



Social Impact Assessment: *Guma Mines, Chhattisgarh, India*

Ultratech Cement Limited

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Ultratech Cement Limited

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List of Acronyms

AB Group: Aditya Birla Group
APPEL: Awareness and Preparedness for Emergencies at the local level
BPL: Below Poverty Line
CDP: Community Development Plan
CPR: Common Property Resources
ERM: Environmental Resources Management
ESDD: Environmental and Social Due Diligence
FGD: Focus Group Discussion
FPIC: Free Prior Informed Concern
GIIP: Good International Industry Practice
Ha: Hectare
IA: Impact Assessment
ICDS: Integrated Child Development Scheme
ICP: Informed Consultation and Participation
IFC: International Finance Corporation
INR: Indian National Rupees
IPs: Indigenous People
LARR: Land Acquisition Resettlement and Rehabilitation
LRF: Livelihood Restoration Framework
LRP: Livelihood Restoration Plan
MGNREGA: Mahatma Gandhi National Rural Employment Guarantee Act
MTPA: Million Tonnes per Annum
MW: Mega Watt
OBC: Other Backward Castes
PAF: Project Affected Families
PESA: Panchayati Raj (extended to Scheduled Areas) Act
PPE: Personal Protective Equipment
PS: Performance Standards
RMC: Ready Mix Concrete
RWCW: Rawan Cement Works
SC: Scheduled Castes
SEP: Stakeholder Engagement Plan
SIA: Social Impact Assessment
ST: Scheduled Tribes
TPH: Tonnes per Hour
UTCL: Ultratech Cement Limited
WPR: Worker's Participation Ratio

List of Definitions used

Term	Definition
Acculturation:	Acculturation is a process in which members of one cultural group adopt the beliefs and behaviours of another group.
Administrative framework:	The compendium of requirements with which the project is required to, and/or has chosen to comply. These include Legal requirements, international treaties or conventions, internal corporate standards, programme requirements and jurisdictional policies
Agricultural Land:	Agricultural land (also agricultural area) denotes the land suitable for agricultural production, both crops and livestock.
Are not available for cultivation:	This category includes Forest area under non-agricultural use, barren and uncultivable land
Area in the immediate vicinity of the project:	The area lying in the radius of 2.5 km from the project site
Baseline:	The physical, biological, cultural and human conditions that will prevail in the absence of the Project, including interactions amongst them.
Below Poverty Line:	Below Poverty Line is an economic benchmark and poverty threshold used by the Government of India to indicate economic disadvantage and to identify individuals and households in need of government assistance and aid.
Child Welfare Centre:	Child Welfare Centre are centres providing care and education services to children below the age of 3 years
Common Property Resources:	community's natural resources where every member has access and usage facility with specified obligation, without anybody having exclusive property right over them
Community Development Plan:	A plan that outlines the investments/interventions which are technically appropriate, environmentally sound, financially beneficial and socially responsible investments aimed at building active and sustainable communities based on social justice, mutual respect, and perception of a common interest
Cultivable wasteland	This category includes all land available for cultivation whether not taken up for cultivation or taken up for cultivation once but not cultivated during the current year.
Endogamy:	The practice of marrying within a specific ethnic group, class or social group
ESDD:	Independent audit and gap assessment aimed at identifying the foreseeable compliance gaps and risks which can be monitored to improve the project's environmental and social performance
Focus Group Discussions:	a discussion carried out amongst a group of people (6-8) from a similar background/profile on a specific topic while being guided by a moderator
Forest area:	Includes all forests under any legal enactment dealing with forests or administered as forests, whether state-owned or private and whether wooded or maintained as potential forest land.
High Influence Stakeholders:	Those who have a high influence on the project or are likely to be heavily impacted by the project activities.

Term	Definition
IA Process:	Systematic processes that predicts the impacts of the Project and evaluate the resulting effects it is likely to have on elements of the physical, biological, cultural and human environment. It identified measures that the Project will take to avoid, reduce, abate, remedy or compensate for adverse impacts/ effects and to enhance positive impacts/effects
IFC PS:	The IFC PSs define client's responsibilities for managing their environmental and social risks
Impact:	Any alteration of existing conditions, adverse or beneficial, caused directly or indirectly by the Project.
Impacted villages:	Villages that are likely to be impacted, adversely or beneficially by the Project
Indigenous People:	Social groups with identities that are distinct from mainstream groups in national societies, who are often among the most marginalized and vulnerable segments of the population
Irrigated Land:	Total area that is irrigated at least once per agricultural year
Kutcha:	Kutcha Structures are those made of mud used for walls/roof and/or dry stone masonry
Land Loser:	Those Project affected families whose land has been acquired/ purchased by the government or a private entity for the purpose of setting up a project
Livelihood Restoration Plan:	A plan aimed at provisioning for financially beneficial, socially equitable, environment friendly and technically appropriate measures/interventions aimed at restoring livelihoods and developing gainful opportunities for the affected groups and communities in a project
Livelihoods:	Livelihood is a set of economic activities including self-employment and or wage employment to generate adequate resources for the meeting of requirements of the self and the household.
Low influence Stakeholders:	Stakeholders with minimal influence on the decision making process or those who are likely to be minimally impacted by the project and are thus low in the project proponent's engagement list
Main worker	Those who have worked for the major part of the reference period (i.e. 6 months or more)
Marginal Workers	Those who have worked for less than 6 months in a year
Non Workers	An individual who did not engage in income generation during the reference period
Medium Influence Stakeholders:	Those stakeholders who have a moderate influence on the project or even though they are to be impacted by the project, it is unlikely to be substantial and is thus neither high nor low in the project proponent's list for engagement
Mitigation: measure	A feature, procedure or other action that the Project commits to implement so as to avoid or reduce the magnitude of an adverse impact or to enhance the magnitude of a positive impact
Monogamy/Monogamous family:	The practice or state of being married to one person at a time
Open Access Resources:	Resources for which no rules of management or usage exist and are characterised by limitless extraction of resources by individuals in terms of the rights bestowed upon them

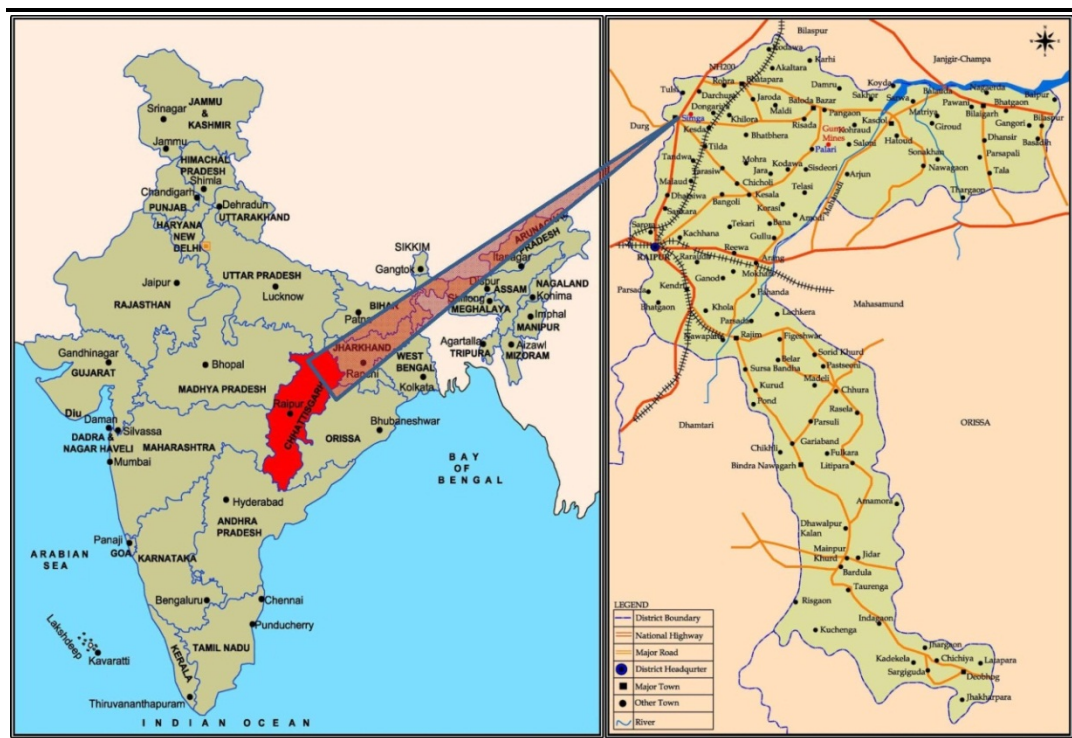
Term	Definition
Open Public Consultations:	Two way exchanges of information between the project proponent and the public in an open and accountable manner, allowing individuals and groups to participate in the decision-making process of the project.
Other Backward Castes:	Those castes which are declared as being educationally and socially disadvantaged
Outer Zone:	The third zone in the project, the zone between 5-10 km radius from the site
Patriarchal/Patriarchy:	A system of society in which the father or eldest male member is the head of the family and descent is traced through the male line
Physical Infrastructure:	Infrastructure which is essential for the maintenance and supply of basic services and amenities which have a direct influence on the economic and social well being
Primary Data:	Data that has not been previously published, and is yet to be subjected to processing or any other manipulation
Primary Health Centre:	PHCs serve as the first contact point between village community and the medical officer. These centres are aimed at providing an integrated curative and preventive health care to the rural population
Primary Stakeholder:	Those who have a direct impact, interest or influence on the project or those likely to be directly impacted by the project
Private Property Resources:	Those resources which are owned and controlled by individual households and businesses rather than the government
Programme Requirements:	The project lender's requirements in terms of rules, regulations and guidelines to be followed
Project Footprint area:	The area that may reasonably be expected to be physically touched by Project activities, across all phases
Project Influence area:	The area likely to be affected by the project and the client's activities and facilities that are directly owned, operated or managed (including by contractors) and that are a component of the project, the impacts from the unplanned but predictable developments caused by the project that may occur later at a different location
Pucca structure	Structures with RCC roof
Questionnaire:	A set of printed or written questions with close ended or open ended questions, devised for the purposes of a survey or statistical study
Scheduled Castes:	Castes historically disadvantaged and explicitly recognized in the Constitution of India
Scheduled Tribes:	Tribes historically disadvantaged and explicitly recognized in the Constitution of India
Study Area:	The area that needs to be studied in order to adequately understand and describe the Baseline likely to be affected by the project. At a minimum the study area will encompass the Project footprint area and the Area of Influence
Survey Area:	The area over which physical surveys take place as part of the collection of primary baseline data.
Vulnerable Groups:	Individuals or groups who could experience adverse impacts more severely than others based on their vulnerable or disadvantaged status. This vulnerability may be due to ethnicity, gender, language, religion, political views, dependence on natural resources, sickness or disability or other factors.

Term	Definition
Workers Participation Ratio:	<p data-bbox="619 163 1193 226">The percentage of people (16 years or above) who are either working or seeking work</p> $WPR = \frac{\text{Total Working Population}}{\text{Total Popultaion}} \times 100$

Rawan Cement Works

Rawan Cement Works (hereafter referred to as RWCW) has been developed as a brownfield integrated cement plant, in the *Simga tehsil; Baloda bazar District* in *Chhattisgarh*. RWCW is well connected being located at an approximate distance of 17 km away from the nearest railway station (*Bhatapara Railway Station*) and approximately 50 km from the nearest National Highway (NH-6), connecting *Sambalpur and Nagpur* and 85 km from the nearest airport (*Raipur Domestic Airport*). The nearest town is *Bhatapara*, located at an aerial distance of 17 km in the south-east direction with an approximate population of 50,118 (*www. Vethi.com, project feasibility report RWCW line II*).

Figure 2.1 Location of the project



RWCW has proposed to use Guma mines as a captive mine. The existing operations at RWCW comprise of a cement plant of 3.3 Million Tonnes Per Annum (MTPA), a clinker production unit of 2.1 MTPA as well as associated components such as a captive power plant, colony area and a captive limestone mine of *Rawan Jhipan*.

The proposed expansion plan of RWCW involves the capacity expansion of all components. The following table provides a brief overview of the existing and expansion plan for RWCW.

Table 1.1 Brief Overview of the existing and proposed expansion plan for RWCW.

S No	Plant Component of RWCW	Existing	Proposed Expansion
1	Cement Plant Capacity	3.3 MTPA	3.2 MTPA
2	Clinker Production Plant	2.1 MTPA	3.3 MTPA
3	Captive Coal Based Power Plant	30MW	50MW

S No	Plant Component of RWCW	Existing	Proposed Expansion
4	Captive Limestone Mine	Rawan Jhipan Mining Lease for 772.83 ha	Guma Mining Lease for 157.122 ha
5	Other Associated Components	Conveyor Belt, Coal Washery, RWCW Colony	Waste Heat Recovery Linked Power Generation, Guma-Sarseni Conveyor Belt
6	Transport Corridors		
6a	Railhead located at Hathband Connected to NH-6	Receives 0.5 MTPA coal through its own Railway siding at the plant	
6b	Road connection to NH-6	Connection Road to NH-6 sees 40-45 trucks plying per day.	
7	Manpower		
7a	Implementation phase		71
7b	Plant Operation Phase		155

Source: RWCW

In short, the proposed expansion includes adding a second line of clinkerisation. This will allow for the current the current the clinker capacity to increase from 2.1 MTPA to 5.4 MTPA, and Cement capacity from 3.3 MTPA to 6.5 MTPA, and the Captive Power Plant capacity from 30 MW (Mega Watt) to 50 MW.

1.1.3

Guma Mines

The Guma Mines, covering an area of 157.122 hectares (ha) of land at a distance of around four kilometres from the plant (latitude 21°34'46.344" - 21°35'9.7584" North and Longitude 82°03'25.6248" - 82°04'9.2784" East), near the village Guma; tehsil Palari, has been allotted to RWCW for the purpose of meeting the new limestone demands due to the plant expansion through supplementing the existing Rawan Jhipan limestone mine. The land of mining lease area in Guma is comprised of both private and government land. No perennial water body runs through it and the rivers Mahanadi and Seonath flow 40 km east and 36 km west of the area respectively. The land details for the existing and proposed expansion plan of the RWCW plant is provided in the table below.

Table 1.2 *Land Details of the existing RWCW and its proposed expansion plan*

S.No.	RWCW Plant Component	Existing Area (in Ha)	Proposed Acquisition Area (in Ha)
A	Existing Plant and Colony Area	388.37	
A.1	Plant Area	64	
A.2	Colony	50	
A.3	Green Belt (Plant Colony)	212.54	
A.4	Unused Area	61.83	
B	Rawan Jhipan Limestone Mining Area	722.834	
C	Guma Mines		157.122
D	Conveyor Belt from Guma Mines to Plant		~20
	Total	1111.204	177.122
	Grand Total		1288.326

Source: RWCW

The RWCW plant presently has 1111.204 hectares which has the capacity to accommodate the expansion of the plant components as discussed in the previous section. Hence, the fresh land requirement for the expansion is limited to the mine area and for constructing a conveyor belt to connect the mine to RWCW plant area.

The land for the Mine Lease Area comprises of a *majority of private land (88%) and a small proportion of government land*. The private land required for the plant expansion is being obtained by direct purchase from the land owners on the basis of negotiated price settlement. *While the land for the mines lies wholly within the boundaries of the village Guma (157.122 ha or 388.25 acres); the land required for the conveyor belt (~20 ha or 49.42 acres) lies in the villages Guma and Sarseni of the Palari block*. The project proponents have initiated the land purchase process as well as the environmental clearance for the Guma Mines. At present UTCL has purchased 81% of the total private land required for the project which is equal to the 71% of the total land in the Mine Lease (ML) area and 63% of the total assessed land requirement for the project (both for the mine and the conveyor belt).

Mining Method

The mining in the Guma mines will be carried out along the methods of mechanized open cast along with deep hole drilling, controlled blasting and heavy earth moving machinery. This method has been identified as technically the most appropriate due to the fact that the limestone exists below a capping of top soil of around two meters depth and the topography of the region is generally flat with gentle undulations.

Table 1.3 *List of Mining Equipment for Expansion*

S. No	Equipment	No.
1	Excavator, Capacity : 6.5 m ³	4
2	Dumper Capacity : 60T	11
3	Dozer, d 155 Eq	1
4	Drill + 30MPH drilling rate	1
5	Drill, 20 MPH drill rate	2
6	Rock Breaker, 60 T class	1
7	Motor grader, 200 HP	1
8	Water Tanker, 12 kl	1
9	Tire Handler with fork lift, for 60 tyre	1
10	Mobile service van	1
11	Diesel Bouser, 8 kl	1
12	Explosive van	1
13	Pick up van	1
14	Mobile Crane, 12-15 T capacity	1

Source: Project Feasibility report, RWCW Line II

Limestone Crushing:

A primary crusher will be employed to crush the limestone at the site itself. Limestone boulders will then be unloaded to the limestone crusher dump

“**Social Impact Assessment (SIA)**” includes “the processes of analyzing, monitoring and managing the intended and unintended social consequences, both positive and negative, of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions”.

The assessment is carried out on the basis of the relevant environmental and social baseline data at an appropriate level of detail, depending upon the project. The process encompasses all the relevant environmental and social risks and impacts of the project within an identified area of influence according to the various phases of the project.

The impacts which may be resultant from particular projects pertain to the changes in the land use of the area, influx of migrant population, the mining technique, change in the traffic in the region, the mushrooming of various ancillary facilities, and change in resource access to the communities amongst others. These impacts have the greatest influence on the lives of the land losers as well as those who reside in the immediate vicinity of the project, and are felt the most during the construction and operation phases of the project.

The importance of understanding such impacts becomes all the more clear when it is kept in mind that such impacts vary according to the economic status of those affected, the social; political and cultural setting of the project and the magnitude of the resource requirement for the project.

Source: ERM IA Standard v1.0, IFC PSs & IFC Guidance Notes: Performance Standards on Environmental and Social Sustainability

This understanding in turn allows the project proponents to make informed decisions on as to the manner in which the activity is to proceed as well as improve the environmental and social performance of the project by identifying mitigation measures required in order to combat the potential negative impacts of the activity. A SIA also provides the affected populations a platform to participate in the planning and implementation process and influence the manner in which their future development is to take place.

1.3

OBJECTIVE AND SCOPE OF WORK

The objectives of this assignment and the scope of the same were to establish a socio-economic baseline for the area in general and the project affected villages in particular and to identify impacts on the same resulting from the land take process. This impact identification then fed into the preparation of the management plans for the site such as the Stakeholder Engagement Plan (SEP), Livelihood Restoration Framework (LRF) and the Community Development Plan (CDP) to manage and mitigate the adverse impacts identified and to equitably distribute the benefits.

Note: The detailed Livelihood Restoration Plan (LRP) for the project is being finalised. This LRP will be disclosed to the relevant stakeholders. Hence, for the purpose of this report reference to the Livelihood Restoration Framework (LRF) which has already been disclosed has been made (instead of LRP). This will be changed once the LRP is finalised and disclosed.

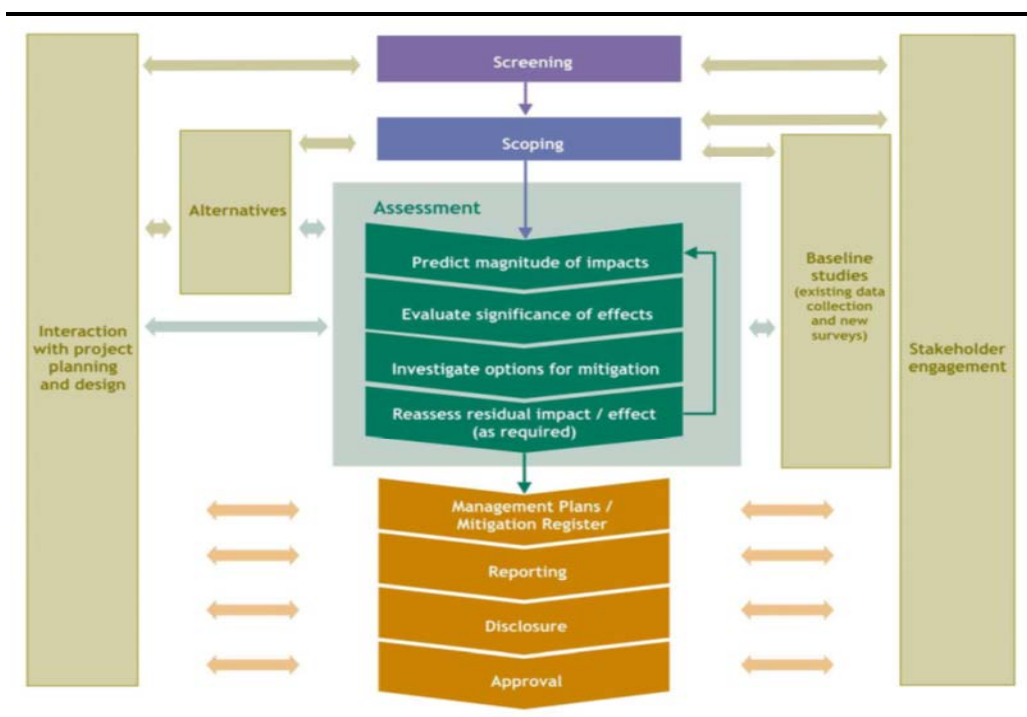
In keeping with the above objectives of the project, the scope of work for the assessment was identified as follows:

- Carry out a **legal and Regulatory review** for the project, covering central, state laws and policies as well as the other institutional frameworks applicable to the project including those pertaining to land acquisition, labour working conditions and their health and safety.
- Compile a detailed **Socio-economic Baseline and Profile** of the affected villages and families within the mining concession area, the conveyor belt right-of-way, and other associated facilities. The generation of the baseline would enable the identification and prediction of impacts and allow for a greater understanding of the community impacted and enabling a future comparison with the pre- project scenario.
- Review **the Process of Land Purchase and Compensation**. The review would help in establishing whether or not good faith negotiations were followed and stakeholders consulted during the process of land take.
- Identify the possible **Impacts** and **suggest Mitigation Measures** for the identified impacts. Also suggest means and methods of monitoring the efficacy of suggested measures through the process of consultations with the local communities and other stakeholders.
- Formulate management plans like the **Livelihood Restoration Framework (LRF)**, **Community Development Plan (CDP)** and **Stakeholder Engagement Plan (SEP)** to mitigate adverse impacts and ensure engagement and consultation process through the lifecycle of the project.

1.4 APPROACH

The SIA thus undertaken by ERM followed the standard Impact Assessment Approach (IA Process) comprising of various stages of Screening, Scoping, Assessment and Management and Monitoring (Figure 2.2)

Figure 2.2 The Impact Assessment process



Source: ERM IA Standard v1.0

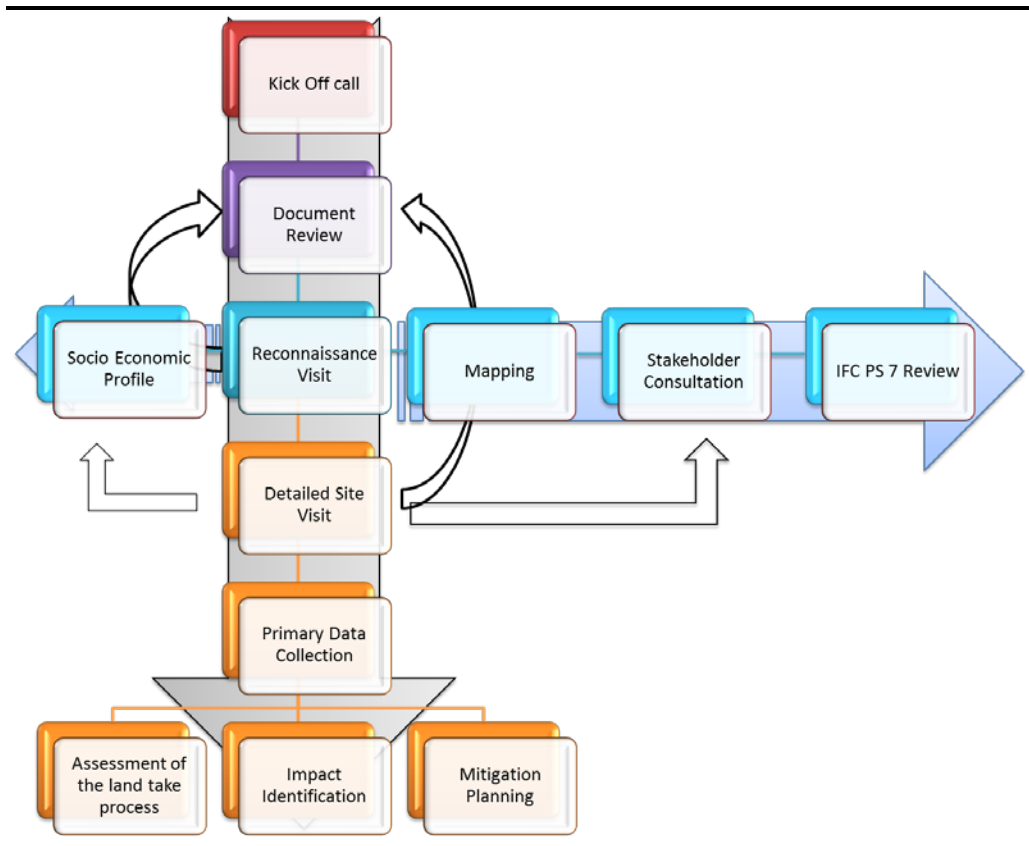
The stages of Screening and Scoping were undertaken during the initial conceptualization of the project and comprised of the description of the project and the alternatives as well as the identification of the applicable legal and regulatory requirements (also undertaken as part of the ESDD process).

Post the stages of Screening and Scoping, the process of Impact Assessment and Management and Mitigation (undertaken as part of this assignment) was undertaken. This process of IA involved the establishment of a Project baseline as well as the identification of the possible impacts of the project and the sensitivities associated with the same and assign impact significances to the impacts identified. The process of management and monitoring involved defining the requirements and developing management plans in accordance with the same.

1.5 METHODOLOGY

Keeping in mind the above approach, the SIA of the Guma mines was undertaken in a phased manner, as described in previous section. The activities conducted in different phases in which the Impact Assessment was carried out have been outlined below.

Figure 2.3 Impact Assessment Methodology



Screening Phase Activities:

Kick off Call

A kick off call was undertaken between ERM, UTCL and IFC so as to develop an understanding of the project and the expectations from the SIA. Also a discussion was held in regards to the expectations from this assessment in terms of the deliverables and the methodology to be followed for the same.

Review of secondary information

A review of the secondary information available on the project area, the administrative block, the district and the state was undertaken so as to allow for the primary data to be substantiated and complimented. Towards this end, the some of the documents that were reviewed included;

- Census of India 2001 & preliminary information available from Census 2011;
- Village and Town Directory: Raipur, Chhattisgarh;
- 17th Livestock Census;
- Administrative Atlas: Chhattisgarh;
- UNDP Human Development Report: Asia - Pacific, 2006;
- Indian Human Development Report, 2001;
- Chhattisgarh Human Development Report, 2005;
- Project Feasibility report for RWCW Line II;
- Project Feasibility report for RWCW Line I;
- *Chinhari* Newsletter Baloda Bazaar district 2013; and
- Published research papers and studies;

Reconnaissance visit

A reconnaissance visit was undertaken in the beginning of the SIA process so as to allow for an understanding to be developed of all the components of the project (land, resettlement amongst others), its various phases as well as the identification of the key sensitive areas and receptors. This visit also served as a guide to the next phase of planning for the SIA.

Figure 2.4 *Reconnaissance visit*



Mapping the Study area and its footprints

ERM with the aid of the project proponents and the local revenue officials (such as the *Patwari*, *Tehsildaar*) undertook the task of identifying and mapping out the boundaries of the mine lease area, the villages and the affected families. The study area was then divided into three zones on the basis of the distance from the project site and the sensitivities and receptors and thereby the likelihood of impact. This was done so as to enable the understanding of area and the socio-economic setting, the extent and severity of the impact to be gauged and subsequently allow for a prioritization of the various mitigative measures to be undertaken as a part of the SIA.

Figure 2.5 *Project Area Mapping*



Scoping Phase Activities:

Stakeholder analysis and consultations

ERM identified the various stakeholders of the project, such as the affected families, the *Panchayats*, the line departments (revenue, land and agriculture), state/district administration and civil society organisations as well as developed an understanding of their stakes, interests and influences on the project. A number of consultations were also undertaken with each of the stakeholder groups to understand the expectations and concerns with regard to the project.

Figure 2.6 *Stakeholder consultations*



Analysis of the relevance and applicability of IFC PS 7

During the course of screening and scoping ERM found that a number of land losers impacted due to land take for the project were tribal families. ERM carried out a rapid ethnography assessment to understand the profile of these families and the potential impacts on them due to the land take for the project. This was primarily targeted to examine the scope and applicability of PS 7 in the context of Guma Mines. The detailed report is attached as *Annex E*.

Impact Assessment Phase Activities

Socio-economic Survey

ERM with the help of local investigators collected primary data for the purpose of this SIA by carrying out household surveys and consultations with various stakeholder groups. This survey was carried out with the purpose of generating information on the social-economic baseline of the Project Affected Families (PAFs) and the community as a whole and allow for the ensuring the accuracy of the information obtained through the triangulation of information through group discussions, community consultations as well secondary information available on the villages. The data generated through this primary data collection comprised of the following:

- Socio-economic profile of the impacted communities and households;
- Literacy/skill levels and employability;
- Land ownership (nature of land owned, present use);
- Income and Livelihoods;
- Expenditure patterns;
- Access to infrastructure/amenities and common property resources
- Livestock and asset ownership;
- Social networks and identification of vulnerable PAFs;
- Cultural/religious and community structures;
- Gender and its role/participation;
- Local governance and decision making;
- Existing development schemes and community development programmes; and
- Concerns and expectations from the project.

Figure 2.7 *Data Collection through Household Survey*



Compilation of Secondary Socio-economic Information

On the basis of the primary data thus generated as well as the secondary information made available, the following socio-economic information on the affected villages was generated:

- Demographic characteristics of the population;
- Socio-economic profile of affected households/communities;
- Current land use and management patterns within the proposed mine concession area and the directly affected neighbouring villages;
- Land ownership and size of holdings;
- Local physical and social infrastructure;
- Livelihood, health and welfare characteristics of the community; and
- Profile of the Scheduled Tribe families/community including social organisation, kinship groups within the village and their relevance and importance;

Review of the Land Take Process

A review of the land take and compensation process was undertaken by ERM, through consultations with the impacted families, the project proponents (the UTCL land and communities team) as well as the local revenue officials so as to evaluate the project's compliance to the IFC regulatory standards (PS 5). This review allowed for developing an understanding of the process followed and the stakeholders consulted during the process of land take. The review also looked at the documentation available with the project proponent so as to assess and to establish the basis of compensation (and rates given in lieu of land). Also the review process (and the consultations with land losers) helped in assessing the nature of negotiations that were undertaken during the course of land purchase.

Impact Identification/Prediction

ERM undertook the process of predicting the impacts likely to occur as a result of this project as well as identifying the various mitigation measures for the same. An effort was also made to identify the vulnerable groups (households without legal ownership of land, pastoralists, women headed households, or Scheduled Tribe households) who might be in need of special assistance. An attempt was made to predict the extent, range and severity of impacts on the Project affected families and groups.

Mitigation and Management strategies

Based on the baseline data and the impact assessment, management plans have been developed for the project. These include a) Livelihood Restoration Framework, b) Community Development Plan, c) Grievance Redressal Mechanism and d) Stakeholder Engagement Plan;

This version of the SIA report will need to be updated based on information from the tribal families (in Guma mines) and those impacted by the Conveyor belt.

1.7 *USE OF THIS REPORT*

ERM is not engaged in consulting or reporting for the purpose of advertising, sales promotion, or endorsement of any client interests, including raising investment capital, recommending investment decisions, or other publicity purposes. Client acknowledges this report has been prepared for their and their clients' exclusive use and agrees that ERM reports or correspondence will not be used or reproduced in full or in part for such purposes, and may not be used or relied upon in any prospectus or offering circular. Client also agrees that none of its advertising, sales promotion, or other publicity matter containing information obtained from this assessment and report will mention or imply the name of ERM.

Nothing contained in this report shall be construed as a warranty or affirmation by ERM that the site and property described in the report are suitable collateral for any loan or that acquisition of such property by any lender through foreclosure proceedings or otherwise will not expose the lender to potential environmental or social liability.

1.8 *LAYOUT OF THE REPORT*

The layout of the SIA is given as under:

Section 0: provides the executive summary for this report

Section 1: (this section) provides an introduction and brief background to the project and its salient features, the specific objectives of the SIA in question, and the methodology followed and its limitations for the same. .

Section 2: provides the administrative framework in which the project is based with a review of the policies applicable to the project

Section 3: provides a review of the land purchase and compensation process

Section 4: provides a socio-economic background of the study area

Section 5: provides a socio-economic profile of the PAFs

Section 6: provides the Public Consultations and Stakeholder Engagement done for the project

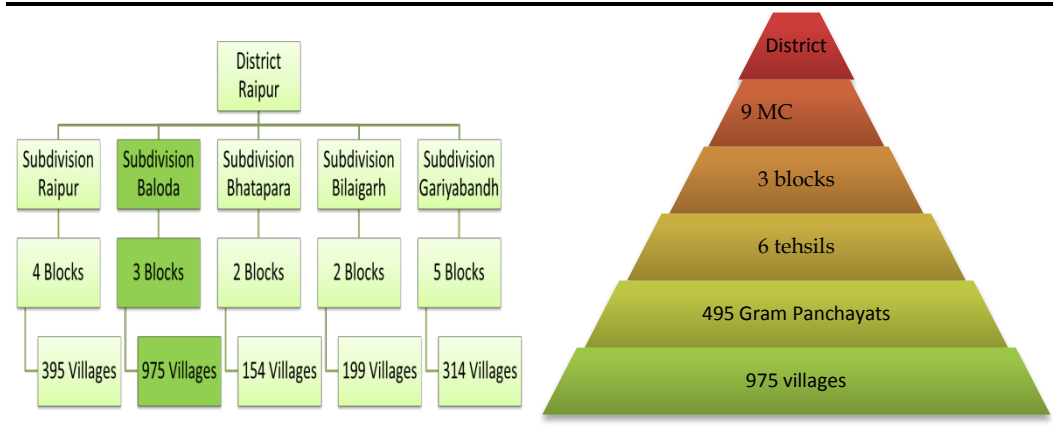
Section 7: provides the Socio-economic Impact Assessment of the Land purchase by identifying risks and impacts due to the land purchase process

2.1 INTRODUCTION

India has a number of Laws and Policies in place for the purpose of protecting the environment and interests of the communities associated with the project, while simultaneously allowing the industry to develop and grow. A review of such laws (at Central, State as well as International level) and policies applicable to this particular project has been undertaken in this chapter. In addition to this, a description of the programme requirements for the project has been provided in this chapter.

