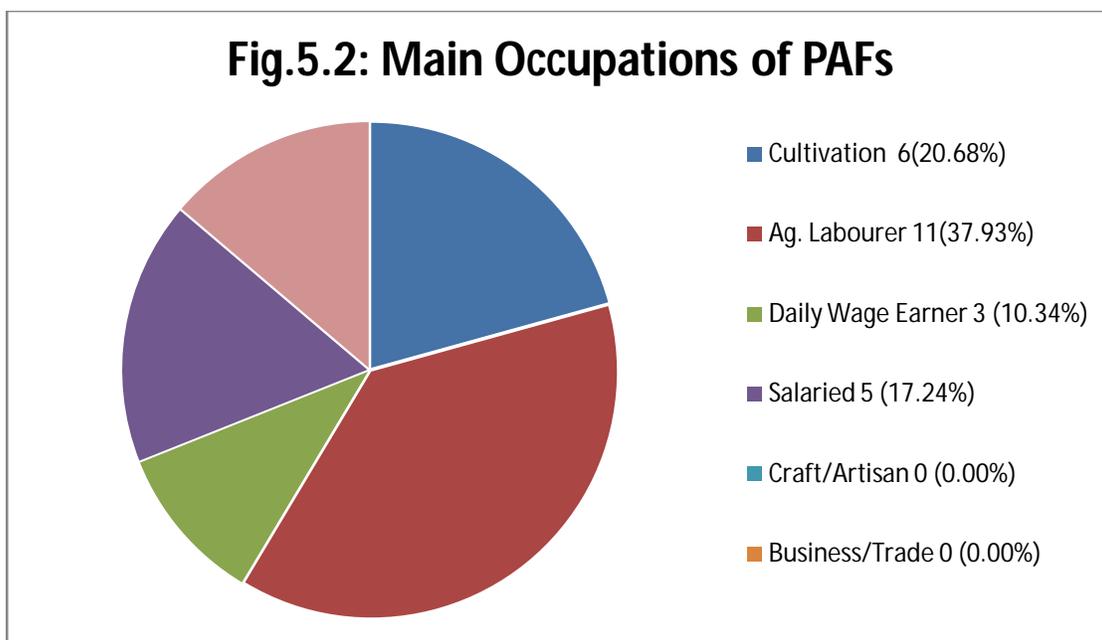
A smaller proportion, 10.34%, are dependent on daily wage earning, which shows reliance on casual and unorganized labour. Notably, no affected persons are engaged in craft/artisan work, business/trade, or professional activities such as priesthood.

Additionally, 13.79% fall under the category of “others”, which mainly includes old-age pensioners and widows dependent on social security schemes.

Overall, the occupational pattern highlights a predominant reliance on agriculture and agricultural labour, supplemented by salaried employment, daily wage labour, and social pensions. The absence of business, craft, and professional occupations points towards limited diversification of livelihoods in the affected households.

Table-5.10: Occupational structure of Project Affected People (Main occupation)		
Name of village: Koida, Tehsil: Koida		
Sl. No	Occupation	Total (in nos.)
1	Cultivation /Agriculture	06 (20.68)
2	Agril. Labourer	11(37.93)
3	Daily Wage Earner	03 (10.34)
4	Salaried	05(17.24)
5	Craft Artisan	0 (0.00)
6	Business/Trade	0 (0.00)
7	Profession/ Professionals (Priest)	0 (0.00)
8	Others (Old Age & Widow Pension)	04 (13.79)

(Source: Field Survey) (Figures in parentheses are percentages)



5.7.2 Family Income

Income is the key indicator of a household's socio-economic status and the overall quality of life of a household depends on it. Findings of the survey indicate (Table 5.11) that average monthly and annual income of project affected households are Rs.12583.33 and Rs.151000.00 respectively.

Table 5.11 - Family Income of PAFs

Village	Total HHs	Monthly family income (in Rs)	Average monthly family income (in Rs)	Annual family income (in Rs)	Average annual family income (in Rs)
Koida	06	75500.00	12583.33	906000.00	151000.00

(Source: Field Survey)

5.8 Assets & Consumer Durables

Asset holding is another significant indicator of a household's wellbeing as larger asset base enables a household to enjoy a better standard of life on a sustained basis. Assets owned by the households along with consumer durables reflect its standard of living and economic status.

Physical assets include land, productive animals, trees, etc., which are income-yielding. Consumers durables do not help generate income, no doubt, but have resale value for which these

have been considered assets in the present study. The PAPs were found unaware of financial assets like bank deposits, post office savings, insurance products, shares, bonds, etc.

Consumer durables and livestock are the important assets of the project affected households in the region. Information about ownership of consumer durables and animal resources of the PAFs has been given in Table 4.12.

Table 5.12 : Assets and Durables of Project Affected Households

Sl. No.	Type	Total qty. available	Approx unit cost (Rs.)	Approx. TotalCost (Rs.)
1	TV	4	4750	19000
2	Tape Recorder	0	0	0
3	Radio	1	1000	1000
4	Refrigerator	1	5000	5000
5	Telephone /Mobile phone	10	5400	54000
6	AC/Cooler	0	0	0
7	Cycle	9	2000	19000
8	Three wheeler	0	0	0
9	Motor cycle	4	35000	140000
10	Four wheeler	0	0	0
11	Bus/Truck	0	0	0
12	LPG	4	3250	13000
13	Utensils	490	35	17500
14	Ornaments	21	16190	340000
15	Animal Resources (Cow/Bullock/Biffa;p/Goat/S heep/Poultry & others)	63	3700	67000

(Source: Field Survey)

5.9 Household Economics

Household is the basic unit in any socio-economic analysis and hence the importance of its economics. Income, expenditure, saving, indebtedness, etc. are decided at the household level. Information regarding household expenditure and indebtedness of the respondents is presented below.

5.9.1 Family Expenditure

A HHs expenditure on different items like food, clothing, housing, education, healthcare and other consumables is constrained by its income. Expenditure data are equally important as income

data for assessment of the standard of living of a HH. Income data were felt to be an underestimate as the respondents apprehended this might affect their economic status. Expenditure data would help validation of income data of a HH. But even reliability of the expenditure data is in question as no written record of expenditure was reported to be maintained by the PAFs. Errors and omissions are very likely to creep in as people have to spend very often. Allowing for these lacunae, expenditure of PAFs has been estimated.

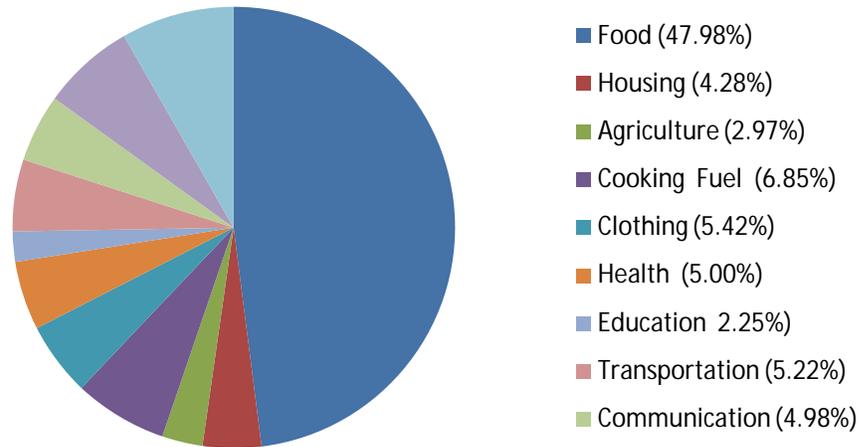
Table 5.13 : Average Monthly Household Expenditure of PAFs (In Rs)

Sl. No.	Items	Total monthly expenditure	Average Monthly expenditure
1	Food	23500.00	3916.66 (47.98)
2	Agriculture	1450.00	241.66 (2.97)
3	Housing	2100.00	350.00 (4.28)
4	Cooking fuel	3350.00	558.33 (6.85)
5	Clothing	2650.00	441.66 (5.42)
6	Health	2450.00	408.33 (5.00)
7	Education	1100.00	183.33 (2.25)
8	Transport	2560.00	426.66 (5.22)
9	Communication	2440.00	406.66 (4.98)
10	Social functions	3310.00	551.66 (6.75)
11	Others	4060.00	676.66 (8.30)
TOTAL		48970.00	8161.61 (100.00)

(Source: Field Survey)

(Figures in parentheses are percentages)

Fig. 5. 3 : Pattern of Family Expenditure



It is observed from Table 5.13 that the average monthly household expenditure of a PAF is Rs. 8,161.61, implying an annualized expenditure of about Rs. 97,939.32 per household. The category-wise pattern shows that spending is heavily food-dominated: households spend Rs. 3,916.66 on food (47.98%). This is followed by Others Rs. 676.66 (8.30%), cooking fuel Rs. 558.33 (6.85%), and social functions Rs. 551.66 (6.75%). Mid-tier items include clothing Rs. 441.66 (5.42%), transport Rs. 426.66 (5.22%), health Rs. 408.33 (5.00%), communication Rs. 406.66 (4.98%), and housing Rs. 350.00 (4.28%). Relatively smaller shares are agriculture Rs. 241.66 (2.97%) and education Rs. 183.33 (2.25%).

In sum, the expenditure profile indicates that nearly half of the monthly outlay is on food, with energy (cooking fuel), social obligations, and essential services (health, transport, communication) together accounting for a substantial part of the remaining budget, while agriculture and education form comparatively smaller shares.

5.9.2 Indebtedness

The indebtedness is a pressing issue that permeates rural communities. In case of urgent need of money for medical, agriculture, marriage and other social activities, people usually turn to local banks, self help groups, Mahajans or relatives. It is found that no households in the project affected villages took loans to meet their various needs as shown in Table-5.14.

Table 5.14: Indebtedness of PAFs		
Sl. No.	Particulars	Surveyed data
1	Total PAFs	06
2	No. of PAFs availed loan	0
3	Total amount of loan availed by PAFs	0
Sources of loan		
3	Bank	0
4	Money lender	0
5	SHG	0
6	NGO	0
7	Relatives	0
8	Others	0
Amount and Purpose of Loan		
9	Investment	0
10	Household durables	0
11	Marriage	0
12	Emergency	0
13	Agricultural operations	0
14	Repayment	0
15	Rate of interest(Per month) from unorganized sources	0
16	Others	0

(Source: Field Survey) (Figures in parentheses are percentages)

5.10 Dwelling Condition

Information of the dwelling condition gives an idea about a household's wellbeing. It is observed that 100% of the PAFs have their own houses and residential land. Table 5.15 also indicated that 4 (66.66%) houses of PAFs are pucca (RCC roofs, Asbestos & Tile roofed) with brick walls while 2 (33.33%) Kuchha houses. Nearly all HHs have Patta (ROR) for their homestead land. Details of dwelling conditions of PAFs are given in Table-5.16.

Table - 5.15: Dwelling Condition									
Sl. No.	Village	Total PAFs	Size and type			House type		Possession	
			Owned	Rented	Total Area of constn. (Ac)	Pucca	Kuccha	With Patta	Without patta
1	Koida	06	06	0	0.32	04 (66.67)	02 (33.33)	06	0

(Source: Field Survey)

5.11 Access to Public Utilities

Besides the physical and socio-economic aspects, quality of life of a population also depends on its access to civic amenities like electricity, safe drinking water, sanitation, cooking fuel etc. Availability of these services makes living easier, comfortable and pleasurable. Provisions of these utilities in the project affected households have been indicated in Table 5.16.

Table - 5.16: Access to Utilities

Sl. No.	Village	Total PAFs	Separate shed for animals	Bath room within the house	Toilet	Washing place	Electricity	Drinking water
1	Koida	06	3 (50.00)	1 (16.66)	1 (16.66)	0 (0.00)	6 (100.00)	6 (100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

The above table indicates that electricity and safe drinking water are accessible to all PAFs.

The importance of sanitation is being emphasized by the government in recent years. The impact is not visible as majority that 1 (16.66%) of the PAFs have toilets and same numbers of PAFs have bathroom within or adjacent to their residences.

3 PAFs (50.00%) of PAFs have constructed separate sheds for animals and no PAFs have the washing platforms and the families use public space including platform of tube wells for washing purpose.

5.12 Health Status

As discussed above, expenditure of the PAFs on healthcare is not substantial mostly because they do not suffer from serious health problem. From the survey, it has been found that all affected households have health problems and all the sick were treated in government hospitals / PHC / CHC. The details of health status and treatment in the area are indicated in Table 5.17.



Table 5.17: Health Status of PAFs		
Sl. No.	Particulars	Total
1	Total PAFs	06
2	Families suffering from diseases	06 (100.00)
Type of Treatment		
3	Medical	06 (100.00)
4	Homeopathic/Ayurved	0 (0.00)
5	Private clinic	0
6	Quacks	0
7	No treatment	0
8	Expenditure on health per month.(Rs.)	2450.00
9	Average Monthly exp. on health (Rs)	408.33
10	Last year birth	1
11	Number vaccinated	1
12	Last year death	0

(Source: Field Survey) (Figures in parentheses are percentages)

5.13 Vulnerable Groups

The Vulnerable Groups include BPL HHs, weaker sections of the society like SC/ST and Women headed households (WHH). Besides, women, children, the aged, differently able and people discriminated against due to stigma are also vulnerable as they are deprived and cannot help themselves. These latter groups live in families. Impact of the project on these groups is simultaneously taken care of along with that of the HH they belong to. So they are at par with others from social point of view as regards land acquisition for the project. Information about the Vulnerable Groups in the project affected area is given in Table – 5.18.

