



Ref: ACL/BYT/ENV/2024-2025/61

Date: 22.05.2024

To,
Regional Officer,
Integrated Regional office,
Ministry of Environment, Forest & Climate Change,
Aranya Bhawan, North Block,
Sector-19, Naya Raipur, Atal Nagar,
Chhattisgarh 492002.

Sub: Submission of Half Yearly Environment Clearance Compliance Report along with Environmental Monitoring Report for the period **October 2023 to March 2024** for Maldi-Mopar Limestone Mines.

Ref: EC letter no. J-11015/252/2008-IA II (M) dated 13th August 2010.

Dear Sir,

Please find the enclosed herewith the six-monthly Environment Clearance compliance report along with Monthly Environmental Monitoring report from **October 2023 to March 2024**, for Maldi-Mopar Limestone Mines Located at Maldi, Mopar, Devrani, Karmadih and Boirdih Village, Balodabazar Tehsil, Balodabazar Dist. Chhattisgarh.

This is for your kind information and record.

Thanking you.

Yours Sincerely,
For Ambuja Cements Limited
(Unit: Bhatapara)




(Kaushal Kumar Mishra)
Chief Operation Manager

Encl: Six Monthly Environment Clearance compliance report along with Environment Monitoring report.

Cc: 1. CPCB Zonal Office, Vithal Market, Paryavaran Parisar, E-5 Arera Colony Bhopal (MP) -462016

2. The M.S., CECB, Paryavas Bhavan, North Block Sector-19, Atal Nagar (C.G.) 490099.

3 The RO, CECB, Commercial Complex, Chhattisgarh Housing Board Colony, Kabir Nagar Raipur (C.G.)

**Environment Clearance Half Yearly Compliance Report
(October 2023 – March 2024)
Of
Maldi Mopar Limestone Mine
(Capacity: 2.0 MTPA, Total Lease area: 553.656 ha.)**

**Located at
Maldi Mopar , Devrani , Karmadih and Boirdih Villages,
P.O. Rawan, Tehsil-Baloda Bazar,
District-Baloda Bazar- Bhatapara, Chhattisgarh**



**M/s AMBUJA CEMENTS LTD.
(Unit: Bhatapara)
P.O.: Rawan, Dist.: Baloda Bazar - Bhatapara
Chhattisgarh - 493331, India**

SL. NO.	EC CONDITIONS	COMPLIANCE STATUS AS ON 22 MAY 2024
i.	The environmental clearance is subject to approval of the State land use Department or concerned Authority in the State, Government of Chhattisgarh for diversion of agricultural land for non-agricultural use.	Govt. Land Diversion Notification and Working permission from Distt. Collector in the Purchased Private land obtained and is attached as Annexure- 1 & Annexure- 1a
ii.	The project proponent shall obtain prior Consent to Establish and Consent to Operate from the Chhattisgarh Environment Conservation Board and effectively implement all the conditions stipulated therein.	CTE Has been Obtained from CECB Raipur vide Letter No 3056/TS/CECB/ 2012 Raipur Dated 06.09.2012 and CTO Vide letter No 7966 TS/CECB/2020, Nava Raipur, Atal Nagar, dated 09.12.2020 valid up to 31.12.2023 for Mining of Limestone in 553.656 Ha with Production capacity of 2 MTPA.
iii.	The topsoil shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation plantation and green belt development.	Topsoil generated is being temporarily stored along the lease boundary, Crusher ramp and haul road to develop greenbelt, photograph of the same is being attached as Annexure-2.
iv.	Catch drains and siltation ponds of appropriate size should be constructed for the working pit to arrest flow of silt and sediment directly into the agricultural fields, rivers and other water bodies. The water so collected should be utilized for watering the mine area, roads, greenbelt development etc. The drains should be regularly de-silted particularly after the monsoon and maintained properly. Garland drain (size, gradient and length) shall be constructed for the mine pit to prevent run off of water and flow of sediments directly into the agricultural fields rivers and other water bodies and sump capacity should be designated keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pit shall be constructed at the corners of the garland drains and de-silted at regular intervals.	Catchment drain: Catch Drains are made all along the working pit and along the Lease boundary to arrest the flow of Silt and Sediments going outside the mining Lease area, all the Catch drains are interconnected with Siltation Pond and rainwater harvesting pits within lease area in south pit entire water from Catch drains will be used for Ground water recharging. Photograph of Catch Drains, Siltation Pond and Rainwater harvesting pit is attached as Annexure- 3. De-siltation ponds are constructed within the lease area in south pit. The siltation pond sizes are Minimum 20m length x 20m width x 2m height. Annexure-3a Garland drains are constructed along the lease boundary and periphery of the mine pit and along the haulroad. Annexure-3b.
v.	Dimension of the retaining wall at the toe of solid waste benches within the mine to check run-off and siltation should be based on the rain fall data.	Retaining walls are constructed along the lease boundary to protect the runoff from Mine. The photographs of same is attached as Annexure- 4
vi.	Plantation shall be raised in an area of at least 54.15 ha including a 7.5 m wide green belt in the safety zone around the mining lease, around the	Greenbelt is developed along the lease boundary within the 7.5m wide safety zone. Drip irrigation is also provided to get the survival rate of