2.2 BALODA BAZAR ADMINISTRATIVE STRUCTURE

This section provides the administrative structure of the *Baloda Bazar* district.

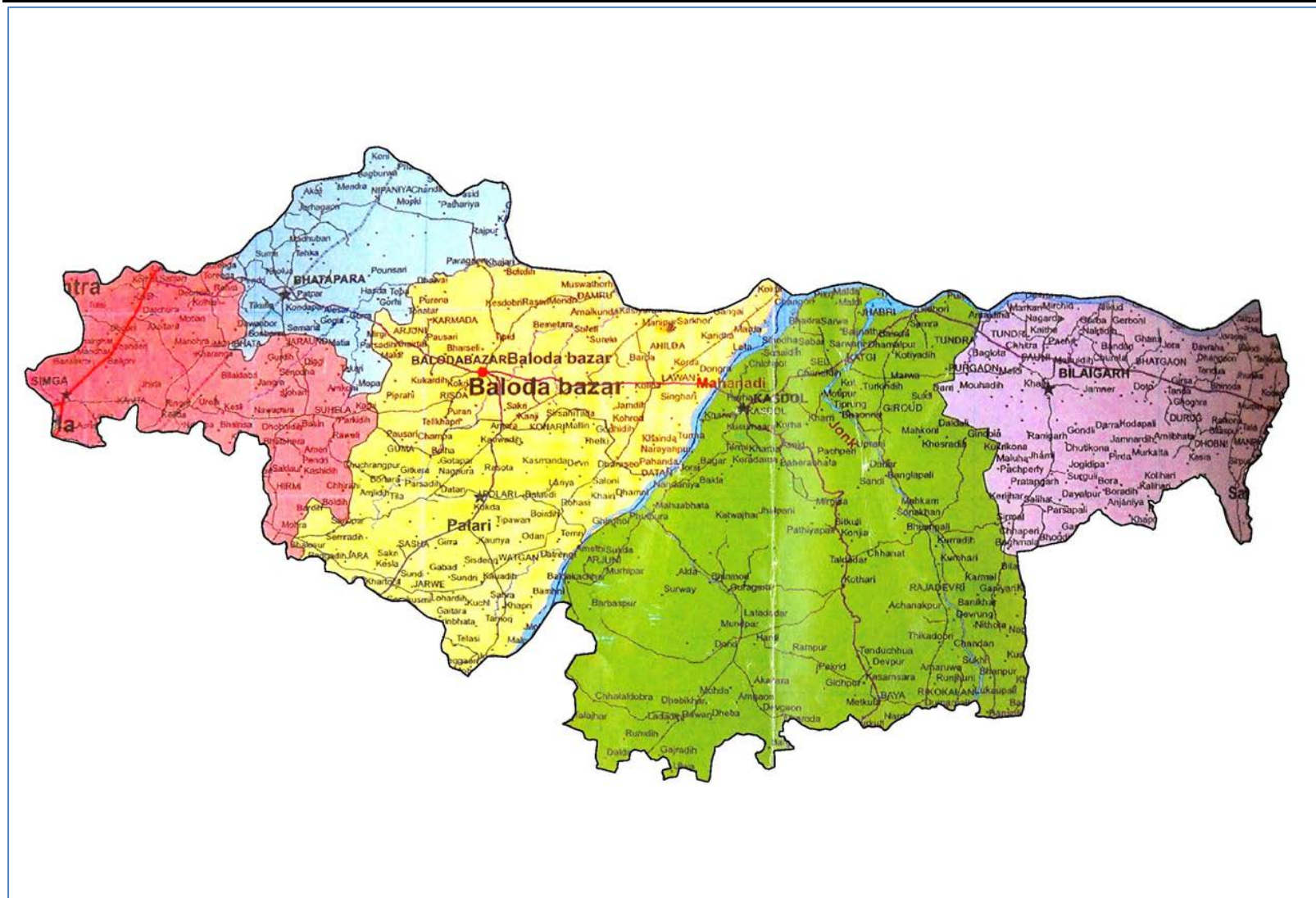


Note: MC- Municipal Corporations

As can be seen in the above figure, the Raipur District, of which Baloda Bazaar was a part of; comprised of approximately 6% of the state's area, with more than 2000 villages, in 16 tehsils and blocks of which 3 are tribal blocks¹. The district Baloda Bazaar on the other hand constitutes of 9 Municipalities and Municipal Corporations, 3 blocks, 6 *tehsils* (*Baloda Bazaar, Bhatapara, Palari, kasdol, Bilaigarh, and Bemtra*), 495 *Gram Panchayats* and 975 villages.

¹ Hence, these areas were notified under Schedule-V protected areas. However Baloda Bazar district does not constitute these tribal areas. Hence, no area under Balodabazar District is notified as Schedule-V area.

Figure 3.1 Baloda Bazaar District Map



2.3 CONSTITUTIONAL PROVISIONS

2.3.1 *Constitutional Provisions Safeguarding Individual Rights and Environmental Provisions*

In India, environment and community relations are governed by the 'intent of law' apart from specific acts and regulations. Any facility / business operations/ corporate/ private/ public sector units can be held accountable for its impact on the larger community based on the interpretation of certain constitutional safeguards and provisions. The Constitution of India guarantees every citizen the fundamental right to life and personal liberty.

- The fundamental Right to Life is guaranteed under Article 21 that states "No person will be deprived of his life or except according to the procedure established by law". Article 21 has been used by the courts in a number of judgements, dealing with a range of social and environmental issues and has constantly progressed to include a number of rights, which interpret the "right to life". These include the 'right to food, water, clean air, clothing, environment, education, medical care and shelter.'
- The Article 48-A of the Constitution of India states that the State will endeavour to protect and improve the environment and to safeguard the forest and wild life of the country. At the same time, it will be the fundamental duty of every citizen of India under Article 51-A (g) of the Constitution of India, to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.

These two provisions have often been interpreted widely to protect and safeguard social and environmental rights and concerns of different stakeholder groups.

2.3.2 *Constitutional Provisions Protecting Tribes and Extending Special Status*

The Constitution of India identifies certain groups/communities as tribal groups and lays out special provisions for such group with the objective of promoting and safeguarding the social, educational and economic interests of the Schedules Tribes. The President is empowered to specify, after consultations with the Governor of a state "tribes or tribal communities" to be listed under the Schedules tribe list. In conjunction with this certain areas have been declared as "Scheduled Areas" in the constitution.

- Thus the specification of Scheduled Areas in relation to a particular State/Union Territory is by a notified Order of the President, after consultation with the State Governments concerned. Regulations are framed under the Fifth schedule of the Constitution to prevent the exploitation of tribals by non-tribals and alienation of agricultural land of tribals being passed on to non-tribals.

- The Constitutional provisions (fifth schedule and article 224) empower the governor of a state to regulate and make regulations for Scheduled Areas and Scheduled Tribes.

These constitutional safeguards assure that the most vulnerable groups in the country have special social and economic protection and rights under the Constitution.

While, the district Raipur (of which the present district Baloda Bazaar was earlier a part of) is partially covered under the fifth schedule, the newly formed Baloda Bazaar district, in which the project is located, has not been declared a Fifth Schedule area and is thus not covered by this provision

2.3.3 *Judicial remedy under the Constitution of India through Public Interest Litigations*

Public Interest Litigation (PIL) has become one of the most important tools of legal aid and has served to bring justice in cases involving social and environmental concerns.

- Under a PIL, any public-spirited individual or group can move the court of law (under Article 226 of the Constitution for High Courts, and Article 32 for the Supreme Court) in case of breach of any fundamental right, to seek judicial redressal. The PIL is a form of writ petition, which can be filed by anybody, even if he or she is not directly affected by the perceived injustice. This has enabled socially and environmentally conscious, public-spirited individuals or groups, which are not an aggrieved party, to have easy access to the highest court of the nation.

2.3.4 *Land Acquisition Act, 1984*

The Land acquisition Act, 1984 is a central legislation that governs the land acquisition process in the country. The act is quite comprehensive in detailing out the nuances of the land acquisition process and the procedure to be followed. The act also has provisions for mandatory consultation, communication, hearing of objections and appeal to the court of law for redressal of grievances. The key features include:

- Preliminary notification for land proposed for acquisition;
- Clearing of objection within 30 days of the notification and the provision for hearing of all objections;
- Declaration of intended acquisition award;
- Reference to court if award is not accepted and hearing in court;
- Apportionment of compensation and dispute settlement regarding the same; and
- Payment of compensation for land value, trees and structures including 30% solatium and 12% p.a. interest for delayed payment.

Table 2.1 *Key provisions of LA Act 1984 and actions specified*

Sections	Actions specified
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Section 4	Publication of preliminary notification
Section 5	Payment of Damage, Hearing of objections
Section 6	Declaration of intended acquisition
Section 9	Notice to persons interested by Collector
Section 11	Enquiry into measurements, value and claims, and award by the Collector
Section 18-28	Reference to Court and Procedure Thereon
Section 29-30	Appointment of Compensation by collector
Section 31-34	Payment of compensation
Section 35-37	Temporary occupation of land
Section 38-44	Acquisition of Land for Companies

2.3.5

National Policy on Rehabilitation and Resettlement (NPRR), 2007

The National Policy for Resettlement and Rehabilitation 2007 and associated measures aim at striking a balance between the need for land for developmental activities and, at the same time, protecting the interests of the land owners, and others, such as the tenants, the landless, the agricultural and non-agricultural labourers, artisans, and others whose livelihood depends on the land involved. The benefits under the Policy will be available to all affected persons and families whose land, property or livelihood is adversely affected by land acquisition or by involuntary displacement of a permanent nature due to any other reason, such as natural calamities, etc. The key elements of the NPRR 2007 are mentioned below:

- The policy gets invoked if the project displaces more than 200 families, *en masse*, in hilly, DDP block (Desert Development Program) and Tribal areas or more than 400 families in plains;
- Vulnerable persons defined as-
 - Disabled, destitute, orphans;
 - Widows, unmarried girls, abandoned women;
 - Persons above fifty years;

The benefits to be offered under the Policy to the affected families include;

- land-for-land, to the extent Government land would be available in the resettlement areas;
- preference for employment in the project to at least one person from each nuclear family within the definition of the 'affected family', subject to the availability of vacancies and suitability of the affected person;
- training and capacity building for taking up suitable jobs and for self-employment;
- scholarships for education of the eligible persons from the affected families;
- preference to groups of cooperatives of the affected persons in the allotment of contracts and other economic opportunities in or around the project site;
- wage employment to the willing affected persons in the construction work in the project;
- housing benefits including houses to the landless affected families in both rural and urban areas; and other benefits.
- financial support to the affected families for construction of cattle sheds, shops, and working sheds; transportation costs, temporary and transitional accommodation, and comprehensive infrastructural facilities and amenities in the resettlement area including education, health care, drinking water, roads, electricity, sanitation, religious activities, cattle grazing, and other community resources, etc.

The benefits expressed in monetary terms have been linked to the Consumer Price Index, and the same will also be revised suitably at appropriate intervals. The Requiring Bodies will be responsible for development of designated areas on the periphery of the project site, and will earmark funds for the purpose of such periphery development activities.

Box 3.1

Provision for the Old Age Vulnerable and SC/ST Population

A special provision has been made for providing life-time monthly pension to the vulnerable persons, such as the disabled, destitute, orphans, widows, unmarried girls, abandoned women, or persons above 50 years of age (who are not provided or cannot immediately be provided with alternative livelihood). Special provision for the STs and SCs include preference in land-for-land for STs followed by SCs; a Tribal Development Plan which will also include a programme for development for alternate fuel which will also include a programme for development for alternate fuel and non-timber forest produce resources, consultations with Gram Sabhas and Tribal Advisory Councils, protection of fishing rights, land free-of-cost for community and religious gatherings, continuation of reservation benefits in resettlement areas, etc.

A strong grievance redressal mechanism has been prescribed, which includes standing R&R Committees at the district level, R&R Committees at the project level, and an Ombudsman duly empowered in this regard. The R&R Committees will have representatives from the affected families including women, voluntary organisations, *Panchayats*, local elected representatives, etc. Provision has also been made for post-implementation social audits of the rehabilitation and resettlement schemes and plans.

2.3.6

Chhattisgarh State R&R Policy 2007

The Government of Chhattisgarh has formulated a Model Resettlement Policy in the year 2005 and amended in 2007 in the line of National Rehabilitation and Resettlement Policy, 2007 of government of India. The aim of this policy is to ensure payment of fair compensation of lost assets to the people affected by projects initiated government and private entities; and improve or at least restore the pre project level socio-economic conditions of affected persons. The main features of the Model R&R policy are laid out below.

- People affected due to loss of land or immovable assets should be provided with alternate land or compensation at replacement value prior to displacement
- The rehabilitation site for project affected should have equal or better infrastructure than the existing habitation site
- Provision of permanent employment to the project for affected families
- Families those are land less and engaged in occupation other than agriculture will preferably be rehabilitated in their primary occupation or be given alternate livelihood options
- Unmarried son who is a major at the time of declaration of section 4 under LA Act will be considered as separate family
- There will be additional provision for vulnerable group and people living in scheduled area

- Families encroached on government revenue land and forest land for a period of not less than three years in the affected area preceding the date of approval of project by central or state government will be eligible for rehabilitation benefit.
- There will be no compensation for encroached government land, however, with the recommendation of district level committee people encroached in schedule area prior to 1990 will be eligible for land distribution
- Families affected by commercial, industrial and mining project and losing more than 75% of their land, at least one member of the family will be provided with employment in the project.
- To ensure implementation of resettlement and rehabilitation programme in a time bound manner and there will be provision of monitoring and evaluation committee at district and state level.

2.4 *THE PANCHAYATI RAJ (EXTENDED TO SCHEDULED AREAS) ACT (PESA) 1996, THE PANCHAYATI RAJ ACT, THE 73RD AMENDMENT AND THE CHHATTISGARH PANCHAYAT RAJ ADHINIYAM*

A number of laws and constitutional provisions are in place in the country with the aim of bestowing more powers on the local governments. An example of such provisions is the 73rd Amendment of the Constitution, effective from 24 April 1993, and the Panchayati Raj Act prior to that, which were brought about due to the realisation that one of the reasons for the failures being witnessed in the implementation of various government policies and projects was the top down approach being followed. This led to the constitutional recognition being bestowed upon the local governance bodies as well as the devolution of certain powers to the Panchayats/ rural local governments at the three levels, the village, intermediate and district Level.

The 73rd Amendment went on to bestow even more powers upon the local structures, such as enabling the Panchayats to make certain decisions pertaining to the social sector and development planning and make contributions towards plans made at the district level, along with a number of rights and duties being outlined for these bodies.

Almost all states now have their own Panchayati Raj Acts, with the Chhattisgarh Act being known as the *Chhattisgarh Panchayat Raj Adhiniyam*, passed in 1993. The Act was later amended to incorporate certain provisions of the PESA. Some of the powers bestowed upon the *Gram Sabha* in the Act are as follows.

- Power to exercise control over institutions or functionaries in all social sectors which may be transferred to, or appointed by the *Gram Panchayat*.
- Power to plan, own and regulate the use of minor water bodies.
- The power to control local plan resources.
- The power to lay down principles for the identification of schemes and their prioritization for the purpose of their economic development.
- The power to approve all plans and projects geared towards social development before their implementation.
- The power to identify the beneficiaries of the various schemes such as poverty alleviation schemes.

- The power to manage the natural resources, within its boundaries in keeping with the applicable laws of the land.

This was followed by the PESA (Panchayati Raj (extended to Scheduled Areas) Act) 1996 which was passed to enable tribal self-rule in the fifth schedule areas by the provisioning of *Panchayats* in these areas as well. The purpose of this act was to enable participatory democracy through the devolution of powers and authority. In this act the state government is directed to mandate the *Panchayats* with powers and authorities pertaining to various aspects such as enforcing the power to prevent alienation of land and approve plans and programmes for social development amongst others.

It should be noted that while the *Panchayati Raj Act*, the 73rd amendment and the *Chhattisgarh Panchayat Raj Adhiniyam* are applicable on the project, the Project Area is not covered by the PESA 1996.

2.5 CONSULTATIONS AND PUBLIC DISCLOSURE RELATED REGULATIONS

This section briefs national laws, policies, regulations pertaining to consultations and disclosure with respect to land acquisition and environmental impacts in India.

2.5.1 *Land Acquisition Act, 1894*

At every stage of the land acquisition process there is adequate flow of communication by virtue of publication of various notifications, declarations, notices etc in the Government Gazette, local press, local areas etc. This ensures provision of timely and reasonable opportunity to all the interested persons to claim rights and compensation.

At the first level the method is transparent and also provides for due opportunities to all the concerned before the determination of the quantum of compensation and the persons entitled to receive it. At the second level the method provides for redressal of any grievance arising out of the aforesaid first level determinations. An aggrieved person can seek reference to the court to look into the grievances concerning the measurement of the land, the amount of compensation, eligibility to receive compensation, apportionment of compensation amongst the interested persons etc.

The LAA initially stated that a notification for land acquisition would have to be issued under section 4(1) indicating the intention of the Government to acquire land or other property in official gazette. However, the 1984 amendment requires the section 4 (1) notification to be also published in two local newspapers, of which at least one should be in a regional language. In addition to the public notice, the substance of such notification made by the Collector has to be made available at convenient places in the locality where the land is situated. Compensation for the land acquired has to be paid on the basis of market value as on the data of notification under section 4(1).

This notification gives the affected/interested parties an opportunity to file objections before the Collector. In case any objection is filed, Collector has to arrange for an oral hearing and thereafter submit a report to the concerned Government department. If the Government after reviewing the objections and responding to it wishes to go ahead with the Land Acquisition, it has to make a declaration under section 6 of the Act. The declaration under section 6 has to be published in a similar manner as section 4(1).

2.5.2 *Right to Information Act, 2005*

The Right to Information¹ Act applies to the whole of India (except the State of Jammu and Kashmir). The Act includes the right to:

- Inspects works, documents, records;
- Take notes, extracts or certified copies of documents or records;
- Take certified samples of materials; and
- Obtain information in the form of printouts, diskettes, floppies, tapes, video cassettes or in any other electronic mode.

The Act does not include information including commercial confidence, trade secrets or intellectual property, the disclosure of which would harm the competitive position of a third party, unless the competent authority is satisfied that larger public interest warrants the disclosure of such information.

2.5.3 *EIA Notification, 2006*

All 'Category A' projects under the EIA notification 2006 require to arrange a systematic time bound and transparent Public Hearing, in a manner ensuring widest possible public participation at the project site or at the nearest district through the State Pollution Control Board. The inputs from the public consultation will form part of the Impact Assessment study submitted to MoEF for grant of Environmental Clearance.

2.5.4 *National Resettlement and Rehabilitation Policy, 2007*

The NRRP 2007 suggests holding consultation with the affected families while preparing a rehabilitation and resettlement scheme or plan. It also directs the projects affecting tribal, to hold consultation and participation of affected tribal families in line with the requirements laid down in PESA Act 1996. ,

2.5.5 *Chhattisgarh R&R Policy*

The policy has the provision of sharing the Rehabilitation Action Plan prepared by Project Proponent with the district administration which invites

(1) ¹ 'Information' means any material in any form including records, documents, memos, e-mails, opinions, advice, press releases, circulars, orders, logbooks, contracts, reports and papers, samples, models, data material held in any electronic form and information relating to any private body which can be accessed by public authority under any other law for the time being in force but does not include 'file notings'.

feedback on the same from the affected community at the time of section-4 notification or with Gram Sabha of affected tribal village. These suggestions are examined by district level committee and then forwarded to the concerned State Administration officer for approval.

2.5.6 *Chhattisgarh State Environment Policy*

The policy mandates participation of all levels of Government, business, industry, trade unions, community organizations and NGOs for effective development of and implementation of the environmental policy. Towards this end the Government commits to:

1. Promote a strong environmental ethic among stakeholders through information campaigns and awards;
2. Ensure public awareness of environmental issues and their ability to participate effectively in environmental management through dissemination of meaningful and relevant information;
3. Encourage a participatory approach to Environmental Impact Assessment of all development projects through public discussion, joint planning and management;
4. Popularize solid waste management technologies such as recycling, reuse, composting, energy generation, etc., through public participation;
5. Incorporate environmentally friendly principles and approaches into the curriculum, assessment and teaching programs of schools and higher education;
6. Promote the scheme of Eco-labeling, which helps consumers to identify products that are environment friendly; and
7. Ensure women's participation in all participatory programmes.

2.5.7 *Mining Laws and Regulations*

A number of mining regulations, both central as well as those passed by the state of *Chhattisgarh*, outline procedures and codes of conduct to be followed while undertaking any mining activity. These include procedures pertaining to activities such as procuring permission, land acquisition, working conditions and safety of workers, and wage rates. The laws and policies applicable to this project are discussed below.

Mines Act 1952 & Mines Rules 1955

The Mines Act lays down a number of guidelines and rules to be followed by a project proponent whilst undertaking a mining operation. These include rules pertaining to the safety of workers, the working conditions and amenities available to them. This in turn includes aspects such as the working hours; both above and below the ground, the minimum wage rates, and sanitation amongst other provisions.

The Mines Rules, along with other rules were passed with the purpose of ensuring the implementation and the upholding of the Mines Act.

Mineral Concession Rules 1960

The Mineral Concession Rule was passed under the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 and sets out the basic

results in total or partial disablement of the worker for a period exceeding three days.

The Maternity Benefit Act, 1961

This Act was enacted with the purpose of regulating the employment of women in certain establishments for a period before and after child-birth as well as provide for maternity and other benefits.

According to the provisions of this Act, no employer shall knowingly employ a woman in any establishment during the six weeks immediately following the day of her delivery or miscarriage. Also, no pregnant women shall, on a request being made by her, be required to do any work of arduous nature or which involves long hours of standing or which in any manner is likely to interfere with her pregnancy, result in miscarriage or interfere with the normal development of her foetus or impact her health in any negative manner.

2.6 PROGRAMME REQUIREMENTS

2.6.1 IFC Performance Standards

PS 1: Assessment and Management of Environmental and Social Risks and Impacts

The *PS 1* requires Social and Environmental Assessment and Management Systems for managing social and environmental performance throughout the life cycle of this Project and runs through all subsequent PSs. The main elements of *PS 1* include:

- A Social and Environmental Assessment to understand the social and environmental impacts and risks;
- A Management Program for mitigating the impacts and minimizing the risks identified in the assessment;
- Establishing and ensuring organizational capacity and requisite trainings to the staff to implement the Management Programme;
- Engagement with the community to ensure free prior informed consultation, community grievance redress constructive relationship all through the project life cycle; and
- Adequate monitoring and reporting systems to measure and report the effectiveness of the Management Programs.

The social and environmental performance is a continuous process to be initiated by the management and would involve communication between organisation, its workers and local communities directly affected by the Project. The PS requires that Project proponent initiate regular assessment of the potential social and environmental risks and impacts and consistently tries to mitigate and manage strategy on an ongoing basis.

PS 2: Labour and Working Conditions

The economic growth through employment creation and income generation is recognised and balanced protecting the basic rights of workers. *PS 2* is guided by the various conventions of International Labour Organization (ILO) and outlines the minimum requirements of working conditions, protection to the workforce (including issues of child and forced labour) and ensuring occupational health and safety of both its 'employees' as well as 'non-employees' working through contractors. The PS requires:

- Establishment of a sound worker-management relationship;
- Encouraging equal opportunity and fair treatment of workers;
- Promoting compliance with national labour and employment laws; and
- Promoting healthy and safe working conditions for workers.

PS 2 requires project proponents to conduct its activities in a manner consistent with the four core labour standards (child labour, forced labour, non-discrimination, and freedom of association and collective bargaining). In addition, *PS 2* also addresses other areas such as working conditions and terms of employment, retrenchment, and occupational health and safety issues.

Some of these requirements refer to the applicable national law. Whereas national law establishes standards that are less stringent than those in *PS 2*, or are silent, the project proponent is expected to meet the requirements of *PS 2*.

PS 4: Community, Health, Safety and Security

PS 4 concentrates on the responsibility that must be undertaken by the client to avoid or minimize the risks and impacts to the community's health, safety and security that may arise from project activities. *PS 4* requires a project to evaluate risks and impacts to the health and safety of the affected community during the Project life cycle and establish measures to avoid minimize and reduce risks and impacts from the Project.

PS 4 recognises that project activities, equipment, and infrastructure often bring benefits to communities including employment, services, and opportunities for economic development. However, projects can also increase the potential for community exposure to risks and impacts arising from equipment accidents, structural failures, and releases of hazardous materials. The performance standard details out project proponents responsibility to avoid or minimise the possible risks and impacts to community health, safety and security that may arise from project activities.

PS 5: Land Acquisition and Involuntary Resettlement

The objectives of this PS are to:

- Avoid or at least minimize the involuntary resettlement wherever feasible by exploring alternative project designs;

- Mitigate adverse social and economic impacts from land acquisition or restrictions on affected persons' use of land by:
- Providing compensation for loss of assets at replacement cost; and
- Ensuring that resettlement activities are implemented with appropriate disclosure of information, consultation, and the informed participation of those affected.
- Improve or at least restore the livelihoods and standards of living of displaced persons;
- Improve living conditions among displaced persons through provision of adequate housing with security of tenure at resettlement sites.

PS 5 require a project to consider various processes and systems to avoid /minimise social and economic impacts related to land acquisition and resettlement. This PS applies to physical or economic displacement resulting from the following types of land transactions:

Type I: Land rights for a private sector project acquired through expropriation or other compulsory procedures;

Type II: Land rights for a private sector project acquired through negotiated settlements with property owners or those with legal rights to land, including customary or traditional rights recognised or recognisable under the laws of the country, if expropriation or other compulsory process would have resulted upon the failure of negotiation;

This PS does not apply to resettlement resulting from voluntary land transactions (i.e., market transactions in which the seller is not obliged to sell and the buyer cannot resort to expropriation or other compulsory procedures if negotiations fail). The impacts arising from such transactions will be dealt with as under PS1, though sometimes, when risks are identified, the project proponent may decide to adhere to PS 5 requirements even in willing buyer-seller cases.

PS 7: Indigenous Peoples

PS7 recognises that the Indigenous Peoples are particularly vulnerable if their lands and resources are transformed, encroached upon, or significantly degraded. Their languages, cultures, religions, spiritual beliefs, and institutions may also come under threat. As a consequence, Indigenous Peoples may be more vulnerable to the adverse impacts associated with project development than nonindigenous communities. This vulnerability may include loss of identity, culture, and natural resource-based livelihoods, as well as exposure to impoverishment and diseases. PS 7 highlights the need to establish and maintain an on-going relationship based on Informed Consultation and Participation (ICP) with the Indigenous Peoples affected by a project throughout the project's life-cycle and to ensure Free, Prior and Informed Consent (FPIC) of the Affected Communities of Indigenous Peoples.

On the basis of the ethnographic screening carried out to establish the applicability of the Performance Standard (as provided in detail in the PS 7 note), it was established that the provisions of PS 7 are applicable to the project. However, it was also assessed that even though the project proponent is required to establish an on-going relationship with the IPs throughout the project life cycle by engaging them through

ICP, the project activities do not involve any special circumstances which merit/require ensuring FPIC (as mentioned in PS-7 (Para 13 to 17)).

2.6.2 IFC EHS Guidelines for Mining

The IFC EHS Guidelines issued in 2007 are applicable when the World Bank Group members are involved in a project. These guidelines comprise of general as well as industry specific examples of Good International Industry Practice (GIIP) as defined in the IFC PS 3 on Pollution Prevention and Abatement.

The guidelines are applicable to underground, open pit, alluvial, solution mining and ocean dredging. These are tailored to the hazards and risks identified for each mining project, and usually involve the establishment of site specific targets along with suitable timelines for the achievement of the targets.

As part of the guideline for Community Health and Safety, the issues pertaining to activities such as transport safety along access corridors, impacts to water quality and quantity, development of new vector sites, and potential transmission of communicable diseases are considered. The guidelines also stipulate the formulation of an Emergency Response Plan in keeping with the guidance of the UNEP APPEL (Awareness and Preparedness for Emergencies at the local level) for Mining

2.6.3 Chhattisgarh New Industrial Policy (2009-2014)

The Industrial Policy aims at promoting private sector participation in the development of the industrial sector while protecting and promoting the interests of the vulnerable sections of the society.

One means by which this is to be achieved is by the provisioning of proper compensation in instances when land acquisition takes place. The project proponents are also to strictly abide by the resettlement and rehabilitation policies applicable in the state when undertaking such endeavours.

Table 2.2 Summary of Applicable Reference Framework

Category	Provision	Applicability to the project
Constitutional Provision	Fifth Schedule	<ul style="list-style-type: none"> The district Raipur is partially covered under the Fifth Schedule. The district Baloda Bazar is not covered by the fifth Schedule
Mining Laws & Regulations	Mines Act 1952 & Mines Rules 1955	<ul style="list-style-type: none"> Rules pertaining to the safety of workers, the working conditions and amenities available to them. Provisions for aspects such as the working hours; both above and below the ground, the minimum wage rates, and sanitation

Category	Provision	Applicability to the project
	Mineral Concession Rules 1960	<ul style="list-style-type: none"> The project proponent is required to obtain a statement of consent in writing from the owners of the land on which mining is to take place prior to commencing activities at the site.
	The Panchayati Raj (extended to Scheduled Areas) Act (PESA) 1996, The Panchayati Raj Act and the 73rd amendment and the Chhattisgarh Panchayat Raj Adhiniyam 1993	<ul style="list-style-type: none"> The PESA 1996, is not applicable on the project, while the Panchayati Raj, the 73rd amendment and the Chhattisgarh Panchayat Raj Adhiniyam are applicable Enables the Panchayats to make certain decisions pertaining to the social sector and development planning and make contributions towards plans made at the district level, In these the Panchayats are bestowed with powers and authorities pertaining to various aspects such as enforcing the power to prevent alienation of land and approve plans and programmes for social development ; Requires the project proponent to obtain a consent from the impacted villages;
Land Acquisition and Resettlement	Land Acquisition Act, 1894 and the Land Acquisition Resettlement and Rehabilitation Bill (LARR) 2011	<ul style="list-style-type: none"> The Act outlines the procedures to be followed by the project proponent for the acquisition of land, declaration of acquisition intent, hearing of objections, and final possession of the land As a part of the provisions in the section 3 of the LARR Bill, the process of SIA is made mandatory for any project coming under its purview. While the sections 11;12; and 21-23, of the Bill contain details on as to the hearing of objections, minimum resettlement and rehabilitation entitlements for the affected families, including monetary compensation, and amenities to be made available respectively. As the LARR is only to be applicable in instances of physical displacement, the Act is not applicable to this project

Category	Provision	Applicability to the project
Labour Laws	The Child Labour (Prohibition and Regulation) Act, 1986	<ul style="list-style-type: none"> The Act provisions that no children are to be employed in certain sectors including mines; Where employed the Act outlines the conditions in which the children work. These conditions included the number of working hours, and rest time
	Contract Labour (Regulation & Abolition) Act 1970	<ul style="list-style-type: none"> The act provides guidelines for the registration of establishments, the provision of the health and safety of the workers, and wages. The Act puts the onus on the principal employer to ensure that the provisions in the Act for the safety and welfare of the workers employed are upheld.
	The Trade Union Act, 1926	<ul style="list-style-type: none"> This Act provisions the registration of trade unions and outlines the laws pertaining to registered trade unions.
	The Payment of Wages Act, 1936, amended in 2005	<ul style="list-style-type: none"> The Act holds the employer solely responsible for the payment of wages to the employees. The Act also specifies the need for a timeline for the wage payment, and the provisions for fines and deductions amongst other details pertaining to wages.
	The Equal Remuneration Act 1976	<ul style="list-style-type: none"> This Act requires the employer to pay equal wages to both men and women for the same amount of work or work of similar nature and to be unbiased while recruiting men and women workers.
	Workmen's Compensation Act, 1923	<ul style="list-style-type: none"> The employer is made liable to pay compensation to the employee in all cases of physical injury arising out of and in the course of employment.
	The Maternity Benefit Act, 1961	<ul style="list-style-type: none"> This Act was enacted with the purpose of regulating the employment of women in certain establishments for a period before and after child-birth as well as provide for maternity and other benefits.
IFC Performance Standards	Performance Standard 1: Assessment and Management of Environmental and Social Risks and Impacts	<ul style="list-style-type: none"> It stresses the importance of the maintenance of an effective Ecological and Social Management System (ESMS) throughout the life of the project. It requires the engagement of the Indigenous people in the process of Informed Consultation and Participation (ICP).

Category	Provision	Applicability to the project
	Performance Standard 2: Labour and Working Conditions	<ul style="list-style-type: none"> It facilitates the maintenance of healthy worker- management relationships in any project through the protection of the fundamental rights of the workers as well as compliance with the national employment and labour laws
	Performance Standard 4: Community Health, Safety and Security	<ul style="list-style-type: none"> It highlights the importance of mitigation of the risks on a community's health; safety and security; especially those resultant from a project, not only as a responsibility of the state but also the project proponents.
	Performance Standard 5: Land Acquisition and Involuntary Resettlement	<ul style="list-style-type: none"> In scenarios of unavoidable resettlement (both physical and economic) of communities the performance standard requires the mitigation of the impact through compensation for the losses suffered; and improvement of the living conditions of the affected communities in the form of comprehensive compensation packages.
	Performance Standard 7: Indigenous People	<ul style="list-style-type: none"> The project proponent is required to establish an on-going relationship with the IPs throughout the project life cycle by engaging them with ICP. Provisions of PS 7 is applicable to the project
IFC EHS Guidelines	IFC EHS Guidelines for Mining	<ul style="list-style-type: none"> Identification of issues of community health and safety in accordance to the different project activities taking place; Formulation of an Emergency Response Plan in keeping with the UNEP APPEL
Jurisdictional policies	National Mineral Policy 2008	<ul style="list-style-type: none"> The project proponents are required to carry out the mining operations under the Sustainable Development Framework A SIA is made mandatory in all projects involving the acquisition of land from individuals
	Chhattisgarh New Industrial Policy (2009-2014)	<ul style="list-style-type: none"> The provisioning of proper compensation in instances when land acquisition takes place. The project proponents are also to strictly abide by the resettlement and rehabilitation policies applicable in the state when undertaking such endeavours
	National Policy for Rehabilitation and Resettlement 2007	<ul style="list-style-type: none"> Not applicable to the project.