Table-5.18: Vulnerable Groups among PAFs		
Village	Vulnerable Groups	Total
Koida	WHH	0 (0.00)
	SC	0 (0.00)
	ST	6 (100.00)
	BPL	0 (0.00)
	Total	6(100.00)

(Source: Field Survey) (Figures in parentheses are percentages)

As evident from Table 5.18, all the PAFs belong to the Scheduled Caste (SC) category, thereby classifying them as a Vulnerable Group in the project-affected village.

5.14 Land Utilisation Pattern and Livelihoods

5.14.1 Utilisation Pattern of Land in Koida Tehsil.

The land use pattern refers to the spatial arrangement and utilization of land for various purposes such as residential, commercial, industrial, agricultural, and recreational activities. Analyzing this pattern helps assess how different sectors interact within a community, identifying potential conflicts or synergies. Moreover, it sheds light on land tenure systems, property rights, and access to resources, which are vital aspects of social and economic development. By examining the land use pattern, stakeholders can anticipate potential impacts of proposed projects or policies, including changes in livelihoods, cultural landscapes, and ecosystem services. The land utilization pattern of the Koida Tehsil is presented in Table-5.19.

Table- 5.19 : Land Utilisation Pattern in Koida Tehsil (in ha.)			
Sl. No.	Land-use Category	Area (ha)	Share of Total Area
1	Forest cover	496,000	51.10 %
2	Miscellaneous trees & groves	25,000	2.60 %
3	Net sown	284,000	29.20 %
4	Permanent Pastures	26,000	2.70 %
5	Culturable wasteland	16,000	1.60 %
6	Land under non-agricultural use	29,000	3.00 %
7	Current fallow	29,000	3.00 %
8	Barren & uncultivable land	66,000	6.80 %

Source: District Survey Report, Sundargarh 2025

As evident from Table-5.19, the land utilization pattern of Koida Tehsil reflects a predominantly forest-based landscape. Nearly 51.10 percent of the total geographical area (4,96,000 ha) is under forest cover, highlighting the ecological richness of the region. Agricultural land, represented by the net sown area of 2,84,000 ha (29.2 percent), constitutes the second-largest category, indicating that farming still holds a significant place in the local economy.

Other land-use categories occupy comparatively smaller shares. Miscellaneous trees and groves account for 2.6 percent, while permanent pastures and culturable wastelands together represent

about 4.3 percent. Land under non-agricultural uses and current fallows each contribute 3.0 percent, showing a balance between developmental needs and temporary uncultivated land. Finally, barren and uncultivable land covers 6.8 percent, pointing to certain limitations for productive use.

Overall, the data indicates that Koida Tehsil has a balanced mix of forest, agriculture, and other land uses, though the dominance of forests suggests the need for sustainable land management practices to protect ecological resources while supporting livelihoods.

5.15 Livelihoods

Information about livelihoods of the PAPs is important to assess their skill level and prepare alternative rehabilitation plan for them in the post-project implementation period. PAPs earn their livelihoods from both farm and non-farm occupations. The farm based occupations primarily relate to agriculture and allied activities, and the non-farm occupations include salaried occupation, wage labour, enterprises, craft, services, etc.

The project affected households are mostly landowners and their primary source of livelihood is agriculture. Lack of assured irrigation, poor fertility of soil and low input use are the main reasons for low productivity of land. Even if irrigation is available near river banks through LIPs, the farmers are not taking up cultivation due to cattle menace and crop damage by monkeys and elephants. Further, the size of cultivable land is gradually decreasing, which reduces the labour absorptive capacity of agriculture. Therefore, the youth in the locality look forward to non-farm activities to earn their livelihood. Business/trade, wage work and miscellaneous activities are some of the sources of livelihood in the area. Income from non-farm activities acts as insurance against the uncertainty associated with agricultural production. Rapid industrialization in the immediate vicinity of the project affected area has opened up opportunities for non-farm employment of the local people. This has induced the younger generation of the PAFs to move away from agriculture and go for service or wage labour.

5.16 Impact on Local Economic Activities

The proposed project is expected to bring significant changes in the local economic scenario. While it will create new opportunities for employment, trade, and services, it may also cause disruptions to traditional livelihoods and add pressures on existing resources. The positive and negative impacts expected for the proposed project, are given below:

A) POSITIVE IMPACTS

- **Enhanced Employment Opportunities:** The project is likely to generate direct and indirect employment during both construction and operational phases. Local people may find opportunities in construction work, transportation, supply of raw materials, and ancillary services such as food stalls, small shops, and vehicle repair outlets.
- **Boost to Local Trade and Services:** Increased demand for goods and services by workers and project staff will encourage local business activities. Small traders, vendors, and service providers are expected to benefit from higher sales and expanded customer bases.
- **Improved Market Access:** Development of road connectivity and related infrastructure can facilitate easier transportation of agricultural and forest produce to nearby markets, thereby enhancing income for farmers and forest-dependent households.
- **Skill Development:** Local youth engaged in project-related activities may acquire technical and managerial skills, which could help them in securing better livelihood opportunities in the future.

B) NEGATIVE IMPACTS

- **Disruption of Traditional Livelihoods:** Acquisition of land and restriction of access to forest or common property resources may adversely affect households dependent on agriculture, livestock grazing, collection of minor forest produce, and other traditional occupations.
- **Inflationary Pressure on Local Economy:** The influx of workforce and increased demand for goods may push up the prices of essential commodities, making it difficult for poorer households to afford basic necessities.

- **Seasonal Livelihood Insecurity:** While employment opportunities during the construction phase may provide temporary relief, they are not permanent. Once construction is over, many workers may again face livelihood uncertainty.
- **Unequal Distribution of Benefits:** Economic benefits may be skewed towards better-off households, traders, and contractors, while marginalized groups, landless laborers, and women may not gain proportionately.

The project is expected to bring both opportunities and challenges for local economic activities. While short-term benefits in employment, trade, and services are significant, long-term sustainability of livelihoods for vulnerable groups will require careful planning, including skill development programs, livelihood restoration measures, and support for traditional occupations.

5.17 Factors that contribute to local livelihoods

The livelihoods of local communities in Koida Tehsil are shaped by a mix of natural resources, agricultural practices, and supplementary income sources. Agriculture remains the primary occupation, with both paddy and non-paddy crops being cultivated depending on land quality and irrigation availability. Forest resources also play a vital role, as many households depend on collection of fuelwood, minor forest produce, and grazing grounds for livestock.

Wage labour in construction, mining, and transportation provides an additional source of income, particularly for landless and marginal farmers. Small trade, petty shops, and service activities like tailoring, carpentry, and mechanics further supplement household earnings. Seasonal migration to nearby towns and industrial hubs is also a common coping strategy during lean agricultural seasons.

Thus, local livelihoods are supported by a diverse set of factors – agriculture, forest produce, wage labour, small trade, and migration, making the economy semi-subsistence in nature, but also vulnerable to external shocks such as land acquisition, environmental degradation, or market fluctuations.

5.18 Kinship patterns and Social & Cultural organization

5.18.1 Kinship patterns

In Koida Tehsil, kinship networks and cultural traditions form the backbone of community life. Social relations are deeply rooted in family ties, where kin groups often extend support in farming, festivals, and crisis situations. Kinship bonds also shape inheritance, land-sharing

practices, and cooperation in daily livelihood activities. Marriage practices usually follow traditional customs, reinforcing unity within and across villages.

The cultural organization of the area is rich with festivals, rituals, and communal gatherings, which act as occasions for strengthening social solidarity. Tribal and rural communities preserve their unique identities through folk songs, dances, and religious ceremonies, many of which are closely linked to agricultural cycles and forest-based livelihoods. Elders and traditional leaders play an important role in guiding community decisions, ensuring discipline, and maintaining cultural continuity.

Overall, kinship ties and cultural organization not only sustain social life but also act as mechanisms of resilience, helping people to collectively face challenges while preserving their heritage.

5.18.2 Socio-Cultural Organizations

Socio-cultural organizations in village Koida serve as platforms for community engagement, collective action, and the preservation of local traditions. The social and cultural organizations available in the village are indicated in Table 5.20.

Village	Institutions	Total available	
Koida	Social Infrastructure	SHG	4
		Festival Location	0
		Yubak Mandal	0
		Bhajan Mandal	0
		Trading Spots	0
		Sports club	1
		Club/Recreation Centre	0
	Cultural Infrastructure	Play ground	0
		Jatra ground	0
		Samadhi Pitha	0
		Temple	0
		Matha	0
		Masjid	0

(Source: Field Survey)

5.18.3 Shrines and sacred places:

In Koida Tehsil, shrines and sacred places hold deep spiritual and cultural significance for local communities. These include village temples, tribal deities, sacred groves, and ancestral worship sites, which not only serve as centers of religious practice but also act as spaces for communal

bonding. Annual festivals and rituals performed at these sites strengthen social ties, reinforce cultural traditions, and provide a sense of collective identity. Many sacred places are linked to natural features such as forests, hills, and water bodies, reflecting the close relationship between spirituality and the natural environment.

5.18.4 Administrative, Political, Community based and Society organizations

The social and political life of Koida Tehsil is shaped by multiple layers of institutions. At the formal level, the Panchayati Raj system plays a central role in local governance and development planning. Alongside, traditional tribal councils and elders continue to exercise influence in resolving disputes and maintaining social order. Community-based organizations such as self-help groups (SHGs), youth clubs, and cooperative societies actively contribute to economic development, women's empowerment, and social awareness. Political participation at village and regional levels also reflects a growing awareness among people about their rights and entitlements. Together, these institutions provide a framework that combines formal governance with traditional authority and community-based cooperation.

5.18.5 Regional dynamics and historical change processes

Koida Tehsil has witnessed significant regional dynamics and historical transformations over the decades. Traditionally, the economy was largely dependent on agriculture, forest-based livelihoods, and barter exchange. With the expansion of mining and industrial activities in the region, patterns of employment, migration, and land use have undergone major changes. While industrialization has created opportunities for wage labor and infrastructure growth, it has also led to pressures on natural resources and displacement of local communities. Historically, these changes reflect a gradual transition from a subsistence-oriented rural economy to one increasingly influenced by markets, industry, and external interventions, reshaping the socio-economic and cultural fabric of the area.

5.19 Resource Map

The resource map of the project-affected village provides a visual representation of the key natural and community resources available to local residents. It highlights the location of agricultural fields, forest patches, grazing land, water sources such as ponds and streams, as well as social infrastructure including schools, health centres, temples, and roads. Such mapping not only reflects the livelihood base of the community but also indicates the socio-cultural spaces that

are integral to village life. This understanding helps in assessing the potential impacts of land acquisition on both economic activities and social relations within the community. The resource map of the village Koida have been drawn and placed as Annexure-III.

5.20 Non-affected Households

A survey of 10 non-affected households was conducted in Koida village to provide a comparative understanding of their demographic and socio-economic conditions. The findings help to contrast their stability with the vulnerabilities of project-affected families.

5.21 Socio-Economic Profile of Non-affected Households

The socio-economic profile of non-affected households in Koida village was studied to provide a comparative understanding of the living standards, livelihood practices, and vulnerabilities between affected and non-affected families. The analysis reveals that these households have relatively stable demographic structures, better socio-economic conditions, and limited vulnerability in terms of poverty or women/PC-headed families.

5.21.1 Demography of Non-Affected Households

The survey of non-affected households in Koida village indicates that a total of 10 households were covered, comprising 37 persons.(Table-21) Out of this population, 18 were males and 19 were females, suggesting a fairly balanced gender ratio. The average family size was found to be 3.7 members per household, which is comparatively small in size when seen against the general rural household average.

In terms of marital status, the majority of the population comprised 22 married persons, while 15 were unmarried, reflecting a predominantly adult household composition. The data also shows that none of the surveyed households were women-headed, physically challenged (PC) headed, or belonging to the Below Poverty Line (BPL) category, which indicates a relatively stable socio-economic status among these families compared to the affected ones.

Overall, the demographic profile of the non-affected households presents a picture of small, nuclear families with a balanced gender composition and relatively better socio-economic positioning, without the vulnerabilities commonly observed in project-affected families.

Village	Non Affected HH	Non Affected Population			Average Family size	Marital Status		Women Headed HH	PC headed HH	BPL HH
		Total	Male	Female		Married	Un-married			
Koida	10	35	20	15	3.5	20	15	0	0	2

(Source: Field Survey)

5.21.2 Occupation & Livelihood of Non-Affected families

The occupational structure of the non-affected persons in Koida village indicates a concentration in a few select livelihood activities (Table-22). As per the data, out of the total 11 non-affected persons, the majority are engaged either as daily wage earners or in salaried employment, each accounting for 45.45% of the total population. This shows that wage labor and formal employment constitute the backbone of the occupational pattern among the non-affected group.