	<p>water body, reclaimed area, mine benches, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 2000-2500 plants per ha.</p> <p>Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.</p>	<p>Plantations is more than 95 %. The photographs of same is attached as Annexure- 5</p> <p>Afforestation is also developed within the lease area near crusher; the survival rate of plantation is more than 95 %.</p> <p>The photographs of same is attached as Annexure- 5a</p> <p>Native species 2500 plants per ha in consultation with the local DFO/Agriculture Department. The photographs of same is attached as Annexure- 5b.</p>
vii.	The excavated area of 497.396 ha. left unfilled shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced, and plantation done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.	Same will be compiled at the end of life of mine.
viii.	Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as mineral handling area, around loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.	<p>Adequate air pollution control measures such as regular water sprinkling on haul roads, loading and unloading points and all transfer points adopted to control dust emission.</p> <p>We are doing the AAQM as per NAAQ2009 in core and buffer zone, monitoring report is enclosed Annexure- 6.</p>
ix.	The project authority should implement suitable water conservation measures including rainwater harvesting on long term basis to augment ground water resources in the area and work out a detailed scheme in consultation with the Regional Director, Central Ground Water Board/Central Ground Water Authority and submit a copy of the same to the Ministry of Environment and Forests and its Regional Office, Bhopal.	Two ground water recharging structures Size 75m x 75m x 6 Mts. and Three Number Surface recharge structures have been constructed with consultation of regional office CGWB. Photographs enclosed as Annexure- 7, 7a & 7b.
x.	Limestone from mines to Crushing plant shall be transported through covered dumpers up to crusher plant and from crusher plant to cement plant by conveyor belt and no other mode of transportation shall be used.	Limestone transportation by pipe conveyor to plant. Annexure - 8.
xi.	Necessary safeguard measures shall be taken to ensure that the resultant particulate level in the area is well within the prescribed limit.	Adequate air pollution control measures have been adopted in the mines to control dust emission. Ambient Air monitoring report is enclosed as Annexure - 6
xii.	The details of project affected peoples (Land outsees / other affected peoples) shall be submitted to the R.O. Office of this Ministry at	There is no land acquisition involved in our mining lease area and hence there are no land outsees and people are not affected by our mining