Category	Provision	Applicability to the project
	Chhattisgarh Model Rehabilitation Policy 2007	<ul style="list-style-type: none"> The policy, outlines the process of land and property acquisition as well as the provisions for the purpose of compensation of the lost assets, whether they be land, house, trees, provision of land for displaced agriculturalists, provision of employment opportunities amongst others.
	Draft National Tribal Policy	<ul style="list-style-type: none"> This policy endows the tribals with rights to certain resources and their use; It provides a legislative resettlement and rehabilitation framework to minimize displacement.

3.1 INTRODUCTION

ERM carried out an assessment of the land purchase and compensation process, taking into account the requirements of IFC's PS5. The approach was to document and assess, the adequacy of compensation payments and measures to address adverse impacts taking into account the requirements of IFC's Performance Standard 5, for Land Acquisition and Involuntary Resettlement

3.2 OVERVIEW OF LAND PURCHASE - STATUS AND PROCESS

3.2.1 Status

As has been mentioned in the Project description a total of 177.122 ha or 437.68 acres is to be purchased across the villages *Guma* and *Sarseni* for the purpose of the Mine (157.122 ha) and the conveyor belt (~20 ha) consisting of both private and government land. While the land for the mines lies wholly within the boundaries of village *Guma* (157.122 ha or 388.25 acres); the land required for the conveyor belt (~20 ha or 49.42 acres) lies in villages *Guma* and *Sarseni* of the *Palari* block. However the process of land take for the conveyor belt has not yet begun during the time the SIA was undertaken.

At present (when the document is being written) UTCL has acquired 81% of private land in Mines Lease area and 63% of the total assessed land requirement (for both the mine and conveyor belt). Though only a small quantity of land (~20 ha, which is 11% of the total land requirement of the project) is required for conveyor belt, due to its linear character total number of project affected families comprise 35% of the total PAFs.

3.2.2 Process of Land Take

The process followed for the land take included the following.

Decision on Direct Purchase: The UTCL team/management (based on discussions) suggested that the decision to take the route of direct purchase through a negotiated settlement was made at the initial/planning stage so as to avoid the issues/concerns and delays that is typically involved in the LA process in the state. UTCL envisaged a) cutting down on the time and effort requirement and b) building good rapport with the community/affected people (due to satisfaction with agreed/negotiated land rates) as the key outcomes of the direct purchase mechanism.

Identification of Land Parcels and Affected Land Owners; After deciding upon the mode of land take, the land team of UTCL demarcated the lease boundary on the revenue map and with the help of the revenue officials

segregated the records of affected land owners. The list of potentially affected land owners (the final list would only be available once the area demarcation has been done by the revenue officials) was prepared based on this exercise.

Updation of Land records; Based on the identification of the potentially affected land owners, UTCL undertook an exercise (along with the land owners) to update the land record to reflect the ground realities and situations. The Updation (done in consultation with the respective land owners) factored in aspects like internal family divisions, change of names (for deceased land owners), distribution of holdings, settlement of rights etc.

Assessment of Market Value for land; UTCL in consultation with different stakeholder groups (as reported) like the land owners, local village representatives, district administration made an assessment of the land rates in the area for different types/categories of land.

Individual as well as Group Negotiations and agreement of Land price: The process of individual as well as group consultations followed post the assessment of the market rate. Based on these negotiations, land prices for different categories of land were agreed. The land rates (after having been finalised) were disclosed in the village following which land purchase was made from the some of the willing land owners.

On-going consultations/Negotiations and Revision of land rates: The land purchase process began in the year 2008. The process of land take for the project was a phased process. The land market in the area saw increased activity which resulted in increase in price of land. This was followed by the Government of Chhattisgarh's decision to fix land rates for different categories of land for mining purposes. Another development that influenced the land rates was negotiations by other companies (for land) in the area. UTCL continued consultations and discussions with the stakeholders (especially the land owners) and renegotiated the rates of land.

3.2.3

Compensation and other Benefits/Entitlements

As discussed in the section above land prices were negotiated based on an assessment of market price and consultations with affected land owners (and other stakeholders like the village Panchayat representatives). The market assessment of land price was based on the average sale price of land in the area as well as an understanding of the actual market. The government of Chhattisgarh vide a notification declared the rates of INR 6, 8 and 10 lakhs for barren, single crop and double crop land. To avoid creating compensation slabs based on land quality (which is generally based on government categorisation), UTCL agreed on a flat rate of compensation which was valid for all categories of land.

The table below summarises the land purchase schedule and prices paid for the land purchased by UTCL for the project.

Table 4.3.1 Land Purchase Schedule and Land Price Offered

Year	Number of PAFs	Compensation amount provided (in lakh/acre)	Amount of land purchased
2008-2010	5	2.5-8	4.31
2010-2012	191	15	277.38
Total	196		281.69

Source: RWCW

In addition to the one-time compensation for land, UTCL has conducted this SIA which based on an independent assessment of impacts and vulnerabilities has proposed different entitlement for different groups of affected and eligible families (refer section on mitigation measures and Livelihood Restoration Plan, Community Development Plan for details)

One of the concerns of the PAFs, pertains to the rate differential rates of compensation for land purchased by UTCL. During the initial years of land acquisition (2008-2010) UTCL had, in keeping with the then market rate paid compensation at the rate of INR 2.5 lakh- 8 lakh/acre. Thereafter the land rates changed in the area and UTCL agreed to purchase land at the rate of INR 15 lakh/acre from 2010 onwards. However an agreement over the payment of the differential amount to those PAFs who sold their land prior to 2010 has not been reached and the affected PAFs expressed concern and dissatisfaction with this issue. The PAFs are of the opinion that they are entitled to the differential amount. Discussions with the UTCL team suggest that there are 5 PAFs who fall in this category and their concerns would be addressed soon.

3.2.4 Feedback on the Compensation and Review of Replacement Cost

During group discussions and individual consultations/interviews, people reported/acknowledged that rates of compensation for land was higher than the market value. The affected families felt that they would be able to replace the land if they wanted. This meets the requirement under PS 5 (of affected families being able to purchase replacement land (of similar type/quality) with the compensation amount) However several affected families complained about the sharp rise in land price in the immediate vicinity of the project site. This in effect meant that people had to move to some distance away to buy/replace land (refer to section on "utilisation of compensation" for details).

People have till date utilised the compensation money for the following:

- Buying land either in the vicinity or in other area. Many people want to buy more land than what they had, and so are preferring to go to places slightly far away where land rates are lower;
- Buying other economically productive assets;
- Deposited the amount in the bank and are exploring investment opportunities;
- Paying off loans, which was a considerable burden on some of smaller/poorer land owners;

4.1 INTRODUCTION

As mentioned in the section on approach and methodology, the social baseline for the purpose of this project has been developed through a combination of review of secondary literature available on the Study area, the *tehsil*, the district and the state. This information was also corroborated during the site visits undertaken through the process of consultations, group discussions, mapping of the project area and the primary baseline data collection for the impacted households.

The purpose of this section is to provide an understanding of the project setting, of the socio-economic profile of the impacted families and the overall study area. This analysis is to then enable a better understanding of the extent and magnitude of impacts which are expected to result from the project.

4.2 STUDY AREA DESCRIPTION

The study area for the project includes the project footprint area (or Direct Influence Area -DIA) and the larger area in which the project is located. The study area for the purpose of this assessment is taken to comprise of the area within a radius of 10 km from the project site (mine).

The study area, for the purpose of the project in turn, has been divided into three zones, on the basis of radial distance from the mining lease boundary. The villages lying within a 2.5 km radius is referred as primary zone, villages within the 2.5-5 km radius as secondary zone and finally the villages lying within the 5-10 km radius as outer zone. Through this division, it was aimed to capture the difference in socio-economic setting across the study area according to the distance of the villages from the project and the DIA.

This study area comprises of approximately 75 villages of the district *Baloda Bazar*. Of these, there are six (6) villages in the immediate vicinity of the project (0-2.5 km) or the primary zone, namely *Sarseni, Guma, Pausari, Champa, Thelki and Bharuwadih* of which the villages *Sarseni* and *Guma* are the villages whose land is to comprise of the mine area and the conveyor belt route, thus forming a part of the project footprint area.

Figure 5.1 Study Area Map

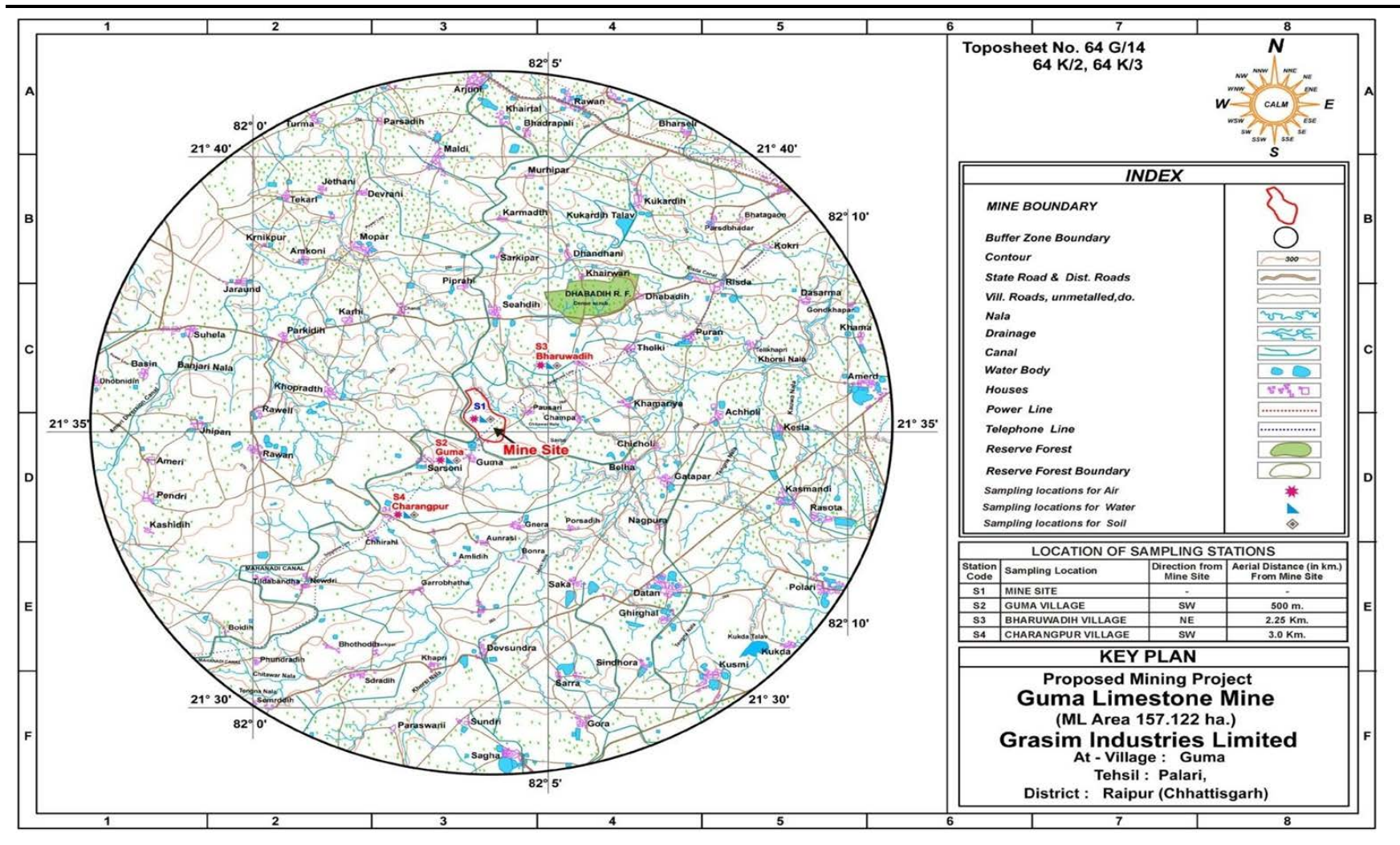
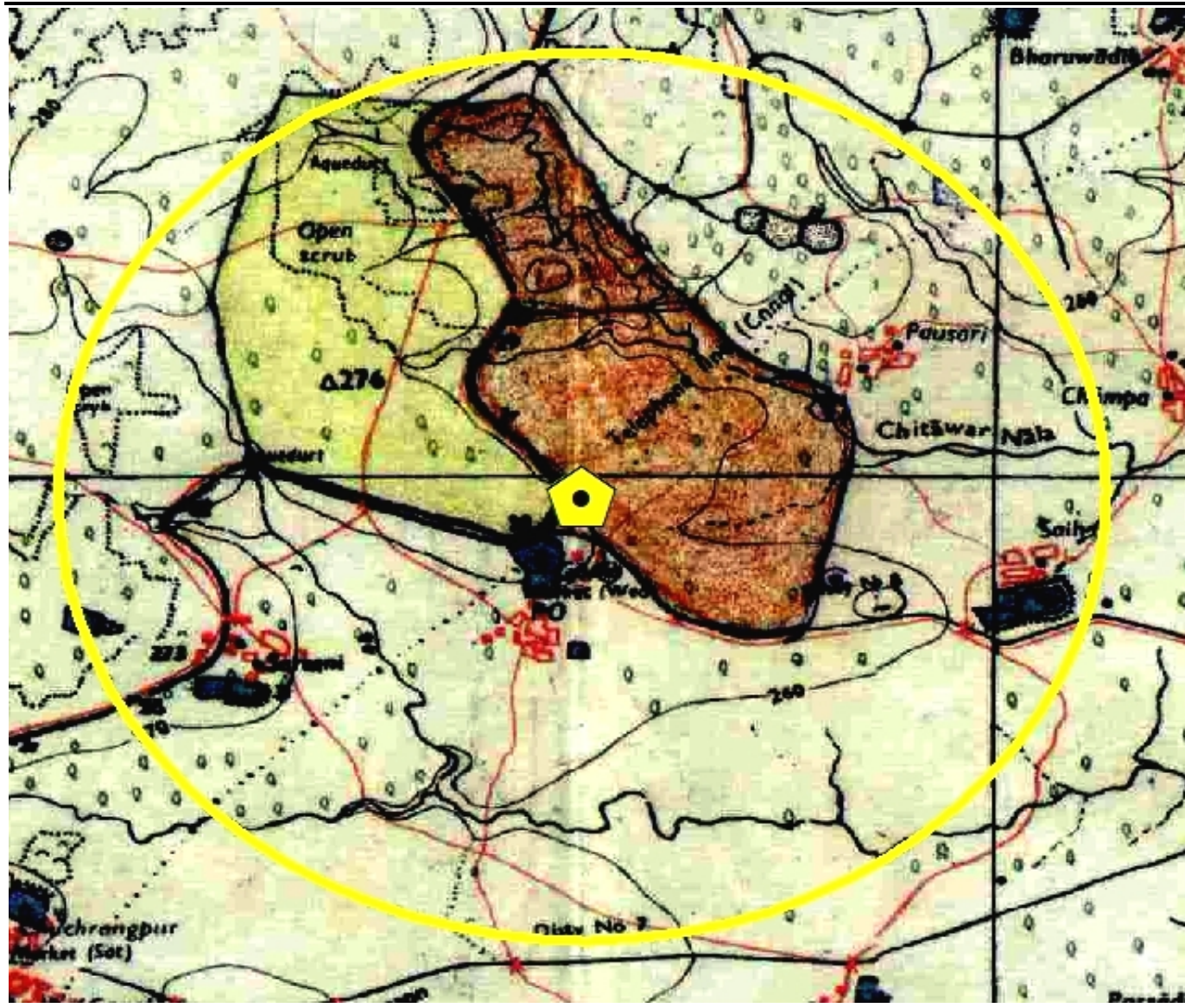


Figure 5.2 Direct Impact Area and the Primary Zone map of the Study Area



4.3 DEMOGRAPHIC PROFILE

4.3.1 Chhattisgarh State

The state of Chhattisgarh was formed on 1st November 2000, after being separated from Madhya Pradesh. It is the seventh largest state in the country and is bordered by the states of Uttar Pradesh and Jharkhand in the north, Orissa in the east, Madhya Pradesh and Maharashtra in the west and Andhra Pradesh in the south.

The state is the 16th most populated state in India according to the Census of India 2011 and is one of the least densely populated regions in India. It is primarily comprised of rural population. However, the state has been witnessing a phase of rapid transformation with urban population growing at a rate of approximately 41.83% over the last decade.

The state has witnessed a population growth rate of approximately 22.59 % in this decade. This is a significant increase in terms of growth rate from the previous decade, when the growth rate was 18.06 percent. This increase in the growth rate has also been accompanied by an increase in the share of the

Area (sq. km.)	13,500
Revenue Divisions	3
Districts	18
Tehsils	149
Tribal development blocks	85
Development blocks	146
Panchayats	9820
villages	20126

Source: Census 2011 (provisional)

state's population in the total population of the country. While the state formed 2.03 % of the country's population in 2001, this number has increased to 2.11 % in the 2011.

Demographic characteristics	
Population	2.55 crore
Population density	191 individuals
Sex Ratio	991
Literacy Rate (%)	71.04
Rural Population (%)	76.76
SC population (%)	12.19
ST population (%)	32.46

Source: Census 2011 (provisional)

This has been accompanied by an increase in the literacy levels and population density in the state. The literacy rate of the state has witnessed an increase from 64.66% in 2001 to 71.04% in

2011 (provisional tables). Similarly, the population density of the state for 2011 has reached 191 individuals per square kilometre from 154 individuals per square kilometre in 2001 (increase of 19% approximately).

4.3.2 Raipur City and District

The city of Raipur, also the capital of the state and part of the *Raipur Metropolitan Region*, is the 16th most populous city in the country. The city is located near the centre of what is commonly known as the 'rice bowl of India', with the river *Mahanadi* flowing to its east, *Maikal Hills* in the north west, *Chota Nagpur Plateau* in the north and north east and the dense forests of the

Baster Plateau in the south. The tributaries of the *Mahanadi*, namely *Sendur*, *Pairy*, *Sondur*, *Joan*, *Kharun*, and *Shivnath* which flow through the city are accredited as the reasons for the fertility in the region.

The *Raipur* city has witnessed a change in terms of its economic profile ever since the creation of the state of *Chhattisgarh*. While traditionally the city's economy was characterised by a predominance of agricultural-processing and saw-milling industries, it is quickly becoming an important regional centre for commercial and industrial establishments with coal, power, steel, chemical and aluminium industries growing in numbers. This has been accompanied by *Raipur* becoming the largest market of steel and iron in India,

Raipur District Demographic Profile

Area (sq. km)	226
Population	40,62,160
Population Density	17974 individuals
Sex Ratio	983
Literacy Rate (%)	76.43

Source: Census 2011 (Provisional)

Baloda Bazaar Demographic Profile

Area (sq.m)	3,593
Population	13,04,881
Population Density	363 individuals /sq m
Sex Ratio	1003
Literacy Rate (%)	61.07

Source: Census 2011 (Provisional)

The district *Baloda Bazaar*, where the project is located, as mentioned earlier, was formed in January 2012, and was earlier a part of the district *Raipur* (of which the city of *Raipur* is a part of). Limited secondary data (census figures) are available as the district was formed after the Census 2011.

4.3.3 Industrialisation in Baloda Bazaar

The newly formed district *Baloda Bazar* over the years has witnessed a substantial change in terms of its economic and livelihood profile. In the previous decades, the primary occupation in the district was cultivation and its associated activities. The agricultural land comprises of 67% approximately of the total land. The district has been witnessing a substantial shift towards industrial land use, with *Baloda Bazar* rapidly becoming the cement hub of the country.

This transition is being facilitated by the presence of four of the seven cement plants in the state and a number of other industrial facilities within the district. The four plants located in the district belong to major cement groups such as Lafarge, Ambuja, Shree Cements and Ultratech. While the Rawan Jhipan Cement Plant (RWCW) of Ultratech is located in the village *Rawan* and the Hirmi Cement Plant is located in the village *Hirmi*, the *Ambuja* Cement Plant is located in the village *Rawaan*, the Shree Cements Plant in the village *Semradih* and the Lafarge Cement Plant is located in the village *Sonadih*. The district is also poised to have three additional cement plants, by Ultratech

Cement Limited; in the village *Kukardih*; and Jaypee and Imami in the village *Bharuwadih* which will bring the total cement plants in the district to six and in the study area to three.

Apart from Cement Grade Limestone the district is also known for its Dolomite and Gold reserves (accounting for the country's 0.55% gold reserves). The importance of the district in terms of cement production can be seen in the fact that one of the reasons for the declaration of the erstwhile *taluka* as a district and the development initiatives being introduced in the area was to allow for the state's cement production capacity to be increased to 100 MTPA from the present 13.8 MTPA.

4.3.4

Palari Block

The block Palari, in the district Baloda Bazaar, is comprised of 73 villages and has a population of 1, 19,621 persons (approximately, comprising around 13.73% of the district's population); of which around 26% are SCs and 7% are STs.

The village Guma, the site of the project is one of the villages in the Palari block and is at a distance of 59 km from the city of Raipur. It is at around 62 km from the Raipur Airport and 22 km from the Bhatapara Railway Station. It has a total population of 1,113 persons, making up almost 1% of the block's population of which around 2% are SCs and 15% are STs.

The following section will provide a detailed socio-economic profile of the project area. This will be done through establishing a basic demographic profile of the entire project area, divided on the basis of the zones as suggested above.

4.4

SOCIO- ECONOMIC PROFILE OF THE STUDY AREA

4.4.1

The Study Area

The Study area is comprised of 75 villages, with a total population of 72,553 individuals (approximately) as per 2001 census¹ and an average population density of 209 individuals per square kilometre. The population density in the study area is higher than the state average density and the average sex ratio of the villages is 1042 females for every thousand males. However, the literacy rate in SA is 54.79% which is lower than the national rural literacy (58.7%).

As can be seen in the Table 5.1 below, the villages within the direct impact area comprised of 439 households with 2149 population. The population density of the area is 155 individuals per square kilometre. Pausari village has the highest population density in the project vicinity. The population density in the primary zone is 222.

¹ The Village wise Population Abstract for 2011 Census is not published yet. Hence, Census 2001 data is used.

Table 4.1 Demographic Profile of the Study Area

Study Area Zones	Total no. of villages	Area (ha)	Number of HHs	Total Population	Population Density	Sex Ratio	Literacy Rate %	Proportion of SC %	Proportion of ST %
0-2.5 km	6	435.66	166	814	194	1045	59.40	14.18	11.25
2.5-5 km	11	343.45	146	720	201	1029	51.16	29.74	3.77
5-10 km	57	464.18	205	1048	234	1030	53.82	21.95	15.34

Source: Census 2001

The figures refer to the averages of all the villages in different zones

HH: Households, no: Number, SC: Scheduled Caste, ST: Scheduled Tribe, Population density refers to the number of individuals per square kilometres, Sex ratio refers to the number of females per thousand males. The proportion of SCs and STs is the percentage of SC and ST, population in the total population

The following sub sections will undertake a detailed discussion of the villages falling within the primary zone of the study area; that is; those villages which lie within the immediate vicinity of the site (0-2.5 km). This along with a comparison of these villages with those lying within the other two zones would enable a detailed understanding to be developed of the social setting of the project and the impacts associated with the same.

As can be seen in the Table 5.1, the villages in the immediate vicinity of the site have a total population of 4,886 and a population density of 194 individuals per square kilometre on an average (the average rural population density in India is approximately 318 individuals per square kilometre¹). Approximately 16% of the total population within this primary zone is under six years of age.

Table 4.2 Demographic profile of Villages in the Study Area

Zones	Name of Village	Area(ha)	Number of HHs	Total Pop	Pop Density	Sex Ratio	Literacy Rate %	SC %	ST %
Primary Zone	Sarseni	597	203	1036	174	981	56.08	7.34	14.48
	Guma	786	236	1113	142	956	53.28	2.16	15.00
	Pausari	406	242	1276	314	1000	62.93	17.01	12.77
	Champa	301	137	595	198	1212	50.76	10.76	13.78
	Thelki	299	90	414	138	1070	67.87	32.37	9.90
	Bharuwadih	225	88	452	201	1054	65.48	15.48	1.55
Secondary Zone	2.5-5 km	3778	1601	7924	201	1029	51.16	29.74	3.77
Outer Zone	5-10 km	464.18	205	1048	234	1030	53.82	21.95	15.34

Source: Census 2001

Legend: Same as table 4.1

2.5-5 km and 5-10 km population density, sex ration, literacy rate, SC and ST proportions are average figures across the villages

The primary zone has a balanced sex ratio, low population density is in keeping with the demographic profile of the rural regions of the state of Chhattisgarh. However, the villages whose lands comprise the Project Footprint area (villages Guma and Sarseni) are characterised by a lower sex ratio, literacy rate and SC population in comparison to the primary zone.

The villages lying in the 2.5-5 km radius (a total of 11 villages) or the secondary zone on the other hand are characterised by a total population of 7,924 individuals, a comparable population density of 201 individuals per square kilometre, balanced sex ratio and with 19% of the population under six years of age.

Similarly the 57 villages which lie in the outer zone of the project area (5-10 km radius) have a total population of 59,743 individuals with population density of 234 individuals per square kilometre. The population density in the project foot-print area is the lowest within the study area.

4.5 SOCIAL GROUPS

The population in the immediate vicinity of the site is comprised of primarily Hindus, with most of the caste groups belonging to the Other Backward Castes (OBCs) such as *Sahu, Verma, Rawat, Lohar, Teli* and *Kurmi*. The total SC and ST population to be found in the study area are 13,684 and 7,736 individuals respectively.

Table 4.3 *Proportion of Scheduled Caste (SC) and Schedule Tribe (ST) population*

Zones	Name of Village	Total Population	Proportion of SC %	Proportion of ST %
Primary Zone	Sarseni	1036	7.34	14.48
	Guma	1113	2.16	15.00
	Pausari	1276	17.01	12.77
	Champa	595	10.76	13.78
	Theiki	414	32.37	9.90
	Bharuwadih	452	15.48	1.55
Secondary Zone	2.5-5 km	7924	29.74	3.77
Outer Zone	5-10 km	1048	21.95	15.34

Source: Census 2001

SC: Scheduled Caste

ST: Scheduled Tribe

Proportion of SC and ST %: Percentage of total population

2.5-5 km and 5-10 km population, SC and ST proportions are average figures across the villages

The proportion of ST and SC populations in the villages of the primary zone is on an average 13% and 14% respectively albeit with considerable variation amongst the villages. While the village Guma has only approximately 2% of its population under the SC category, it has the highest population in the ST category at 15%, similarly, the village Theiki, has the highest share of SC population at 32.37% approximately. The lowest proportion of ST population is in the village *Bharuwadih*, at 1.55%.

In comparison to the representation of the SC and ST groups in the first zone, the secondary and outer zones are characterised by a higher proportion of SC population; at 25.8% on an average and a slightly lower ST representation with a 9.55% average.

Of the total 31 scheduled tribal groups known to inhabit the state of *Chhattisgarh*, 7 are found in the district of *Raipur*, of which *Baloda Bazaar* was earlier a part of. These 7 tribes are the *Gond*, *Binjwar*, *Dhanwar*, *Khariy*, *Kamar*, *Kondh*, and *Bhunja*. Of these, the tribe *Bhunja* are found exclusively in the *Raipur* district of *Chhattisgarh*, while the others are known to be spread across a number of districts in the state as well as in other adjoining states, of which the most widespread are the *Gond*. *Gonds* and *Shikaris/Pardhis* are the only tribes found in the project area.

Figure 5.3 *Gonds (Tribal groups) in the Study Area*



The *Gonds* in the Project area identify themselves as *Dhruv*, with local clans such as *Netam*, *Mandayu*, *Markam*, *Khusro* and *Sori*. They live in a mixed settlement and share habitat with other caste *Hindus*. Centuries of living together has resulted in considerable acculturation of the *Gond* population in the project area. This process of acculturation can be seen most clearly in the fact that the present generation of *Gonds* in the project area speak and receive education in the *Chhattisgarhi* language, while their traditional language *Gondi* is now only spoken by the elder generation and in marriage rituals and narrations of their history or cultural traditions. The social identity of *Gonds* is now maintained through a strict rule of endogamy and political assertion using their ethnic identity.

The *Gonds* also have their own traditional *Panchayats*, which play a significant role in their social life, particularly in the matters of marriage and adjudicating disputes among the members of the community. The *Gonds* in the surrounding 40 villages also have a Head Man, who resides in *Shivpur*, where they also have an ancient temple. Furthermore, through the provision of reservation in the *Panchayati Raj* system, the present *Sarpanch* in the *Guma Gram Panchayat* is a *Gond* woman. Box 5.1 provides a brief description of the main tribe, *Gonds* found in the district.

Gonds; The *Gonds*, who are also known as the *Koi or Koitur*, are a well-known tribe of Central India, and are found across the states of Maharashtra, Madhya Pradesh, Chhattisgarh and Orissa. With a population of over nine million, they comprise the largest tribal group in the country. They are believed to have settled in eastern Madhya Pradesh, sometime in between the ninth and thirteenth centuries A.D. The main language of the Gonds is known as Gondi, and belongs to the Dravidian Languages and is related to Telegu and Kannada. The Gonds are also known to speak Hindi, Marathi or Telegu.

The most distinctive feature of Gond religion is the *Persa Pen*. Gonds worship a high god known as *Baradeo*, who is also known as *Bhaghvan*, *Sri Shambu Mahadeo*, and *Persa Pen*. He is respected but he does not receive fervent devotion, which is shown only to clan deities. Each Gond clan has its *Persa Pen*, who protects all clan members. Each village also has its *Village-Guardian* and *Village-Mother* who are worshipped when villagers celebrate regular festivities. Gonds also worship family and household gods, gods of the field, and gods of cattle. It is the village priests (*devari*), who perform sacrifices and rituals for village festivals. While it is the head of a household who typically carries out family ceremonies, Clan priests known as *katora* tend to the shrine and ritual objects of the clan's *Persa Pen*. These priests also guard the sacred spear point and organize annual festivals. Most aspects of Gond life, from the greatest festivals to the building of new cattle shed are accompanied by a sacrifice. Most of the Gond festivals are connected to agriculture amongst which the *Pola*, a cattle festival, and *Nagpanchami*, the snake festival, are very popular; *Dasahara* is also an important Gond holiday.

A number of rituals characterize the Gond community, one of the most important of which is the protection of pregnant women against spells and evil influences, and the performance of several rituals after a baby is born. A mother's brother generally names a baby boy, while the father's sister names a girl. Children grow up as part of a family, clan, and phratry (one of the four main divisions of Gond society), and gradually learn the ways of their people. Both boys and girls help guard family crops from birds and monkeys. Males undergo a ritual shaving of the beard, mustache, and eyebrows as a sign of adulthood. Girls are considered full-grown at their first menstruation. Gonds cremate or bury their dead. Children, unmarried persons, and individuals dying an inauspicious death (for instance, in an epidemic) are buried without much ceremony. Gonds perform death rituals to help the spirit move into the other world and to ease its acceptance by other clan spirits. Kinship and marriage customs among Gonds reflect broader regional patterns. The norm is cross-cousin marriage (for example, marrying one's mother's brother's daughter), which is typical in southern India. Gond groups that have been influenced by northern peoples such as Marathas, however, follow northern customs in determining marriage partners.

A typical Gond village has several hamlets. Each consists of homesteads that house extended families. Houses are usually built of mud and thatch. They consist of a living room, kitchen, veranda, a special room for women to use while menstruating, and a shrine for clan gods. Each Gond village has a headman (known by local names such as *mukhia*, *mahji*, or *patel*) and a village council (*panchayat*) chosen by the villagers. The council consists of the headman, priest, village watchman, and four or five elders. Gonds today are mainly farmers. Although some Gond communities have risen to the status of landowners, many are landless laborers.

Source: www.indianmirror.com, www.tourismofchhattisgarh.com

A rapid ethnography of the Annual cycle of livelihood and cultural practices of the *Gonds* in the project area has been provided in the Annexure E.

4.6

SETTLEMENT PATTERNS

The villages in the study area are characterised by settlements of both *Pucca* as well as *kutchha* houses, with the houses aligned in a linear manner, along the pathways and around the local water bodies (locally known as *Taalaabs*). Each household is reported to have its own grain storage (locally known as *byaara*) and compost pit for waste collection and conversion into manure. The villages have local market areas within their boundaries, which cater to the everyday needs of the inhabitants of the villages. Some of the villages, such as Guma, are also characterised by designated areas, where weekly markets are set up for the sale of vegetables, in which inhabitants of that as well as the surrounding villages are able to sell and purchase their produce (see Figure 5.4 image B).

Also, no clear demarcation of the settlements on the basis of tribal or non-tribal group was observed. However, it has been reported that the scheduled caste groups maintain separate settlements within the villages.

Figure 5.4 Settlement Patterns in the Study Area



4.7

FAMILY TYPE AND SIZE

The average family size of the villages in the study area varies from 4.3 to 5.5. The families in study area are patriarchal and nuclear households (with the proportion of (only 20% joint families). The marriage is mostly, monogamous and endogamy practiced by each caste or tribal group. The average household size in the impact area is provided in table below.

The average households are thus comprised of the head of the households, their spouses and dependent children (underage children, unmarried girls, unemployed sons) as well as dependent parents.

Table 4.4 *Average Family Size of Villages in Study Area*

Zones	Name of Village	Number of HHs	Total Population	Family Size
Direct Impact Area	Sarseni	203	1036	5.1
	Guma	236	1113	4.7
	Sub-Total	439	2149	4.9
Primary Zone	Pausari	242	1276	5.3
	Champa	137	595	4.3
	Theiki	90	414	4.6
	Bharuwadih	88	452	5.1
	Sub-Total	557	2737	4.9
Secondary Zone	1601		7924	4.9
Outer Zone	11685		59736	5.1
Study Area (Grand Total)		14282	72546	5.1

Source: Census 2001

4.7.1 *Key Influences on the community*

During the consultations and surveys undertaken as part of the SIA, the following aspects and institutions were brought out that influence the community's behaviour:

- *Village Panchayats*: The village *Panchayats* were identified as the key entities that decide on the affairs of the village (development, planning and security).
- *Block and District Administration*: The block and district administration comprise of government officials who govern/ implement the development schemes and ensure law and order in the area and handle land and agriculture related issues. The district administration, based in Baloda Bazaar is largely responsible for setting goals, planning, budgeting and implementation. Any decision made at the village/*sansad* level has to be approved by all three levels of administration before any further action is taken.
- *Schools* - children are sent to primary schools within their villages, while the Secondary Schools are available only in select locations and they serve as catchments for the nearby villages, with a secondary school being available in the Project footprint area of village Guma. The school's influence is crucial as the community is increasingly getting sensitised to the merits of educations and hence willing to send their children to schools, at least till the primary level, with a number of households expressing interest in paying higher fees in order to ensure the proper education of their children.
- *Village Elders*: each community has their own elders, who are extremely respected and are consulted in all major decisions and disputes amongst the communities.