A smaller section, comprising 9.10%, is engaged in business or trade, which highlights a limited presence of entrepreneurial activity in the village. Notably, there are no households reported under cultivation, allied activities, agricultural labor, craft artisanship, or other categories of employment.

Overall, the data portrays a livelihood pattern among the non-affected persons of Koida that is primarily dependent on daily wage earning and salaried jobs, with negligible representation in traditional agriculture or allied activities. This occupational structure points towards a gradual shift away from primary sector activities toward wage-based and service-oriented livelihoods.

Village	SI No.	MainOccupation	Total
Koida	1	Cultivation	0
	2	Allied activity	0
	3	Agril. Labourer	0
	4	Daily Wage Earner	5 (45.45)
	5	Salaried	5 (45.45)
	6	Business/Trade	1 (9.10)
	7	Craft Artisan	0
	8	Others	0
Total			11 (100.00)

(Source: Field Survey)

(Figures in parentheses are percentages)

5.21.3 Income and Expenditure of Non-Affected families.

The income and expenditure pattern of non-affected households in Koida village presents a clear picture of their economic standing (Table-5.23 & Table-24). The ten surveyed households together earn a total monthly income of Rs.1,11,000, which translates to an average of Rs.11,100 per family per month, or Rs.1,33,200 annually. On the expenditure side, the average monthly family spending amounts to Rs.8,131, with the bulk of expenses directed towards food (Rs.3,850), followed by health (Rs.595), cooking fuel (Rs.570), and social functions (Rs.540). Other recurring heads include education, clothing, housing, transport, and communication, while no expenditure is reported on agriculture. The comparison between income and expenditure suggests that, on average, households are able to maintain a modest surplus after meeting their monthly needs, indicating relative economic stability among the non-affected families.

Table- 5.23 - Family Income of Non-affected Households (in Rs.)					
Sl. No.	Village	Total HHs	Total monthly income of the N-PAFs (10 nos.)	Average monthly family income (in Rs)	Average annual family income (in Rs)
1	Koida	10	1,11,000	11100	133200

(Source: Field Survey)

Table-5.24: Average Monthly Expenditure of Non-affected Households (in Rs)				
Village	Sl. No.	Particulars	Monthly family expenditure (10 families surveyed)	Average Monthly Expenditure (10 families)
Koida (Total NA Families Surveyed- 10)	1	Food	38500	3850
	2	Agriculture	0	0
	3	Housing	2800	280
	4	Cooking fuel	5700	570
	5	Clothing	4400	440
	6	Health	5950	595
	7	Education	4050	405
	8	Transport	3900	390
	9	Communication	4000	400
	10	Social functions	5400	540
	11	Others	6610	661
Total			81310	8131

(Source: Field Survey)

5.21.4 Caste & Gender Distribution of N-PAF

Of 10 non-affected households, 2 (20.00%) and 8 (80.00%) belong to OBC & General category respectively, whereas no SC & ST category household found in project affected area under survey.

The details of caste distribution among non-affected category are given in Table 5.30. Of 10 non-affected HHs with 35 persons surveyed, 20 are males and 15 are females with a sex ratio of 750 females per 1,000 males. Nearly 57.14% of the population were found to be married and 42.85% were unmarried. All of (100.00%) non-affected HHs surveyed, are Hindu religion. The details are given in Table 5.25 - 5.28.

Table-5.25: Caste-wise Distribution of Non-affected Households.

Caste	Koida (No.of PAFs)
SC	0
ST	10 (100.00)
OBC	0(0.00)
GEN	0 (0.00)
Total	10 (100.00)

(Source: Field Survey)

(Figures in parentheses are percentages)

Table-5.26: Size and Sex-Ratio of Non-affected Households

Village	Items	Surveyed data
Koida	Total HH Surveyed	10
	Total Persons of Surveyed HHs	37
	Male	18
	Female	19
	Sex Ratio	1055
	Average family size	3.7

(Source: Field Survey)

Table-5.27: Age-wise Gender Distribution with Marital Status of Non-affected People Surveyed			
Particulars		Sex	Total
Distribution in age group	0-6 yrs	Male	1 (2.70)
		Female	0 (0.00)
	7-18 yrs	Male	6 (16.22)
		Female	6 (16.22)
	19-60 yrs	Male	11 (29.73)
		Female	13 (35.13)
	Above 60 yrs	Male	0 (0.00)
		Female	0 (0.00)
Marital Status		Married	22 (59.46)
		Un-married	15 (40.54)
Non-affected people surveyed (Nos.)			37

(Source: Field Survey) (Figures in parentheses are percentages)

Table-5.28: Religion of Non-affected Households		
Sl. No.	Religion	Total families (Nos.)
1	Hindu	10 (100.00)
2	Muslim	0
3	Christian	0
4	Others	0
	Total	10 (100.00)

(Source: Field Survey)

5.21.5 Heads of Non-affected Households

Table-5.34 presents the age distribution of the heads of non-affected households in Koida village. Out of a total of 10 households, the majority of heads 7 (70.00%) fall within the **below 45 years** age group, while 3 (30.00%) are in the **45–60 years** age group. Interestingly, no household head

was found above 60 years of age. This indicates that the heads of non-affected households are relatively younger, reflecting a more active and economically productive age profile.

Table-5.29: Heads of Non- affected Households										
Sl. No.	Village	Age Group (Yrs)								
		< 45			45-60			> 60		
		WH	MH	Total	WH	MH	Total	WH	MH	Total
1	Koida	0	7	7 (70.00)	0	3	3 (30.00)	0	0	0 (0.00)

(Source: Field Survey)

5.21.6 Education of Non-Affected families

Table-5.35 highlights the educational profile of the non-affected persons in Koida village. Out of a total of 37 individuals surveyed, 27.03% males and 24.31% females have attained secondary education, while 18.92% each of males and females studied up to the primary level. A small proportion of females (5.41%) reached the +2/Intermediate level, whereas 5.41% of males remain illiterate. No respondent was found with higher, technical, or professional education. Overall, the data suggests that most non-affected persons have only achieved basic to secondary-level education, with limited access to higher studies.

Table-5.30: Educational Level of Non-affected Persons				
Village	Sl. No.	Level of Education	Male	Female
Koida	1	Illiterate	2(5.41)	0 (0.00)
	2	Up to primary	7(18.92)	7(18.92)
	3	Secondary	10(27.03)	9(24.31)
	4	+ 2/Intermediate	0	2(5.41)
	5	Graduation & above	0	0
	6	Technical-Degree/Diploma	0	0
	7	ITI / Prof. Degree	0	0
Total			19 (51.36)	18 (48.64)

(Source: Field Survey) (Figures in parentheses are percentages)

5.21.7 Health Status of Non-Affected households.

Table-5.39 depicts the health status of the non-affected households surveyed in Koida village. A total of 10 households were covered, and all reported that at least one family member had suffered from some form of illness. The preferred mode of treatment was exclusively medical facilities, with no reliance on homeopathy, Ayurveda, private clinics, or quacks. The households together

spend around Rs. 5950 per month on healthcare, which comes to an average monthly expenditure of Rs. 595 per family. Notably, there were no cases of birth, vaccination, or death reported in the last year.

Table-5.31 : Health Status of Non-affected HHs Surveyed			
Village	Sl. No.	Particulars	Total (Nos.)
Koida	1	Total Non-affected HHs surveyed	10
	2	Families suffering from diseases	10
	Type of Treatment		
	3	Medical	10
	4	Homeopathic/Ayurved	0
	5	Private clinic	0
	6	Quacks	0
	7	Monthly Expenditure on health (Rs.)	5950
	8	Average Monthly exp. on health (Rs)	595
	9	Last year birth	0
	10	Number vaccinated	0
11	Last year death	0	

(Source: Field Survey)

Chapter -6

Social Impact Assessment

6.1 Introduction

6.1.1 Framework and Approach to Identifying impacts

Social impact of a project explores how availability of resources, services, living condition, quality of life and environment in the project area are affected by execution of the project. These effects have been captured after conducting survey among both affected and non-affected households and through stakeholder consultations. The following steps were followed:

- (i) Conduct of census survey among the project affected and additional 5% non-affected households.
- (ii) Discussion with local communities.
- (iii) Consultation with local PRI representatives and local elites.
- (iv) Interaction with government officials, and opinion leaders.

Acquisition of land by a project usually causes loss of land and displacement of habitations warranting rehabilitation of people. But in the present case, the project does not cause dislocation of habitations leading to rehabilitation of people, for which loss of land and natural assets like trees remains the major concern of the PFAs. The nature and extent of impact of the project can broadly be categorized under:

- (a) Impact on the livelihood of households whose land will be acquired for the project.
- (b) Impact on the socio-economic conditions of the communities in general in the project affected area.
- (c) Impact on social security of the people living in the area affected by the project.

6.1.2 Classification of the Social Impact

The proposed land acquisition for construction of the Koida Bypass Road in Sundargarh district, Odisha, is likely to have multi-dimensional impacts at different stages of the project cycle. The impacts may be categorized as follows: (Table 6.1).

Table-6.1: Classification of Impact of the Project

Impacts	Narration
1. Impact During Pre-Construction Phase:	During the pre-construction stage, the major impacts will be associated with land acquisition and displacement. Loss of agricultural land and small landholdings is likely to reduce livelihood options for the affected families. Uncertainty and anxiety regarding compensation, resettlement, and livelihood restoration may also create stress among the Project Affected Families (PAFs). In addition, social relations and community dynamics could be affected due to changes in land ownership patterns. Proper information dissemination, consultation, and timely compensation are crucial to minimize these impacts.
2. Impact During Construction Phase:	In the construction stage, the impacts will largely arise from physical project activities. These may include temporary disturbances due to dust, noise, and movement of heavy machinery. Local traffic congestion, safety risks, and restricted access to certain areas may also affect the community. Employment opportunities may arise for local labourers and small contractors during this phase, creating short-term economic benefits. However, pressure on local resources and the potential influx of migrant labour may pose social challenges. Proper safety measures, environmental safeguards, and priority to local employment can reduce adverse impacts and enhance positive ones.
3. Impact During Post-Construction Phase:	In the post-construction phase, the impacts will primarily be long-term and developmental. Improved connectivity will facilitate easier transportation of goods and services, better access to markets, schools, and healthcare facilities, and overall economic development of the region. Property values in surrounding areas are likely to increase, enhancing local economic opportunities. However, the permanent loss of agricultural land may continue to affect livelihoods for some families, especially marginal landholders. Increased vehicular movement may also raise safety concerns and environmental impacts such as air pollution. Long-term monitoring, road safety measures, and livelihood support programs will therefore be essential.

6.2 Description of Impacts at Various Stages of the Project Cycle

Impacts were analyzed across the project lifecycle. In the pre-construction phase, land acquisition led to changes in agricultural patterns and potential disruptions to household livelihoods. Cultural and social practices were also temporarily affected due to relocation or restricted access to community spaces. During the construction phase, temporary disturbances were observed, including impacts on health, safety, and local utilities, while employment opportunities were created for local labor. In the operational phase, long-term changes in land use, livelihoods, and income were anticipated, along with alterations in social cohesion and community structures. For each impact, the distinction between direct effects (e.g., loss of land) and indirect effects (e.g., reduction in agricultural income due to altered irrigation patterns) was maintained.

6.3 Impact on Community Health

Construction and establishment activities associated with the Koida Bypass Project will generate dust, emissions, and noise. These are likely to cause temporary air and noise pollution, which may inconvenience households living close to the project alignment. In particular, air pollution can potentially lead to respiratory problems and other health issues among local residents.

Proposed Mitigation Measures

- Create alternative access routes for vehicles transporting construction materials to reduce traffic through residential areas.
- Regulate and monitor the speed of construction vehicles with proper road signage and markings.
- Undertake regular water sprinkling on construction sites and material stockpiles to suppress dust emissions.

6.4 Impact on Livelihood & Culture

The Project Affected Families (PAFs) in Koida derive their livelihoods from diverse sources, primarily wage labour and service. Land acquisition for the bypass project will reduce average landholding size, thereby affecting agricultural output and, indirectly, wage employment in agriculture. However, agriculture is not the primary livelihood for most households; many youth are already shifting towards industrial and service sectors.

At the same time, the project is expected to stimulate new business opportunities by improving connectivity. Local people may gain direct employment during construction and indirect livelihood opportunities through shops, eateries, transport services, and other small businesses that can emerge along the bypass corridor. Over time, these may evolve into sustainable economic activities.

Proposed Mitigation Measures

- Provide preferential employment to local people in project-related activities.
- Establish training programmes to upgrade the skills of local youth, enabling them to access industrial and non-farm employment.
- Facilitate the transition of workers from traditional farm-based activities to non-farm sectors.
- Support local entrepreneurs with vocational skills to establish ancillary industries and small businesses, ensuring multiplier benefits for the local economy.

6.5 Impact on Project Affected Land Owners

Most of the 0.1000 acres of private land to be acquired is agricultural or barren land. Compensation will be paid in line with the provisions of the RFCTLARR Act, 2013, with amounts higher than the prevailing market value. This compensation package provides an opportunity for landowners to reinvest in land, housing, education, healthcare, or business.