	Bhopal and to the Ministry within 30 days from the issue of this letter. The project affected peoples shall be Rehabilitated and compensated as per the National Rehabilitation and Resettlement policy, 2007 in consultation with the State Government. Detailed Plan shall be prepared in this regard within 3 months and a copy of the same be submitted to Regional Office of this Ministry at Bhopal and to the Ministry immediately.	project. Therefore, rehabilitation and resettlement provisions are not applicable. A Study on the same is carried out by Accredited Consultant and the same is attached as Annexure - 9
xiii.	Land-use pattern of the nearby villages shall be studied, including common property resources available for conversion into productive land. Action plan for abatement and compensation for damage of agricultural land/common property land (if any) in the nearby villages, due to mining activity shall be prepared and implemented.	At the time of EIA study land use pattern of 10 km radius with respect to mine lease studied. Agriculture and common property is not affected from mining activities. Land Use and Land Cover Study has been carried out recently by Accredited Consultant M/s ShrutiSeva Private Limited. Agriculture and Common Property are not affected by Mining Activity. Study Report is attached as Annexure-10, 10a.
xiv.	The project authorities should undertake sample survey to generate data on pre-project community health status within a radius of 3 km from proposed mine. Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.	Periodic health and hygiene survey are being conducted in villages around the Maldi-Mopar mine lease area in 3km. Medical Camp Photograph and Medical Report is attached for your Kind perusal please. Pre-placement medical examination and periodical medical examination of the workers engaged in the project has been carried out and records have been maintained at our OHC. Periodical Medical Examination report records maintained at our OHC.
xv.	Over burden (OB) shall be stacked at earmarked dump site(s) only and shall not be kept active for long period. The maximum height of the dump shall not exceed 30 m, each stage shall preferably be of 10 m and overall slope of the dump shall not exceed 28°. The OB dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. To the extent possible, the OB generated shall be back filled. The entire backfilled area shall be progressively afforested. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhopal on six monthly basis.	The overburden dumps with a maximum height of 30m and overall slope of 28° will be maintained. Since Maldi mines is at its very early stage, presently only topsoil is being removed which is being used for Plantation all along the Mining Lease boundary, No OB Dump is created yet. As per the Mining Plan the OB will be used for Back filling in small portion of the area and will be progressively afforested, which will be regularly monitored till it will be self-sustained as desired.
xvi.	Regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM ₁₀ and PM _{2.5} such as around crushing and screening plant, loading and	Regular water sprinkling on Haulroad, Loading and Unloading points and all the transfer points is done to control dust emission. AAQMS Study is being conducted at four different

	unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by Central Pollution Control Board in this regard.	locations in core Mine Lease area and buffer Zone the report of the same is attached as Annexure- 6
xvii.	Regular monitoring of ground water level and quantity shall be carried out within the mines lease and in the surrounding area (up to 5 km of the mine lease) by establishing a network of groundwater monitoring stations (existing wells and installing new piezometers) during the mining operation in consultation with Central Groundwater Authority/Ground Water Board and groundwater table shall be monitored and records maintained. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be send regularly to the Ministry of Environment and Forests and its Regional Office Bhopal, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity then mining shall be stopped and resumed only after mitigating steps to contain any adverse impact on ground water is implemented.	<p>Online piezometer station is installed within the lease area for continuously monitoring ground water level.</p> <p>Periodically monitoring of groundwater table within core zone and buffer zone area is carried out. The quarterly ground water level reports are submitted to Regional Office Bhopal, the Central Ground Water Authority and the Regional Director, Central Ground Water Board, State Ground Water Board/Central Ground Water Authority.</p> <p>The Pre-monsoon, Monsoon, Winter and post monsoon data are enclosed as Annexure- 6</p>
xviii.	The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of ground water required for the project.	NOC No CGWA/NOC/MIN/REN/1/2021/6607 has been expired on dated 26.10.2023 and further application for renewal 2 has been submitted the same is under progress . Ministry of Jal Shakti, Department of Water Resources. The copy of NOC and CGWA NOC Renewal Application is attached as Annexure- 11.
xix.	Appropriate mitigative measures shall be taken to prevent pollution, percolation/seepage of water and breaching of the canal system adjoining the ML area. There shall be no use of canal water in this mine project in any way and at any point of time and no utility, if any, shall be constructed over the canals without prior approval of the concerned State Agency/Deptt. Of Chhattisgarh Govt.	<p>A safety zone has been left along the canal as per approved mine plan and necessary protective measures have been taken for percolation/seepage of water and breaching of the canal system adjoining the ML area. A Boundary wall is also being constructed all along the Canal for Protection purpose.</p> <p>Canal water shall not be used for mining purpose in any condition.</p>
xx.	Drills shall either be operated with dust extractors or equipped with water injection system.	Drills have been provided with Dust extractor as well as water injection system; these are inbuilt with the machine itself. The records area available in attached Annexure-12