Land resources, whether private or common are an extremely important asset for rural communities, especially so in the resource scarce dry tropical regions. At the village level it is the land resources which allow for the satisfaction of the needs/demands of fuel wood, and fodder for livestock and other everyday resources. At the household level, land holdings are arguably the most valuable asset for rural communities, which serve as an important means for livelihood and source of income. It also serves as an insurance to help tide over financially difficult situations. Land resources are thus invariably important indicators of not only economic wellbeing but also social standing of a household in the community and thus serve as important indicators of the social set up of the village.

Land Use

The villages in the primary zone of the project are characterised by a dominant agricultural land use with the village Thelki having the maximum amount of land under cultivation at 88% approximately of the total land of the village (see Table 5.5) while the lowest proportion of agricultural land is of the village Sarseni at 58%. However, what must be kept in mind is that, most of the land under cultivation in this area is classified as single crop land and is thus not characterised by intensive cultivation. Regardless, the importance of cultivation can also be seen across the other two zones with the agricultural land under the secondary and outer zones comprising of 58% and 73% of the total land respectively.



Table 4.5 Land Use details of villages in the Study Area

Zones	Name of Village	Total Area (Hectares)	Forest Area (%)	Area Not Available for cultivation (%)	Cultivable Wasteland (%)	Agricultural Land (% of total land)
Primary Zone	Sarseni	597	0	17.09	24.62	58.29
	Guma	786	0	4.58	17.56	77.86
	Pausari	406	0	5.02	7.36	75.12
	Champa	301	0	4.65	12.29	83.06
	Thelki	299	0	4.93	19.95	87.63
	Bharuwadih	225	8	4	9.33	78.67
Secondary Zone	2.5-5 km	343.45	10.66	13.19	17.70	58.45
Outer Zone	5-10 km	464.16	3.08	6.56	16.86	73.50

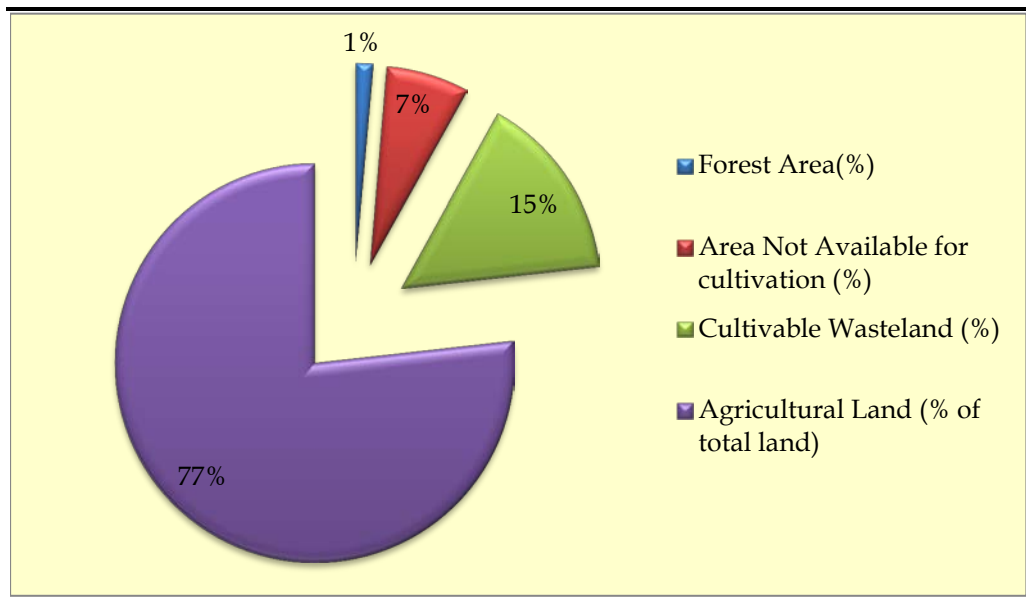
Source: Census 2001

Figures for 2.5-5 km and 5-10 km are averages across the villages

Forest Land

Out of 75 villages within the study area, only 15 have any land under forest cover within their boundaries with a total of 1653 hectares of land being classified as forest (5% of the total land). The village *Gondalabahara* (in the outer zone) is the village with the highest proportion of forest area with approximately 84% of its area being categorised as forest area, while the only village in the immediate vicinity of the site having any land under forest being *Bharuwadih*. There is no forest land in direct impact area of the project.

Figure 5.5 Land Use in Primary Zone (0-2.5kms)



Source: Census 2001

4.9 LAND OWNERSHIP

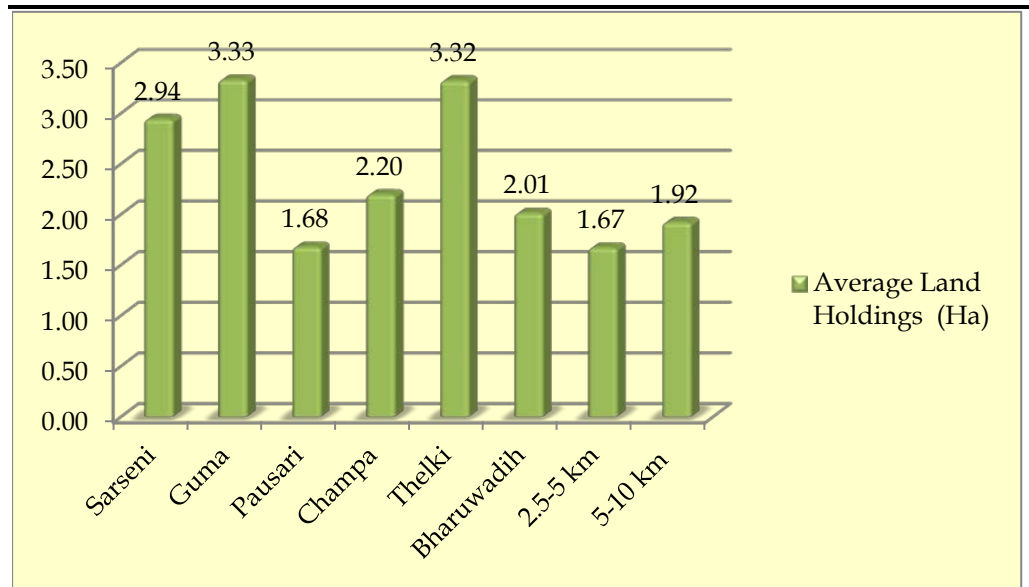
The landholdings in the villages can be categorised into the following categories:

- *Self-Owned Holdings*: those that are owned by owners who have legal title of the land (*pattas*) and are self-cultivators/residents on the land.
- *Share Cropping*: where the ownership of the land is vested in a non-cultivating land owner who gives his land on rent/lease to the actual tillers of the land on a mutually agreed yield/profit sharing basis. The share cropping regime in the study area can be classified into two types, *Adhiya* or *Regha*. While *Adhiya* refers to the arrangement where the expenses and produce are shared on a 50-50 basis *Regha* is when one individual contributes the land in return for a fixed amount of produce (20 *boras*) while the other individual meets all the other expenses and keeps the rest of the produce.
- *Occupation of land without legal ownership of land holdings/Encroachment*: Where the land is used without legal titles (either on the forest land or on the revenue land belonging to the state/ local government) that are either used for habitation or for agricultural purposes. Such forms of land use

were observed (very limited) in the village in the form of land owners extending their land boundaries to encroach upon the surrounding government/revenue land.

The landholdings in the villages in the study area are characterised by variable land holdings as well as small average land holdings per household. The average landholdings per household within the immediate vicinity of the site are approx. 2.5 hectares or 6.18 acres.

Figure 5.6 *Average Land Holdings in Study Area villages*



Source: Census 2001

The land holdings on an average are low with only few households owning large tracts of land (as reported during the consultations). There are very few households which are characterised as landless (as reported during the consultations). These households are reported to be those who have migrated to the villages *Guma* and *Sarseni* in the last decade with the purpose of settling closer to relatives or those who have sold off their land holdings due to the need for money to meet household expenses.

This lack of availability of purchasable land can also be seen in the fact that

XXXX Sahu, a resident of the village *Guma*, sold his 2 acres of land so as to be able to meet the expenses of this daughter’s wedding. Mr Sahu informed that the reason why he chose to sell his land instead of taking a loan for his daughter’s wedding was because of the good price that he was offered. He suggested that agricultural land as an income and livelihood source offered limited opportunities due to the absence of irrigation facilities and linked poor productivity. He informs that most of the land is single cropped and mostly rain dependent making agriculture an unreliable livelihood proposition sometimes not able to meet sustenance needs of food grains for the families. He thus chose to sell all his land and shift both his dwelling place and occupation. He now runs a small grocery shop in the nearby town and suggests that the income from this venture was more sustained and reliable than agriculture.

since the establishment of the numerous cement plants and their mines in the district, the land rates have increased from 2-3 lakh INR per acre to INR 6-8 lakh per acre. Furthermore, despite the increase in land rates, there is reportedly limited availability of land available for purchase, with the locals willing to buy land having to look to land in other villages, at a distance of approximately 3-4 km from their resident villages.

Agriculture Land Use

On an average, 76.8% of the total land in a village in the primary zone is classified as agricultural land (see Table 5.5). The share of the agriculture land in other two zones is 58.45% and 73.5% respectively, which is lesser than the primary zone.

Majority of the agriculture land (approximately 60%) is classified as irrigated land. The village *Ghirghol* (in the secondary zone) having the highest proportion of Irrigated land (98.82%). The other villages with more than 95% irrigated land are *Bharuwadih* in the primary zone, *Belha* (95.93%), *Amlidih* (97.01%) and *Chhirahi* (97.95%) in the secondary zone and *Parsadih* (95.35%), *Khairtal* (98.63%), *Deorani* (95.97%), *Karmada* (95.88%), *Parsabhadar* (98.32%), and *Sundri* (98.6%) in the outer zone.

On the other hand, *Sarkipar*, *Garhabhatha* (in the secondary zone), *Rawan*, and *Bhothdih* (in the outer zone) have 100% of their agricultural land classified as un-irrigated land.

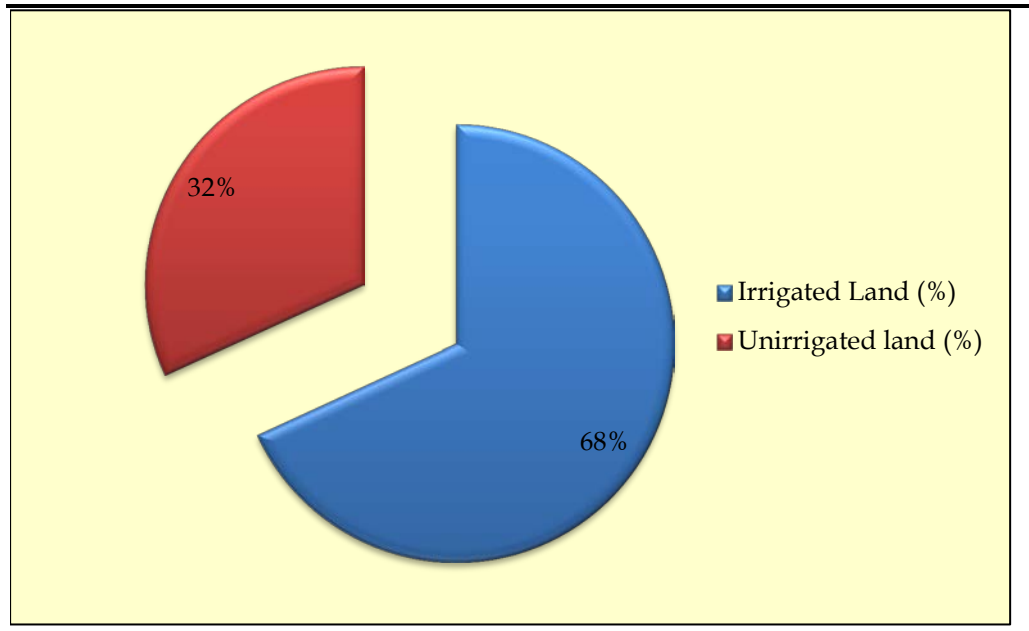
Figure 5.7 *Agricultural Land in the Study Area*



Further, un-irrigated land is classified into a number of categories (*Dhanha*, *Kanhar*, *Aamar*, *hayig*, *Bahla*, *Bhatasi*, *Horsa*, *Khar*, *Chatar*, *Bhari*, *Tikra*, *Bhata*, *Padat*, *Marhan*, *Dand*, *Badi*, *Nyara*, *Kothar*, *Aajadi*) according to the soil type, with the soil type *Kanhar* being the most prominent of the land types in the area. The *Kanhar* soil type belongs to the larger group of red and yellow soils and is developed by the deposition of shales with quartzite intercalations and lime stone conglomerates (quartzite, sand stone and silicious shales). These soils are black in colour, deep clayey in nature with 43-56% clay and are poor in calcium but are characterised by iron concretions, nitrogen, phosphorous and potassium with a well-developed drainage and good water retention. The irrigation in the area is dependent upon the Mahanadi canal which flows next to the mine lease boundary, which provides irrigation to the villages only.

during the *Kharif* season and is reported to be unreliable. Bore wells were not considered as reliable, due to deeper ground water levels (water available only at 500-600 feet)

Figure 5.8 *Agricultural Land details of the Villages in the Immediate Vicinity of the Site*



Source: Census 2001

Table 4.6 *Irrigated and Un-irrigated Land Break up in villages in Study Area*

Study Area Zone	Villages	Irrigated Land (%)	Unirrigated land (%)
Direct Impact Area	Sarseni	59.8	40.2
	Guma	78.4	21.6
Primary Zone	Pausari	75.7	24.3
	Champa	64.8	35.2
	Thelki	33.6	66.4
	Bharuwadih	96.6	3.4
Secondary Zone		49.57	50.43
Outer Zone		60.08	39.92

Source: Census 2001, Village Directory

XXX Vaishnu, a resident of the village Guma provided an understanding of the status of irrigation in the area. According to Mr Vaishnu, despite the fact that most of the land in the primary zone is part of the command area of the Mahanadi Canal, most of the villagers are unable to reap the full benefits of the irrigation. As a result of this, despite the fact that most of the land is classified as irrigated land in the government land records, the same remains categorised as single crop land.

Mr Vaishnu informs that even though the Mahanadi canal exists in close proximity to the village, the water supply from the canal is restricted to the monsoons. During which as well, the water supply is extremely erratic and unpredictable. Thus, because paddy, the main Kharif crop, requires assured and timely supply of water, the villagers are unable to depend upon the canal for irrigation and have to rely on the monsoons.

Common Property Resources

Common Property Resources (CPRs) as put by N.S. Jodha are “community’s natural resources where every member has access and usage facility with specified obligations without anybody having exclusive property rights over them” (Narpat S. Jodha, 1995). These resources are thus fundamentally different from Private Property Resources (PPRs) in their nature of access since even though with CPRs¹ every member has certain rights of usage on the property as well as certain obligations towards the resource and other members/users; none of the members hold exclusive property rights on them.

CPRs thus include resources such as community pastures, community forests and woodlots, wastelands, common dumping and threshing grounds, watershed drainage, village ponds, rivers and rivulets and their banks and beds.

It can be inferred from this set of resources that CPRs form a part of an essential survival strategy for the rural communities especially the rural poor in the form of social and institutional arrangements designed for the purpose of coping with the stressed environmental conditions of their systems, especially in the semi-arid and arid regions of the dry tropical countries such as India.

The CPRs in the project area are of primarily two types;

- the village water bodies; and
- the common grazing lands of the villages.

While the common grazing lands for the village *Guma* are located at an approximate distance of 2 km from the village and consist of open lands where cattle are left to graze, the village water bodies; known as *Taalaabs* are scattered across the villages, with *Guma* having three *Taalaabs* within its boundaries. While most of these are seasonal in nature, drying up in the dry months, at least one *Taalaab* per village is provided water through the Mahanadi canal during the dry months to allow the communities to meet their everyday water needs for cleaning and washing purposes.

Figure 5.9 *Ponds in the Study Area*



¹ A distinction also needs to be drawn between CPRs and open access resources (OARs), where in the latter no rules of management or usage exist as compared to CPRs where not only rules exist on as to the usage rights over the resource but also the duties which the usage entails.

Community consultations and discussions with Panchayat and opinion leaders came across deepening of the *tallab* and constructing concrete embankments around it as a key community demand/expectation from the project. They suggested that this pond was the lifeline of the village and its upkeep and care should be taken up by UTCL with support of the village.

4.10 LIVELIHOOD PROFILE

On an average, the villages in lying in the study area have 44.8% (approximately) of its population engaged in gainful economic activity. The total non-working population in the area is 13,441 individuals (18.5% of the total population) (see table 3.7). The main occupation in the study area is agriculture and farm-based livelihoods in which approximately 74% of working the population is involved (for more than 180 days in a year). The following categories comprise the main occupational activities within the study area:

- Agriculture based livelihoods (cultivators, share croppers and agricultural labourers);
- Livestock rearing;
- Non-farm based livelihoods (mainly private/ government service and commerce)

Table 4.7 *Livelihood Profile in villages in the study Area*

Zones	Name of Village	WPR %	Main Workers %	Marginal Workers %	Non Workers %
Primary Zone	Sarseni	43.63	36.58	7.05	56.37
	Guma	46.90	43.58	3.32	53.10
	Pausari	28.37	2.98	11.68	17.79
	Champa	49.75	35.63	14.12	50.25
	Thehki	45.17	63.04	24.40	220.77
	Bharuwadih	47.56	36.28	11.28	52.43
Secondary Zone	2.5-5 km	46.72	33.29	13.30	53.41
Outer Zone	5-10 km	44.98	33.44	10.92	55.64

Source: Census 2001

WPR: Worker's Participation Ratio: percentage of total population

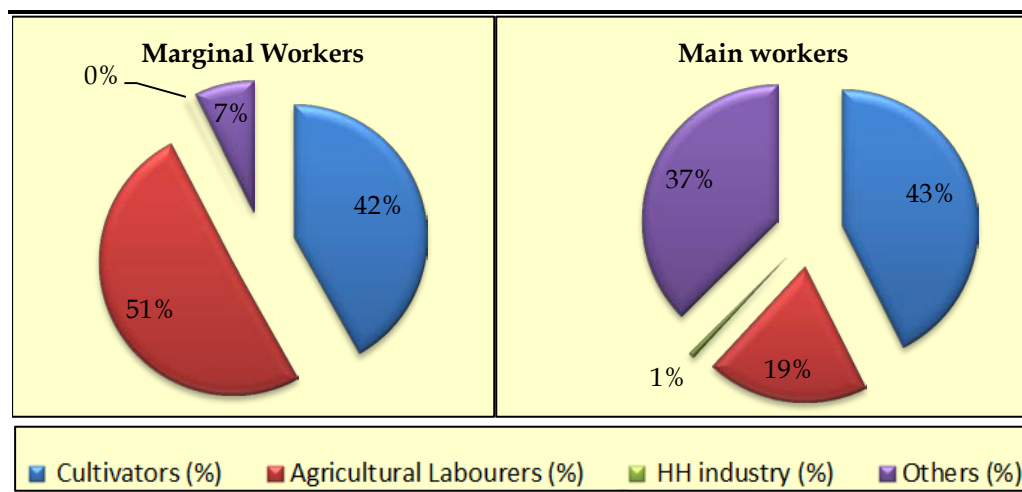
Main Workers, Marginal Workers, and Non workers: % of individuals in each category

The categories 2.5-5 km and 5-10 km are averages across the villages.

Agriculture and Allied Activities

As can be seen from Figure 5.10, farm based livelihoods, consisting of both Main and marginal workers (involved as cultivators, agricultural labourers and sharecroppers), forms the most important livelihood source of the villages within the 2.5 kms area from the project. 62%, the main and 93% of marginal workers are involved in farm based livelihoods (as cultivators, sharecroppers or agricultural labourers).

Figure 5.10 Working population in the villages in the immediate vicinity of the site¹



Source: Census 2001

While the villages in outer zones show similar trends, the villages in the secondary zone show higher dependence upon agriculture (83% of their main workforce and 97% of marginal workforce involved in farm based livelihoods).

The agricultural production in the area comprises of two cropping seasons in, *Kharif* (June to October) and *Rabi* (November to February). While rice is the most important crop in *Kharif* season, main crops in *Rabi* season are pulses (*Tuar* and, *Udad*) and groundnut. Paddy is the most important crop in the project area as well as in Baloda bazar district and in Chhattisgarh State. The other crops produced in project area are wheat, pulses, rice, *Udad*, *Lakh-Tiwara*, peas, onion and oil seeds such as *alsi*, soyabean, and groundnut.

The average annual paddy productivity in the state is approximately 0.6 tonne per acre, while that for *tuar* is 0.1 tonne per acre. The rice yield in the study area as reported by the farmers during consultation with them is around 0.2-0.5 tonnes per acre depending upon proximity to the canal and availability of water. Only a few households are engaged in double cropping. Mostly they grow food grain in Kharif and go for a cash crop as the second crop.

The agricultural practices, water availability, cropping patterns, methods of farming etc have led to a situation where the community is unable to reap the full economic benefits from this livelihood source. Some of the issues that were identified and discussed in community consultations regarding the problems associated with this livelihood source include:

- Low productivity, which can be linked to poor availability of water as well as increasing fragmentation of lands;
- Uneven pattern of monsoon and lack of other irrigation sources;
- Increasing cost of inputs which include fertilizers like urea, agricultural machinery etc; and

¹ Main workers refer to those who have worked for the major part of the reference period (that is, 6 months or more)

Marginal workers refer to those who have worked for less than 6 months in a year

Non Workers refer to those who have not been involved in gainful work at all during the reference period

- Low yield resulting in less crop availability for selling and an increasing proportion of production being used up for household consumption.

In an attempt to increase the yields, an effort is being made (by the government) to introduce the farmers to the new technologies and methods. Since, most part of the Chhattisgarh state was under the mono-culture regime at the turn of the century, an attempt is also made to diversify the agricultural production as well as increase the proportion of oil seeds and cash crops being grown.

Mr XXX Kumar, a resident of the village Sarseni, undertakes the cultivation of paddy on his landholdings of 3.25 acres of single crop land. Mr Kumar informed that the cultivation of paddy is dependent upon the monsoons. This is due to the fact that the water from the irrigation canal does not prove sufficient for the purpose of paddy cultivation, and his family does not have a bore well to utilize the ground water in the area.

Apart from a large supply of water, a good crop of paddy in the area was also reported to be significantly dependent upon the usage of pesticides and manure. The seed supply is usually maintained by keeping aside a small portion of the last year's produce. The most common form of manure utilized in the area is Urea. Mr Kumar, reported that even though the process of cultivation is increasingly becoming mechanized, his family is still dependent upon the plough, due to the lack of financial resources. Mr Kumar reported the total expenses incurred by him to approximate 15,000-17,000 INR in a year, the most significant expense of which is the purchase of pesticide and manure. According to Mr Kumar, the average production in a year is approximately 0.2-0.4 tonnes per acre, while in a good year; the produce goes upto 0.6 tonnes per acre. Mr Kumar attributed the variability in the irrigation, and the inability of his family to adopt mechanized agriculture as the primary reasons for the low production rates.

Thus while agriculture and other farm based activities are the main sources of the livelihoods of the communities in the study area, these are on most occasions supplemented by certain secondary economic activities. These secondary sources of supplementing income have been discussed in the following sub sections.

Livestock rearing

Livestock rearing, across the semi-arid eco-zones in Indian sub-continental has been adopted by the communities as a means of diversifying their livelihoods. Such diversification helps reducing their dependence upon agriculture as source of income and thus protecting themselves against the uncertainties which is associated with agriculture.

The state of Chhattisgarh registered more than thirteen million livestock heads in the seventeenth livestock census in 2003. The milk production of the state in 2003-2004, was to the tune of eight crore and twelve thousand tonnes (0.65% of India's milk production), while the eggs produced numbered eighty crore and ninety one lakhs. These livestock numbers comprise of bovines; cows and

buffaloes and fowls. Apart from these the other species which form a part of the livestock in the state are goats, pigs, rabbits and poultry. Sheep and horses though recorded in the state are present only in negligible numbers.

Figure 5.11 *Livestock holdings*



An attempt is also being made at the district level to provide Below the Poverty Line (BPL) families with an additional source of income in the form of pig farming and poultry farming, however these are not very popular in the study area. It should be noted that livestock is kept not only as a secondary source of livelihood, but also for their nutritional qualities and their contribution to the farm lands in terms of manure and in providing animal power for various activities such as ploughing fields.

Similarly in the study area the livestock holdings comprise of mostly bovines, cows and buffaloes with a limited number of households reporting owning fowls. These livestock holdings are reported to serve the singular purpose of their nutritional qualities as well as their use in agriculture, with a very limited number of households reporting economically gainful engagement in trade of milk, milk products or meat. These animals play an important role in agriculture through the provisioning of manure, and in providing animal power for the various activities such as ploughing fields.

Due to the lack of proper nutrition being available to the animals, the productivity of milk is low, to the tune of approximately 1-2 kg per day and is restricted to few months in a year. This leads to a situation, where many households are unable to meet their own milk and milk product requirements on a regular basis and are thus unable to engage in the sale of milk products. This lack of nutrition was primarily attributed to the practice of open grazing prevalent in the study area, as a result of which the community was unable to monitor the feed and nutritional intake of the livestock.

Non-farm Based Livelihood

A number of families who have agriculture as their main source of livelihood (especially small and marginal farmers) also use wage income as an important diversification strategy. The non-farm livelihood includes income from jobs such as labour for the collection of forest produce, or those engaged in cottage

Mr XXX Sahu, a 63 year old resident of village Guma, discussed the change witnessed amongst the community in the livelihood practices, especially amongst the younger generation.

According to Mr Sahu, while in the previous generation the most preferred form of livelihood was agriculture, this has seen a shift over the last generation, with the younger generation expressing interest in business, services and labour, instead of agriculture. According to Mr Sahu, this shift in the tendencies was a welcome change amongst the community as it would allow for the families to progress and the younger generation to live a better life than the previous ones. This was attributed primarily to the fact that while the production of agriculture was unpredictable, these options allowed for a steady monthly income.

Mr Sahu attributed this shift in preference to two main attributes, namely, the unpredictability associated with agriculture and secondly the growing industrialization in the area. According to Mr Sahu, agriculture despite being increasingly mechanized remains unpredictable, primarily due to the continued shortage of irrigation. On the other hand, the increasing industrialization in the area has allowed for the younger generation to acquire contract worker jobs in the industries and its allied services, as labourers, drivers and other service providers.

4.11

VULNERABILITY

The vulnerability for the study area has been determined by the following criterion:

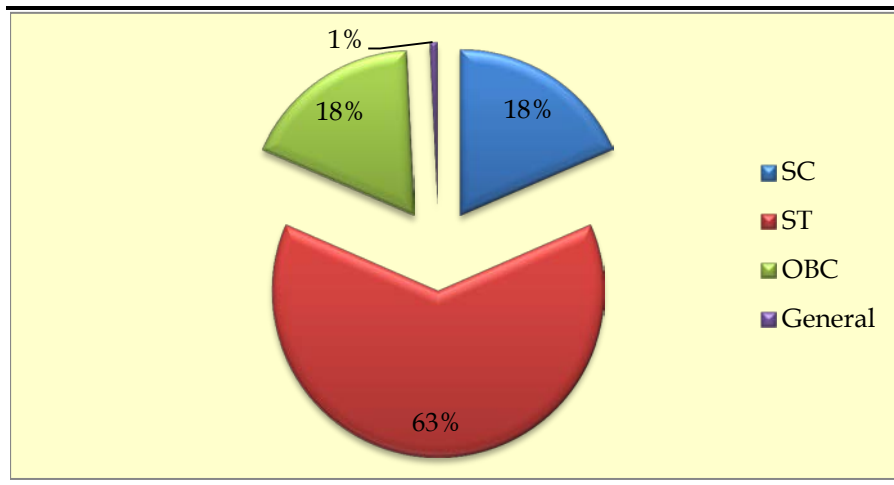
- Families with members who differentially abled; and
- Families with members above the age of 60 years as main earning member;
- Women headed Households;
- Scheduled Tribe ;
- Below Poverty Line (BPL) families

The government uses the Below Poverty Line (BPL) status as a measure of socio-economic vulnerability and poverty. The villages in the direct impact area (*Guma* and *Sarseni*) are characterised by 130 BPL families (29% approximately of the total households). Of these BPL families, 24 belong to the ST community, while 82 belong to the OBC category and 23 belong to the SC category (the proportions of ST (18.46%) and SC (17.69%) households is comparable to the overall proportion of the SC and ST populations in the villages).

The BPL status, however, for various reasons (like political influences, information/ data challenges etc) may not in several cases be a true reflection of the vulnerability status in the society (for example even affluent and large land owners due to their influence may also get a BPL card/status to avail some benefits). For the purpose of this assessment only those BPL families

who a) either have economically viable land holdings or b) employment have been excluded from the purview of this form of vulnerability.

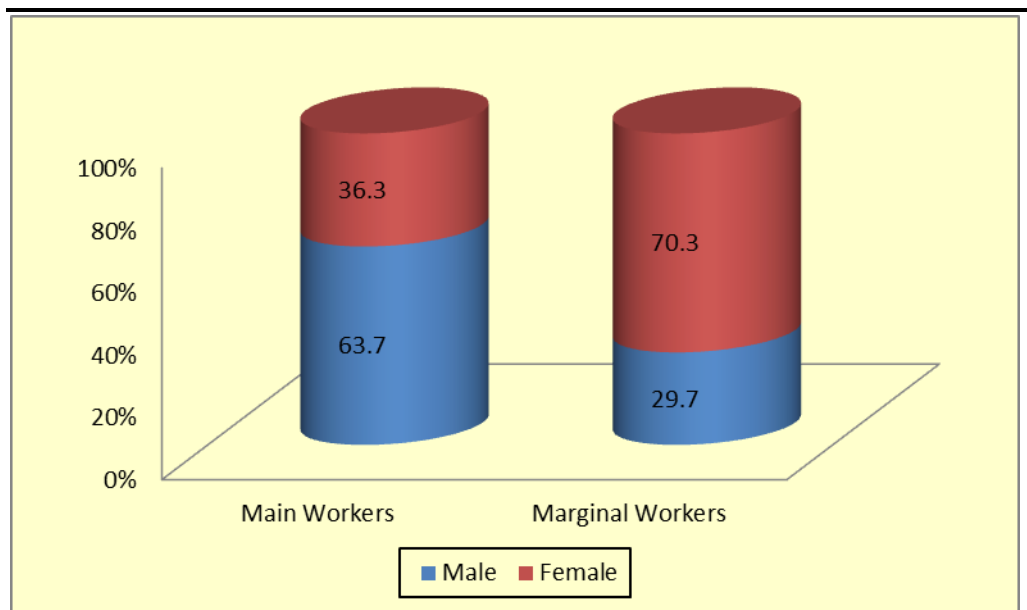
Figure 5.12 Community wise breakdown among BPL families in Guma and Sarseni



Source: B.P.L family final census list for Palari Block, District Raipur, 2002-2003

One of the other vulnerable groups identified in the area are women. The status of women is regarded as lower than that of men, with the lower status manifesting itself not only in terms of the economic power but in terms of political and decision making power vested amongst the women in both private and public spheres. The gender breakup of the Workers Participation Ratio shows that women's economic contribution is relatively prominent as marginal workers vis-à-vis main workers.

Figure 5.13 Gender Wise Division of Work force in villages in Primary Zone



Source: Census 2001

One of the primary indicators of societal standing of any individual/group is the economic power of the same. In this regards, according to the Census 2001,

the female Worker Participation Ratio (WPR) in the villages in the primary zone is comparable to the overall WPR in the region. However, what must be kept in mind is that even though the female WPR of the region is comparable to the state female WPR (40%) and is significantly higher than the national female WPR (Rural-31% and total -25.7%) most of the work force is concentrated in the marginal category. This can be seen in the fact that women make up approximately 70% of the marginal workforce in the primary zone. This large share of women in the marginal category has been mostly attributed to the role played by women in agriculture as labourers during the peak months of harvest and sowing.

One sector in which women are known to have an important share is artisanship, which constitutes about 17% of the workforce across the state. In this sector women are usually partners in the business and play a significant role.

Empowerment of women through reservation of seats for women in Gram Panchayat has provided opportunity for women to occupy decision making positions in local governance. It should be noted that the *Sarpanch* of the village Guma in DIA is a women elected by the village during the last elections. Having said this, it should be kept in mind that the overall representation of women in the Panchayat still remains low, with the Sarpanch being the only women member of the Panchayat.

Another vulnerable group identified with regards to this project, is the ST community. The vulnerabilities of these communities arise from low literacy levels, traditional/customary health seeking behaviours, limited skill and capacities to be employable, traditional methods of agriculture, cultural and religious mores etc. Within the villages in direct impact area (*Guma* and *Sarseni*), the Gonds comprise of a higher proportion of the tribal groups amongst the total population.

4.12

PHYSICAL INFRASTRUCTURE

Physical infrastructure include infrastructure which are essential for maintenance and supply of basic services and amenities resulting in economic and social well-being. These networks are tangible in nature and mostly involve service provisioning facilities/assets like water, drains, roads, waste disposal arrangement, electricity, railways etc come under this category.

Transport and Communication

The district *Baloda Bazaar* is connected with the neighbouring districts and cities and the rest of the country by an extensive road network and easy connectivity to the national highways; NH-6, NH -200 and NH 217.

Figure 5.14 Road Connectivity of the district



Source: <http://mapsofindia.com>

The villages within the area are well connected with the village *Thelki*, *Bharuwadih* and *Champa* being the only villages without Pucca road connectivity.

Figure 5.15 Typical linking roads connecting the villages in the study area



The villages within DIA (*Guma* and *Sarseni*) have private bus services connecting them to the rest of the district which ply at a frequency of four times a day. Furthermore, the *Guma* along with *Sarseni* have telephone connectivity and *Guma*, *Theiki* and *Champa* have postal offices within the village boundaries.