However, the long-term impact on livelihoods will depend on how effectively the compensation is utilized. If used constructively (for land purchase, skill training, or small business investment), the standard of living may improve. Misuse of compensation, however, could lead to economic vulnerability.

Proposed Mitigation Measures

- Provide cash compensation at or above replacement cost, with 100% solatium as per RFCTLARR provisions.
- Acquire entire unviable land patches to avoid leaving fragmented, unusable holdings.
- Introduce livelihood restoration programmes tailored to the specific needs of affected households.

- Prioritize skilled and qualified PAF members in employment opportunities created by the project.

6.6 Loss of Land of SC/ST Families

While the direct impact on livelihood is minimal, the symbolic and social significance of land as an asset may be affected.

Proposed Mitigation Measures

- Provide land-for-land compensation or alternative productive assets of permanent value, as per the family's preference.
- Ensure preferential access for SC/ST households in employment and benefit-sharing opportunities.
- Identify these households as target groups for Corporate Social Responsibility (CSR) interventions, with emphasis on training, infrastructure support, and social development schemes.

6.7 Impact on Sharecroppers and Agricultural Labourers

Although sharecropping is common in the area, specific data on sharecroppers was not available, as landowners were reluctant to share such information. Sharecroppers, being temporary and unregistered, remain a vulnerable group. Agricultural labourers, who mostly belong to landless or marginal households, are also at risk due to limited and uncertain income sources.

While land acquisition may not directly displace them, reduced agricultural activity may affect their employment. However, new opportunities may arise through construction-related work and ancillary businesses.

Proposed Mitigation Measures

- Provide project-related jobs to sharecroppers and agricultural labourers wherever feasible.
- Conduct skill development and vocational training programmes to diversify their livelihood base.
- Facilitate access to credit and entrepreneurship support for small-scale enterprises.
- Ensure targeted inclusion of these groups in livelihood restoration schemes.

6.8 Impact on Vulnerable Groups

Vulnerable groups such as BPL households, SCs, STs, and women-headed families are more prone to economic hardship from land acquisition, given their limited asset base and lack of access to formal credit. Without adequate support, they may fall deeper into poverty.

Proposed Mitigation Measures

- Identify all vulnerable families and prioritise them for benefits under CSR and social welfare schemes.
- Provide preferential employment opportunities to individuals from these groups.
- Train eligible members for skill development to access higher-income jobs.
- Ensure advance compensation to prevent livelihood disruptions.
- Guarantee social security and livelihood support, particularly for women and tribals, enabling them to lead dignified lives.

6.9 Tribal Issues

The tribal population in Koida relies heavily on social cohesion and community-based livelihood systems. Land acquisition may disturb this fabric. Welfare schemes of both state and central governments need to be integrated with the project's rehabilitation and resettlement framework, ensuring that tribals are left better off after implementation.

Proposed Mitigation Measures

- Design compensation packages that combine monetary benefits with access to government welfare schemes.
- Provide targeted infrastructure, livelihood, and training programmes tailored to tribal communities.
- Safeguard tribal cultural and social practices through community-level consultations and participatory planning.

6.10 Gender Issues

The project has the potential to positively impact women by improving mobility, reducing travel time, and enhancing market access. This may increase women's income-generating opportunities, enabling greater participation in household decision-making and strengthening their social status.

Proposed Mitigation Measures

- Target women-headed households for CSR and credit-based interventions.
- Offer preferential employment to women in project-related activities.
- Provide skill training for women to enhance employability and entrepreneurship.
- Ensure timely compensation to avoid livelihood disruption.
- Promote women's social security and participation in community-level decision-making.

6.11 Impact on Transportation and Traffic System

During construction, movement of heavy vehicles carrying materials and equipment will increase significantly. This may lead to congestion, safety risks, and inconvenience for local commuters.

Proposed Mitigation Measures

- Schedule vehicle movement during non-peak hours.
- Deploy traffic marshals and signage to regulate movement.
- Ensure strict compliance with road safety standards for construction vehicles.

6.12 Impact on Livestock

Focus group discussions revealed concerns about reduced grazing land due to project activities. This may affect livestock-dependent households.

Proposed Mitigation Measures

- Identify and develop alternative grazing spaces.
- Provide veterinary support and fodder supply schemes for affected households.
- Facilitate livelihood diversification for households highly dependent on livestock.

6.13 Social Impact Management Plan

It cannot be gain said that acquisition of land for construction of the proposed project “**Construction of Koida Bypass Road**” of the district has adverse impacts. Implementation of the proposed project may interfere with the livelihoods and socio-cultural life of people and cause environmental problems in the project area. Keeping in view the mandates of the Government of India and Government of Odisha, a strategy called Social Impact Management Plan (SIMP) has been prepared for mitigation of these unfavourable impacts. The plan has spelt out roles of the people, government and land acquiring organization for sustainable development in the area. Attempt has been made to make the plan flexible such that it can adapt itself to the changing

environment for being relevant throughout the project life. The objectives of the plan are to minimize the adverse social impacts and enhance the beneficial impacts of the project. The SIMP has been based on the SIA study and consultations with the stakeholders.

The proposed project in Koida Tehsil of Sundargarh district requires 0.1000 acres of private land to be acquired on payment of compensation. Compensation to the land owners is governed by namely, (i) Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCTLARR Act, 2013) and (ii) Odisha Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Rules, 2016. The amount of compensation is determined and awards are made to the land losers as per the provisions in the rules.

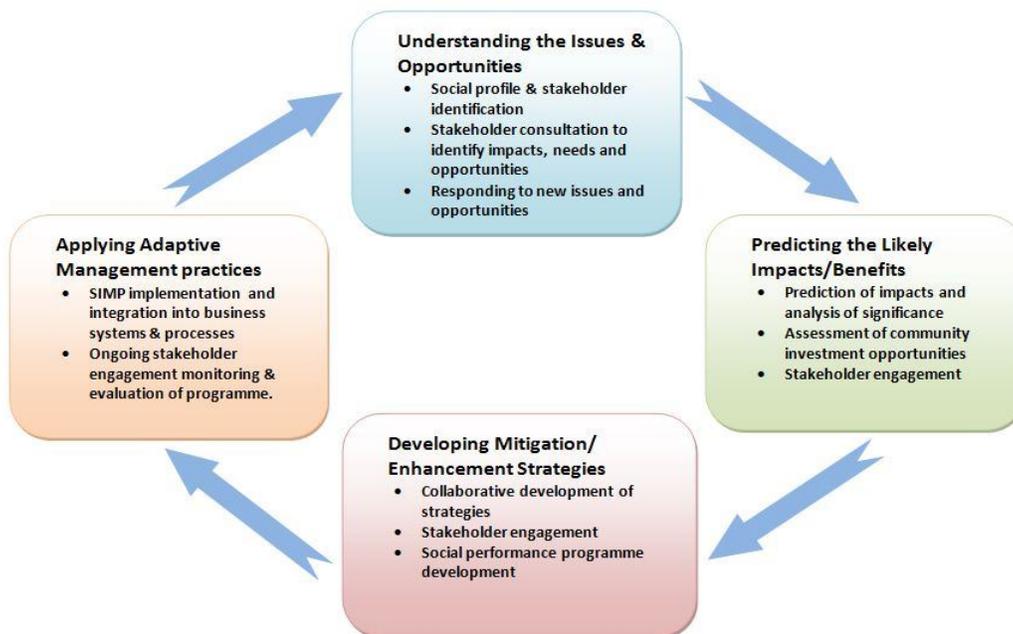


Fig.6.1: Social Impact Management Plan

This SIMP comprises a set of mitigation, monitoring and institutional measures to be taken during the design, construction and operational phases of the project to eliminate/minimize adverse social impacts or to reduce them to acceptable levels. There are provisions in the plan for implementation at various stages of the project. A description of these management measures to be followed at different stages of the project is suggested in the alongside diagram.

It may be observed from the above diagram that social impact management process puts emphasis on stakeholder participation at all stages including development of strategies. Focus of the stakeholder engagement has gone beyond that of the traditional approach which identifies only the negative impacts associated with project activity. Views on issues relating to the future sustainability of impacted communities as well as suggestions were sought for leveraging the positive benefits of the project. Besides, baseline assessment and findings through consultation have been reflected in this SIMP. This will help promote transparency, openness and willingness to work collaboratively.

It appears from the analysis and overview of the relevant Acts that compensation for land acquisition is to be sufficient to take care of losses of PAFs as well as PAPs and social issues. For transparency, the broad provisions of the Act are indicated below;

- Continued consultations with representatives of Panchayats/Municipality will be the main feature of the R&R planning and implementation of the project
- The Administrator and Commissioner for Resettlement and Rehabilitation will be appointed by the appropriate government.
- The Administrator of the project will ensure preparation of R&R plan and public disclosure as per the provisions of the Act.
- The SIA report shall be disclosed as per Section 7(5) of the Act.
- The R&R benefits will be as per provision of the Second Schedule of the Act, which are elaborated hereunder (Table-6.2 & 6.3)

Table-6.2: Analysis of Social Impact of Land Acquisition

Sl. No	Type of Impact	Mitigation measures
1	Loss of agricultural land	Compensation as per provision of LARR Act 2013 & Rules
2	Loss of homestead land	Compensation as per provision of LARR Act 2013

Table-6.3: Analysis of Social Impact on Livelihoods and Infrastructures

Sl. No	Type of Impact	Mitigation Measures
1	PAFs will lose their agricultural land, homestead land and livelihoods	Compensation as per the provision of LARR Act, 2013. Rehabilitation assistance as per schedule II, Alternative job opportunities may be provided to the eligible family members by the authorities of the district
2	Possibility of environmental pollution due to dust and other material during construction of the project	Surrounding the project site with very tall tin or asbestos.
3	Loss of Trees of PAFs	Supply of purified water to the project site and temporary housing of the employed workers

6.14 Findings of Focus Group Discussions

As a part of the study, Focus Group Discussions (FGDs) were conducted in the village affected by the project to get an insight into the opinions of people. The details of FGDs are given in Table-6.4.

Table-6.4: Details of FGDs held

Sl No	Name of the Village	Date of FGD	Number of participants		
			Men	Women	Total
1	Koida	10.08.2025	12	9	21

(Source: Field Survey)

In the project affected village, FGD was organised with a group of 21 persons (male-12 and female-9) and leading questions (prepared earlier keeping the objectives of the SIA in view) were asked to get the response of the participants. While selecting care was taken to select representatives of various socio-economic groups of a village. Wherever feasible, the village maps were used to study the field situation. The expert team facilitated discussion, maintained a neutral attitude and appearance and summarised the session reflecting the participant's opinions evenly and fairly. A detailed report was prepared after the session was over. Findings of the FGDs are presented in the subsequent paragraphs. Sample photographs of FGDs are given in **Annexure-3**.

6. 14.1 Perception and General Feeling of PAFs on the Project

The perceptions of both project-affected and non-affected people reflect a broad spectrum of expectations, concerns, and aspirations regarding the proposed project. While the affected families express apprehensions about loss of livelihood, displacement, and the adequacy of compensation, they also acknowledge potential benefits in terms of improved infrastructure and access to services. On the other hand, the non-affected people largely perceive the project as an opportunity for regional development, enhanced connectivity, and expansion of business and employment opportunities. Together, these perceptions provide valuable insights into the social dynamics surrounding the project and underline the importance of addressing both concerns and opportunities in a balanced manner.

During surveys and FGDs the perception of the PAFs on implementation of the project were captured (Table-6.5)

Table-6.5: Perception of the Project Affected and Non-Affected People.

Sl. No	Issues / Aspects	Perceptions of Project Affected Families (PAFs)	Perceptions of Non-Affected People (NAPs)
1	Loss of Livelihood	Fear of losing traditional livelihood sources such as farming, grazing, and small businesses.	Believe new opportunities will emerge, reducing livelihood risks overall.
2	Overall Benefits of Local People	Expect some indirect benefits (roads, services), but worry about unequal distribution of compensation. But supportive, if proper R&R measures are ensured.	Optimistic about improved connectivity, trade, and access to services.
3	Impact on Kinship Structure	Fear of community ties breaking due to relocation and migration.	Do not anticipate major effects on kinship, expect families to stay connected.
4	Increase in Social Unrest and Crime	Worry that displacement and unemployment may trigger unrest.	Concerned about in-migration of outsiders increasing crime.
5	Impact on Family Disturbances	Fear of conflicts over compensation money and disrupted routines.	Anticipate family tensions rising among affected households.

Sl. No	Issues / Aspects	Perceptions of Project Affected Families (PAFs)	Perceptions of Non-Affected People (NAPs)
6	Anticipate misuse of compensation funds	Anticipated that compensation funds may be misuse towards alcohol/drugs.	Share similar concern about increased social evils in affected areas.
7	Health Status and Risks.	Fear of reduced access to natural resources affecting nutrition and health. Concern about dust, pollution, and accidents due to project activities.	Expect improved healthcare access with better connectivity. Acknowledge risks but believe benefits outweigh them.
8	Anticipated Downward Trend in the Local Economy	Fear temporary decline due to land loss and livelihood disruption.	Believe that project will offset short-term decline with long-term growth.
9	Impact on Social Stress	Fear of rising disputes within and between families.	Believe stress is temporary and will reduce post-project
10	Anticipated Increase in Health Related Expenditure	Expect higher medical expenses due to pollution, accidents, and stress.	Anticipate slight increase but balanced by better facilities.
11	Increase in Business Opportunities	After the completion of the Bypass Road, better business opportunities will become available to the local people	Hope for wider opportunities in trade and services.
12	Anticipated Downward Trend in the Local Economy	Fear temporary decline due to land loss and livelihood disruption	Believe project will offset short-term decline with long-term growth.