xxi.	Need based assessment for the nearby villages shall be conducted to study economic measures which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes under CSR. This will be in addition to vocational training for individuals imparted to take up self-employment and jobs.	Need Based Assessment study has been carried out by Accredited Consultant M/s Shruti Seva Private Limited. Study report copy is attached as Annexure-13 . Based on that the activity carried by ACF (Ambuja Cement Foundation) in Consultation with Local Village Head/Panchayat Head and Projects are taken on priority basis. The comprehensive details of CSR activities and Fund Allocation for the CSR activities, year wise expenditure incurred for the CSR activities is attached as Annexure-13 a .
xxii	Sewage treatment plant shall be installed in ML area. ETP shall also be provided for the workshop and wastewater generated during the mining operation.	STP & ETP is operational. The test report of STP & ETP is undertaken by a third party (NABL accredited).as Annexure-06 .
xxiii.	Provision shall be made for the housing the labourers within the site with all necessary infrastructure and facilities such as fuels for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	As the Housing colony is already established at Rawan cement Plant along with necessary amenities and infrastructure facilities, No Housing is desired at the Mine site. Necessary facilities like Rest shelter, drinking water, urinals, first aid center toilet etc has been provided at the Mine for Mine Workers.
xxiv.	The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in , shall also be referred in this regard for its compliance.	CAAQMS Display board is installed at Maldi Mopar Limestone Mines gate. CAAQMS has been installed in core and buffer zone and data of same is being reported to CPCB /SPCB Server . Also AAQ monitoring is undertaken by a third party (NABL accredited).
xxv.	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered flora and fauna found in the study area. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to the project site shall be effectively implemented. A copy of action plan shall be submitted to the Ministry of Environment and Forests and its Regional Office, Bhopal.	Authentication of flora and fauna done from DFO as per EIA studies. Greenbelt developed along the lease boundary and native plant species are being planted. Fencing has been provided around the plantation area to avoid inadvertent entry of the animals in the plantation and mining area. The photographs and approved list of flora and fauna are attached as Annexure-5,5a, 5b ,5c .

xxvi.	Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bhopal.	Complied The Digital processing of entire lease area using remote sensing technique for the year 2022 has been submitted as Annexure-14 .
xxvii.	A final mine closure plan, along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	Agreed and will be complied. Mines is in very early stage of development.
xxviii.	The environment clearance is subject to the condition, if any, stipulated by the IBM on the mining scheme submitted by the project proponent for its approval.	Noted

General Condition

i.	No change in mining technology and scope of working shall be made without prior approval of the Ministry Of Environment & Forests.	No change in mining technology and scope of working will be made without prior approval of MoEF&CC.
ii.	No change in the calendar plan including excavation, quantum of mineral and waste shall be made.	We are proceeding as per guidelines in mining scheme.
iii.	At least four ambient air quality-monitoring stations shall be established in the core zone as well as in the buffer zone for PM ₁₀ , PM _{2.5} , SO ₂ , Nox monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State pollution Control Board.	Four continuous ambient air quality-monitoring stations shall be established, in core and buffer zone with consultation of CECB, Letter in this regard submitted to CECB for their consent. Request Letter for CECB approval has been submitted and will be approved shortly. Air Quality monitoring report is enclosed as Annexure-6 .
iv.	Data on ambient air quality (PM ₁₀ , PM _{2.5} , SO ₂ , Nox) should be regularly submitted to the Ministry including its regional office located at Bhopal and the State Pollution Control Board/ Central Pollution Control Board once in six months.	Ambient air quality ((PM ₁₀ , PM _{2.5} , SO ₂ , Nox). Monitoring report is enclosed as Annexure -6 Regularly Ambient Air quality report submitted to MoEF&CC / CECB/CPCB along with Half yearly EC compliance Report.
v.	Measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc shall be provided with ear plugs/muffs.	Workers engaged in operations of HEMM, etc ear plugs/muffs has been provided. Noise monitoring report enclosed as Annexure-15 .
vi.	Industrial wastewater (workshop and wastewater from the mine) should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluents.	Vehicle wash system with oil & grease trap and filtration system has been constructed in limestone mine for treatment of effluent generated from workshop.