Water and Sanitation

Within the district of *Raipur* (of which *Baloda Bazaar* was earlier a part of), 99.66% of the villages are provided by a drinking water source by the government. 90% of this drinking water supply is dependent upon the Ground water available in the region.

Most of the villages have drinking water supply through hand pumps and only 207 villages (21.23%) in the entire district having access to tap water. The ground water available in the region is considered to be portable (as reported). However what must be kept in mind is that the



ground water in the area is available at depths of 500-600 feet, resulting in limited access of the community to ground water. This limited access is primarily the result of very few families being able to afford boring, and also due to the frequent cases of bore wells drying up due to over extraction of water.

In terms of sanitation facilities, only 30-40 households in village *Guma* have their own toilets and bathrooms. However due to the fact that most of the households do not have access to tap water, the households in the study area resort to open defecation. Also, none of the villages in the primary zone have a proper drainage/ sewerage network that connects the different parts of the village. Waste water is generally drained out into fields and open areas in and around the household.

In terms of waste management, each household in the DIA was reported to have a pit within their household, for the purpose of collecting the household and livestock waste and converting it into compost, which is then used as manure in the agricultural fields. This trend was seen as extremely popular across the study area. The non-degradable waste which has increased in quantity with increasing consumerism, the villagers are found to be littered. .

Electricity

According to the information available with the Census of 2001, all villages within the primary zone are electrified. However, while Thelki, Pausari and Champa receive electricity for both domestic use as well as agriculture, the villages Guma, Bharuwadih and Sarseni only receive domestic electricity.

The locals in the study area also reported that while the supply of electricity during the winter months is extremely good with no load shedding and power outages, during the summer months a number of outages are experienced, sometimes extending to as many as eight hours continuously.

These power outages were reported to be the result of an increase in the electric consumption during the summer months, due to the use of appliances such as refrigerators, coolers and fans, which are not used during the winter months. The power outages are also attributed to the increasing dependence of agriculture. This increasing dependence has been attributed to the growing mechanization in the area and the increasing number of households exploring bore wells as a source of irrigation.

4.13

SOCIAL INFRASTRUCTURE AND DEVELOPMENT

Social Infrastructure is one of the most important indicators of human development in any society and in an era of fast-paced economic development, indices of health and education facilities occupy a central place in policy formulation and development planning.

Health and Health Seeking behaviour

The health facilities in the state of Chhattisgarh are poor, especially so in the rural areas with only 251 (1.2%) of the 20378 villages having a primary health centre (PHC) and 137 community health centres. The health services in the Raipur district are comprised of 58 allopathic medical centres, 46 primary centres, 537 sub health centres and 96 traditional nursing homes.



The villages in the project footprint area don't have access to any health facilities in the form of hospitals or PHCs. The health facilities are available in *Bhatapara* (17 km) or *Baloda Bazaar* (35 km by road). As part of the CSR activities of UTCL, the villagers of Guma and Sarseni are offered treatment in the plant hospital at nominal rates, as well as ambulances at the rate of INR 2 per km on request and regular health camps are organised. However, these are rarely availed by the community due to the fact that the locals are yet to familiarise

with these services, as the provision is only a year old and there is an inherent reluctance to consult doctors or proper medical facilities by a large proportion of people.

Anganwadi centres, launched under the Integrated Child Development Scheme (ICDS) with the aim of assisting the proper psychological development of children below the age of six years, and improve their health and nutrition. Anganwadi workers play an important role in providing health services to the pregnant women, new mothers and infants. All villages have at least one *Anganwadi* centre (the project footprint area has four) and the big villages; such as *Simga* and *Palari* have three-four. An attendance of 15-20 infants (less than four years of age) per Anganwadi was reported.

Table 5.9 provides a list of the common ailments recorded in a sample of villages across the project area from the local PHCs and *Anganwadis*.

Table 4.8 *Disease Prevalence in Study area in 2012-13*

Village Name	Main Diseases	Frequency of occurrence	Persons affected
Jhipan	Malaria	Summer	30
	Itching	Summer	50
	Cough & cold	Winter	150
Pendri	Malaria	Summer	40
	Cough/Cold	Winter	70
Chhirahi	Malaria	Summer	25
	Itching	Summer	30
	Cough & cold	Winter	35
Rawan	Malaria	Summer	75
	Itching	Summer	65
	Cough & cold	Winter	150
Raveli	Malaria	Summer	20
	Itching	Summer	20
	Cough & cold	Winter	40
	Diarrhea	Rainy	50
Padkidih	Malaria	Summer	15
	Itching	Summer	20
	Cough & cold	Winter	55
	Diarrhea	Rainy	35
Khapradih	Malaria	Summer	35
	Itching	Summer	40
	Cough & cold	Winter	120
	Diarrhea	Rainy	350
Tildabandha	Malaria	Summer	35
	Itching	Summer	40
	Cough & cold	Winter	120
Kasidih	Malaria	Summer	10
	Tifide	Summer	15
	Cough & cold	Winter	25
Newari-Fulwari	Malaria	Summer	45
	Tifide	Summer	32
	Cough & cold	Winter	145
Chuchrungpur	Malaria	Summer	15
	Itching	Summer	20
	Cough & cold	Winter	70
Sarseni	Malaria	Summer	15

Village Name	Main Diseases	Frequency of occurrence	Persons affected
	Itching	Summer	24
	Cough & cold	Winter	35
	Diarrhea	Rainy	45
Guma	Malaria	Summer	30
	Tifide	Summer	20
	Cough & cold	Winter	125
Auransi	Malaria	Summer	15
	Itching	Summer	20
	Cough & cold	Winter	55
	Diarrhea	Rainy	35
Kukurdi	Malaria	Summer	35
	Tifide	Summer	25
	Cough & cold	Winter	140

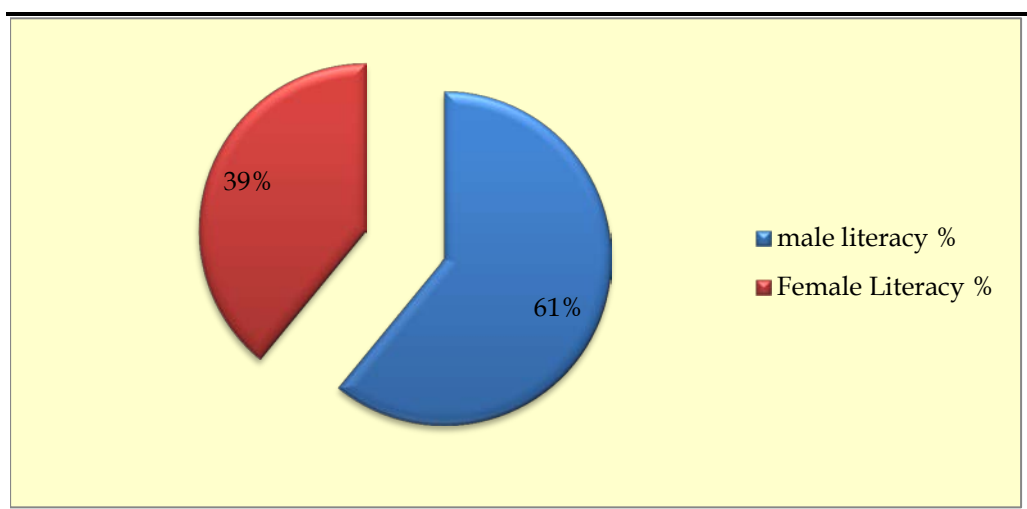
Source: RWCW

During the consultations undertaken, the villagers reported mostly respiratory diseases, itching, malaria and common ailments such as fevers, cough and cold. These ailments though were reported to occur on a regular basis, however, are not drivers for the morbidity in the region. The malaria is reported to be endemic to the region, however, a reducing trend is observed in the region, due to better awareness and improved access to medical facilities.

Education

The state of Chhattisgarh with a mission of achieving 100% literacy by 2022, has a present literacy of 65%. However as was mentioned earlier, the literacy level in the primary zone of the project is much lower than the state average or target. All villages in the project impact area have primary schools. However, only *Guma* has a secondary school, thereby suggesting that the access to higher education is relatively poor in the primary zone.

Figure 5.16 Male-Female Literacy Rate for the Study Area



Source: Census 2001 Village Directory

Table 4.9 Enrolment in Schools and Student-Teacher Ratio in the Study area

Name of Village	Number of girls	Number of boys	Number of teachers	student/teacher ratio
Government Schools				
Rawan	670	661	23	58
Raveli	38	53	3	30
Padkidih	112	132	8	31
Khapradih	258	242	14	36
Tildabandha	94	97	5	38
Kasidih	16	12	2	14
Newari-Fulwari	322	329	15	43
Chuchrungpur	169	186	8	44
Sarseni	32	20	6	9
Guma	393	389	16	49
Auransi	46	36	4	21
Kukurdi	196	169	11	33
Jhipan	210	222	18	24
Pendri	194	181	8	47
Chhirahi	51	62	4	28
Private Schools				
Rawan	670	661	24	55.5
Raveli	NA	NA	NA	NA
Padkidih	66	112	9	19.8
Khapradih	NA	NA	NA	NA
Tildabandha	NA	NA	NA	NA
Kasidih	NA	NA	NA	NA
Newari-Fulwari	NA	NA	NA	NA
Chuchrungpur	22	30	7	7.4
Sarseni	NA	NA	NA	NA
Guma	NA	NA	NA	NA
Auransi	NA	NA	NA	NA
Kukurdi	NA	NA	NA	NA
Jhipan	NA	NA	NA	NA
Pendri	NA	NA	NA	NA
Chhirahi	NA	NA	NA	NA

Source: RWCW

Therefore the secondary school in *Guma* caters to the students of not only *Guma* but the surrounding villages such as *Sarseni*, *Thelki* and *Champa* as well. While the total student population of the secondary school was reported to be 377 students, it was reported that only 60% were from *Guma*, while the remaining 40% were reported to be students from the surrounding villages.

Figure 5.17 Primary School in the Study area



Banks and Rural Markets

The rural economy in the region, as was mentioned earlier, revolves around agriculture and other farm based activities. While each village has its own credit facilities in the form of local money lenders and credit from shops, formal credit societies, whether they be agricultural or non-agricultural are only found in village Guma.

In terms of banks, the project impact area has branches of a number of national banks such as the State Bank of India, Union Bank of India and the Punjab National Bank. It was reported that the Union Bank of India branch in the village *Guma* was closed down due to the inability of the bank to recover the loans given out to the locals.

The locals of the village Guma reported to having bank accounts in one of the remaining branches of the State Bank of India, in the Ultratech Plant in Rawan or the village *Hirmi* or the Punjab National Bank branch in the village *Palari*. This increase in the utilization of formal banking facilities has been attributed to the land purchase process for the Guma mines and the other cement plants coming up in the area, which has resulted in large amounts of money (at the rate of INR 15 lakh per acre) being available at the disposal of the PAFs.

4.14

DEVELOPMENT PROGRAMMES

The government has in place a set of rural development schemes, plans and programmes, primarily aimed at poverty reduction, employment generation, rural infrastructure and provision of minimum services. These schemes cover a wide range of sectors and social categories of the rural population. While some of the schemes have a single focus and target only one activity or category of population there are other schemes which follow an integrated approach encompassing many activities and targeting different categories of rural population. Some of the programmes presently being implemented in the district and also in the study area are:

- *Swarna Jayanti Swarozgaar Yojana*

- Indira Awaas Yojana
- Ananyavyavasaaye Rozgaar Yojana
- Aam Aadmi Beema Yojana
- D.R.I Yojana
- Old Age Pension Programme
- Mahatma Gandhi National Rural Employment Guarantee Act
- Female Sterilization Programmes such as Copper T

Figure 5.18 Development Programmes in the Study area



Of these numerous programmes, the only development programme to be active in the project area is the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). MGNREGA, earlier known as the NREGS

As part of the MGNREGA initiatives in the project area, the tasks of check dams and lining of *Taalaabs*, building of non-metalled roads, and *Pakka* houses were undertaken in the months of March-June in the villages Guma and Sarseni. It was also reported that apart from these activities, the MGNREGA has also received permission to undertake the additional activities of drain (*Naali*) construction, construction of cow shelters, pig farming and poultry farming and aid in construction of toilets; at both the village as well as private level (25% of the cost of construction for private toilets, and 100% of the cost of construction for school urinals) across the villages in the project footprint area.

(National Rural Employment Guarantee Scheme) is a major rural initiative launched by the government of India in 2005 covering 200 districts in the country (now the coverage has been increased to more than 600 districts). The scheme guarantees 100 days of wage employment each fiscal year for every rural household that self-selects into the programme, with a provision of unemployment allowance if the government fails to provide employment. Job cards are issued to the eligible candidates (one job card per household) and such candidates then apply to the Panchayat office for employment. Employment is then provided to the interested candidate within 15 days.

There is no archaeological site or designated heritage sites within the block. Each village has a number of sites of religious significance such as temples, revered trees etc. that are sprinkled across the village. The most common areas of cultural significance in the project footprint villages are the temples of the communities, which are mostly located along the banks of the *Taalaabs*. These temples hold importance for the community especially during the religious festivals and important rites of passage for marriages and death. Apart from these, a number of households also have their own private shrines within the boundaries of their houses, which are used by the residents on a daily basis to offer prayers as well as on religious occasions.

Figure 5.19 Culturally significant areas



It was also reported that the land designated for the *Ram Janaki* temple (a temple dedicated to Lord Ram), in the form of agricultural land falls within the Mine Lease area. However, UTCL is in the process of consultation with community and has approached the District Collector for identifying alternative land for the temple outside the Mine Lease area.

This section provides a socio-economic profile of the Project Affected Families (PAFs) for the Project. This profile has been established on the basis of the demographic baseline as discussed in the previous section as well as the information received from the socio-economic survey undertaken. This profile is an essential step in determining the socio-economic status of the affected persons, in allowing for the impacts from the projects and their possible mitigation measures to be clearly identified as well as in enabling for a process of monitoring of the implementation/success of the mitigation measures to be undertaken during the various phases of the project.

5.1

THE CONTEXT

The proposed project, as discussed in the Chapter 2 (project description) would require approximately 177.122 Ha of land. This land purchase will impact two villages' 1) Guma where the mine is located and 2) Sarseni through which the route for the conveyor belt is proposed.

Based on available information it is estimated that the land take for the project (as reported by UTCL) will impact 244 families in *Guma* village and about 134 families in Sarseni village (through which the conveyor belt passes). The impact assessment done in the sections below should be viewed in light of the above data/facts available with the consultant at the stage of developing this SIA.

Guma Village

1. Total Number of Impacted families - 244;
2. Land and loss details made available by UTCL (from government records)- 196 families;
3. Land details currently not available- 48 families (tribals);
4. Utilisation of compensation details available for 160 families;
5. Household survey done for the SIA-107 families

Sarseni Village

1. Approximate number of families impacted- 134
2. Land details available - None
3. Household survey done- none

The following discussion and narrative has thus been undertaken on the basis of the information presently available with UTCL and ERM on a sample size of 160 PAFs (65% of the PAFs whose land is part of the Guma Mines) (including those for whom the survey was undertaken as well as those PAFs for whom information is available with UTCL), whose land has been acquired

for the *Guma* Mines. The sample though representative of the PAFs, has the notable limitation of covering primarily non-tribal PAFs only as well as only those PAFs whose land is part of the Mine area. The information in regards to the tribal PAFs is limited and is restricted to the demographic details of few households (20). This is due to the fact that the land purchase process for the remaining tribal PAFs and the conveyor belt is underway, as a result of which the information of the land sold and the compensation received for the PAFs is unavailable at the moment.

This version of the Social Impact Assessment (SIA) report will thus have to update at a later time, once the information for the remaining PAFs is available.

5.2 METHODOLOGY

For the purpose of establishing the socio-economic profile of the PAFs, ERM undertook a socio-economic survey for the PAFs in Guma Village where the mine is located.

Table 5.1 *Details of PAFs and Survey Details*

		Mine Lease Area	Conveyor Belt
Guma	Non-Tribal HH	196	0
	Tribal HH	48	0
	Total HH	244	0
	HH Surveyed	107	0
Saseni	Total HH	0	~134
	HH Surveyed	0	0
Total HHs		244	~134

Note:

- At the time of the survey the names of only 216 (out of 244 PAFs) were made available. The attempt was made to locate all these families. However, only 107 (51% of 216 PAFs and 44% of total PAFs) were surveyed. Household survey could not be carried out in the remaining because:
 - Land details for the 48 tribal families are not available with UTCL (they will be available once the purchase process is finalised);
 - Some of the PAFs did not cooperate with the survey process and refused to participate in it;
 - Some of the PAFs had shifted out of the village and could not be located.
- At the time of the primary survey/ data collection the layout and land schedule for the conveyor belt had yet to be finalised by UTCL. Hence the identification of land owners/losers and data on exact quantification of their loss was not available. Due to the lack of this information/ data the household surveys were not undertaken in *Sarseni* village (where the land for the conveyor belt lies).
- This SIA document, as has been discussed in chapter 2 will need to be updated based on the assessment of impact once the information with respect to the land is available for the conveyor belt and the tribal families.

The current survey covered approximately 51% of the total households residing in Guma Village. The survey questionnaire aimed at capturing the pre land purchase/post land purchase socio-economic status of the PAFs to the extent possible. In addition, the information was triangulated through focus group discussions (FGDs) and consultations and Social Mapping. Wherever possible the Project Affected Persons (on whose name the land existed) and the head of the households were interviewed for the purpose of information collection. When this was not possible, the required information was sought from the other family members.

Thus the following sections provide a socio-economic profile of the PAFs on the basis of the survey undertaken for the 107 PAFs and the land details for the PAFs from the *Patawari*.

5.3 SOCIAL PROFILE OF PAFS

Table 5.2 Social Profile of the PAFs Surveyed

Component	Number
Total Number of Households	107
Total Population	783
Number of Joint and Extended Families	17
Sex Ratio	975
Number of Children	69
Proportion of SC Population (%)	0.93
Proportion of OBC Population (%)	43.92
Proportion of ST Population (%)	18.69

Source: SIA Survey-2013

As can be seen in the table above, the total population of the households surveyed is 783, a substantial proportion of which belong to the OBC category (47 households). The entire population of PAFs has been identified as Hindus. While the overall sex ratio amongst the PAFs surveyed is 975, the age and gender break-up of the population showcases a more balanced sex ratio in the <6 years and 7-18 years age-group. In the productive age-group of 19-30 years, female population is way below the male population. This may be due to higher maternal mortality rate. There is again a gender balance in the middle age group (31-45 years). However, females show greater longevity vis-à-vis male population in older age-groups.

Table 5.3 Age wise distribution of Sex Ratio

Age-Groups	Female	Male	Sex Ratio
< 6 Years	35	34	1029
7-18 Years	118	102	1157
19-30 Years	85	100	850
31-45 Years	85	83	1024
46-60 Years	51	60	850
61-75 Years	10	18	556
>75 Years	3		
Grand Total	387	397	975

Source: SIA Survey-2013

5.4

FAMILY TYPE AND SIZE

The PAFs for the project are characterised by a patriarchal system and marriages are endogamous. Mostly, monogamy is practiced across castes and tribes. The family size varies in the range 2 to 18 members, with average family size as 7.2. There are 18.5% families where more than ten members were reported, mostly comprising of Joint and Extended households. The variation of family size of the PAFs is provided in table below.

Mr XXXX Yadav, a resident of the village Guma, resides with his family in his father's house along with his elder brother and his family. The household size is 15 and includes children, parents and an unmarried sister. The primary reason for staying in joint household, as communicated by Mr Yadav was the economic comfort it provided. As Mr Yadav stated, the earnings from agriculture (his main source of livelihood) and the gifts received from their family at the time of his wedding had not proved sufficient to allow for the establishment of a separate household. Furthermore, his father had a relatively small land holding size of 4.75 acres, which would have been reduced to 2.37 acres upon partition for each brother.

According to Mr Yadav, this reduced land holding size and the unpredictability of agriculture and the limited resources for setting up a new household, were the primary reasons for him choosing to stay with his family.

Table 5.4 Family Size of PAFs

Family Size	No of PAFs	% of Total
2	6	5.6%
3	7	6.5%
4	13	12.0%
5	21	19.4%
6	11	10.2%
7	11	10.2%
8	8	7.4%
9	8	7.4%
10	3	2.8%
11 to 18	20	18.5%
Total	108	100.0%

Source: SIA Survey-2013

The families with more than 10 members, represent the Joint and Extended households. These households are characterised by two or more brothers staying together in the same household (with the same hearth) with their families post marriage and their parents, unmarried siblings and other dependents. Such Households were reported as the variations from the trend with most of the adult sons choosing to establish their own households after marriage.

Table 5.5 Household Composition of PAFs

Head of Household	Age-Group	No of Households	% of Total
Women headed households	31-45 Years	8	73%
	46-60 Years	2	18%
	>75 Years	1	9%
Total (Women headed households)		11	10%
Male headed Households	19-30 Years	9	9%
	31-45 Years	24	24%
	46-60 Years	52	52%
	61-75 years	15	15%
Total		100	90%
Grand Total		111	100%

Source: SIA Survey-2013

Consultations and discussions with the families and the village elders and a review of primary data suggest that a substantial portion of the women headed households belong to the BPL category. The average household structures comprises of the head of the households, their spouses, and dependent family members (dependent parents, unmarried girls, unemployed sons, and children)

5.5 LITERACY

The literacy profile of the PAFs shows 78.7% literacy (approximately). The illiteracy among female population is higher than the male population. 27.9% of the total female population is illiterate, vis-à-vis only 14.8% of illiterate in male population.

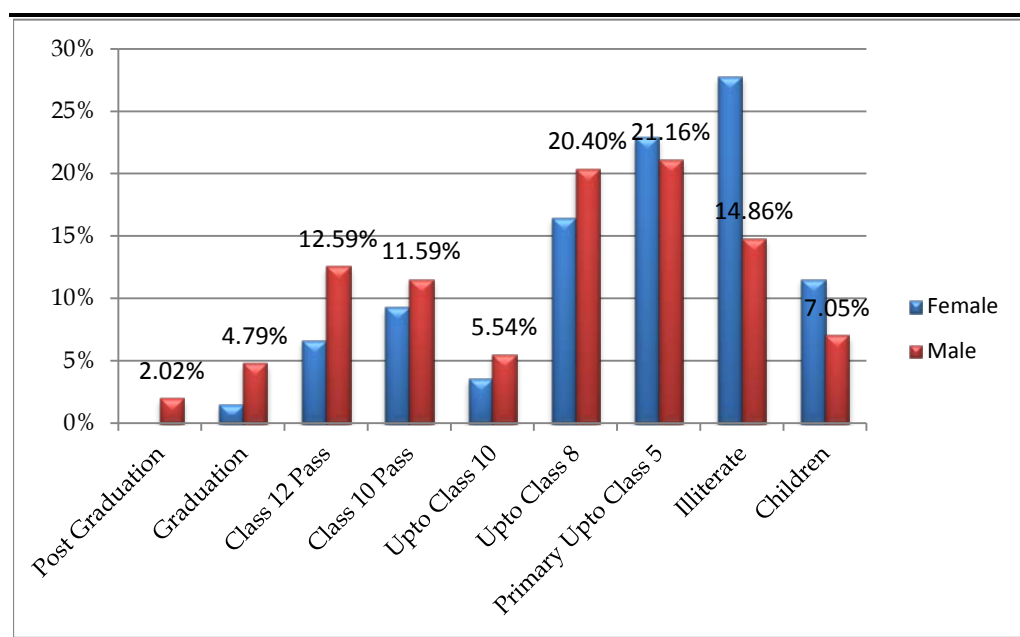
Table 5.6 Break up of Education Levels

Row Labels	Female	Male	Grand Total	SC	ST	OBC
Post-Graduation	0.00%	2.02%	1.02%	0.00%	0.00%	0.62%
Graduation	1.55%	4.79%	3.19%	16.67%	0.00%	2.16%
Class 12 th Pass	6.46%	12.59%	9.57%	0.00%	5.34%	9.87%
Class 10 th Pass	9.30%	11.59%	10.46%	33.33%	1.52%	13.58%
Upto Class 10 th	3.62%	5.54%	4.59%	0.0%	6.10%	4.94%
Upto Class 8 th	16.54%	20.40%	18.49%	50.0%	27.48%	16.35%
Primary Upto Class 5 th	23.00%	21.16%	22.07%	0.00%	32.06%	19.44%
Illiterate	27.91%	14.86%	21.30%	0.00%	27.48%	33.02%
Children	11.63%	7.05%	9.31%	0.00%	0.00%	0.00%
Grand Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Source: SIA Survey-2013

A clear gender disparity is visible in education level (see the chart below). Most of the women have studied only upto 5th standard (23%) and 16% up to class-8. The disparity is more apparent in higher education, where only 1.5% of female population is Graduate and none of them have reached post-graduation level.

Figure 6.1 Gender wise distribution of Education Levels



Source: SIA Survey-2013

In regards to the literacy levels amongst the various social groups, the maximum illiteracy was reported amongst the OBC category (33%). Amongst the OBC population, a substantial proportion (73.75%) reported having studied upto only Class 10. However, in comparison, the ST population amongst the community reported more than 90% of its population having studied upto Class 10, while only 5.34% have completed class 12.

5.6 ECONOMIC PROFILE OF THE PAFs

The predominant sources of livelihood for the PAFs surveyed can be categorised into the following categories:

- Farm Based Livelihoods
- Non-Farm Based Livelihoods

While the Farm Based Livelihoods primarily pertain to the agriculture and allied activities, the Non-Farm Based Livelihoods pertain to the income from wage labour, enterprises and services provided.

As can be seen from the table below, a majority of the population, both Above Poverty Line and Below Poverty Line are dependent upon farm Based Livelihoods.

Table 5.7 Livelihood Options

Livelihood Options	General		OBC		SC	
	Above Poverty Line %	Below Poverty Line %	Above Poverty Line %	Below Poverty Line %	Above Poverty Line %	Below Poverty Line %
Farm Based	33	40	69	58	0	100
Non-Farm Based	67	60	31	42	0	0
Total	100	100	100	100	0	100

Source: SIA Survey-2013

However, it is worth noting that amongst the different social groups amongst the PAFs, the PAFs belonging to the general category are primarily dependent upon non-farm based Livelihoods for their income and sustenance. This can be seen in the fact that a majority (58%) of the households drawing livelihood from non-agriculture sources belong to General Caste, and the rest belong to OBC category. Most of the families (63%) pursuing agriculture and allied activities as primary sources of livelihood belong to OBC category.

However, if we take into consideration other working members of the family along with head of household, 55% of the total population is reported as non-working population. Among the working population (19-60 years of age) 45% work in agriculture and allied sector while 30% of them only work in non-agriculture sector.

Table 5.8 *Age Wise Classification of Livelihood*

Age Groups	Agriculture and Allied	Non-Agriculture	Not Working
< 6 Years	0%	0%	100%
7-18 Years	12%	2%	86%
19-30 Years	28%	48%	24%
31-45 Years	42%	28%	30%
45-60 Years	65%	15%	20%
61-75 Years	68%	4%	28%
>75 Years	33%	0%	67%
Grand Total	41%	4%	55%

Source: SIA Survey-2013

The age breakup of the working population shows that almost 14% of the population below 18 years is working, and most of them are in agriculture and allied sector. A significant majority in older age-group is reported to work in agriculture and allied livelihood activities. The highest percentage of non-agricultural occupation is reported in 19-30 age-group, while a majority of the population above the age of 45 are reported to be involved in agriculture. In terms of non-working population, amongst the age-groups of 19-60, 25% of the population was reported as non-working. This population includes, women, disabled and other dependents as well.

Thus from the above table it can be seen that, while a substantial proportion of the younger generation have moved away from agriculture, this is primarily concentrated in the general category (refer to table 6.7). This change in preferences can also be seen in the fact that the working population above the age group of 45 years, continue to depend primarily upon agriculture as their source of livelihood.

5.6.1 *Farm Based Livelihoods*

As mentioned above, the farm based livelihoods pertain to primarily the practice of agriculture and income obtained there from. The high dependence of the PAFs surveyed upon agriculture as a source of income can be observed in the land ownership patterns observed in the area.

Land Holding and Ownership

As mentioned previously, the land in the Mine Lease area is comprised of mostly private land, used for the purpose of agriculture (88% approximately), while the rest of the land is characterised as government land (includes land under roads, pathways and the land owned by the *Ram Janaki Mandir*). As per the revenue records, the Mine Lease area neither has pasture lands or forests nor has any site of cultural or religious importance. However, Mine Lease area includes a road connecting *Guma* to village *Pausari*, leading to *Baloda Bazaar*.

The land holding size in the project is small and marginal with the average land holdings being 2.5 hectares. These trends are also visible in the land holdings of the PAFs with average land held by PAFs being 1.31 ha, and more than 22% (approx.) of PAFs reporting less than one ha in land holdings. Hence, a sizable number of PAFs are small or marginal farmers. Another 22% PAFs held 1-2 ha of land and are small farmers.

Table 5.9 *Land Holdings of PAFs*

Holding Sizes (ha)	No of PAFs	% of Total
Landless	0	0
0.01 to 0.49	21	11%
0.5 to 0.99	21	11%
1.0 to 1.99	43	22%
2.0 to 4.99	77	39%
5.0 to 9.99	23	12%
More than 10	11	6%
Total	196	100%

Source: Land records- UTCL

Note- The above analysis is based on land data for 196 PAFs (for which the data was provided by UTCL)

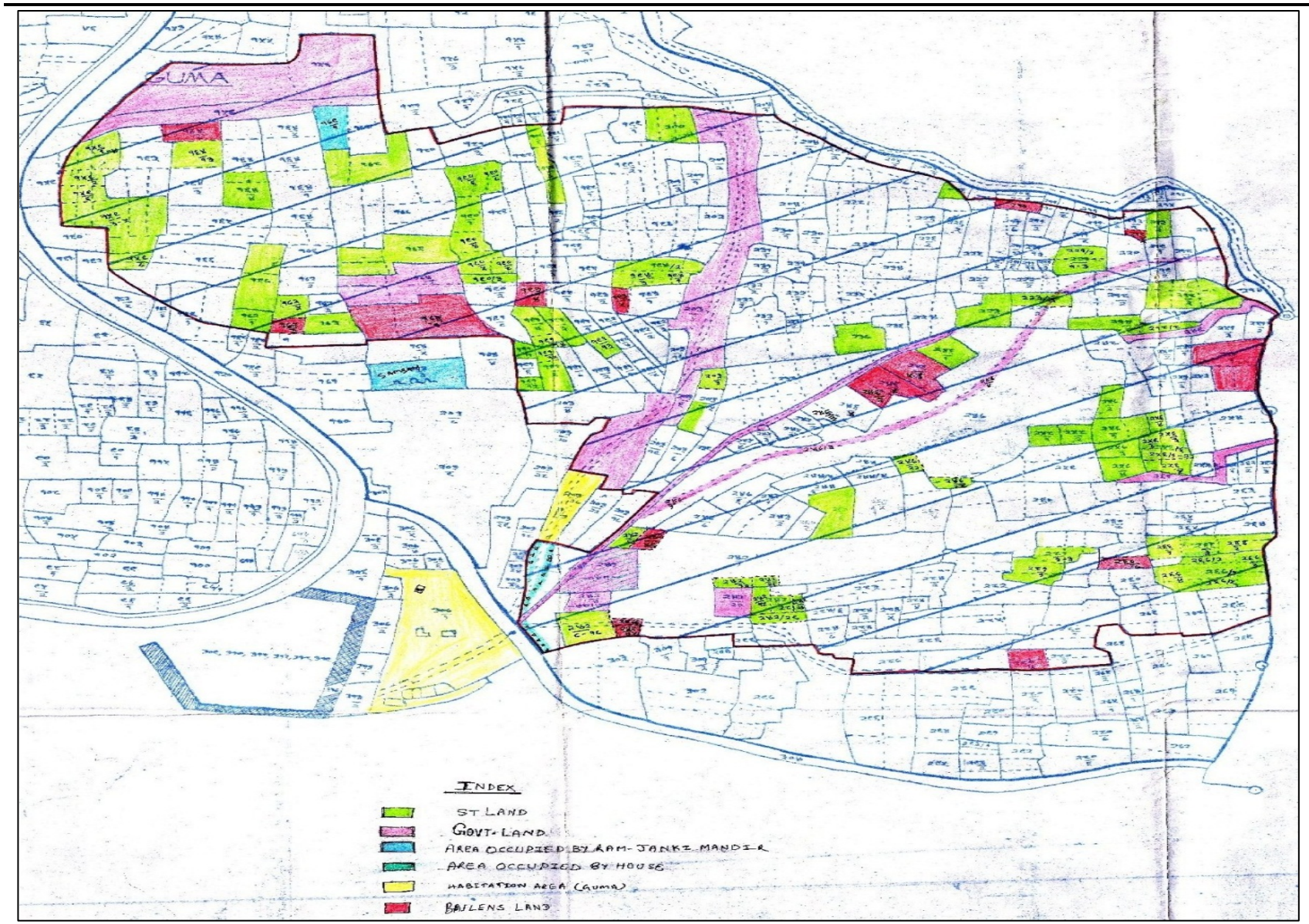
The land holding; as discussed in the table above; refers to the actual ownership of land by an individual. This analysis thus excludes any land which may be encroached upon by the land owner, which is not depicted in the government revenue records.

Table 5.10 *Nature of land ownership*

Category	Number of PAFs	% of PAFs
Owned by Individual Men	128	65.3
Owned by Individual Women	27	13.7
Co-Owned	41	20.9

Source: RWCV

Figure 6.2 Mine Lease Area and details



Land use

As mentioned in the previous section, the agricultural production in the area is characterised by two main cropping seasons, *Kharif* and *Rabi* with the main crops being Rice or Paddy and pulses such as *Tuar* in the respective seasons.

Most of the farmers follow the traditional methods of cultivation and are rain dependent, as a result of which most of the land holdings are classified as single crop. These trends are also visible in the land holdings of the PAFs with approximately 67% of the agricultural land in the Mine Lease area being categorised as single crop land.

Table 5.11 *Cropping Pattern and Irrigation Potential of Land in Project Footprint area*

Category	Land (acres)	% of total land
Single Crop land	205.9	67
Double Crop land	61.67	31
Irrigated	277.05	98.37
Unirrigated	4.65	1.65
Total Land	281.65	

As can be seen from the table above, 98% of the land in Mine Lease area falls under the command area of the Mahanadi canal which is also utilized for the supply of water to the village ponds during the dry months. However, due to limited supply of water through this canal, 67.34% of the land is registered as single cropped (82.19%) and the remaining 32.64% (27.9 ha) were classified as two-cropped land in the government revenue records.