(Source: Field Survey)

6.14.2 Support of Local People for the Project

Almost all the participants in FGDs were in support of the project, they were willing to part with their land for due compensation and work in the project on wage basis, and provide water and accommodation facilities to the project employees during construction phase.

6.14.3 Problems, Benefits and Concerns

Participants in the FGD conducted in the affected village didn't anticipate any problem after project implementation. It was apprehended that livelihoods will be affected after land

acquisition. The other problems to be encountered are noise and environmental pollution. Public resentment may surface if employment is not given to local people. On the other hand, the project may be beneficial for the people in the region. Increase in more employment opportunities, better marketing facilities, improved healthcare and education are some examples of benefits to be reaped by people in the project area. On the whole, socio-economic development is likely to occur after the project is completed.

6.14.4 Critical Issues

Environmental problems like air, water and noise pollution associated with construction and implementation of the project is very critical from both short-term and long-term perspective. Social disturbances due to increased addiction to intoxicants may aggravate the situation.

6.15 General Socio-Economic Situation

As the project affected village is in urban area, the major sources of livelihood of people are wage earning, small business, Govt. and private services. Economical condition is good in this area.

Cropping Pattern

The table 6.5 presents the cropping pattern in Koida Tehsil, which is a project-affected area. Koida has a total geographical area of 84,940 hectares, out of which 8,162 hectares are under cultivation. The cultivated land is divided between paddy and non-paddy crops. During the Kharif season, farmers primarily grow paddy, alishi, and vegetables, while in the Rabi/Summer season, the main crops include kulthi, maize, and vegetables. This indicates a mixed cropping system, reflecting the region's adaptation to seasonal variations and soil suitability.

Table-6.6: Land utilisation and cropping pattern in the Project Affected Tehsil

Block/Tehsil	Geographical Area in Ha.	Cultivated Area in Ha	Paddy Area in Ha	Non Paddy Area in Ha.	Cropping pattern adopted	
					Kharif	Rabi/Summer
Koida	84940	8162	-		Paddy, Alishi, Vegetables	Kulthi, Maize, Vegetables

(Source: District Statistical Handbook, Sundargarh)

Yield and Economics

Koida Tehsil, with its predominantly agrarian economy, shows a mixed cropping pattern adapted to local soil and climatic conditions. The major crops grown include paddy, kulthi, maize, and vegetables, cultivated in both Kharif and Rabi seasons. Crop yields vary according to seasonal conditions, irrigation availability, and input usage, but generally reflect traditional farming practices.

Economically, agriculture remains the primary source of livelihood for households in Koida. The cultivation of paddy and vegetables during Kharif, followed by pulses and maize in Rabi, provides both food security and supplemental income. Farmers rely on local markets to sell surplus produce, while the profitability of crops depends on yield, market prices, and cost of inputs such as seeds, fertilizers, and labor. Overall, the economic return from agriculture supports the sustenance of rural households, though it is subject to seasonal variability and market fluctuations.

6.16 Indicative Impact Areas

The key areas of impact identified include:

- **Land:** Acquisition and conversion of agricultural land leading to changes in land use and potential loss of income.
- **Livelihoods and Income:** Disruption to agriculture and local businesses, with possible mitigation through alternative income sources.
- **Physical Resources:** Effects on water resources, grazing land, and other natural assets.
- **Private Assets:** Loss or damage to houses, structures, and other personal property.
- **Public Services and Utilities:** Temporary or permanent impacts on schools, health facilities, roads, and water supply.
- **Health:** Potential risks during construction, sanitation challenges, and access to healthcare services.
- **Culture and Social Cohesion:** Disruption to cultural sites, local traditions, and community networks.

- **Gender-Based Impacts:** Differential effects on women and vulnerable groups, including workload changes, livelihood disruptions, and safety concerns.

Overall, the project's impacts in Koida Tehsil are varied but manageable, and identification at this stage provides a basis for developing targeted mitigation measures and rehabilitation plans to minimize adverse consequences and support sustainable development.

6.17 Proposed SIMP Outlay

An outlay plan has been prepared on the basis of SIMP outlined above. It is a tentative plan as compensation against land loss is to be decided by the Authorities concerned as per Act and Rules. The same is indicated in Table 6.6.

Table-6.7: SIMP Outlays					
Sl. No	Description	Unit	Quantity	Rate (Rs in lakh)	Amount (Rs. in lakh)
1.	Monetary Compensation for loss of land to affected households.	Acre	0.10 Ac	30,00,000.00	3.00
2.	Training for skill development for livelihood restoration.	Person	100 Persons	3000.00	3.00
3.	Compensatory afforestation	Acre	3.00 Ac	1,00,000	3.00
4.	Water & Sanitation	Village	1 Village	L.S.	1.00
5.	Other development works in villages	Village	1 Village	L.S.	2.00
Total					12.00

Chapter -7

Cost-Benefit Analysis and Recommendations on Acquisition of Land

7.1 Introduction

One of the objectives of SIA is to study the social impact of the project and environmental impact. The social costs and benefits of an infrastructural project are different from its private costs and benefits because of externalities. It also aims to estimate cost of addressing them in accordance with the R&R policy of the government. It results in overall assessment of additional requirements for Rehabilitation and resettlement if any. This section provides an overview of budget required vis-à-vis the benefits of the project. It also discusses about assessment of public purpose, social impacts and social costs of this project.

This chapter presents the analysis of costs and benefits arising from the proposed acquisition of 0.1000 acre of barren land for the construction of the Koida Bypass Road. It evaluates the extent of social impacts, examines the public purpose of the project, and explores whether the land requirement has been minimized to avoid displacement. Further, it reviews the viability of mitigation measures outlined in the Social Impact Management Plan (SIMP) and provides recommendations on whether the acquisition is justified in light of the anticipated social and economic benefits.

“Construction of Koida Bypass Road (from change 0.00 Km to 8.00 Km) in Koida Tehasil of Sundargarh district” presents a significant development opportunity for the region. However, like all large-scale infrastructure projects, it entails both costs and benefits that must be carefully considered. This chapter outlines the social costs and benefits associated with the project, focusing on how it will impact local communities, their livelihoods, and overall regional development.

7.2 Social Costs of the Project

Although the proposed acquisition of 0.1000 acre of non-irrigated agricultural land for the construction of the Koida Bypass Road is minimal in extent, every developmental intervention carries some degree of social cost. These costs are not only limited to direct land acquisition but also include indirect impacts on the community, local economy, and social fabric. The following sub-titled points capture the range of possible social costs in this project:

7.2.1. Loss of Land and Ownership Rights

The most direct cost is the permanent loss of ownership rights over the acquired land. Although the land is barren and non-agricultural, its ancestral value to the affected family cannot be overlooked. Ownership is shared among six brothers, and therefore, the emotional and symbolic attachment to family land constitutes a social cost that must be acknowledged.

7.2.2 Impact on Livelihood and Income

As the land is not being used for agricultural or livelihood purposes, the project does not involve direct livelihood displacement. However, the affected family may express concerns regarding the lost potential of utilizing the land for future livelihood activities. Thus, even though economic costs are negligible, perceived livelihood insecurity is a possible social concern.

7.2.3 Distribution of Compensation and Family Relations

Since the land is jointly owned, compensation will be shared among six brothers. This may lead to disputes, disagreements, or dissatisfaction regarding equitable distribution of the compensation money. Such issues can affect kinship relations and intra-family harmony, creating a subtle but important social cost.

7.2.4. Psychological and Emotional Stress

Even where the physical impacts are minimal, the process of land acquisition often generates psychological stress among affected households. Concerns regarding adequacy of compensation, delays in payment, or perceived undervaluation of land can cause anxiety and mistrust. This emotional burden is part of the broader social cost of land acquisition.

7.2.5. Impact on Community Perception

The project may generate differing perceptions among affected and non-affected people. While the larger community may view the bypass road as a development opportunity, the directly affected household may perceive it as an imposed loss. Such divergence in perception can sometimes result in social tension or a sense of unfairness.

7.2.6 Increased Vulnerability to Social Risks

Cash compensation, if not managed properly, may expose the affected family to social risks such as misuse of money, increased expenditure on alcohol or non-productive items, or vulnerability to exploitation by moneylenders. These risks, though indirect, represent an important social cost in the context of land acquisition.

7.2.7. Transitional Adjustment and Adaptation

Although the land being acquired is barren and does not cause physical displacement, the affected household still faces the challenge of adjusting to the transition from land ownership to cash compensation. This shift represents a social and cultural adjustment that forms part of the intangible social costs.

Conclusion on Social Costs

In this project, the social costs are minimal in scale and largely intangible, since no agricultural land, homestead, or livelihood resources are affected. However, symbolic loss of ancestral land, compensation-sharing disputes, and potential emotional stress remain significant concerns. These costs need to be carefully addressed through transparent compensation processes, grievance redressal mechanisms, and awareness measures to ensure that the acquisition process is both fair and socially acceptable.

7.3 Assessment of Public Purpose

The project has been initiated to enhance connectivity and reduce traffic congestion within Koida and surrounding areas. Improved road infrastructure will benefit local communities by facilitating easier access to markets, healthcare, and education, while also promoting trade and transport efficiency. Given its potential to strengthen the local economy and enhance regional development, the acquisition clearly serves a ****public purpose**** of strategic importance.

7.4 Less-Displacing Alternatives and Minimum Requirement of Land

The total land acquisition requirement is only 0.1000 acre, which demonstrates that the planning and alignment of the bypass have already been optimized to minimize displacement and land loss. No residential structures, agricultural fields, or sensitive community resources are involved. The use of barren land ensures that the minimum land necessary has been identified and that displacement impacts are avoided altogether. Thus, the present plan represents the least displacing alternative.

7.5 Nature and Intensity of Social Impacts

The intensity of social impacts in this project is extremely low due to the following reasons:

- The acquired land is barren and non-productive.
- No physical displacement of households will occur.
- No agricultural or livelihood resources are being lost.
- Ownership is fragmented among six brothers, thus the individual loss is minimal.

Social impacts are therefore limited to the symbolic value of ancestral land and the adjustment to compensation sharing among family members. No large-scale adverse impacts on community networks, kinship systems, or livelihoods are expected.

7.6 Balancing Social Costs and Benefits

While the project does involve some social costs, these can be effectively mitigated through thoughtful planning, adequate compensation, and active community participation. The long-term social benefits—enhanced agricultural productivity, employment generation, improved water security, and flood control—are substantial and have the potential to transform the socio-economic landscape of the region. By addressing the potential social costs through robust mitigation measures, the project can be implemented in a socially responsible manner.

7.7 Final Recommendation

For the construction of the Koida Bypass Road, acquisition of 0.1000 acres of non-agricultural (podia) land has been proposed. The Cost-Benefit Analysis indicates that the developmental and social benefits of the project outweigh the limited social costs associated with the land acquisition. Based on this analysis, the following recommendations are made:

a) Project Feasibility

The project is socially and economically viable. The bypass road will reduce traffic congestion, save travel time, minimize accidents, improve trade and commerce, and decongest the town, **thereby generating multiple direct benefits for the community.**

b) Limited Social Costs

The acquired land is non-agricultural and unproductive, ensuring that no significant displacement of livelihood occurs. Since the land is under joint ownership of six brothers, compensation distribution may pose challenges, but this can be addressed through transparent mechanisms.

c) Compensation and Rehabilitation

- Compensation should be provided based on Fair Market Value.
- Timely disbursement of compensation is essential to reduce emotional and psychological distress among the affected families.
- Affected households must be involved in the consultation process for transparent allocation and grievance avoidance.

d) Grievance Redressal Mechanism

A local Grievance Redressal Committee (GRC) should be established to address complaints, disputes, or dissatisfaction regarding the acquisition process, ensuring quick and fair resolutions.

e) Community Participation

- Affected families should be made aware and informed about the project.
- Regular consultation meetings with the community should be conducted to incorporate their expectations and suggestions into project implementation.

f) Long-Term Social Benefits

After completion of the project:

- Enhanced economic activities will emerge.
- Temporary employment opportunities during construction will benefit locals.
- Improved rural-urban connectivity will stimulate regional growth.
- Savings in time and fuel will contribute to both social and environmental welfare.

7.8 Recommendation on Acquisition

In conclusion, the proposed project “**Construction of Koida Bypass Road (from change 0.00 Km to 8.00 Km) in Koida Tehasil of Sundargarh district**” is recommended for approval, given its significant potential to drive socio-economic development, enhance water security, and contribute to environmental sustainability. The SIA has demonstrated that the project’s benefits will positively impact local communities, and the well-designed mitigation strategies will minimize any adverse effects. Therefore, it is advised that the project is socially acceptable, and the balance of costs and benefits is strongly in favour of acquisition.