vii.	Personnel working in dusty areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspect. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Regularly necessary PPE's providing to workers and also training imparted on safety and health aspect. Occupational health surveillance program is in place, as a part of which pre-employment and periodic medical check-up of workers has been done and record of the same maintained by our OHC,
viii.	A separate environmental management cell with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the organization.	A separate environmental management cell with suitable qualified personnel has been set-up under the control of a Senior Executive, who reports directly to the Unit Head. The details of same is attached as Annexure – 16
ix.	The project authorities shall inform to the Regional Office of the Ministry located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Grant of environmental clearance: 13th August 2010. Mine development work has been completed and limestone production started from May 2021.
x.	The fund earmarked for environmental protection measures shall be kept in separate account and should not be diverted to other purpose. Year wise expenditure shall be reported to the Ministry and its Regional Office located at Bhopal.	Funds earmarked for environmental protection measures will not be diverted. Year wise expenditure is reported to the Ministry. As the production and despatch activity of Mine has been started in June 2021 and environmental protection expenses details is attached as Annexure 17
xi.	The project authorities shall inform the Regional Office located at Bhopal regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	Grant of environmental clearance vide letter no. J - 11015/252/2008- IA-II(M) dated 13 th August, 2010. Mine development work has been completed and limestone production started.
xii.	The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/information/monitoring reports.	Noted and Agreed.
xiii.	The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its regional office, Bhopal, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and	Six monthly compliance report submitted via mail on date 31.05.2023 . Environment Clearance Six monthly compliance report uploaded on company website.

	simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests, Bhopal, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.	
xiv.	The project proponent should advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned, within seven days of the issue of the clearance letter informing that the project has been accorded Environmental clearance and copies of clearance letter are available with the State Pollution Control Board and also at the website of the Ministry of Environment and Forests at http://envfor.nic.in and a copy of the same shall be forwarded to the Regional Office of this Ministry located in Bhopal.	The advertisement has been given in two newspapers in Hindi and English.
xv.	A copy of clearance letter shall be send by the proponent to concerned Panchayat, Zila Panchayat/Municipal Corporation, Urban Local bodies and local NGO, if any, from whom suggestion/representation, if any were received while processing the proposal. The clearance letter shall also be put on website of the company by the proponent.	We have given the Environmental clearance Letter to the following Sarpanch (dated 20.08.2010) <ol style="list-style-type: none"> 1. Sarpanch Maldi 2. Sarpanch Mopar 3. Sarpanch Dhandnih 4. Sarpanch Bordih
xvi.	State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.	Copies of EC are submitted to State PCB and RO, DIC on dated 02.12.2010.
xvii.	The environment statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and shall also be put on the website of the company along with the status of compliance of environmental clearance conditions. The same shall also be sent to the Regional Office of the Ministry by e-mail.	The environment Statement (Form-V) has been submitted to CECB Head Office Nava Raipur and Regional Office Kabir Nagar, our vide letter No. ACL/BYT/ENV/2023-24/312dated 14.09.2023.
5.	The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. MoEF&CC may impose additional environmental conditions or modify the existing ones, if necessary.	Noted & agreed

6.	In case of any deviation or alteration in the project proposed from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.	Noted & agreed
7.	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted & agreed
8.	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.	Agreed
9.	The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules.	Noted

न्यायालय नायब तहसीलदार भाटापारा जिला बलौदाबाजार भाटापारा (छ.ग.)

// ज्ञापन //

क. 402 / वा. / ना. तह. / 2018
प्रति.