This also goes on to prove that though the area is categorised as irrigated land (on government records) due to the availability/catchment of the canal, the actual agriculture is seasonal and mostly one rain dependent crop.

Agricultural production

As discussed in sections above, the land, though falling in the catchment area of the canal has limited use and productivity due to availability of water in the area. This is seen in the low agricultural production in the area. The paddy production in the area is estimated at 0.2-0.5 tonnes per acre (as against state and district average of at least 0.6 tonnes per acre), while that for *Tuar* is estimated at 0.1 tonnes per acre, dependent upon proximity to the canal.

Inputs (per acre)	Quantity
Seed	20 kg
Pesticide	300 Rs
Manure	1200 Rs
Tractor	2000 Rs
Labour	2500 Rs
Other expenses	500 Rs
Total expense	6500 Rs

Source: SIA Survey 2013

The agricultural production in the area is supported by the soil type in the study area which is locally known as Kanhar or sandy loam. The soil with its concentration of essential nutrients, good water absorption capacity and well

developed drainage thus bears all the essential attributes for good crop growth.

Livestock Ownership

As mentioned in the previous section, livestock rearing is an important livelihood diversification strategy, so as to protect against the uncertainties which may be associated with dependence upon agriculture. The livestock holdings in the project area comprise of mostly bovines, cows and buffaloes with a limited number of households reporting owning fowls.

In keeping with these trends observed in the project area, the PAFs also reported rearing cows and buffaloes. These livestock holdings supplemented the food and nutrition supply as well as used in agriculture. The rearing of these livestock was mostly for household use as no PAF reported to be engagement in trade of milk, milk products or meat. These animals play an extremely important role in agriculture through the provisioning of manure, and in providing animal power for the various activities such as ploughing fields.

Mr XXX Sahu, a land loser in the project, having sold 1.2 acres of land, has a livestock holding of 3 bovines, a pair of bulls and a cow. Mr Sahu, informed that apart from the financial resources for the purchase of livestock, the availability of space in the household played an extremely crucial role in the deciding of the number of livestock heads.

Mr Sahu informed that even though he had invested in hybrid cattle, which are supposed to produce more milk than the *desi* breeds, due to the lack of proper fodder and nutrition, the milk productivity is extremely low (not more than 2 kgs a day). As a result of this, most months of the year, the house does not have enough milk for its own consumption as he has four growing kids.

However it should be noted that increasingly many PAFs are reporting a shift away from animal power to mechanized power for the purpose of agriculture, in terms of tractors, threshers and tillers, thereby reducing the role and importance of livestock holding. Also, due to the lack of proper nutrition being available to the animals, the productivity of milk is low, to the tune of approximately 1-2 kg per day and is restricted to few months in a year. This leads to a situation, where many households are unable to meet their own milk and milk product requirements on a regular basis.

5.6.2

Non-Farm Based Livelihoods

The Non-farm Based Livelihoods amongst the PAFs as reported during the surveys and consultations are as follows:

- Small enterprises such as black smithy, small provisional stores, tea stalls etc;
- Wage labour;
- Contractual Workers; and

- Car Driving.

The average annual income from such activities as reported during the consultations was INR 33,300 per annum. However, it should be noted that for a majority of the households, these sources of income serve the purpose of supplementing the income from the Farm based livelihoods and providing protection against the uncertainties which accompany agricultural production. The primary household survey process came across a hesitation (as reported earlier) in sharing individual/family level income from different sources for the PAFs. Hence it is difficult to estimate the exact number of families (among the PAFs) who have such income sources. However, based on consultations and discussions with elders/sarpanch and key informants it is estimated that there are around 20-30% of families who are gainfully employed and earn income from these sources.

Mr XXX Lal, a PAF in the project, is a 22 year old whose main source of livelihood is the income from driving and hiring out his car. Mr Lal, purchased the car from the dowry received from his wife's family at the time of marriage. He made this purchase in keeping with the rising presence of industries in the neighbouring villages as well as the increased outside traffic in the villages.

Mr Lal, justified this dependence upon the income from car driving, by indicating towards the unpredictability of agriculture as well as highlighting the fact that while the car driving provides him a steady source of income (of approximately INR 3000 a month), it also allows him to undertake alternative sources of livelihood such as wage labour and agriculture.

However, with the rapid industrialization of the district and a number of industries being established in the immediate vicinity of the villages, the dependence upon Non- Farm Based livelihoods are reported to be growing in importance. This was most markedly observed amongst the younger generation amongst the PAFs, with a number of the youth voicing their desire to move away from agriculture into service or wage labour. The older generations also expressed interest in educating the next generations so as to allow them to move away from the village into the cities and/or exploit the opportunities arising in the villages in the form of industries.

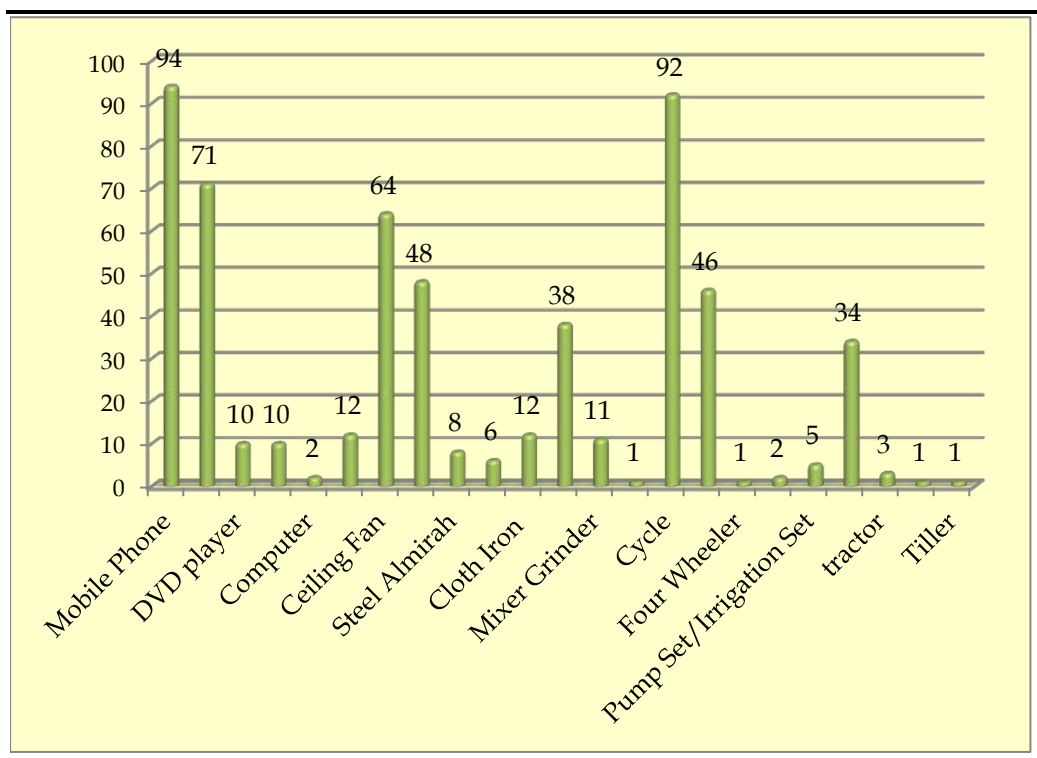
5.7

ASSETS OWNERSHIP

All the PAFs in the area reported owning immovable assets in the form of houses and land (homestead and agricultural). With regards to immovable assets, the PAFs reported ownership of vehicles such as two wheelers; including bicycles and four wheelers, along with agricultural assets such as tractors, threshers and tillers along with electrical appliances such as television, DVD players, fans, dish TV connections and radio sets. The ownership of movable assets amongst the PAFs surveyed is provided in Figure 6.3

As a consequence of the land acquisition process and the utilization of the compensation received, the movable asset holdings underwent a significant change, which will be discussed in detail in the section on project impacts.

Figure 6.3 *Movable Assets of PAFs*



As can be seen from the above figure, it can be seen that the highest proportion of movable assets are in the form of vehicles, whether they be two wheelers or four wheelers. In comparison to this, the proportion of agricultural implements such tractors and tillers and irrigation sets were reported in an extremely small proportion of the PAFs.

This is perhaps indicative to the reluctance of the PAFs to invest in agriculture, which provides unpredictable returns, in comparison to investment in modes of transport, especially four wheelers, which can be then be utilized for the generation of income.

5.8 INCOME AND EXPENDITURE

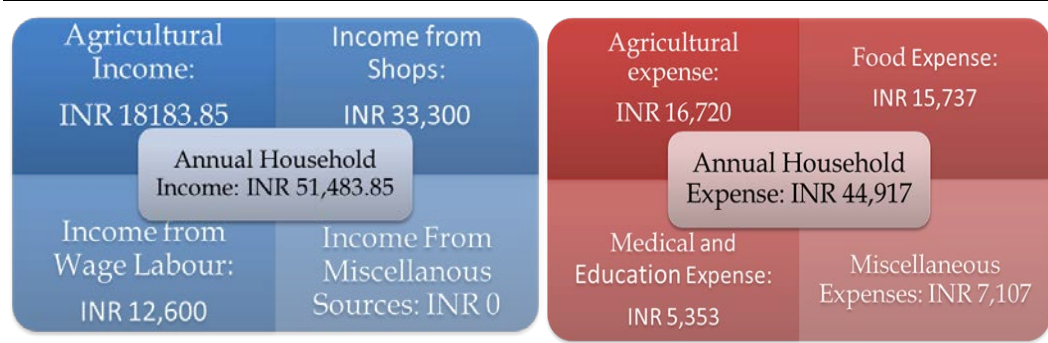
As has been mentioned above, agriculture is the main source of income and livelihood in the project area, followed by wage labour and ancillary activities. There is also a shift being witnessed in terms of the younger generation’s preferences with most of the youth expressing an interest in undertaking wage labour, in comparison to continuing with cultivation.

Despite the reluctance expressed by the respondents to share sensitive information regarding their income (only 73 (37%) respondents answered the questions pertaining to income and expenditure), the information made

available indicated towards a high dependence on agriculture, with a negligible proportion of households siting income from petty trade as a source.

In keeping with the production patterns recorded in the area, and the information made available by the respondents regarding the agricultural productivity in the region, the income from Paddy production in the area is estimated at approximately INR 2,219.4 per acre (according to an estimate of 0.6 tonnes per acre) and that for Tuar is estimated at INR 1,455.5 per acre (according to an estimate of 0.1 tonnes per acre). This thus indicates towards an agricultural income of approximately INR 2,200 for single crop regimes and INR 3,600 for double crop regimes (negligible amongst the PAFs) in the project area (based on reported data). In regards to the income from petty trade, the average annual income reported INR 33,300.

Figure 6.4 Annual Income and Expenditure PAFs



Source: Social Survey 2013. The numbers represent the averages as reported by the PAFs
 Note: these estimates are on the basis of the information averages derived on the basis of the information available pertaining to the livelihood profile of the PAFs and their expenses.

As can be seen from the above figure, it can be seen that the PAFs on an average have a saving of approximately 6500 INR per annum. According to the information made available during the consultations, these savings (variable across the years) are kept in bank accounts by the families and utilized to meet unexpected and large expenses which arise from time to time. These expenses include the expenses incurred from medical treatments, marriages in the family etc. The growing importance amongst the PAFs of utilizing banks for saving can be seen in the fact that as reported, all the families in the village Guma have an account in one of the banks in the village or in the neighbouring villages.

In regards to the expenditures incurred by a PAF in a year, as can be seen in Figure 6.4, the average expense annually for the PAFs was reported to be to the tune of INR 44,917 with the agricultural expenses having the largest share in the expenses (37% of annual expense). Apart from agricultural expenses, the PAFs reported maximum expenditure on food, with Grain and Pulses having the highest share in the same followed by fruits and vegetables, edible oils and milk products. Apart from these, while the PAFs reported expenditure on medicine, education and miscellaneous expenses such as utilities, fixed payments, transportation, clothes and expenses due to

festivities and other occasions, these comprised of a small share of the annual expenditure, representing only 11% and 15% approximately of the total expense.

5.9 VULNERABILITY

The social survey and consultations tried to assess the existing and project related vulnerabilities amongst the affected PAFs. As mentioned in the previous section, the vulnerability for the purpose of this assessment has been defined on the basis of the socio-economic and physical status of the population. The vulnerable sections amongst the PAFs thus include, the BPL families (as meeting the criteria defined in the earlier section), the families belonging the ST community, the women headed households and households with weak/infirm and disabled members.

As can be seen from the following tables, a majority of the BPL families for whom information was available (this does not include the ST PAFs) belong to the OBC category.

Table 5.12 Economic Status of the PAFs

Caste Groups	Above Poverty Line	Below Poverty Line	Information Not available
General	11	24	1
Other Backward Castes	18	29	3
Scheduled Castes	0	1	0
Scheduled Tribes	12	7	1
Grand Total	41	61	5

Source: SIA Survey-2013

Note: The above is based on the households' surveyed. PAFs who belonged to the ST community were not surveyed and hence an estimation of BPL status of ST families cannot be made

Table 5.13 Food Supply amongst BPL families

Food Supply/Security	General	Other Backward Classes	Scheduled Castes
Mostly Short Throughout the Year	9.4%	7.3%	0.0%
Short for few Months	23.6%	49.1%	0.0%
Sufficient	67.0%	43.6%	100.0%
Grand Total	100.0%	100.0%	100.0%

Source: SIA Survey-2013

Gen- General Castes, OBC- Other Backward Castes, SC-Schedule Castes

As can be seen from the above table, it can be seen that a substantial proportion of the OBCs reported a shortfall in the availability of food throughout the year, while 43.6% of the OBCs reported sufficient food supply. On the other, 67% of the general category PAFs reported sufficient food supply. As discussed in the previous sections, a substantial proportion of the general category is dependent upon non-agricultural sources of livelihoods. This thus is indicative of the unpredictability associated with agriculture, in comparison to non-farm based livelihoods. This can also be seen in the fact that 17% of the PAFs (mostly small farmers) not being able to meet the household's annual food grain needs.

Apart from these families, who have been identified as vulnerable due to their economic status in the community, a number of families have also been identified as vulnerable on the basis of their social standing amongst the community. These families comprise of the women headed households and those households which belong to the SC and ST community.

5.10 SANITATION PRACTICE

A detailed description of the physical and social infrastructure in the study area and the project footprint area was provided in section 5 of the report. The waste management and sanitation practices were identified as an important key area which needs to be analysed at the PAF level. This analysis of considered important for the purpose of developing a proper understanding of the life style of the PAFs as well as developing relevant management plans for the project area.

Table 5.14 Sanitation Facilities

Type of Sanitation Facility	General	OBC	SC	Grand Total
Flush Toilets	20%	2%	0%	9%
Non-flush Toilets	10%	18%	0%	14%
Community Toilets	0%	3%	0%	2%
Open Defecation	71%	77%	100%	75%
Grand Total	100%	100%	100%	100%

Source: SIA Survey-2013

Gen- General Castes, OBC- Other Backward Castes, SC-Schedule Castes

The reasons for such a widespread practice of open defecation was attributed to habits, damaged toilets, bad odour and fear among children and general lack of running water. The caste break-up of the reasons for open defecation is provided in table below.

Table 5.15 Reasons for Open Defecation

Reasons For Open Defecation	General	OBC	SC	Grand Total
Habit	6%	50%	100%	23%
Lack of Water	6%	0%	0%	4%
Filling of Pits	0%	25%	0%	8%
Damaged Toilet	29%	25%	0%	27%
Fear in Children	29%	0%	0%	19%
Habit, Bad Odour, Fear	6%	0%	0%	4%
Filling of Pits, Bad Odour, Fear	6%	0%	0%	4%
Bad Odour and Fear	18%	0%	0%	12%
Grand Total	100%	100%	100%	100%

Source: SIA Survey-2013

Gen- General Castes, OBC- Other Backward Castes, SC-Schedule Castes

Table 5.16 Household Waste Disposal

Household Waste Disposal Site	General	OBC	SC	Grand Total
Anywhere Behind House	13%	2%	0%	6%
Specific Space near house	74%	95%	100%	87%
Community Dumping Area	0%	2%	0%	1%
No Proper Place	13%	2%	0%	6%
Grand Total	100%	100%	100%	100%

Source: SIA Survey-2013

Gen- General Castes, OBC- Other Backward Castes, SC-Schedule Castes

6.1 INTRODUCTION

“Stakeholder Analysis” is the process of identifying the individuals or groups that are likely to affect or be affected by a proposed project, and sorting them according to their impact on the project and the impact the project will have on them. This information is then used to assess the manner in which the interests of the stakeholders should be addressed in the project plan, policy, program, or other action.

The importance of such an analysis lies in the role played by this understanding in the assessment of the socio-political environment surrounding the project. It allows for the:

- Identification of the interests, concerns and potential risks surrounding the stakeholders, as well as conflicts of interests (if any).
- Identification of relations between stakeholders that may enable "coalitions" of project sponsorship, ownership and co-operation as well as the mechanisms which may have a role in influencing other stakeholders.
- Key groups/ individuals to be pin pointed who need to be informed about the project during the execution phase.
- Identifying stakeholders (those who are likely to have an adverse impact on the project) and taking appropriate measures to combat their influence;
- Generation of information essential to the planning, implementation and monitoring of the project; and;
- Development of a framework for participatory planning and implementation of various project activities

The identification of stakeholders and their inclusion in the decision making process is thus essential in the process of prioritising, analysing and addressing issues; and in creating management systems and strategies to address the concerns/ expectations of the various stakeholders.

The following sub sections provide a profile of the various stakeholders in the project as well as their concerns and relative influence with regards to the project.

Note: *The section summarises the summary of public consultations and stakeholder engagements carried out by UTCL and in the process of the SIA. It maps the stakeholders and their influence levels on the project. A detailed Stakeholder Engagement Plan (SEP) has been prepared for the project and annexed along with the report.*

6.2

STAKEHOLDER PROFILE

A stakeholder is “a person, group, or organization that has a direct or indirect stake in a project/organization because it can affect or be affected by the Project/organization's actions, objectives, and policies”. Stakeholders thus vary in terms of degree of interest, influence and control they have over the project. While those stakeholders who have a direct impact on or are directly impacted by the project are known as **Primary Stakeholders**, those who have an indirect impact or are indirectly impacted are known as **Secondary Stakeholders**. Keeping in mind the nature of the project and its setting, the stakeholders have been identified and listed in the table given below.

Table 6.1 Stakeholder Group Categorization

Stakeholder Groups	Primary Stakeholders	Secondary Stakeholders
Community	<ul style="list-style-type: none"> • Land owners: 100% Land Losers , Tribal land losers, Other losers • Encroachers, any other users • Sharecroppers • Agricultural labourers • Vulnerable Group 	<ul style="list-style-type: none"> • General community • Religious leaders • Village elders • Villages within the project impact area • School going children
Institutional Stakeholders	<ul style="list-style-type: none"> • Affected Gram Panchayat • Project investors (IFC) 	<ul style="list-style-type: none"> • Village Institutions (schools, health centres); • Political Parties
Government Bodies	<ul style="list-style-type: none"> • Regulatory Authorities; • District Administration 	
Other Groups		<ul style="list-style-type: none"> • Local NGOs • Media • Other industries/projects • External influences

6.3

STAKEHOLDER MAPPING

“Stakeholder mapping” is a process of examining the relative influence that different individuals and groups have over a project as well as the influence of the project over them. The purpose of a stakeholder mapping is to:

- Identify each stakeholder group;
- Study their profile and the nature of the stakes;
- Understand each group’s specific issues, concerns as well as expectations from the project that each group retains.
- Gauge their influence on the Project;

On the basis of such an understanding, the stakeholders are categorised into High Influence/Priority, Medium Influence/ Priority and Low Influence/Priority. The stakeholders who are categorized as high influence are those who have a high influence on the project or are likely to be heavily impacted by the project activities, and are thus high up on the project proponent’s priority list for engagement and consultation. Similarly, the stakeholders categorized as medium influence are those who have a moderate influence on the project or even though they are to be impacted by the project,

Table 6.2 Stakeholder Profiles and Opinions

Stakeholder Category	Relevant Stakeholders	Profile/Status	Concerns surrounding the project	Expectations from the project	Influence on Project	Rating of Stakeholder Influence
Primary	Landowners: 100% land Losers	This category comprises of those land losers (48 in the sample of 196) whose entire land holdings have been impacted due to the land take for the project. While 11 of the PAFs who have already sold their land (196) have purchased replacement land from the compensation amount, 19% of the PAFs still remain landless. This category of land owners is further sub divided into three categories of large land owners (more than 10 ha), medium land owners (2-10 ha) and small land owners (1-2 ha)	The primary concerns of these stakeholders pertain to the adequacy of the mitigation measures to be undertaken by UTCL. Apprehensions surround the impacts the project may have on the PAFs in the absence of sound livelihood restoration programme. These concerns are the strongest amongst the small and medium land owners who have lost 100% of their land holdings due to the land acquisition for the project.	The expectations of these stakeholders are as follows: <ul style="list-style-type: none"> • Adequate compensation for mitigation of the project impacts • Formulation and implementation of comprehensive livelihood restoration programmes and other community development programmes • Timely and complete sharing of information pertaining to the project by UTCL 	This group would be the most impacted in terms of economic/ livelihood impacts. Absence of a livelihood restoration programme and resettlement planning may result in the creation of negative opinion against the project.	High: Direct and severe impact of the project due to the land acquisition process and the resultant landlessness
	Landowners: Tribals	The tribal PAFs belong to the <i>Gond</i> tribe and comprise of approximately 13% of the total PAFs of the project and own approx. 65 acres of out of the 437.68 acres required for the project. These PAFs are similar to the non-tribal community in the village in terms of their livelihood, living conditions and cultural practices. However, this group has been differentiated from the rest of the community in terms of the statutory regulations which need to be followed in terms of the land acquisition process for the project.	The primary concerns of these stakeholders pertain to the delays being faced in the process of land purchase due to the constitutional provisions applicable. Furthermore, these stakeholders expressed their concern regarding the adequacy of the mitigation measures to be undertaken by UTCL.	The expectations of these stakeholders are as follows: <ul style="list-style-type: none"> • Assistance from UTCL in obtaining the District Collector's approval for the purpose of land sale. • Adequate compensation for mitigation of the impacts of the project • Formulation and implementation of comprehensive livelihood restoration programmes and community development programmes • Timely and complete sharing of information 	Delay in land purchase or resettlement planning may result in time and cost over runs. Furthermore, Absence of a livelihood restoration programme and resettlement planning may result in the creation of negative opinion against the project.	High: Direct and Severe impact on livelihoods due to land acquisition process

Stakeholder Category	Relevant Stakeholders	Profile/Status	Concerns surrounding the project	Expectations from the project	Influence on Project	Rating of Stakeholder Influence
				pertaining to the project by UTCL		
	Landowners: Other	This category of landowners comprise of the non –tribal PAFs who have lost only portions of their as part of the land acquisition for the ML area	The primary concerns of these stakeholders pertain to the adequacy of the mitigation measures to be undertaken by UTCL.	The expectations of these stakeholders are as follows: <ul style="list-style-type: none"> • Adequate compensation for mitigation of the project impacts • Formulation and implementation of comprehensive livelihood restoration programmes and community development programmes • Timely and complete sharing of information pertaining to the project by UTCL 	Absence of a livelihood restoration programme and resettlement planning may result in the creation of negative opinion against the project.	High: Direct and Severe impact on livelihoods due to the land acquisition process
	Encroachers	The ML area has been observed to have a small amount of encroachment onto the government land. This encroachment is however, minimalistic and is done for the purpose of agriculture by those owning land next to the government land. This encroachment has been done by the pushing of the boundaries of the privately owned land into the government land.	The primary concerns of these stakeholders surround the apprehension that due to the fact that the land in question is not owned by them, compensation for the encroached land would not be provided	The expectations from the project pertain to the following: <ul style="list-style-type: none"> • Awarding of adequate compensation for the land lost. • Formulation and implementation of comprehensive community development programmes • Timely and complete sharing of information pertaining to the project by UTCL 	Absence of adequate compensation and a livelihood restoration programme may result in the creation of negative opinion against the project.	Medium-low: The encroachment onto the government land in the ML area appears to be minimalistic, thereby indicating to a medium or low impact depending on the amount of encroachment.
	Share Croppers	According to the information presently available with ERM and UTCL, a total of 18 share cropper families have been identified on the impacted land. This	The primary concern of these stakeholders pertain to the impact of the land acquisition upon their	The expectations from the project are: <ul style="list-style-type: none"> • Adequate compensation for mitigation of the project 	Absence of adequate compensation and a livelihood restoration programme may result	High: Direct and significant impact of the

Stakeholder Category	Relevant Stakeholders	Profile/Status	Concerns surrounding the project	Expectations from the project	Influence on Project	Rating of Stakeholder Influence
		number however may increase as more information is made available. These share croppers comprise of individuals from within the village Guma as well as the neighbouring villages who are involved in the practice of leasing in land for the purpose of agriculture	livelihood	<ul style="list-style-type: none"> impacts Formulation and implementation of comprehensive community development programmes Timely and complete disclosure of information pertaining to the project by UTCL 	in the creation of negative opinion against the project.	project in terms of impacts on livelihoods due to land acquisition process
	Agricultural Labourers	These stakeholders comprise of those residents of Guma or surrounding villages for whom an important source of livelihood is working as labourers in the fields of others. These stakeholders, thus do not own any land of their own. However, it must be kept in mind that the specific information pertaining to this group of stakeholders is presently unavailable	The primary concern of these stakeholders pertain to the impact of the land acquisition upon their livelihood	<p>The expectations from the project are:</p> <ul style="list-style-type: none"> Adequate compensation for mitigation of the project impacts Formulation and implementation of comprehensive community development programmes Timely and complete disclosure of information pertaining to the project by UTCL 	Absence of a livelihood restoration programme and resettlement planning may result in the creation of negative opinion against the project.	High: Direct and significant impact of the project on livelihoods due to land acquisition process
	Vulnerable Communities	Vulnerable groups comprise of the Schedule tribe, women headed households, differentially abled people, old, infirm, Below Poverty Line (BPL) families (meeting the requirement specified)	The primary concerns of these stakeholders pertain to the ability of the mitigation measures to cater to their specific needs	<p>Expectations from the project are:</p> <ul style="list-style-type: none"> Formulation of mitigative measures (in terms of R & R compensation and other Community Development Activities) which would cater to the specific requirements of each of these groups Timely and complete disclosure of information pertaining to the project by UTCL 	Despite the fact that these groups may not be able to exert much influence on the project, they are likely to be heavily and on most occasions disproportionately impacted by the project activities	Low: low impact on the project due to few numbers in the village,
	Guma and	The Panchayat is the lowest levels of	The primary concerns of	The expectations of these	Most of the	High: extremely

Stakeholder Category	Relevant Stakeholders	Profile/Status	Concerns surrounding the project	Expectations from the project	Influence on Project	Rating of Stakeholder Influence
	Sarseni Gram Panchayat	local governance and consists of one or more revenue villages. This body of local governance was accorded with a number of responsibilities and powers as part of the 73 rd Amendment to the Constitution. As part of this, most of the rural development schemes and funds for central schemes are channelled through this body of governance. Also, it is the Panchayats who are bestowed with the decision making authority for economic development and social justice. Thus in order for the smooth and proper functioning of the project, the consent of the Panchayat is imperative.	these stakeholders pertain to the adequacy of the mitigation measures to be undertaken by UTCL.	stakeholders are as follows: <ul style="list-style-type: none"> • Timely and complete sharing of information pertaining to the project by UTCL • Involvement in the formulation of the compensation and the livelihood restoration programmes and community development programmes • Adequate compensation for mitigation of the project impacts • Formulation and implementation of comprehensive livelihood restoration programmes and other community development programmes 	communication and development activities are routed through the Panchayat. Furthermore, the Panchayat members are extremely important as opinion makers within the community and are thus critical in securing the support of the local community	important stakeholders for opinion making and the smooth functioning of the project.
	Project Investors (IFC)	The IFC as the project investor has a number of requirements which must be fulfilled for various projects. These requirements are enlisted as guidelines within the IFC Performance Standards (IFC PS) on Social and Environmental Sustainability	The primary concerns of these stakeholders are the proper compliance of the project to the PSs as well as the government regulations.	The expectations of these stakeholders are as follows: <ul style="list-style-type: none"> • Compliance with the applicable PSs • Adequate compensation for mitigation of the project impacts • Timely and complete disclosure of information pertaining to the project by UTCL • Provision of regular updates in regards to the progress of the project 	As the investors in the project, the influence of IFC is high as in case of non-compliance with the requirements of the PSs the funding for the project can be discontinued	High: high influence due to role as project investor

Stakeholder Category	Relevant Stakeholders	Profile/Status	Concerns surrounding the project	Expectations from the project	Influence on Project	Rating of Stakeholder Influence
	Regulatory Authorities	The regulatory authorities comprise of the central, state and district level bodies generally involved in the determination of compensation, providing environmental and land clearances for various project components. These include the departments such as forest, revenue, agriculture, health, energy, irrigation, public works, sanitation amongst others	The primary concern of these stakeholders is that the project complies with all the regulatory requirements applicable on the project.	The expectations of these stakeholders from the project are: <ul style="list-style-type: none"> • Compliance with the regulatory requirements applicable • Timely and complete disclosure of information pertaining to the project by UTCL • Provision of regular updates in regards to the progress of the project 	Abidance with the various rules and regulations of such authorities and the various clearances required from the same are instrumental in the smooth functioning of the project	High: The consent and permissions from these departments are imperative for the implementation of the project.
	District Administration	The project area is administered by government bodies at three levels: at the district level, at the taluka/ block level and at the <i>Panchayat</i> level in each village. The process of decentralisation has resulted in substantial decision making authority being vested in the district authorities with substantial funds being routed through them towards fund development. Accordingly, the bureaucracy under the Block Development Officers, District Education Officers, the village secretary, and <i>Patwari</i> have become extremely influential	The primary concern of these stakeholders is that the project complies with all the regulatory requirements applicable on the project.	The expectations of these stakeholders from the project are: <ul style="list-style-type: none"> • Compliance with the regulatory requirements applicable • Timely and complete disclosure of information pertaining to the project by UTCL • Provision of regular updates in regards to the progress of the project 	These authorities not only serve as important points of contact for villagers or other party wanting to liaise with higher authorities but are also critical in obtaining permissions and support for the various project activities.	High: The consent and permission from the district administration is essential for the implementation of the project
Secondary	General Community	This stakeholder group comprises of the members of the village Guma, who even though have not lost any land to the ML area are to be heavily impacted by the mining and other ancillary activities due to the Mine being located within the	The primary concerns of these stakeholders pertain to the adequacy of the mitigation measures in abating the project impacts	Expectations from the project are: <ul style="list-style-type: none"> • Adequate compensation for mitigation of the project impacts in terms of R & R compensation and other 	The support of the community is extremely important for the smooth functioning of the project. Also conflict	High: The impacts of the project on the community and vice versa are to be high

Stakeholder Category	Relevant Stakeholders	Profile/Status	Concerns surrounding the project	Expectations from the project	Influence on Project	Rating of Stakeholder Influence
		village boundary. The total population of the village is approx.1113 individuals of which 15% are ST and 2% are SC (according to 2001 census)		Community Development Activities <ul style="list-style-type: none"> Timely and complete disclosure of information pertaining to the project by UTCL 	with the community is likely to result in cost and time over runs	due to the location of the mines within the boundaries of the village
	Religious Leaders	This stakeholder group comprises of those who are respected amongst the community due to their standing amongst the religious communities. Their opinions have a considerable impact on shaping the opinion of the community	The primary concerns of these stakeholders pertain to the adequacy of the mitigation measures in abating the project impacts	Expectations from the project are: <ul style="list-style-type: none"> Adequate compensation for mitigation of the project impacts in terms of R & R compensation and other Community Development Activities Timely and complete disclosure of information pertaining to the project by UTCL 	Apart from the Panchayat and Elders, this group has the potential of influencing the community to a varying degree	Medium: Important role as opinion makers
	Village Elders	Village elders are those who are considered by the village community as wise and experienced due to their age. The opinion of such members of the community is given special attention by the youth of the village while making decisions	The primary concerns of these stakeholders pertain to the adequacy of the mitigation measures in abating the project impacts	Expectations from the project are: <ul style="list-style-type: none"> Adequate compensation for mitigation of the project impacts in terms of R & R compensation and other Community Development Activities Timely and complete disclosure of information pertaining to the project by UTCL 	Just as the Religious leaders, the Village elders have the potential of influencing the community to an extent	Medium: Important role as opinion makers
	Villages within the Study	The villages within the Study Area the approx. 75 villages which lie within the 10 km radius of the ML area. The	The primary concerns of these stakeholders pertain to the adequacy of the	Expectations from the project are: <ul style="list-style-type: none"> Adequate compensation for 	The support of these villages will enable the smooth functioning of	Medium-Low: depending upon distance

Stakeholder Category	Relevant Stakeholders	Profile/Status	Concerns surrounding the project	Expectations from the project	Influence on Project	Rating of Stakeholder Influence
		relevance of these villages will be correspondent to the distance at which they are located from the ML area, with those who are lying within the 0-2.5 km radius being likely to have the maximum influence over the project, while being the most heavily impacted beyond the immediate community	mitigation measures in abating the project impacts	<p>mitigation of the project impacts</p> <ul style="list-style-type: none"> Timely and complete disclosure of information pertaining to the project by UTCL 	the project	of village from the village Guma, the ability to influence the project and be influenced by it will vary.
	School Going Children	The school going children from the surrounding villages are to be impacted due to the fact that the main road connecting the village Guma to Pausari and Sarseni is going to be diverted as its current alignment runs through the middle of the ML area. The impact on this group is to be on the lines of altered approaches to the sole Secondary school in the 2.5 km radius, which is in the village Guma	The primary concern of these stakeholders pertains to the impact the project is likely to have on the ability of the students to reach schools from neighbouring villages due to the closure of the road connecting Guma to them	The expectations of the stakeholders from this project pertain to the provisioning of an alternative road by UTCL without drastically increasing the travel time required.	Due to the fact that the road diversion is unlikely to drastically increase the travel distance or time, the influence of the project on this group is unlikely to be substantial	Low: Low impact of project due to diversion of road
	Village Institutions	Village institutions include the health and education institutions at the village level. The village institutions present in the villages in the immediate vicinity of the project site are primarily the schools present in the villages. The primary schools in the villages <i>Sarseni, Thelki, Champa, Pausari, and Bharuwadih</i> and the primary and secondary school in the village <i>Guma</i> .	The primary concern of these stakeholders pertain to the maximization of the development benefits to the villages within the Study Area	<p>The expectations of these stakeholders from the project are:</p> <ul style="list-style-type: none"> Timely and complete disclosure of information pertaining to the project by UTCL Provision of regular updates in regards to the progress of the project Adequate compensation for mitigation of the project impacts in terms of R & R compensation and other Community Development 	These stakeholders are unlikely to have a significant impact or be significantly impacted by the project activities due to the nature of the project. However, they are likely to play a role in the process of opinion building	Low: Limited influence on the local communities

Stakeholder Category	Relevant Stakeholders	Profile/Status	Concerns surrounding the project	Expectations from the project	Influence on Project	Rating of Stakeholder Influence
				Activities <ul style="list-style-type: none"> To be involved in the formulation and implementation of the CSR and development activities for the project 		
	Political Parties	Political parties in such areas, showcase a keen interest in the working of the various projects in the region. They play a key role in sensitising people and developing public opinion. The political parties also play a key role in the negotiation process as well as the public hearing. However, the presence of Political parties in the projects in the study area was reported as being minimal in nature.	The primary concerns of these stakeholders pertain to the provisioning of adequate compensation to the impacted communities	The expectations of these stakeholders from the project are: <ul style="list-style-type: none"> Compliance with the regulatory requirements applicable Timely and complete disclosure of information pertaining to the project by UTCL Provision of regular updates in regards to the progress of the project Adequate compensation for/ mitigation of the project impacts in terms of R & R compensation and other Community Development Activities 	Political parties in any region are capable of influencing (to a varying degree) the public opinion regarding a project or a component of the project.	Low: Influence limited as opinion makers due to limited presence in the project area
	Local NGOs	The local NGOs have a very limited presence and primarily deal with issues like tribal development programmes, sanitation, improvement of education and rural development.	The primary concerns of these stakeholders pertain to the provisioning of adequate mitigative measures by UTCL	The expectations of these stakeholders from the project are: <ul style="list-style-type: none"> Timely and complete disclosure of information pertaining to the project by UTCL Provision of regular updates in regards to the progress of the project Adequate compensation for 	Even though the influence of these stakeholders is extremely limited due to the low presence in the region, they can play an extremely important role in forming public opinions regarding the project	Low Influence limited due to scarce presence in project area

Stakeholder Category	Relevant Stakeholders	Profile/Status	Concerns surrounding the project	Expectations from the project	Influence on Project	Rating of Stakeholder Influence
				<p>mitigation of the project impacts in terms of R & R compensation and other Community Development Activities</p> <ul style="list-style-type: none"> • Involvement of the local NGOs in the identification of these mitigative measures • Engagement of UTCL in the NGO activities so as to contribute towards the development of the region 		
	Media	The regional press (both print and audio-visual) has in the past showcased a keen interest in the mining projects coming up in the region. They are known to have played an extremely important role in generating awareness in previous projects, especially so in the processes such as the public hearing	The primary concerns of these stakeholders pertain to the provisioning of adequate mitigative measures by UTCL as well as compliance of the project to the statutory requirements applicable.	<p>The expectations of these stakeholders from the project are:</p> <ul style="list-style-type: none"> • Timely and complete disclosure of information pertaining to the project by UTCL • Provision of regular updates in regards to the progress of the project • Adequate compensation for mitigation of the project impacts in terms of R & R compensation and other Community Development Activities 	These stakeholders play an important role in generating awareness and forming public opinion through the dispersion of information	Medium: influence the opinion of not only local community but others as well through dispersion of information
	Other Industries/ projects	A number of other mining projects for companies such as Shree Cement are also in the pipelines and are likely to come up in the immediate vicinity of the project in a short span of time.	The primary concerns of these stakeholders pertain to the issues which may arise due to differential compensations across projects	The expectations of these stakeholders involve collaboration across the projects in terms of investments made in the community development activities as well as the	Collaboration with the other mining companies in the region will allow for the optimization of the investments made by	Low: low impact due to limited influence of the project and on the project

Stakeholder Category	Relevant Stakeholders	Profile/Status	Concerns surrounding the project	Expectations from the project	Influence on Project	Rating of Stakeholder Influence
				compensation packages provided	the project proponents towards the community development activities	activities
	External Influences	These stakeholders comprise of residents from neighbouring villages, who appear to be influential in the opinion formation amongst the impacted villages.	The primary concerns of these stakeholders pertain to the opinion that the present mitigation measures being undertaken appear to be insufficient	The expectations of these stakeholders involve Adequate compensation for mitigation of the project impacts in compliance with the state Resettlement and Rehabilitation Policy	These stakeholders appear to have an important role to play in terms of in forming public opinions regarding the project	Medium: despite the fact that these influences appear to play an important role in opinion formation their limited numbers curb their influence

Summary of Consultations

The section below captures the summary of the stakeholder consultations carried as a part of the SIA.