Annexure-I

Govt. of Odisha Notification

ଓଡ଼ିଶା ସରକାର

ରାଜସ୍ୱ ଓ ବିପର୍ଯ୍ୟୟ ପରିଚାଳନା ବିଭାଗ

RDM-LAC-SUN-0002-2025- 27080 / R&DM. dated 21 JUL 2025

ସାମାଜିକ ପ୍ରଭାବ ନିର୍ଦ୍ଧାରଣ ନିମନ୍ତେ ଅନୁସୂଚନା

ରାଜ୍ୟ ସରକାର ପ୍ରଭାବିତ ଗ୍ରାମ / ଖାର୍ଡ ସ୍ତରରେ ସମ୍ପୂର୍ଣ୍ଣ ଗ୍ରାମ-ପଞ୍ଚାୟତଙ୍କ ପରାମର୍ଶକ୍ରମେ ନିମ୍ନଲିଖିତ ଭୂମି ଅଧିଗ୍ରହଣ କରିବାକୁ ଚାହୁଁଛନ୍ତି ଏବଂ ସେଥି ନିମନ୍ତେ ସର୍ବସାଧାରଣ ଉଦ୍ଦେଶ୍ୟରେ ପ୍ରଭାବିତ ଅଞ୍ଚଳରେ ସାମାଜିକ ପ୍ରଭାବ ନିର୍ଦ୍ଧାରଣ (Social Impact Assessment) ସର୍ବେକ୍ଷଣ କରିବାକୁ ଚାହୁଁଛନ୍ତି। ଭୂମି ଅର୍ଜନ, ପୁନର୍ବାସ ଓ ଅଇଥାନରେ ଉଚିତ ମୂଲ୍ୟ ଏବଂ ସ୍ୱଚ୍ଛତା ଅଧିକାର ଆଇନ - ୨୦୧୩ ର ଧାରା ୪ ଅନୁଯାୟୀ ଉକ୍ତ ସର୍ବେକ୍ଷଣ କରାଯିବ ।

- ୧. ପ୍ରକଳ୍ପ ବିକାଶକାରୀଙ୍କର ନାମ:- ଅଧ୍ୟାକ୍ଷକ ଇଞ୍ଜିନିୟର, ପୂର୍ବ ବିଭାଗ, ରାଉରକେଲା ।
- ୨. ପ୍ରସ୍ତାବିତ ଭୂମି ଅଧିଗ୍ରହଣର ଉଦ୍ଦେଶ୍ୟ- ସୁନ୍ଦରଗଡ଼ ଜିଲ୍ଲାର DMF ପାଣ୍ଠି ଅଧୀନରେ ୦/୦୦ କିଲୋମିଟର ରୁ ୫/୦୦ କିମି ପର୍ଯ୍ୟନ୍ତ କୋଇଡ଼ା ବାଇପାସ ରାସ୍ତା ନିର୍ମାଣ ନିମନ୍ତେ ।
- ୩. SIA study କରୁଥିବା ଅନୁଷ୍ଠାନର ଯୋଗାଯୋଗ ସୂଚନା; M/s. Research and Information Centre for Orissa (RICOR), Bhubaneswar.
- ୪. SIA ସର୍ବେକ୍ଷଣ ଅନୁଷ୍ଠାନ: Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar, Phone No. 0674- 2300471/ 2301094
- ୫. ପ୍ରକଳ୍ପ ପାଇଁ ସୁନ୍ଦରଗଡ଼ ଜିଲ୍ଲାରେ ପ୍ରସ୍ତାବିତ ଭୂ-ଅଧିଗ୍ରହଣର ବିବରଣୀ/ ତଥ୍ୟସିଲ

କ୍ରମିକ ନଂ	ତହସିଲ	ଗ୍ରାମ ପଞ୍ଚାୟତ/ ଗ୍ରାମନିସିପାଲିଟି	ଗ୍ରାମ	ବେସରକାରୀଜମି (ଏକରରେ)	ମନ୍ତବ୍ୟ
୧	କୋଇଡ଼ା	କୋଇଡ଼ା	କୋଇଡ଼ା	୦.୧୦	
ମୋଟ-				୧. ୦.୧୦	

ଭୂମି ଅନୁସୂଚିର ନକଲ ଏଥି ସହିତ ସଲଗ୍ନ କରା ଯାଇଛି ।

୨. ପ୍ରସ୍ତାବିତ ପ୍ରକଳ୍ପ ର ସଂକ୍ଷିପ୍ତ ବିବରଣୀ :- ସୁନ୍ଦରଗଡ଼ ଜିଲ୍ଲାର କୋଇଡ଼ା ତହସିଲର କୋଇଡ଼ା ଗ୍ରାମରେ ଅଧ୍ୟାକ୍ଷକ ଇଞ୍ଜିନିୟର, ପୂର୍ବ ବିଭାଗ, ରାଉରକେଲା କି ଦ୍ୱାରା DMF ପାଣ୍ଠି ଅଧୀନରେ ୦/୦୦ କିଲୋମିଟର ରୁ ୫/୦୦ କିମି ପର୍ଯ୍ୟନ୍ତ କୋଇଡ଼ା ବାଇପାସ ରାସ୍ତା ନିର୍ମାଣ ନିମନ୍ତେ ଘରୋଇ ଜମି ଅଧିଗ୍ରହଣ କରାଯିବ ।

୭. SIA ସର୍ବେକ୍ଷଣ ରେ ଅନ୍ତର୍ଭୁକ୍ତ ପ୍ରକଳ୍ପ ଅଞ୍ଚଳ ଏବଂ ପ୍ରକଳ୍ପ ପ୍ରଭାବିତ ଅଞ୍ଚଳ :-

ସୁନ୍ଦରଗଡ଼ ଜିଲ୍ଲାର ଉପରୋକ୍ତ ୦୧ ଟି ଗ୍ରାମର ମୋଟ ୦.୧୦ ଏକର ଘରୋଇ ଜମି, ଅଧୀକ୍ଷକ ଇଞ୍ଜିନିୟର, ପୂର୍ବ ବିଭାଗ, ରାଉରକେଲା ଙ୍କ ଦ୍ଵାରା DMF ପାଣ୍ଠି ଅଧୀନରେ ୦/୦୦ କିଲୋମିଟର ରୁ ୫/୦୦ କିମି ପର୍ଯ୍ୟନ୍ତ କୋଇଡା ବାଇପାସ ରାସ୍ତା ନିର୍ମାଣ ନିମନ୍ତେ ଅନ୍ତର୍ଭୁକ୍ତ । ପ୍ରକଳ୍ପ ପ୍ରଭାବିତ ଜମିର ବିସ୍ତୃତ ତାଲିକା/ ତଫସିଲ SIA ସର୍ବେକ୍ଷଣ ଅନ୍ତେ ମିଳିପାରିବ ।

୮. SIA ସର୍ବେକ୍ଷଣ ର ପ୍ରାଥମିକ ଉଦ୍ଦେଶ୍ୟ ଏବଂ ମୁଖ୍ୟ କାର୍ଯ୍ୟାବଳୀ :-

ସର୍ବସାଧାରଣ ଉଦ୍ଦେଶ୍ୟ ନିର୍ଦ୍ଧାରଣ

ପ୍ରଭାବିତ ଅଞ୍ଚଳରେ ଥିବା ସମସ୍ତ ଗ୍ରାମପଞ୍ଚାୟତ / ଗ୍ରାମ / ଖାର୍ଡର ପରାମର୍ଶକ୍ରମେ SIA ସର୍ବେକ୍ଷଣ କରାଯିବ । SIA ସର୍ବେକ୍ଷଣ କ୍ଷେତ୍ର ପରିଦର୍ଶନ, ପ୍ରଭାବିତ ବ୍ୟକ୍ତିଙ୍କ ସାମୂହିକ ଆଲୋଚନା ଏବଂ ପ୍ରଭାବିତ ବ୍ୟକ୍ତିଙ୍କ ମତାମତ ଚୁଡ଼ାନ୍ତ ରିପୋର୍ଟ ରେ ସ୍ଥାନିତ ହେବ ।

ଭୂମି ଅଧିଗୃହିତ ପ୍ରତ୍ୟକ୍ଷ ଅଥବା ପରୋକ୍ଷ ଶତକଡ଼ା ୨୫ ଭାଗ ପ୍ରଭାବିତ ସମସ୍ତ ଗ୍ରାମ ସଭା ମାନଙ୍କ ରେ ଜନ ଶୁଣାଣି କରାଯିବ ।

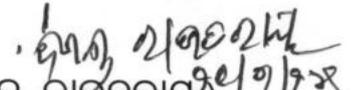
୯. ଗ୍ରାମସଭା / ଭୂମିମାଲିକଙ୍କ ସହମତି ଆବଶ୍ୟକ କି?

ହଁ ସହମତି ଆବଶ୍ୟକ ।

୧୦. SIA ସର୍ବେକ୍ଷଣ ଆରମ୍ଭ ଏବଂ ସମାପନ ରିପୋର୍ଟ ପ୍ରଦାନ ଏବଂ ତାହାର ପ୍ରକାଶନ ସରକାରୀ ବିଜ୍ଞପ୍ତି ପ୍ରକାଶିତ ଦିବସ ୦ରୁ ୬ ମାସ ମଧ୍ୟରେ SIA ସର୍ବେକ୍ଷଣ ସମାପନ କରାଯିବ ।

SIA ସର୍ବେକ୍ଷଣ ରିପୋର୍ଟ ସମ୍ପୂର୍ଣ୍ଣ ପ୍ରଭାବିତ ପଞ୍ଚାୟତ/ ଗ୍ରାମ/ ଖାର୍ଡ ସ୍ତରରେ ସ୍ଥାନୀୟ ଭାଷାରେ ପ୍ରକାଶନ କରାହେବ । ତତ୍ ସହିତ ଜିଲ୍ଲାପାଳ, ଉପଜିଲ୍ଲାପାଳ ଏବଂ ବ୍ଲକ ମହକୁମାରେ ପ୍ରକାଶନ କରାଯିବ ଏବଂ ସର୍ବସାଧାରଣଙ୍କ ଗୋଚରୀର୍ଥେ ସରକାରଙ୍କ ୱେବସାଇଟରେ ସୂଚିତ ହେବ ।

ରାଜ୍ୟପାଳଙ୍କ ଆଦେଶାନୁସାରେ


(ଦିଗନ୍ତ ରାଉତରାୟ)
ଅତିରିକ୍ତ ଶାସନ ସଚିବ

Memo No. 27081

/ R & DM, Dated 21 JUL 2025

Copy along with copy of land schedule and CD forwarded to the Director, Printing Stationary, Odisha, Cuttack for information and necessary action. He is requested to publish the Notification in the next issue of the Odisha Gazette without fail as this is a statutory one.

SRO Number may be allotted to this publication.

Memo No. 27082

/ R & DM, Dated

21 JUL 2025

Under Secretary to Govt.

Copy forwarded to RDC (N.D), Sambalpur/ Works Department for information and necessary action.

Memo No. 27083

/ R & DM, Dated 21 JUL 2025

Under Secretary to Govt.

Copy forwarded to Collector, Sundargarh/ Land Acquisition Officer, Sundargarh for information and necessary action. Since the area is coming under "Scheduled Area", rules and regulations related to the scheduled area under the RFCTLAR&R Act, 2013 must be followed scrupulously. The Gram Sabha must be conducted before carrying out the SIA Study.

Memo No. 27084

/ R & DM, Dated 21 JUL 2025

Under Secretary to Govt.

Copy forwarded to State Coordinator, Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar for information and necessary action. "Schedule Area", rules under the RFCTLAR&R Act, 2013 Act must be followed scrupulously. The Gram Sabha must be conducted before carrying out the SIA Study.

Memo No. 27085

/ R & DM, Dated

21 JUL 2025

Under Secretary to Govt.

Copy forwarded to the e-Governance Cell, R&DM Department for information and necessary action.

Under Secretary to Govt.