Table 6.3 *Summary of Stakeholder Consultations carried out as a part of the Social Impact Assessment (SIA)*

Stakeholder Group	Date of Consultation	Venue	Number of attendees	Summary of Discussion
RWCW CSR Department	06-07-2012	CSR office	2	<ul style="list-style-type: none"> A brief was given on the various activities undertaken by the CSR department in the fields of education, health, livelihood, and Societal issues
Tribal women	06-07-2012	Guma	8	<ul style="list-style-type: none"> develop an understanding of the social, cultural and lifestyle practices of the community develop an understanding of the community's perception of the project discussion on the community's concerns/grievances regarding the project
Local community	06-07-2012	Gram Panchayat Bhavan	30	<ul style="list-style-type: none"> generate a basic understanding of the community, develop an understanding of the project status and the land purchase process develop an understanding of the community issues/grievances in regards to the project
Tribal community	07-07-2012	Biasakhu Ram's residence	10	<ul style="list-style-type: none"> develop an understanding of the social, cultural and lifestyle practices of the community develop an understanding of the community's perception of the project discussion on the community's concerns/grievances regarding the project
Patawari	07-07-2012	Patawari office	1	<ul style="list-style-type: none"> an understanding of the land categorization and agricultural production in the area was established
Tribal community	08-07-2012	Bhaiya Ram Sahu's residence	8	<ul style="list-style-type: none"> develop an understanding of the community's perception of the project discussion on the socio-economic survey being conducted
Guma Panchayat	31-08-2012	Residence of Gram Sarpanch	2	<ul style="list-style-type: none"> discussion on the socio-economic survey being conducted and the manner in which it will be conducted
Local Community	02-09-2012	Guma village	5	<ul style="list-style-type: none"> to generate a socio-economic understanding of the community, to develop an understanding of the land purchase process for the project
Local Community	03-09-2012	Gram Panchayat Bhavan	10	<ul style="list-style-type: none"> discussion on the status of the requests/demands of the community discussion on the socio-economic survey to be undertaken
Women and Child Development Cell	12-02-2013	District Headquarter	1	<ul style="list-style-type: none"> An understanding of the status of women in the district Discussion on the vulnerabilities and challenges faced by women in the area Role of women in agriculture and other livelihood activities Development programmes focussing on women and children in the area
MNREGA Department	12-02-2013	Jan Panchayat Office	2	<ul style="list-style-type: none"> Understand the developmental activities undertaken by the government in the district Discussion was around the daily wage labour and the trends in the same

Stakeholder Group	Date of Consultation	Venue	Number of attendees	Summary of Discussion
Deputy Collector	12-02-2013	Deputy Collector's office	1	<ul style="list-style-type: none"> Obtaining the Census 2011 data and other demographic data
Local community	13-02-2013	Residence of Gram Sarpanch	12	<ul style="list-style-type: none"> Discussion on the socio-economic survey being conducted Discussion on the community concerns/grievances
Community	15-02-2013	Community Centre	8	<ul style="list-style-type: none"> Generate a socio-economic understanding of the community, including demographic profile, livelihood profile, infrastructure, livestock holdings, agricultural productivity etc
Women	16-02-2013	Sukham Bai's residence	9	<ul style="list-style-type: none"> Generate a socio-economic understanding of the community, including demographic profile, livelihood profile, infrastructure, livestock holdings, agricultural productivity etc
Women	17-02-2013	Budhiya Bai's Residence	5	<ul style="list-style-type: none"> Understanding of the community's perception of the project Discussion on the manner in which UTCL can assist in the development of the village Discussion on the manner in which the community can be involved in the implementation of such programs
Local community	17-02-2013	Community Centre	6	<ul style="list-style-type: none"> Discussion on the socio-economic survey being conducted Discussion on the perception of the project amongst the community Discussion on the community's perceptions of the kind of interventions to be introduced as part of the LRP
Local Community	18-02-2013	Community Centre	7	<ul style="list-style-type: none"> To generate a socio-economic understanding of the community, including demographic profile, livelihood profile, infrastructure, livestock holdings, agricultural productivity etc

7.1 INTRODUCTION

This section discusses the potential socio-economic impacts due to the development of the mine and associated facility (conveyor belt). These impacts have been identified through a) discussions with the local community b) household surveys of land losers, c) consultations with Panchayat and village representatives and opinion leaders, d) government representatives and influential people among the community, e) the project proponents and f) ERM's previous project experience in handling assignments of a similar nature.

The potential socio-economic impacts of the proposed mine must be assessed in the context of the baseline of the project location as well as the profile of the project affected families described in the previous section.

7.1.1 Identification of Impacts- Criteria

For the purpose of reporting the impacts identified have been categorised on the basis of three phases of the project namely;

- Planning Phase;
- Mine Development/ Operations Phase; and
- Mine Closure Phase

The establishment of the mine in a predominantly rural area (witnessing increasing mining related activities), with basic infrastructural facilities, along with the prevailing socio-economic constraints of the region is likely to generate impacts with different extents and severities. The obvious impacts include loss of land, potential employment generation, business and linked opportunities for the local people, specific impacts from the inherent features of the area/region and its local communities/dynamics etc. These can broadly be categorized as:

- Direct impacts on the families/households whose land has been purchased as well as impacts on general community and prevailing socio-economic environment in the project affected villages (*Guma* and *Sarseni*);
- Indirect/Induced impacts that may be secondary impacts, derived from the existing socio-economic environment and developments linked to the project but not directly associated with it;
- Cumulative impacts arising from a) the development of other mines in the area, b) impacts that would accumulated over the entire life-cycle of the project, its various components and range of activities and c) from impacts of other projects/mine developments that are located nearby.

7.2 IMPACTS IN PLANNING PHASE

The project is to have a direct impact on the DIA and the study area primarily through the land purchase process. The impacts resultant from the Land purchase process for the project have been discussed in following sub sections, along with a description of the mitigation measures that have been already been taken or are proposed for the same.

7.2.1 *Potential Displacement (Physical)*

The mine lease area of 157.122 hectares also has some houses located along the fringes of the lease boundary (towards the Guma village). These houses (numbering around 20) would be required to be shifted if the whole lease area was to be mined. In such a scenario these families would have to be resettled by the project.

Proposed Mitigation Measures

UTCL has decided/agreed (and communicated in the village and amongst the stakeholders (government, panchayat, house owners etc) that they would modify the lease boundary so as to avoid impact (of physical displacement) on these families.

Based on the above understanding it is assessed that there will be no physical displacement resulting from the project and its operations. Hence there is NO applicability of the impact (of physical displacement) for the project.

7.2.2 *Loss of Land*

The development of Guma mines would require approximately 157.122 hectares of land (Private land- 138.26 and 18.85 hectares of Government land). Apart from this approximately another 20 hectares of land will be required for laying down the conveyor belt linking the mine to the plant.

Distribution of the Total Land and Current Status

Project Component	Village	Land required(ha)	Land Purchased (till date)	Number of Affected families
Mine	Guma	157.122	111.35	244
Conveyor Belt	Guma & Sarseni	~20	None	~134

Source: RWCW

This land has been directly been purchased on the basis of a negotiated settlement from the land owners. UTCL has also planned to directly purchase the land from the affected land owners whose land falls in the route of the conveyor belt. The land for the same is currently being surveyed and technical design specifications being finalised.

The land falling in the mine area has been officially listed as private agricultural land and government land in the village revenue records. The land purchase for the project has/will impact the following groups:

- **Landowners:** A majority of this land is owned by the Other Backward Castes (*Rawat, Yadavs* etc), General and Schedule Tribe Community (most *Gonds* and *Sahus*). They cultivate at least one crop on their land;
- **Sharecroppers:** Land purchased is also cultivated by a number of sharecroppers in the village. The arrangement between land owners and sharecroppers is discussed in the baseline section. The socio-economic survey came across 18 sharecroppers on the impacted land;
- **Agricultural labourers:** They belong to all caste and community groups and mainly work on lands owned by the medium and large land owners.

7.2.3

Loss of Land - Impact on Project Affected Land Owners

Change in Land holdings

As discussed earlier, the project area is characterised by small landholding with the average land held by PAFs being 1.31 ha, and more than 22% (approx.) of PAFs having less than 1 ha. Hence, a sizable number of PAFs were marginal farmers. Another 22% PAFs held 1-2 ha of land and were small farmers. The most visible impact on an individual/family level has been identified as a change in the land holdings of the PAFs (owners).

The process of land purchase had a substantial impact on the land holding sizes, with a total of 24% of the PAFs losing all their land and the number of large medium farmers (5.0 to 9.9 ha) being reduced from 12% to 7%, that of small medium farmers (2 to 4.9 ha) from 39% to 19%. On the other hand, the share of small farmers (1 to 2 ha) increased from 22% to 25% of the total PAFs after the sale of land.

Table 7.1 *Change in Land Holding sizes of PAFs-Pre and Post Land Purchase (Till date)*

Holding Sizes (ha) of PAFs	Before Project		After Sale of Land		Current	
	No of PAFs	% of Total	No of PAFs	% of Total	No of PAFs	% of Total
Landless*			48	24%	37	19%
0.01 to 0.49	21	11%	24	12%	22	11%
0.5 to 0.99	21	11%	17	9%	11	6%
1.0 to 1.99	43	22%	49	25%	46	23%
2.0 to 4.99	77	39%	37	19%	48	24%
5.0 to 9.99	23	12%	13	7%	20	10%
More than 10	11	6%	4	2%	6	3%
Info not avail	0		4		6	
Total	196	100%	196	100%	196	100%

Source: RWCW

*Landless in this context means people who lost all their land and have received compensation.

The loss of land and in turn utilization of the compensation has resulted in a change in the size of the landholdings amongst the PAFs (see Table 7.3). This process of purchase of replacement land has (*till date*) resulted in a total of 113 PAFs having less land than what they had in the pre-project stage (69.75%) and 49 PAFs (30.24%) have increased their landholdings. As a consequence of the purchase of replacement land, the number of landless PAFs reduced to 19% of the total PAFs, while that of large medium farmers increased to presently constitute 10% of the total PAFs. On the other hand, the proportion of small farmers reduced to 23% while that of marginal farmers reduced from 21% to 17%, suggesting a trend towards restoration of their agricultural livelihood. The land compensation being paid was found (through the process

of consultations, market assessment and discussions with revenue and government officials) to be higher than the market value of the land in the area. Also the discussions with PAFs suggest that they (if willing) can buy replacement land with the compensation amount. This, thus meets the criteria of the replacement cost suggested in PS 5.

Proposed Mitigation Measures

The following mitigation measures have been undertaken by the project for mitigation of adverse impacts arising from loss of land for the individual land owners;

- **Cash Compensation:** Cash compensation for the loss of land at higher than market value (replacement cost) has been paid to the **legal titleholders** and land owners whose land has been purchased for the project. The value of the land has been decided on the basis of a negotiated settlement and people have expressed satisfaction on the rates. This therefore meets the definition of replacement cost;
- Land parcels whose **access has been obstructed** or which have **been rendered unviable for use** will also be purchased by the project. The compensation for these land parcels is/will be based on the replacement value of the land;
- Livelihood restoration measures will be taken by the project to ensure that the affected families either restore or better their standard of living (Refer to **Livelihood Restoration Framework (LRF)** for details). The Livelihood restoration plan will have special focus on the needs of this group of affected families;
- Skilled and qualified people (from amongst the affected families) who meet the needs of the project will be given **preference in employment (refer LRF for details)**;
- **Facilitate the option/provision of Land for Land.** UTCL has made an attempt to facilitate the purchase of replacement land by identifying sites where land was available
- Allowing the affected families to **use of the affected land** for agricultural purposes as a transition arrangement (till they purchase alternate land)

Considering the impending impact of the land loss for these marginal and small farmers, UTCL made an attempt to facilitate the purchase of replacement land by identifying sites where land was available. However this option (though still available) did not enjoy favour of PAFs. The PAFs wished to get a comprehensive financial package in terms of higher purchase price of the land and freedom to decide on its utilization for managing and mitigating economic impacts caused due to loss of land.

Access to Land- UTCL's Strategy to support PAFs in the transition phase

Apart from providing monetary compensation to the PAFs, UTCL has also refrained from creating boundaries in the Mine Lease Area and limiting access to the land. This has allowed the community to continue to cultivate the land even after its sale. Discussions with UTCL team suggested that this initiative is aimed at allowing for a smoother transition of the PAFs and to a) ensure that the livelihoods are not impacted in the process of *Transition* (allowing land owners to look for alternate land and make purchase agreements) and b) to allow access to those land parcels belonging to tribal families with whom sale agreements have not yet been made (due to delay in the approvals from the district administration).

UTCL intends to allow the access and use of land till the time all the land parcels have been purchased and the mine development work has commenced (reportedly till 2014)

Monetary Compensation for Purchased Land and Utilisation of Compensation

As discussed above, the rates of compensation paid for land were higher than the/then prevailing market rate. While the PAFs have utilized the compensation received in a number of ways, only 18.36% (36 individuals) of PAFs have spent the entire compensation amount. Of these 126 land losers who have some compensation amount remaining, 95 (75.4%) have deposited the money into the local bank branch (Union bank and others) in the village and earn income on it at the rate of 9% p.a. This interest earned is also seen by the affected families as a transition support till the time they find alternate land or use their money for other economically gainful purposes.

Table 7.2 *Extent of Compensation Utilization*

Amount of Compensation Spent	No. of families	%
Partial	126	77.77
Complete	36	22.22

Source: RWCW and Social Survey

The uses to which the compensation received is put include land purchase for agriculture/homes; fulfilling family responsibilities such as marriages medical treatments, and repayment of loans; investment in business projects or real estate and vehicles for personal and commercial use.

The higher compensation paid to PAFs enabled them to purchase land in replacement or to opt for non-agriculture livelihoods. This can be seen in the fact that of the 160 PAFs for whom information is available, 66 PAFs have already purchased alternative land in the surrounding areas (64 for agriculture and 2 for non-agriculture purposes), while another 18 are in the process of selecting plots for purchase.

Table 7.3 *Details of Utilization of Compensation*

Utilization of Compensation	Number of PAFs	% of PAFs
Purchased land (agriculture)	66	40.74
Searching for land	18	11.11
Business enterprise	8	4.94
Investment	13	8.02
Purchase of Vehicles	54	33.33
Loan Repayment	25	15.43
Marriages in family	10	6.17
Medical treatment of family members	2	1.23

Source: RWCW

Apart from the 84 PAFs who have purchased land or are searching for land, a number of land losers (15% approx.) have also used the compensation to repay the loans taken by them on an earlier date. A number of PAFs have also invested the compensation amount in purchase of vehicles and tractors (33.33%), some of them also intended for commercial use. 21 PAFs have either invested in business activities or have put it aside for investments for providing them a continuous income.

Status and Impact on families losing all their land: The impacts on 19% of the households who still remain landless face disconnect with livelihood pursuits, and 17% of PAFs face reduction in income from agriculture. Considering the broader context of industrialization in the project area and preparedness of PAFs to diversify their livelihood basket, it would be premature to conclude that these families have failed to mitigate their risk of impoverishment, an impact which can only be ascertained after the lapse of the initial years. This aspect assumes further relevance in light of the fact that a substantial number of them have not used their compensation amount till date.

The 37 PAFs who are still landless (at the time of the survey) are grouped in terms of amount of compensation received by them and their feedback on intended use of the compensation amount is provided in table below.

Table 7.4 *Intended use of the Compensation - Landless families*

Compensation Range in INR	Intended use of Compensation Received by PAFs who lost all their land			
	Looking for/willing to purchase land	Other Investments	Repayment of Loan	Grand Total
Up to 5 Lakhs	3	2	4	9
5 to 10 Lakhs	5	3	2	10
10 to 15 Lakhs	2	3	1	6
15 to 20 Lakhs	3	2		5
30 to 50 Lakhs	2	2		4
20 to 30 Lakhs	2	1		3
Grand Total	17	13	6	37

Source: RWCW

A substantial number of families (~75%) as reported have only partially utilised the compensation received. Consultations with the local bank officials suggest that a large number of people have parked their money in the bank and are availing the interest rate either on a monthly/quarterly or six monthly basis. They also suggest that the affected families have been spending the money judiciously and there are only a few visible/reported instances where the compensation received has been squandered. Consultations with some of the PAFs suggest that the most preferred method of using compensation in order of priority was 1) buying alternate land, 2) investing in productive assets like tractors/jeeps and 3) starting business enterprises. At least 25-30% of PAFs are yet to decide upon the method of using compensation and discussion with a few of them came across a general satisfaction with the interests being earned from the deposited money.

In the light of the above observations the figures reported (in the section above on change in land holdings) may change as it is more likely that there will be an increase in land transactions /purchase amongst the impacted PAFs.

7.2.4 *Loss of Land - Tribal Families*

As discussed in sections above, the development of mine and resultant land take would impact 48 tribal families who own land parcels within the mine lease area. Purchase of private land owned by tribal families requires permission by the district administration (district collector) due to the safeguards provide to these community groups under the legal framework of

our country. UTCL and the PAFs have jointly made an application to the district administration expressing their willingness for the land purchase/sale between the two parties. However, the district administration has yet to allow for this transaction and has asked the interested parties to demonstrate that the land take would not render the tribal families more vulnerable (or increase existing vulnerabilities) and susceptible.

The SIA (and UTCL) has considered these groups as vulnerable groups and hence eligible for specific benefits and entitlements (refer entitlement matrix). The impact on these groups could not be ascertained as the data/information regarding their land and loss has not yet been compiled by the UTCL land team. This SIA report as has been reported above will need to be updated on the basis of specific impacts on these groups.

Proposed Mitigation Measures

Though the specific project impacts resulting from land take has yet to be determined, UTCL has/is undertaking following measures to minimise impacts.

- Providing access rights to the impacted tribal families and not disrupting their agricultural dependent livelihood means;
- Paying advances to the impacted tribal families so that they can secure land in the area. This is because the land prices and availability have seen a sharp uptrend and delay in disbursement of compensation would be detrimental to their chances of securing land;
- Providing the option of land for land to these families. UTCL is facilitating the process of land identification so that these families can purchase land at a fair price in the area;
- Prioritising, the employment benefits to these groups. UTCL reported that amongst the PAPs, the tribal families having skill and suitability are considered first for employment and other benefits;
- Identifying these groups as “Target Groups” for the CSR programmes and making specific targeted interventions aimed at maximising benefits to these groups. This would include prioritising them training, skill development, employment and providing access to infrastructure and services.

7.2.5

Loss of Land - Impact on Land users (Sharecroppers & Agricultural Labourers)

Impact on Sharecroppers: Apart from land owners, a number of sharecroppers have been impacted by the project. 18 sharecroppers on impacted land were reported in the survey and consultation process. However, the land owners were not willing to share the details of sharecropper families on the impacted land and they could not be identified and no information is currently available on them.

Several of the PAFs who have purchased land (either away from the village or those who have diversified to other livelihood sources) have reportedly given their land on a sharecropping basis. 42 sharecropper families have been reported on the purchased land. Different categories of PAFs who cultivated their land through share cropper is provided in the table below. The information reveals that all classes of farmers irrespective of their landholding size employed share croppers. This may be due to process of livelihood

diversification in the region. Village discussions suggest that the sharecroppers groups are not fixed to one (or a particular) land parcel and there is no trend to suggest that these arrangements (between a land owner and sharecropper) are long term (more than 2-3 years). These sharecroppers cultivate different land parcels based on the most viable economic proposition/arrangement that they can have with the land owner.

Table 7.5 Practice of Sharecropping by different categories of PAFs on Impacted land and Purchased Land

PAF Categories as per their Landholding Size	Sharecropper families on Land Sold/ Lost	Sharecropper families on purchased land
0.01 to 0.49 Ha	2	6
0.5 to 0.99 Ha	5	11
1.0 to 1.99 Ha	2	14
2.0 to 4.99 Ha	8	8
5.0 to 9.9 Ha	1	3
Total Sharecropper families	18	42

Source: RWCW

The number of sharecropping families on purchased land is higher as most of these lands are located in such a distance where PAFs living in Guma cannot (or in several cases do not) want to cultivate it directly. The area of land under sharecropping at various ranges of distance from Guma is provided in table below for further insights.

Table 7.6 Practice of Sharecropping and Distance of Land Purchased

Location of Land (Distance from Guma)	Land Lost	Land Purchased					
	Self - Cultivated (in Ha)	Under Sharecropping	Total	Self-Cultivated	Under Sharecropping	Total	
		(in Ha)	(in Ha)	(in Ha)	(in Ha)	(in Ha)	% of Total
Within Guma	102.405	11.643	114.04	11.94	0	0%	11.94
Within 5 km from Guma				4.06	2.63	39%	6.70
5-10 Km from Guma				10.12	4.45	31%	14.57
11-15 Km from Guma				0.83	9.51	92%	10.34
16-25 Km from Guma				4.05	10.93	73%	14.98
26-50 Km from Guma				5.59	17.21	75%	22.79
51-90 Km from Guma				0.83	2.02	71%	2.86
Total Land Area	102.405	11.643	114.04	37.43	46.76	56%	84.19
% of Total Land Area	90%	10%	100%	44%	56%		100%

Source: RWCW

While only 10% of the impacted land was under share-cropping in Guma, most of the newly purchased land (56%) is under sharecropping. This can be linked to the distance of these land parcels from Guma as the prevalence of share-cropping arrangement increases with distance (see Table 7.7).

Consultations with the land owners and elders suggest that sharecropping as a trend was on the rise in the area and landowners (mostly those who had received compensation and used it partly to purchase land and partly to diversify their livelihoods) were willing to enter into the sharecropping arrangement with interested parties. Impact on this category was not expected to be significant primarily due to two reasons a) land and opportunities available for sharecropping in the area and b) UTCL's approach to allow use of purchased land (this has ensured that there is no immediate severance of livelihood source and the affected sharecroppers have the time to make the transition).

Impact on Agricultural Labourers: As discussed in the sections above, agriculture in the impacted area is carried out through a mix of arrangements (self- cultivation, sharecropping, agricultural labourers). Agricultural labourers as an impacted group/category are the most vulnerable (due to their characteristics like small or marginal holdings, limited access to credit, caste community linkages etc) category in the village. However, the social survey and stakeholder consultations faced challenges in identifying the persons (agricultural labourers) who were particularly engaged in the land impacted by the project. This was due to the mobile nature of employment that these persons avail in the area. They are not typically restricted to one area (or agricultural field/land owner) and their employment depends upon the factors like availability of work, seasons, wages etc.

Consultations with the *sarpanch* and the village elders (though identifying these groups as vulnerable categories in the village) suggested that they would not be significantly impacted by the project and its resultant land take. They informed that a) abundance of job/engagement opportunities and b) the mobile nature of this group (which ensured that they had access to other opportunities) to base their assessment and predication of extent and severity of impacts on these groups.

Proposed Mitigation Measures

The following mitigation measures are proposed for mitigation of adverse impacts arising from loss of land for sharecroppers and agricultural labourers;

- Livelihood restoration measures will be taken by the project to ensure that the affected families either restore or better their standard of living (Refer to **Livelihood Restoration Framework (LRF)** for details). The Livelihood restoration plan will have special focus on the needs of this group of affected families. This will include (but not be limited to);
- Willing and suitable sharecroppers and agricultural labourers will be given **preference in contracts**;
- Trainings to improve skills and increase employability and promote income generation will be provided to all adult members (18-50 years of age) of the affected families;
- Guidance and support for start-up enterprises and getting loan for cottage/small scale businesses will be provided to these families;

7.2.6

Impact on Vulnerable Populations

As has been discussed in the section above, the development of the mine and the resultant land take process is to impact a number of individuals

categorised by the project as vulnerable groups. These populations have been identified on the basis of the vulnerabilities resultant from their socio-economic status. This group thus includes BPL families (8-10 who have neither land nor any employment), tribal families (48 households) and women headed households (11 households).

These groups are expected to experience differential impacts from the project activities, due to their present socio-economic condition. In keeping with this understanding, UTCL has identified these groups as eligible for specific benefits and entitlements (as provided in the entitlement matrix). The socio-economic survey undertaken as a part of the social impact assessment covered the BPL families and women headed households. However, the same data/information could not be ascertained for the tribal PAFs as the information regarding their land and loss has not yet been compiled by the UTCL land team. This SIA report as has been reported above will need to be updated on the basis of specific impacts on the tribal PAFs. A detailed list of the vulnerable populations is attached as Annex I

Proposed Mitigation Measures

UTCL has/is undertaking following measures to minimise impacts.

- Providing access rights to the impacted vulnerable families and not disrupting their agricultural dependent livelihood means;
- Paying advances to the impacted tribal families so that they can secure land in the area. This is because the land prices and availability have seen a sharp uptrend and delay in disbursement of compensation would be detrimental to their chances of securing land;
- UTCL will also explore the option of providing monthly allowances to the vulnerable groups so as to assist the process of livelihood restoration
- Providing the option of land for land to the tribal families. UTCL is facilitating the process of land identification so that these families can purchase land at a fair price in the area;
- Prioritising, the employment benefits to these groups. UTCL reported that amongst the PAPs, the vulnerable families having skill and suitability are considered first for employment and other benefits;
- Identifying these groups as "Target Groups" for the CSR programmes and making targeted interventions aimed at maximising benefits to these groups

7.2.7

Change in Land area and Land Use of the Village

Guma village will lose approximately 20% (157ha out of 786 ha of its territory) of its total area for the mining operation. The land required for the project is majorly (88%) privately owned land.

The land use in the affected villages will undergo a permanent change from agriculture to industrial. This in turn will result in the reduction in the agricultural land area available. Apart from this, several more mining lease areas have been assigned to other mining companies. As the exact area to be acquired by other mining companies could not be ascertained, it was not possible to determine the extent of the cumulative effect on land and

livelihood in the region. However, it can be safely assumed that the area will further lose agriculture lands for mining and industrial activity in the region.

Proposed Mitigation Measures

UTCL proposes (as a part of the mine closure plan) to rehabilitate the land area by developing water body (which, as reported, could be used by the community as a water source) and carrying out plantation activities. These plantation activities will be carried out in as a part of the progressive plan (in parallel with mine development). Though this is not expected to result in any increase in agricultural area of the village it is likely (in the long run) to address issues of water availability and contribute to increase in green cover in the area.

7.2.8 *Impact on Livelihoods*

The process of land purchase and the change witnessed in the landholding sizes has resulted in an impact on the livelihoods of not only the land losers but also other members of the community, such as sharecroppers and labourers. Analysis of data collected for the affected families suggest that 53% of PAFs have continued with agriculture as their primary mode of livelihood and of the remaining of them appear to either drift away from agriculture or have yet to purchase land and continue agricultural practices. The land owners, who sold their lands are amongst the groups who are directly impacted from the project in terms the income and livelihoods (arising from agriculture).

As mentioned previously, the PAFs have undertaken the process of purchasing replacement land. Till date PAFs have purchased 85.61 ha of land in lieu of 111.36 ha of land lost by them collectively. Thus, the land replacement achieved till date is 77% of the land lost. 82.19 ha of one crop and 27.9 ha of two crop land was lost by PAFs and till date 61.68 ha of one crop land 22.67 ha of two crop land is purchased using the compensation. Thus, land purchased till date constitute 75% of the one crop land and 81% of two crop land lost in the project.

Table 7.7 *Cropping Potential of 'Land lost' and 'Land purchased' among different Categories of PAFs categorised as per their Landholding size*

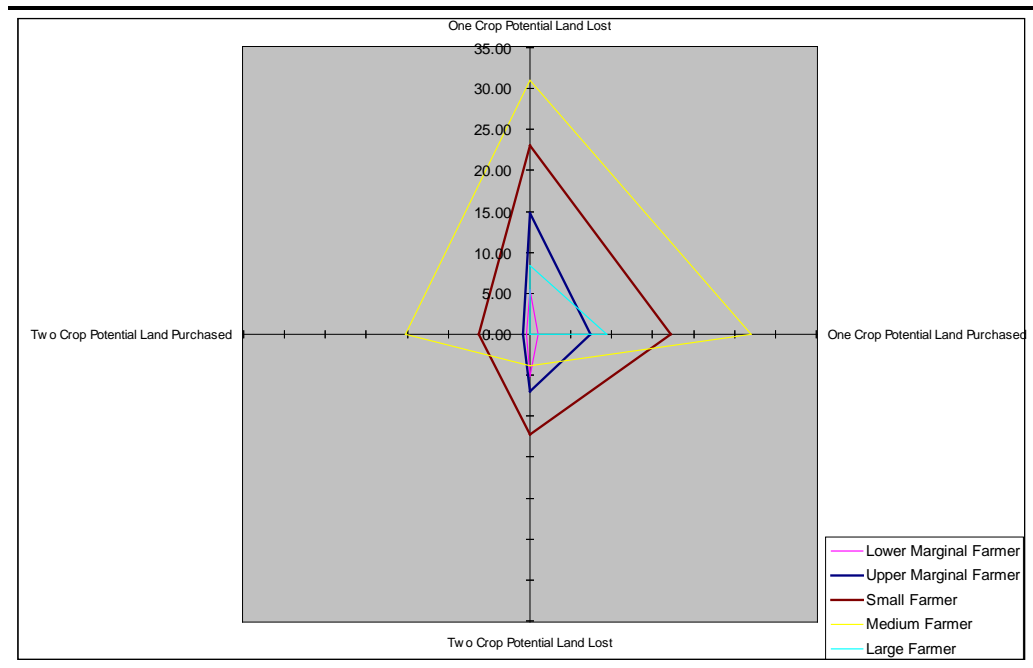
PAF categories As per their Landholding Size	Land Lost in Ha				Land Purchased in Ha					
	One crop	Two crop	No Info	Grand Total	One crop	Two crop	House	No Info	Non-agri land	Grand Total
Landless		0		0				0	0	0
Marginal (Lower)	5.39	5.12	0.13	10.64	0.93	0.40		0.00	0.02	1.36
Marginal (Upper)	14.69	6.94		21.63	7.30	0.81		0.40	0.01	8.53
Small Farmer	22.93	12.17		35.10	17.21	6.28	0.81	0.00		24.29
Medium Farmers	30.83	3.76	1.05	35.64	26.92	15.18		0.00	0.02	42.12
Large	8.35			8.35	9.31			0.00		9.31

PAF categories As per their Landholding Size	Land Lost in Ha				Land Purchased in Ha					
	One crop	Two crop	No Info	Grand Total	One crop	Two crop	House	No Info	Non-agri land	Grand Total
Farmer										
Total Area	82.19	27.994	1.17	111.36	61.68	22.67	0.81	0.40	0.04	85.61
% of Total	74%	25%	1%	100%	72%	26%	1%	0%	0%	100%

Source: RWCW

Note: A substantial number of families as reported above have deposited the money in the bank and are yet to decide upon usage of compensation. The figures reported above may change should there be an increase in land transactions / purchase amongst the impacted PAFs

Figure 7.1 Trends of Replacement of Land among different categories of PAFs



As can be seen from the Figure 7.2, the maximum land loss has been among medium farmers, and it is interesting to note that they have purchased more land in comparison to the quantity of land lost by them. They also have purchased more two crop potential land in comparison to their earlier holdings. On the other hand, the large farmers have not gone for purchase of more two crop potential land. A reverse trend of land replacement is observed among marginal and small farmers. They have lost more two crop potential land than they have purchased.

Livelihood Restoration -Trends and Observations

Impacts on livelihoods of the affected families and trends in livelihood restoration observed/reported include;

1. The current trends in utilisation of compensation and the ability of the affected PAFs to buy replacement land. From the trends and estimates currently available a significant proportion of affected PAFs have purchased alternate land (of similar type though located at some distance);
2. Most (~75%) of the PAFs have not utilised their full compensation. A large percentage of them are inclined toward buying land or productive assets.
3. PAFs who have deposited money in the bank are earning interest;
4. UTCL has allowed the impacted land owners to continue using the land. This has ensured that there is no immediate severance of livelihood of the affected families. The affected families (land owners, share croppers and agricultural labourers), while in the transition (looking for other land or related opportunities) have continued to use the land. This has, to an extent ensured that transition phase impacts are not very pronounced;
5. Challenges in livelihood restoration remain in terms of finding alternate land in near vicinity. The area being a mining belt there is also an apprehension with respect to buying land in near vicinity. Opportunistic buying of land has led to increase in land rates in the area. This poses challenges especially for small and marginal land owners/losers;
6. Trends show a gradual shift in occupational pattern of the PAFs. Rise in sharecropping and increased investments in business and willingness to buy land in urban /peri- urban areas demonstrate this trend;
7. UTCL is committed to implementing a Livelihood Restoration Framework (LRF) which aims at mitigating the adverse impacts of livelihoods. Provisions of LRF like preferential employment, trainings to increase employability, support in income generating ventures of PAFs, agricultural productivity enhancement support etc would help in restoring livelihoods and increasing avenues for employment in the area.

7.2.9

Impacts on Land Market and Availability of Land

Another impact envisaged is the impact on the land market in the area and the overall availability of land. In order to gauge the impacts of the land take process on the land market and the overall availability of land in the area, the distance of the land purchased by PAFs from the village Guma was taken as a proxy indicator. From the information made available by the PAFs, only 15% of the replacement land is located within Guma village, with a number of PAFs purchasing land at a distance of more than 15 km (almost 50% of the land purchased).

Table 7.8 Location of the land purchased by different PAF Categories

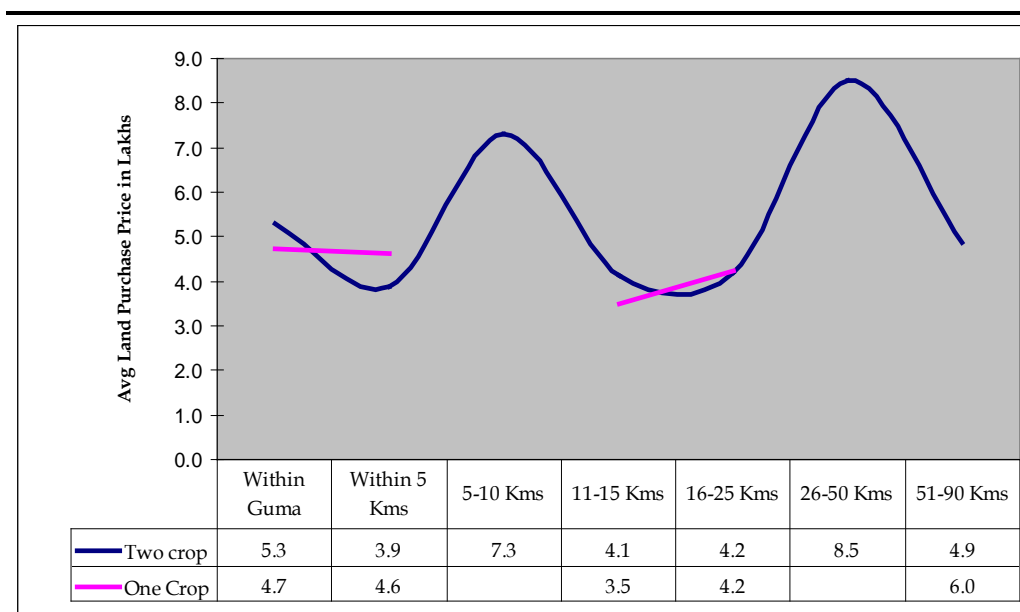
PAF categories as per their land holding size	Within Guma		within 5 Km		5-10 Km		11-15 Km		16-25 Km		26-50 Km		51-90 Km	
	in Ha	% of Total	in Ha	% of Total	in Ha	% of Total	in Ha	% of Total	in Ha	% of Total	in Ha	% of Total	in Ha	% of Total
Marginal (Lower)	2.83	26	2.02	18		0		0		0	6.11	56		0
Marginal (Upper)	3.04	11	3.86	14	12.9	48	1.23	5	1.62	6	4.34	16	0.01	0
Small Farmer	4.66	16	0.40	1	1.62	6	3.64	13	10.9	39	7.09	25		0
Medium Farmer	1.42	10	0.40	3		0	5.47	39	2.43	17	1.62	11	2.85	20
Large Farmer		0		0		0		0		0	0.40	100		0
Total Area	11.94	15%	6.70	8%	14.6	18%	10.3	13%	14.9	19	19.5	24	2.86	4%

Source: RWCVW

While the marginal farmers have purchased land at a distance up to 10 km range, small farmers show the trend of purchase of land upto 25 km range. Medium farmers again show preference for land in a range of 10 to 15km. The large farmers show preference for long distance ranges (26-50 Km).

The consultation with farmers revealed that the land in the vicinity of Guma is mostly mine lease areas and therefore government notified land rate for this area is higher. Farmers who wish to continue agriculture as their livelihood do not want to purchase land which they would eventually sell for non-agriculture use (as the entire area is a limestone belt and will be mined in times to come).

Figure 7.2 Variation in Land Prices in Guma and Surrounding Villages



Source: Primary Survey

Another impact of the land process is the increase in the land rate in the. The land prices in the locality have been influenced by the industrialization of the area. The industrialization process has resulted in some families opting for non-agricultural livelihoods and wanting to sell off their land.

The families who cannot take non-agricultural livelihoods due to lack of skills or requisite financial strength wish to increase their land holding. The demand and supply of land thus could be seen directly linked to the industrialization process in the region. Several industrial houses have also initiated their mining and industrial projects and pay comprehensive cash compensation packages for acquiring land. The changes in the land market can be studied through the land prices paid by PAFs for purchasing land in different places.

The land price in Guma has almost doubled due to increase in demand and limited availability of land for sale. The land prices seem to cast a cascading effect in the region. Land prices marginally drop within 5 km of range and are considerably lower in between 10 to 25 km distance. However some PAFs (large farmers) have preferred to buy land in higher prices in distant locations depending on their plans of diversification of livelihood and consideration of other factors.

The rise in land price has a mixed impact on local community. The positive impact of the price rise is that it enhances the net worth of individual households. On the flip side, it becomes difficult for economically weaker households to purchase additional land required for getting sufficient production for satisfying their household requirement of sustenance and income.

7.2.10 Access related Impacts

The mining activity in ML area will require the *Guma-Pausari* road to be closed for public use. Hence, it would affect road connectivity and access to civic amenities and services available at *Baloda bazaar* which is the district head quarter and the nearest township for *Guma* and surrounding villages.

Proposed Mitigation Measures

UTCL has proposed to divert the road along the mine lease boundary to restore road connectivity between these villages and the district head quarter at *Baloda bazaar*. This would result in increase of travel distance by 3-4 km for villagers. The school children, women and other community groups which frequent this road between *Pausari* and *Guma* would be affected. The Community Development Plan (CDP) will explore options for minimising impacts by supporting schools with infrastructural support to ferry school children. UTCL also proposes to strictly abide by road safety norms and its internal health & safety policies to avoid any accidents or mishaps.

7.3 MINE DEVELOPMENT/OPERATIONS PHASE IMPACTS

The mine development phase impacts are likely to be restricted to the primary zone of the study area, concentrated in the DIA, comprising of the villages *Guma* and *Sarseni*. The following sub sections discuss the expected impacts from the project activities.

This section documents the principles and approach that has been followed by UTCL in minimizing and mitigating negative social and economic impacts by the project. It also defines the additional measures/steps that need to be taken to meet the requirements of internationally recognized principles for management of social impacts arising out of loss of land and livelihoods and to ensure that the benefits and opportunities arising from the project are shared amongst the different impacted stakeholder groups.

The framework for entitlements has been developed based on consultations with the project proponents, community and the affected PAFs. It outlines the commitment of the project proponent to mitigate, to the extent feasible, the socio-economic impacts of the project. The proposed framework will be implemented by the project proponents with the help and support of the community, Panchayats and block and district administration. The framework also provides the basis for development of detailed management plans (like the livelihood restoration plan).

8.1

BROAD PRINCIPLES

The entitlement framework is based on the following principles:

- Negative/ adverse impacts of the project will be avoided or minimized, to the extent possible;
- Wherever negative/adverse impacts are unavoidable, the project-affected persons will be assisted in improving or regaining their livelihood and standard of living;
- Vulnerability has been defined for the project. Vulnerable groups/people include women headed households, differently abled people, the landless, old/infirm, tribal groups etc will be identified and specific assistance will be provided to them;
- The project will compensate land, structure and assets at full replacement cost.
- The project will recognize livelihood impacts from formal as well as informal land use and dependence. Accordingly sharecroppers and agricultural labourers and any other dependents on the impacted land will be compensated accordingly
- The project will be transparent in disclosing information related to the project and people's participation will be sought across the project cycle.
- The project will strive to mitigate adverse impacts on access routes, CPRs and other community sensitivities. Wherever unavoidable the project will provide alternatives for such losses;
- Appropriate grievance redress mechanism will be established at the project level to ensure speedy resolution of grievances/disputes. Representation of the community will be ensured in the grievance redressal mechanism.
- The project will develop and implement a Livelihood Restoration Plan that will enable people to restore , and preferably enhance pre-project income levels;
- The Project will undertake a Community Development Plan that will address the local community's development needs and will be based on the CSR principles adopted by ABJ group.

UTCL has developed and disclosed an entitlement matrix for eligible persons impacted by the project. The objective is to restore livelihoods of all project affected families. The impact of land loss on title as well as non-titleholders, land market/rates and utilisation of compensation received by Project Affected Families has been examined while developing the entitlement matrix. The measures proposed for each category of stakeholders such as land owners, share croppers, landless labourers, STs, etc. is provided below:

1. Land owners: The livelihood measures proposed are:

- Preference will be given to eligible candidates for jobs/ employment subject to vacancy and suitability and/ or training will be provided for making suitable candidates employable and the Company will provide jobs.
- Land owners will be provide income generation training a for starting an income generation activity;
- Preference in contracts workmen based on skill & knowledge;
- All adult members of all land owners families (18-50 years of age) will be given training linked to skill development and income generation;
- Guidance and support for start-up enterprises and getting loan for cottage/small scale businesses will be provided;
- Guidance and assistance for soil sample testing and analysis, field trials of improved and new variety of crops, crop diversification, etc. will be provided to improve agricultural productivity;
- Training for farmers (who are interested and keen)for productivity enhancement will be given like use of high quality and better yield seeds, change in cropping systems, cultural practices, farm equipment's, cattle camps and animal husbandry development programs.
- Support in livestock/ animal husbandry development for income generation will be provided

2. Sharecroppers:

- Preference in contracts workmen based on skill & knowledge will be provided;
- All adult members (18-50 years of age) will be given training linked to skill development and income generation;
- Guidance and support for start-up enterprises and getting loan for cottage/small scale businesses will be explored;

3. Landless Sharecroppers.

- They will be provided with income generating training, for starting income generation activity;
- All adult members (18-50 years of age) will be given training linked to skill development and income generation;
- Preference in contracts workmen based on skill & knowledge will be given;

- Support in livestock/ Animal husbandry development for income generation will be explored.

4. Landless Labourers:

- Preference in contracts workmen based on skill & knowledge will be provided.
- Will be provided with income generating training for starting income generation activity;
- All adult members (18-50 years of age) will be given training linked to skill development and income generation;
- Support in livestock/ Animal husbandry development for income generation or other activity for income generation will be provided.

5. Encroachers:

- Preference in contracts workmen based on skill & knowledge will be provided.
- Will be provided with income generating training for starting income generation activity;
- All adult members (18-50 years of age) will be given training linked to skill development and income generation;
- Support in livestock/ Animal husbandry development for income generation or other activity for income generation will be provided.

6. Scheduled Tribe:

- Acquiring permission from the District Collector for the purchase of the tribal lands & to provide advances to the PAF so as to enable them to replace the land lost and thus meet the requirements of the directives of the district administration.
- Preference will be given to eligible candidates for jobs/ employment subject to vacancy and suitability and/ or training will be provided for making suitable candidates employable and the Company will provide jobs.
- Land owners will be provide income generation training a for starting an income generation activity
- Preference in contracts workmen based on skill & knowledge.
- All adult members of all land owners families (18-50 years of age) will be given training linked to skill development and income generation.
- Guidance and support for start up enterprises and getting loan for cottage/small scale businesses.
- Guidance and assistance for soil sample testing and analysis, field trials of improved and new variety of crops, crop diversification, etc.
- Training for farmers (who are interested and keen)for productivity enhancement will be given like use of high quality and better yield seeds, change in cropping systems, cultural practices, farm equipments, cattle camps and animal husbandry development programs.

On the basis of the impacts identified in the previous chapter and the Entitlement matrix disclosed, a number of Management Plans have been developed so as to ensure that a) the impacts are minimised/mitigated, b) livelihoods are restored to the extent possible and c) there is on-going process of communication and engagement that is based on principles of participation, quick redressal or grievances and trust amongst different stakeholder groups.

This section summarises the key impacts and issues identified for the project, provides a brief description of the management plans formulated (which are attached as annexures), the roles and responsibilities of UTCL in the same, and the implementation and monitoring strategy to be followed for the same.

9.1

IMPACT MANAGEMENT PLAN

The key impacts and issues for this project, as discussed in the previous section are:

- Loss of land;
- Loss of livelihoods;
- Impacts on land markets;
- Access related Impacts;
- Land use related impact;
- Impacts of mining related activities such as blasting, transportation of limestone to plant, boost to local economy etc
- Impacts on community health and safety

Apart from the aforesaid impacts, the key challenges and issues facing the project pertain to the following:

- Restoring livelihoods and mitigating impacts on the same;
- Managing Community Expectations;
- Management of labour and contractors during development and operations phase;
- Functional Grievance Redressal system; and
- Streamlining Social/Community Investments.

The impacts have been elaborated upon in the previous sections and the process related issues and organizational structure to manage the social issues and impacts have been discussed in this section.

As part of this Social Impact Assessment study and on the basis of the impacts discussed in the previous section, three management plans have been formulated, which specifically cater to the management and process related issues described above. These plans include:

- Stakeholder Engagement Plan;

- Community Development Plan; and
- Livelihood Restoration Framework (to be developed into a detailed plan)

These management plans are to be seen as linked documents with common processes and organisational arrangements, albeit focussing on the three identified critical elements (livelihoods, community development and stakeholder engagement). These plans have been attached as Annexures to this report.

9.2 *SOCIAL SURVEY (COVERAGE AND LIMITATIONS) AND UPDATION*

The social economic survey undertaken as a part of this SIA covered primarily non-tribal PAFs (land owners) whose land has already been purchased. The information in regards to the tribal PAFs was restricted to the basic demographic information for some of the families. The data presented in the report and analysis of the same has been done on the basis of the list of land losers provided by UTCL. The survey does not include the information on the impacts of land purchase on the families that have been or will be impacted by the land purchase for the conveyor belt or the 48 tribal PAFs who are impacted by the land take for the project. The social survey also did not include those families who expressed unwillingness to participate in it. It is suggested that the SIA report be updated on the basis of the primary survey of these impacts families.

9.3 *MANAGEMENT ISSUES*

UTCL has developed an entitlement matrix based on the assessment of impacts and disclosed it to the different stakeholder groups.

Some of the issues with respect to the project that need time and attention of the management have been listed and discussed below. Speedy redressal of these issues would go a long way in building trust and addressing some stakeholder concerns with respect to the project

- Resolving the issue of the tribal land purchase;
- Decision and communication on Differential Rates of compensation
- Ensuring proper Implementation of the Management Plans
- Contractor management;
- Ensuring proper communication and grievance redressal amongst the community

9.3.1 *Tribal Land Purchase*

During the consultations with the tribal PAFs, serious concerns over the delay in the purchase of tribal lands falling within the Mine lease area were expressed by the PAFs. The tribal community is of the opinion that the said provisions, in the present scenario are inhibiting the tribal from willingly selling land and receiving the compensation they are entitled to. These groups

see the delay in sale of land as an opportunity loss for themselves (other groups have been able to procure more land and secure better livelihood options from the compensation received)

UTCL and the affected families have been making efforts to resolve the issue and get permission for sale of land. It is suggested that UTCL follow up on this issue as a top priority so that a) the interest of the tribal families are protected and b) it is able to secure land for the mine lease area.

9.3.2 *Issue of Differential Rates of Compensation*

As has been discussed in sections above, the land purchase done for the project (in early stages) was at a lower rate than the current market value (given 2010 onwards) for the land. The concerned PAFs (5 in number) view this as a loss and are demanding more compensation (difference between rates). UTCL is engaging with these groups to arrive at an amicable solution acceptable to both parties. It is suggested that this issue be considered and addressed so as to allay the fears and apprehensions of the impacted PAFs. Speedy resolution of the issue would also go a long way in building and developing trust in the community.

9.3.3 *Proper Implementation of Management Plans*

In order to mitigate the impacts identified in the project, a Community Development Plan and a Livelihood Restoration Plan have been developed which look into the options of community development and social investments and outline the interventions through which the needs of the community can be met. These plans are to be implemented through a process of consultation with the community, Panchayats, block and district administration. In order to ensure the proper implementation of the plans, regular monitoring of the interventions will be taken to assess their impacts and to suggest mid-term corrections (if required), activities or thrust area. *(For more details please refer to the Community Development Plans and the Livelihood Restoration Plans.)*

Operationalizing these Plans, demonstrating ownership of the suggestive measures and committing resources (human as well as financial) would be crucial to the success of livelihood restoration, meeting community expectations and developing/strengthening trust and good will which the company currently enjoys in the area.

9.3.4 *Contractor Management*

In the mine development and operations phase, UTCL would involve the services of some contractors and contract workers/labourers. Some essential management measures that will be considered include:

- Adequate orientation of the contractors and the labourers on the environmental and social obligations during their works. This should be

done at the pre-bid level, so that they are able to incorporate adequate budget and manpower resources to manage these issues in the field.

- Specific commitments to be included into the contractor's commitment on the social obligations including community relations, handling complaints and grievances, health and safety on the work site, adherence to labour laws and international commitments etc.
- On-going monitoring of contractors to ensure compliance.

9.3.5 *Consultation, Disclosure and Grievance Management*

For the purpose of undertaking consultations and ensuring a proper grievance redressal mechanism, the project has developed a Stakeholder Engagement Plan (SEP). The SEP identifies the stakeholders of the project, the engagement to be undertaken with each, and the strategy towards information dissemination and community amongst the various stakeholders. As part of the SEP, the key principles for consultation and documentation are provided and the provisions for the key documents to be made available to the community in a manner readily accessible are laid down. For details of the consultation and disclosure process please refer to Stakeholder Engagement Plan.

The SEP provides for a Grievance redressal procedure and mechanism outlining the process and steps to be taken and the time limit within which the grievances would need to be resolved to the satisfaction of the complainant. The process (internally) would be managed by the project proponent, constituting 1-2 people and directing all grievances and its redressal systems. For disputes that cannot be internally resolved, the project will set up an independent mechanism with representation from community, *Panchayats*, VLCs and locally respected citizens of the area to sort these conflicts. If it has a legal implication the district administration will be approached. As part of the engagement and disclosure process the project will share information about these mechanisms to the local community. This grievance mechanism will respond to the concerns and grievances of local families, NGOs, *Panchayats* and any other aggrieved party (Refer to SEP and GRM).

9.4 *MANAGEMENT PLANS*

The impact mitigation measures proposed for the project also includes the detailed management plans for a) livelihood restoration, b) community development and c) stakeholder engagement and grievance handling. In line with the above these plans have been prepared which lay down requirements, actions and measures to be implemented along with budgetary allocations, internal as well as external mechanisms to ensure success of the plans. A brief summary of the management plans developed is provided below (the detailed plan is attached as annexure)

9.4.1

Stakeholder Engagement Plan

The Stakeholder Engagement Plan has been developed to provide a clear understanding of the objectives of the objectives of engagement as well as identifying the standard practices and processes to be followed by UTCL during engagement with the stakeholders. The SEP includes:

1. A detailed overview of the stakeholders in the study area/region who either have an interest, influence or bearing on the project;
2. Profiles the stakeholders into primary and secondary groups based on their influences and interests;
3. Maps/ Analysis the different stakeholder groups based on identification of their interests, concerns and potential risks surrounding the stakeholders, as well as conflicts of interests (if any). It also studies the profile of such groups to get an in-depth understanding of their nature and influences;
4. Provides a road map for engagement (Engagement Plan) with these groups outlining tailored methods for each stakeholder groups, tools for consultation etc;
5. Assesses present status of engagement of the project with the identified stakeholders and makes a narrative commentary on the same;
6. Lists down challenges on stakeholder management and engagement;
7. Lays down Grievance Management System and procedure;
8. Outlines the institutional framework and the resources to be required for the implementation of the SEP and the monitoring and evaluation process to be adopted through the life cycle of the project; and
9. Suggests way forward in terms of continued and on-going engagement with different stakeholder groups.

The Stakeholder Engagement Plan for this project is provided in the Annexure A.

9.4.2

Community Development Plan

The process of engaging with the community and contributing towards the development of the same, keeping in mind the changing socio-political contexts is of utmost importance for the project proponents. Such a process of engagement not only allows the project proponents to secure broad community support (BCS) but also acceptance of the project by the community thereby minimizing business and reputational risks which may accompany a failure to earn and maintain the community's trust and confidence.

The Community Development Plan for the project proposes investments/interventions which are "technically appropriate, environmentally sound, financially beneficial and socially responsible investments aimed at building active and sustainable communities based on

social justice, mutual respect, and perception of a common interest". The CDP is thus created keeping in mind the importance of such an engagement.

The Community Development Plan for this project has been developed in a manner so as to provide an understanding of the factors which necessitate the preparation of the plan along with a description of the activities already being undertaken by UTCL. Apart from this, the CDP provides details on the numerous projects to be undertaken as part of the CDP along with an eligibility criteria and resource requirement for the same. The CDP projects have been formulated on the basis of a need assessment carried out. The Key needs identified during the assessment are as follows:

- Drinking Water;
- Irrigation and Water Conservation;
- Education;
- Health;
- Skill Training;
- Infrastructure;

The Community Development Plan (CDP) developed for the project (apart from the focus areas identified above also makes an assessment of:

- Target beneficiaries for each of the identified needs;
- Identifies target areas for intervention for these needs;
- Details the activities linking it to the entitlement matrix developed for the project (for example the skill training or irrigation and water conservation need is linked to the aim of agricultural productivity enhancement of the PAFs/ community and increasing employability);
- Identifies Key performance Indicators to measure success of interventions;
- Discusses the resourcing (manpower as well as financial) for the CDP; and
- Outlines the institutional mechanisms and monitoring and evaluation regime for implementation phase of the CDP.

The Community Development Plan for this project is provided in the Annexure C

9.4.3 *Livelihood Restoration Framework*

The aim of the Livelihood Restoration Framework (LRF) is to mitigate the adverse impacts of the project and restore/improve (to the extent possible) the livelihoods of the impacted groups and communities, in keeping with the entitlement matrix developed for the project. The LRF is thus aimed at not only mitigating the adverse impacts from a project but also develop positive sentiments amongst the community towards the project, thereby ensuring its 'social license to operate'. This is to be achieved in keeping with the planning principles of sustainability, participation and social justice and equity.

The Livelihood Restoration Framework for the purpose of this project has been developed in a manner so as to provide a clear understanding of the

context of the framework, as well as the projects to be undertaken as part of it. Apart from this the LRF also provides details on the eligibility criteria and the resource requirement for the same. The LRF interventions have been formulated on the basis of the need assessment carried out.

The LRF will go on to enable the formulation of a detailed LRP, including a data base of all impacted families and their respective eligibilities and entitlements (based on assessment of impacts and the proposed entitlement matrix). The LRP for the purpose of this project will be developed shortly and disclosed.

The LRF for the purpose of this project is provided in the Annexure D

9.4.4 *Grievance Redressal Mechanism*

The Grievance Redressal Mechanism is to be established for the purpose of this project so as to allow for the local communities to communicate their grievance and concerns on the various project activities, the risks associated with the same, the impacts and the subsequent mitigation measures in a proper manner while allowing the project proponent to respond to such views and take necessary actions. This would in turn allow for the development and sustenance of relationships between the project proponent and various stakeholders, throughout life of the project. The aim of such a Mechanism encompasses overall good risk management, reduction in business and reputational risks associated with poor stakeholders.

9.5 *IMPLEMENTATION MECHANISM, MONITORING AND EVALUATION*

9.5.1 *Organizational Arrangement for Implementation of Management Plans*

Corporate Level

As discussed in the various Management Plans developed for the project, there is a CSR cell at the corporate level, which will play an active role in overseeing the implementation as well as monitoring of the Management Plans. The CSR cell has a clear mandate and policy defining its goals and objectives (as reported). These include:

- Engage with stakeholders impacted by the project and roll out the management plans with the support and guidance from the management;
- Hiring staff with experience in dealing with engagement, livelihood restoration and community development and with knowledge of community issues;
- Building awareness about the plans, entitlement matrix and community development issues in the impacted villages.
- Mobilizing socio-political and business contacts, training, financial; management; human resources and other resources in support roll out of the plans;

- Building a good community relations and relations and development program through effective public consultations and ensuring long term good trust and good will for the project and company. Ensure that there is no reputational risk to the project.

Figure 7.1 Organisational structure for CSR team



The implementation of the management plans will be undertaken by UTCL through its already existent CSR and land teams. The team is to be led by a Manager and is to comprise of a CSR team member and two members of the Rural Development team. Furthermore, while the main responsibility is to lie with the CSR team, the land team for RWCW is to play a supporting and facilitating role in the implementation. The land team is likely to play a major role in the formulization of the strategies and the facilitation of the implementation of the project, as through the land purchase process the team representatives already have an existent relation with the local community.

The team will also select an NGO or external agency for the implementation of the LRF and CDP (as and when required). Furthermore, external evaluation and monitoring agencies will be appointed by the UYCL/ CSR team to audit and monitor activities and assess success of implementation. Other experts and consultants will be appointed by the CSR team as necessary in close coordination with the project level staff.

Project Level

CSR team

At the project level, there is a CSR head looking after the CSR activities of RWCW along with other activities and reporting to the administration department head at the plant. The CSR head is assisted by 2 staff members

and three field workers. The field workers are to facilitate effective interaction and liaison with the community and the NGO.

The CSR team will manage:

- Operationalization and implementation of the Management Plans;
- Put in time and resources for successful implementation of the plans;
- Liaise with the NGOs/civil society organisations, panchayats and other stakeholder groups for planning and smooth implementation of the LRF, CDP and SEP;
- Implement the grievance redressal system;
- Internal Monitoring of the Management Plans implementations at regular intervals;

The primary purpose of integrating the implementation of the Management Plans, is to allow for the implementation of the plans in a smooth manner as well as to ensure optimal utilization of resources, both manpower and financial by avoiding the creation of multiple channels of community engagement and duplication of efforts. This is would also allow for uniform and consistent messages going to the communities and other stakeholders. This in turn would allow for the communities to develop a relationship, familiarity and trust with the team implementing the plans.

As the project proponent, the UTCL team will have overall responsibility for the project and the implementation of the Management Plans. It is the responsibility of the team identified above to know UTCL's policies, programs and contractual terms and the provisions of the Management Plans.

Village Level Committees

In order to successfully implement the Management Plans, it is essential to organize communities in the form of village level Committees (VLC). The VLC will be composed of representatives of the various community stakeholders of the project. The role of the VLC will be to oversee the implementation of the Management Plans, monitor individual activities and contractors and maintain close contact with the CSR team. Another key role of the VLC's would be in redressal of grievances.

Monthly meetings will be planned with the VLC and the CSR team. The CSR team will collect information from the communities with the help of VLCs and NGO and assimilate in the form of a quarterly progress report to assess progress of the management plans implementation. These reports along with the monitoring reports will be submitted to UTCL management and other desired parties.

NGO

UTCL proposes to engage the services of NGO for specific activities as identified in the LRF and CDP. As reported the role of the NGO is currently seen to be able to provide UTCL team with the grass-root skills and capacity

for field activity in the implementation of specific activities (like demonstration farms, trainings etc) envisaged in the plan in close cooperation with the CSR team and the VLCs formed as and when required.

The tasks of the NGO would be to:

- Provide inputs and implement specific programme (upon request by UTCL) as identified in the LRF and CDP;
- Along with CSR team organize relevant training programs for building skills and capacities of the communities especially the PAFs;
- Work with UTCL team in engaging with the community, formalising GR systems and process, documentation, reporting etc.
- Assist UTCL in internal as well as external monitoring of the implementation of the plans

9.6 COMMUNICATION

9.6.1 Internal communications

UTCL will maintain a regular channel of internal communication through the life of the project, in the form of meetings; including progress meetings to be held at least every quarter and regular status reports. The primary focus of these communications is to assess the effectiveness of the implementation process and to follow up on issues identified during the social audits and the monitoring process undertaken. Proper records will be maintained and circulated of these meetings in the form of Minutes of Meetings. Apart from these formal meetings, communication will also be undertaken across the team through the means of emails, video and telephone conferencing and face to face meetings.

9.6.2 External Communications

Communication with VLCs and other Stakeholders

The project will maintain a community liaison for the life of the project, from the project team. The responsibility of the liaison will be to:

- Hold regular meetings with VLCs, NGO and other stakeholders including investors;
- Disclose information (through periodic briefings) on the progress of implementation of the management plans and success of livelihood restoration strategies;
- Clarify and respond to any stakeholder concerns (on an as and when basis and based on the need)

Communication with the local/state/regional authorities

UTCL will work in collaboration with the concerned authorities and government bodies so as to ensure the minimization of impacts on the community. These authorities are to include (but not be restricted to)"

- Baloda Bazaar District Authority
- Local Block and Village Administration
- Block Jan Panchayat

9.7

MONITORING PROCEDURE

To ensure the proper implementation of the Management Plans, UTCL will undertake a regular review process (every six months at least), in which the implementation of each individual plan formulated will be monitored and updated as and when felt necessary. In order to achieve this, feedback will be requested from the stakeholders, as part of the stakeholder engagement, in terms of verbal (as well as written, wherever possible) questions so as to provide an indication of the effectiveness of, and levels of satisfaction, with the implementation.

The monitoring is thus to be carried out on a three-tier basis, comprised of:

- On-going (day to day monitoring) through the community liaison at the site;
- Internal progress monitoring by the CSR team (at least six monthly)
- External monitoring by a third party independent specialist

This arrangement is aimed at ensuring the proper implementation of the management plans in a transparent manner so as to allow for trust to be strengthened and maintained amongst the stakeholders.

9.7.1

Internal Monitoring

The internal monitoring will be carried out at least every six months is to focus on the assessment and reporting of the progress in the implementation of the management plans. Monitoring indicators and activity schedules will be drawn up. The CSR team at the project level will be responsible for the overall monitoring of the activities. The monitoring tasks to be undertaken by the team are to include:

- Communication with the land team and the local communities to review the progress of land purchase and any community issues linked to it;
- Verification that measures to mitigate impacts as agreed are being implemented;
- Identification of any problems, unresolved issues or cases of hardship resulting from land purchase;
- Review grievance records and check that grievance logs are being correctly completed and maintained;
- Selection a random sample of grievances and follow up with the complainants that appropriate corrective actions have been taken and that outcomes are satisfactory;

- Preparation of brief six monthly progress and compliance reports for UTCL Management and external monitoring.

9.7.2 *External Monitoring*

UTCL would engage an independent social assessment consultant to undertake annual monitoring of the Management Plan. The purpose of the external monitoring is to assess overall compliance with the provisions and requirements laid out and in and additional measures identified during the project as well as with the policies of any investors on board. Through interviews with community leaders, key informants and households, assess project affected peoples level of satisfaction with outcomes of the implementation of management plans.

UTCL would undertake a third party/independent Livelihood Restoration Audit exercise at the end of two years to assess the success of livelihood restoration measures and actions taken. The review/audit report will be shared with the relevant stakeholders.

9.7.3 *Time frame*

It has been a few years since the land purchase process was initiated and currently majority of the land in the mines area has been purchased. Hence, The rollout and implementation of the aforesaid plans should be taken up on priority. The suggestive time frame for the implementation of the Management Plans is proposed from the third quarter of 2013. A detailed schedule is provided in each of the specific management plans.

9.7.4 *Budget*

UTCL has made budgetary provisions for the implementation of various plans and to successfully implement the entitlement matrix. The specific plans provide details of the budgetary allocations made for implementation of different measures/activities. UTCL will review the budget as a part of the internal review process (six monthly) to assess it adequacy and sufficiency.

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