ଖତିୟାନ

ମୌଜା : କୋଇଡ଼ା

ତହସିଲ- କୋଇଡ଼ା

ଥାନା- କୋଇଡ଼ା

ଜିଲ୍ଲା- ସୁନ୍ଦରଗଡ଼

କ୍ରମିକ ସଂଖ୍ୟା	ଖାତା ସଂଖ୍ୟା	ପୂର୍ବ ସଂଖ୍ୟା	କିସମ	ମୋଟ ରକବା (ଏକରରେ)	ଅର୍ଜନ ରକବା (ଏକରରେ)	ଖାତା ରୟତଙ୍କ ନାମ, ପିତାଙ୍କ ନାମ, ଜାତି ଓ ବାସସ୍ଥାନ
୧	୯୧	୧୫୨୮	ଗୋଡ଼ା ଏକ	୦.୧୦	୦.୧୦	ସାଧୁ ନାଏକ ପି- ଫଗୁ ନାଏକ ପ୍ରତିମା ନାଏକ ପି- ଉଦ୍ଧବ ନାଏକ ନାଥ ନାଏକ, ପାର୍ଥ ନାଏକ, ସାବିତ୍ରୀ ନାଏକ, ସବିତା ନାଏକ ପି- ଶିବ ନାଏକ ଜା- ଭୂୟାଁ ବା- ନିଜ ଗାଁ (କନ୍ତରକଲ୍ଲା)

B. Mahapatra
Record Keeper
Tehsil Office, Koira

Amin
Amin
Koira, Tahasli

[Signature]
ରାଜସ୍ୱ ନିରୀକ୍ଷକ
ଭୂ ଅର୍ଜନ ଉପଦିଭାଗ
ସୁନ୍ଦରଗଡ଼

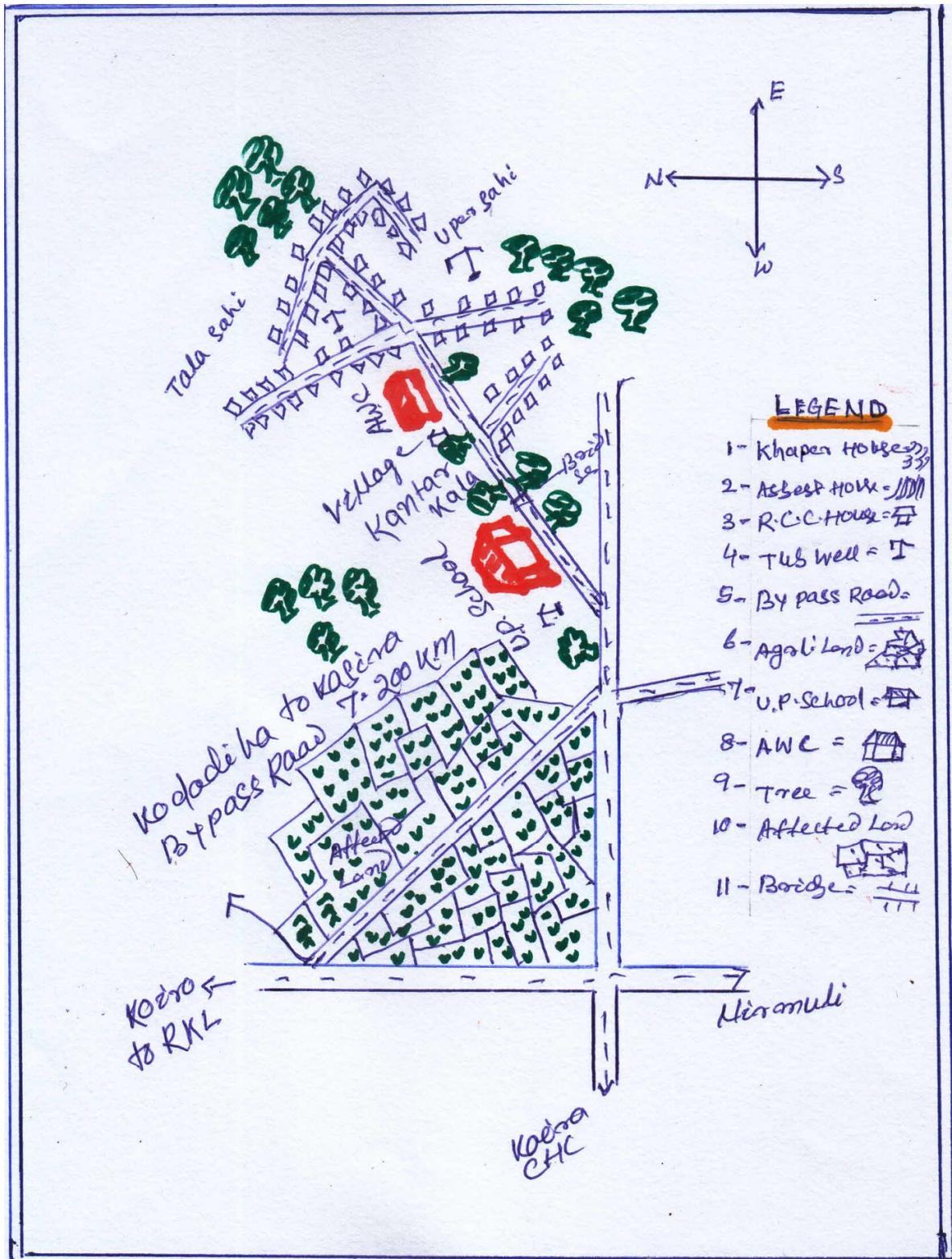
Counter signed

[Signature]
LAND ACQUISITION OFFICER
COLLECTORATE SUNDARGARH

Annexure-II

Resource Maps of Project Affected Villages

**RESOURCE MAP OF VILLAGE KOIDA, TAHASIL: KOIDA, DIST:
SUNDARGARH**



Annexure-III

**Photographs of FGDs
and Household Survey**

Photographs of FGD and Field Survey conducted in Koida village



Annexure-IV

**Questionnaire for
Household Survey**

Section 1: General Information

- 1.1. Name of the Village: 1.2. Name of the GP
- 1.3. Name of Tahasil..... 1.4. Name of Block:.....
- 1.5. District:
- 1.6. Name of the Respondent:
- 1.7. Relationship with the Head of the household:

1.8 Nature of property to be affected:

1	2	3	4
House	Homestead Land	Agricultural Land	Others (Specify)

- 1.9. Years of occupation of the property to be affected: _____ Years
- 1.10. Present address of the property: _____
- 1.11. Mother Tongue: (Hindi-1; Odia-2; Others-3; in case of others specify.)

Section 2 : Identification of the Household

- 2.1 Name of the Household : _____
- 2.2 Sex (1-Male, 2-Female): _____
- 2.3 Nationality: _____
- 2.4 Religion: _____
- 2.5 Caste/Tribe: (SC-1, ST-2, OBC-3, General-4) :
- 2.6 Sub Caste/ Sub Tribe (Specify):
- 2.7 Have you been displaced earlier? : Yes-1, No-2
- (a) From where: Village: _____, Tahsil: _____, District: _____
- (b) When: _____
- (c) Type of project: _____
- (d) Name of project: _____

Section 3: Socio-Economic Status

3.1 Household Particulars

Sl.	Name of Persons	Relationship with HH	Sex (M/F)	Age	Marital Status (Give coding as noted below)	Educational Qualification (Give coding as noted below)	Occupation and Monthly Income (Give coding as noted below)				Total monthly Income (Rs.)
							Main Occupation	Monthly Income	Subsidiary Occupation	Monthly Income	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											

* Sex:	Male-1, Female-2, Third Gender:3
** Marital Status	Married-1; Unmarried-2; Divorcee-3; Separated-4; Widowed/Widower-5;
*** Educational Qualification:	Illiterate-(1); Just literate-(2); Primary-(3); High School-4; Matriculate-(5), Intermediate/+2 -(6) Graduate-(7), Post- Graduate-8, Technical Degree-(9), Technical Diploma-(10), ITI/CT, etc.-(11), Professional Degree (MBA, etc)-(12), Others (Specify)-(13)
**** Usual Activity:	Employed-(1), Unemployed-(2), House wife-(3), Student-(4), Non-School going Child-(5), Old-6, Retired-7, Others (Specify)-8
### Occupation:	Cultivator-1, Allied activity-2, Agricultural Labourer-3, Daily Wage Earner-4, Salaried-5, Business -6, Craft Artisan - 7, Profession/Professional-8, Others (specify)-9.

3.2 Number of family members: Total: _____ Male: _____ Female: _____
 Family members above 18 years of age: Total: _____ Male: _____ Female: _____

3.3 Type of Family: Joint-1, Nuclear-2

3.4 Do you have ration card (Verify)? Yes-1, No-2

3.5 If Yes: Ration Card no: _____

3.6 Vulnerability status of the household:

A. Is it a woman headed household? Yes-1, No-2

B. Is it headed by physically/mentally challenged person? Yes-1, No-2

C. Is it a household Below Poverty Line (BPL)? : Yes-1, No-2

D. If BPL, provide BPL card number: _____

3.7 Annual income of the family from all sources: Rs. _____

Dwelling Condition:

3.8 Housing: Own house-1, Rented-2, Others (Specify)-3

3.9 If living in own house, size of homestead land in acres (1 acre = 100 decimals):

3.10 Do you have Patta: Yes-1, No-2

3.11 If yes, specify your Khata and Plot numbers _____

3.12 If no, who is the owner of the land? _____

3.13 Details of Houses:

Sl. No.	House No.	Built-up area (sq.ft)	No. of rooms	No. of storey #	Construction Details			Use of Building##
					Wall*	Roof**	Floor***	

N.B: Serial number could be used to indicate any separate house structure owned by the household including the main dwelling. For example, separate cattle shed, separate structure for poultry, etc.

Single-1, Double-2, More than two storeys-3

* Mud-1, Brick with mud-2, Bamboo or wood with mud plaster-3, Brick with cement-4 any other specify-5.

** Thatched (Chhana)-1 Asbestos-2, Tiles-3, Concrete roof-4, Tin-5, any other specify-6

*** Earthen -1 cement-2 Tiles-3 any other specify- 6

Own-living-1, Rented-2, Shop/Business Purpose-3, any other specify-3

3.14 Aspects of Housing Condition:

i. Separate place for animals : Yes-1, No-2

ii. Bathroom within the house: Yes-1, No-2

- iii. Toilet within or adjacent to the house : Yes-1, No-2
- iv. Washing place within the house : Yes-1, No-2
- v. Electricity connection : Yes-1, No-2
- vi. Source of drinking water: Pipe water-1, Tube well/handpump-2,
 a. River/stream-3, Open well-4, Others (specify)-5
- 3.15 Whether the house presently resided by you is likely to be affected by the project? Yes-1, No-2

3.16. Possession of material /livestock assets

Type of Assets	No.	Present Value (in Rs.)	Type of Assets	No.	Present Value (in Rs.)
Television			Cooking Gas		
Tape Recorder			Utensils		
Radio			Ornaments		
Refrigerator			Any Other (specify)		
Telephone			Live Stock		
AC/Cooler			Cows		
Cycles			Buffaloes		
Three Wheeler			Sheep		
Two-Wheeler			Goats		
Four Wheeler			Poultry		
Bus / Truck			Others		

3.17. Loan and Indebtedness

1	Have you taken any loan? Yes-1, No-2	
2	Who has taken the loan? 1. HHH; 2. Spouse; 3. Son; 4. Daughter in law; 5.HHH and spouse together; 6. Son and HHH; 7. Daughter in law and Mother- in-law; 8. Others (specify)	
3	If yes, sources of loan: 1-Bank, 2-NGO, 3-Money lender, 4-Relative/Friend, 5- SHG; 6. Others (specify)	
4	If yes, amount of loan (in Rs.)	
4(i)	Loan from institutional source such as public sector, scheduled bank, etc.	
4(ii)	Loan from private source	
5(i)	Rate of interest paid per month/annum for institutional loan	
5(ii)	Rate of interest paid per month/annum for private loan	
6	Could you please tell us the purpose of loan? 1-Productive investment, 2-Purchasing durables, 3-Meeting emergency needs, 4-Children's marriage, 5- Past loan repayment, 6-Others (specify)	

3.18. Expenditure Pattern

Kindly indicate expenditures made on different items during last one year:

Sl. No.	Particulars	Monthly Expenditure (in Rs.)	Rank them from highest to lowest
1	Food		
2	Agriculture/Occupation related		
3	Housing		
4	Cooking Fuel		
5	Clothing		
6	Health		
7	Education		
8	Transport		
9	Communication		
10	Social functions		
11	Others		

3.19. Health Status

1. Has any of your family members suffered from any illness during the last 12 months?: 1-Yes, 2-No, 3-Don't Know
2. If yes,
 - (a) Number of persons suffered
 - (b) Name of diseases they suffered from
3. Type of treatment taken: 1-Allopathic Government, 2-Allopathic Private, 3-Allopathic Govt. & Private both, 4- Homeopathy, 5- Ayurvedic, 6- Faith Healers; 7- Quacks; 8-No Treatment, 9-Others (specify)
4. Which is the nearest formal medical facility available? : 1-PHC; 2-CHC; 3-Dist Hospital, 4-Private Hospital/Clinic, 5-Others
5. Where do you usually go for medical treatment? : 1-PHC; 2-CHC; 3-Dist Hospital, 4-Private Hospital/Clinic, 5-Others
6. Does anybody from your family suffer from any chronic disease and requiring regular treatment? Yes-1, No-2
If yes, specify the disease(s) _____
7. Expenditure incurred towards healthcare per month: Rs. _____
8. Whether any child was born in the family during last one year? Yes-1, No-2
9. If yes, specify whether the child has been vaccinated? Yes-1, No-2

10. Whether anybody from your family died during last one year? Yes-1 No-2

11. If yes, specify the cause of death:
1-Old age, 2-Critical illness, 3-Accident, 4-others (specify)

12. Age of the deceased at the time of death:

3.20. Access to facilities

Code	Distance of following facilities/amenities from the location of the house?	Approx. km	Mode to access	Frequency	Trips made by		
					M	F	Both
1	Primary School						
2	Secondary School						
3	College						
4	Regular Market						
5	Commonly visited health service place						
6	Hospital						
7	District Office						
8	Block Office						
9	Panchayat Office						

Mode: Walk-1; Cycle-2; Personal transport-3; Public transport-4; Frequency: Daily-1; Weekly-2; Monthly-3; Very Rare-4;

3.21. Decision Making and Participation at Household Level

Sl.	Subject	Male	Female	Both
1	Financial matter			
2	Education of child			
3	Health care of child			
4	Purchase of assets			
5	Day to day household activities			
6	On social function and marriages			
7	Women to earn for Family			
8	Land and property			
9	Others			

Section 4: Land Particulars (in acres)

4.1 Details of Land owned

Khata No	Plot No.	Kissam As per Record	Total land owned	Total Area of the affected Plot (in acre)	Total area to be acquired (in acre)

4.2 Total area of land owned:

Private	Government	Religious	Community	Forest	Others (specify)

4.3. Type of Land:

Irrigated	Non-Irrigated	. Barren	Forest	Others (specify)

4.4 Use of Land:

Cultivation	Orchard	Residential	Commercial	Forestation	No Use/Barren	Others (specify)

4.5 Status of ownership:

1. Titleholder (Pvt. owner), 2. Customary right, 3. Encroacher, 4. Squatter

4.6 Name of the land owner: _____

4.7 Father's name: _____

4.8 Name of the present occupier/tenant, if the house is given on rent: _____

4.9 Is any of the following associated with the land?

A. Agricultural labourer: Yes-1, No-2

(i) If Yes, then how many?: _____

B. Sharecropper: Yes-1, No-2

(ii) If Yes, then how many: _____

4.10 Number of trees within the affected area:

Total no. of Trees	Fruit Bearing (in nos.)	Non-fruit bearing (in nos.)

4.11 Are there other claimants over the land under acquisition? Yes-1, No-2

4.12 If yes, specify their name(s), relationship and present residential address

Sl.	Name of Claimant/shareholder	Relationship	Present address

Section 5: Resettlement and Rehabilitation Option

5.1 Do you think that you are going to lose assets and sources of your livelihood by the project? Yes-1, No-2, Can't say-3

5.2. If yes, what are those losses?

5.3 Likely Loss of Other Assets:

	Species	No.	Type
Tree			
Well			
Other individual assets			
Any other (specify)			

5.4 What percentage of your present earnings will be lost due to loss of the present asset on account of the project?

5.5 Willingness to shift: 1-Voluntarily, 2-Non-voluntarily

5.6 Are you willing to allow the company to acquire your land/house for the upcoming development project? Yes-1, No-2

5.7 If yes, please specify the price that you would like to charge to the project authority for the aforesaid land: Rs. _____

5.8 If no, please specify the reasons and any other alternative so that the project could be made operational without affecting your interest.

5.9 Besides taking cash compensation for the land, what other benefits would you like to avail from the project authority in lieu of handing over your land/house? Please specify:

5.10 Assistance Option: (Put a ✓ mark)

- 1. Self relocation
- 2. Cash for land loss
- 3. Cash for house/shop loss
- 4. Project assistance

5.11 Income Restoration Assistance (The most preferred option):

- 1. Employment Opportunities in Construction work.
- 2. Assistance/ Loan from other ongoing development scheme.
- 3. Vocational Training.
- 4. Others (specify).

5.12 Other support from Project (Specify):

5.13. Women Participation at Community Level. (Put a ✓ in the respective boxes)

1	Do women of the household participate in decision making processes at community level	
2	Is any woman member of the household a member or office bearer of village / block / zilla panchayat?	
3	Is any women member of the household works as Anganwadi worker or ANM?	
4	Is any woman member of the household also a member of any self help group?	
5	If yes, is that SHG still active?	
6	Do women of your household make direct economic contribution for your family?	
7	If so, what percentage of the family income is contributed by the women at present?	

5.14. Employment opportunity in the area:

1-Seasonal, 2-Employed throughout the Year, 3-None

5.15 Do family members migrate out for Work?

Sl.	Type of Work	In Rs. Per year	Do men migrate for work outside the village? (Daily -1, Seasonal - 2 Long term – 3, No – 4)	Do women also migrate for work outside the village? (Daily -1, Seasonal - 2 Long term – 3, No – 4)
1	Agriculture			
2	Shopkeeper/Business (including petty business)			
3	Employer (industrialist/Factory/Mill owner, etc)			
4	Government Service			
5	Private Service			
6	Wage Labour (Agriculture)			
7	Wage Labour (Non Agriculture)			
8	Self employed (insurance, finance, doctor, engineer, lawyer)			
9	Not employed (income recipient such as retired, remittance, property rent, bank interest, etc)			
10	Household work			
11	Others (specify)			
	Total			

Section 6: Perception of Household Regarding the Project

- 6.1. Are you aware of this project ?
is going to be constructed in this region? Yes-1, No-2
- 6.2. Do you think that it will be beneficial to your household? Yes-1, No-2
- 6.3. If yes, what benefits (social, economic) do you think your household will receive?

Social Benefits

- a.
- b.
- c.

Economic Benefits

a.

b.

c.

6.4 If no, what consequences (social, economic, cultural, and environmental) of the project according to you, your household will have to face?

Social Consequences

a.

b.

c.

Economic Consequences

a.

b.

c.

Cultural Consequences

a.

b.

c.

Environmental Consequences

a.

b.

c.

6.5 Do you think that it will be beneficial to your village/ area? Yes-1, No-2, Cannot say- 3

6.6 If yes, what benefits (social/economic) do you think the project will provide in the village/area:

Social Benefits

(a)	
(b)	
(c)	

Economic Benefits

(a)	
(b)	
(c)	

6.7 If no, according to you, what consequences (social, economic, cultural, and environmental) of the project your village / area will face?

Social Consequences

(a)	
(b)	
(c)	

Economic Consequences

(a)	
(b)	
(c)	

Cultural Consequences

(a)	
(b)	
(c)	

Environmental Consequences

(a)	
(b)	
(c)	

6.8. In case your land is acquired, what steps do you think the project should take to ensure your family livelihood?

6.9. Do you think that with the project functioning in your area, the employment opportunities in other sectors will improve?:

6.10. If land is acquired from you, do you have any choice in selecting the place where your household would like to resettle? Yes-1, No-1, Cannot say-3

6.11. If yes Name of the place: _____ Distance (km): _____

6.12. Reason for selection of that place:

6.13. How much do you agree with the following?

Sl. No	Impacts	Strongly Agree-(1)	Agree-(2)	No Opinion-(3)	Disagree-(4)	Strongly Disagree-(5)
1.	The project will affect your family positively by increasing your socio-economic status					
2.	The project will ruin the sustainable livelihood of my family					
3.	The project will ruin our local forest on which we subsist					
4.	The project will ruin our common property resources on which the family subsists					

Sl. No	Impacts	Strongly Agree-(1)	Agree-(2)	No Opinion-(3)	Disagree-(4)	Strongly Disagree-(5)
5.	The project will breakdown our kinship structure and affect our community life					
6.	The project will lead to an increase in crime					
7.	The project would affect the health status of local people due to increasing pollution					
8.	The project will cause unforeseen health risks					
9.	The project will pose more health risk for the people in its vicinity					
10.	The plant is likely to increase physical and social stress in my family due to increasing pollution and vulnerability of family members to many pollution related diseases					
11.	Family violence is likely to break out in my household in times of stress					
12.	I have to spend too much money on things that are bad for my health					
13.	A portion of my income or family income will go to drugs or alcohol					
14.	Money will be a big source of stress for me					
15.	More youths of the locality will be vulnerable to drugs and alcohol due to flow of easy money from the project					
16.	I have seen co-workers have trouble with alcohol or drugs					
17.	The project will create numerous business opportunities for my family					
18.	I am concerned about short term effects on local business					

Sl. No	Impacts	Strongly Agree-(1)	Agree-(2)	No Opinion-(3)	Disagree-(4)	Strongly Disagree-(5)
19.	I am concerned about long term effects on local business					
20.	The project will open-up numerous self-owned business opportunities for the locality					
21.	It will create opportunities for my existing business					
22.	This will be good for the local people					
23.	This will be good for the people in and around the region					
24.	Out of regional business influx will hurt local business					
25.	The project will facilitate increased local competition					
26.	New businesses created as a result of development will displace or harm the existing businesses					
27.	When the project is completed, it will cause a downward trend in the local economy					
28.	Proper business planning now could prevent a downward economic trend in the local economy.					
29.	The positive overall business impact shall outweigh any negative impact that may occur.					
30.	The construction of project will affect my investments					
31.	There will be more investment opportunities for me					
32.	I foresee short-term opportunities for me (get in/get out)					
33.	I foresee long-term ongoing investment opportunities for me					

Sl. No	Impacts	Strongly Agree-(1)	Agree-(2)	No Opinion-(3)	Disagree-(4)	Strongly Disagree-(5)
34.	It will create investment opportunities in local area / region.					
35.	The project is likely to cause decrease of investment in other sectors					
36.	This will cause a decrease in investments in other communities					
37.	This will cause a decrease in investments in other communities in the long-term					
38.	This will cause a decrease in investments in other communities in the short-term					
39.	Development related investments will create new businesses, new jobs, and boost the local economy for both long-term and short-term jobs.					
40.	I believe that the positive overall gains from new investment outweigh any negative impact that may occur					
41.	I feel good about the overall investment opportunities that will arise from the project					

Signature of the person answering question of the survey

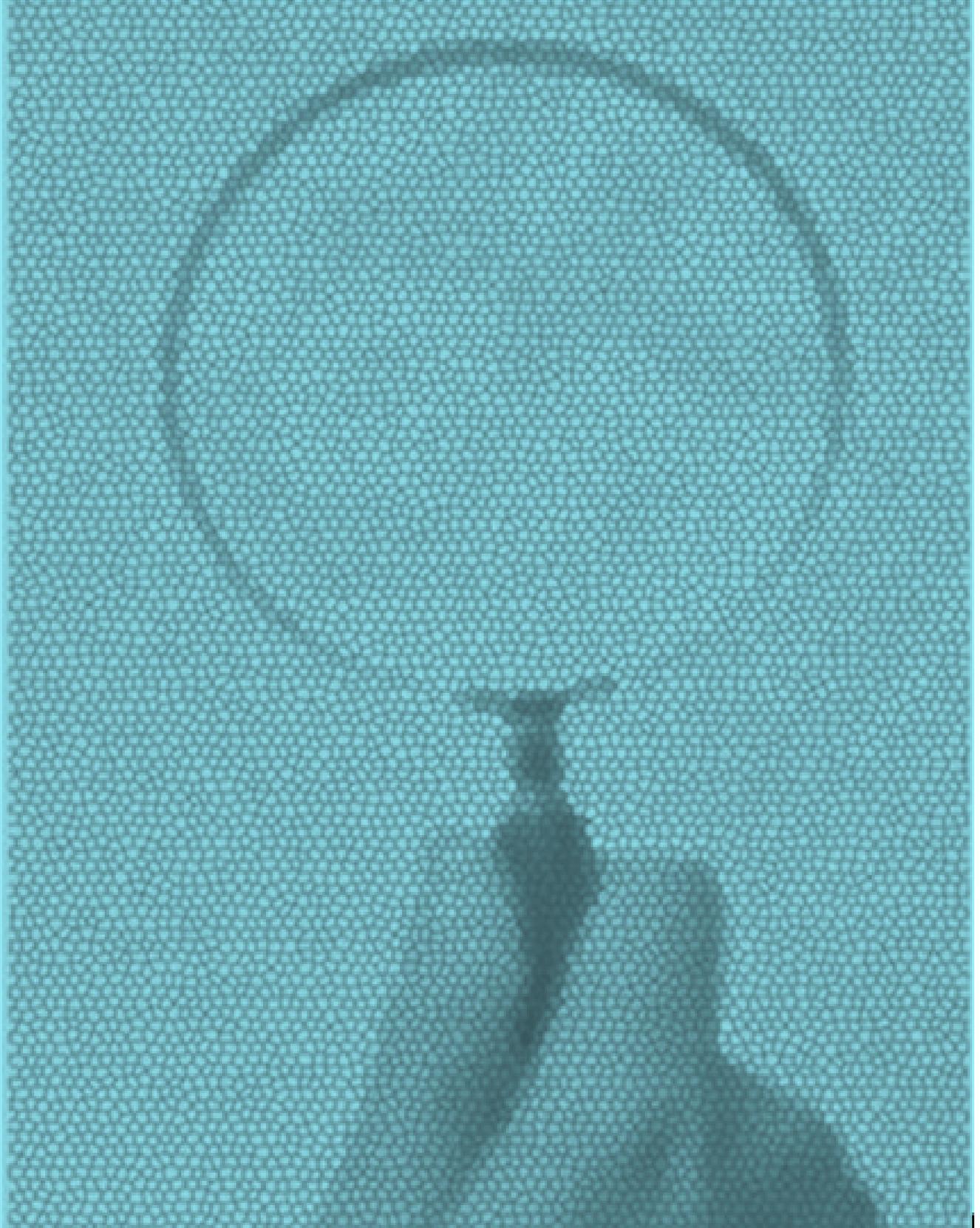
(Name of the Investigator)

(Signature of the Supervisor)

Date: _____

Annexure-V

Village-wise Entitlement Matrix of PAFs



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