भाटापारा, दिनांक 03.03.2018

01. प.ह.न. 36
ग्राम- मल्दी
02. प.ह.न. 37
ग्राम - मोपर, देवरानी

विषय :- अभिलेख दुरुस्त करने बाबत ।

विध्यांतर्गत लेख है कि इस न्यायालय के रा.प्र.क. 201707212500001 / 11अ-6अ / 2016-17 में आवेदक अंबुजा सीमेंट कंपनी प्रबंधक रमेश मिश्रा विरुद्ध छ.ग.शासन ग्राम मल्दी, मोपर, देवरानी, के प्रकरण में ग्राम मल्दी प.ह.न. 36 रा.नि.मं. निपनिया तहसील भाटापारा स्थित शासकीय खसरा नंबर 910, 993, 1001, 858/1, 859, 858/2 रकबा क्रमशः 0.640, 0.182, 0.162, 39.985, 2.423, 1.021, कुल रकबा 44.413 हे० ग्राम मोपर प.ह.न. 37 रा.नि.मं. निपनिया तहसील भाटापारा स्थित शासकीय भूमि खसरा नंबर 1107, 1177, 1205, 1215, 1217, 1218/1 रकबा क्रमशः 0.101, 0.040, 0.081, 0.530, 0.474 1.887 हे० कुल रकबा 3.113 हे० ग्राम देवरानी प.ह.न. 37 रा.नि.मं. निपनिया तहसील भाटापारा स्थित शासकीय भूमि खसरा नंबर 335 रकबा 0.012 हे० । इस प्रकार ग्राम मल्दी मोपर एवं देवरानी के कुल रकबा 47.538 हे० भूमि खसरा के कालम नंबर 12 में अंबुजा सीमेंट लिमिटेड का नाम शासकीय पट्टेदार के रूप में दर्ज किये जाने का आदेश दिनांक 03.03.2018 को पारित किया गया है।

अतः उपरोक्तानुसार अभिलेख दुरुस्त कर पालन प्रतिवेदन तीन दिवस के भीतर प्रस्तुत करें।

प्रति
13-3-18

तहसीलदार
भाटापारा

फार्म 'अ'

(परिषद् बी-1 की कड़िका 6 देखिए)

राजस्व आदेश पत्र (रेवेन्यू आर्डर शीट)

न्यायालय नायब तहसीलदार, भाटापारा

प्रकार:- मूल मामला

मामले की श्रेणी:- राजस्व

वाद भूमि:

तहसील: भाटापारा ग्राम: देवरानी (प.ह.न.-

00037), मलदी (प.ह.न.- 00036).

मोपर (प.ह.न.- 00037) खसरे:

राजस्व प्रकरण क्रमांक: 20170721250000111 सन्:-

2016-2017

विषय:- अ-6 अ (खसरे में अथवा धारा-114 के अधीन तैयार किये गये किसी अन्य अ

अतिरिक्त संबंधी कानून में कानून परिशिष्ट का सुधार अथवा उनमें परिवर्तन संबंधी विवाद)

रमेश मिश्रा (प्रबंधक पिता/पति/विभाग-स्व. रवि शंकर

मिश्रा पता-गाँधी चौक बलौदाबाजार

- आवेदक

विरुद्ध

- अनावेदक

आदेश अथवा कार्यवाही की तारीख	पीठासीन अधिकारी के हस्ताक्षर सहित आदेश अथवा कार्यवाही	जहाँ आवश्यक हो पक्षी/वकीलो / प्रस्तुतकार लिपिक के संबंधित हस्ताक्षर
11/07/2017	<p>आवेदक रमेश मिश्रा पिता स्व. रविशंकर मिश्रा प्रबंधक अंबुजा सीमेंट कंपनी रवान तहसील -बलौदाबाजार जिला - बलौदाबाजार-भाटापारा (छ.ग.) के द्वारा ग्राम मलदी प.ह.न. 36 रा. नि. म. निपनिया तहसील भाटापारा स्थित शासकीय भूमि खसरा नंबर 910, 993, 1001, 858/1, 859, 858/2 रकबा क्रमशः 0.640, 0.182, 0.162, 39.985, 2.423, 1.021 हे० भूमि ग्राम मोपर प.ह.न. 37 रा. नि. म. निपनिया तहसील भाटापारा स्थित शासकीय भूमि खसरा नंबर 1107, 1177, 1205, 1215, 1217, 1218/1 रकबा क्रमशः 0.101, 0.040, 0.081, 0.530, 0.474, 1.887, एवं ग्राम देवरानी प.ह.न. 37 रा. नि. म. निपनिया तहसील भाटापारा स्थित शासकीय भूमि खसरा नंबर 335, रकबा 0.012 हे० भूमि को रजिस्टर्ड लीज डीउ में प्राप्त होने के कारण खसरा के कालम नंबर 12 में आवेदक कंपनी के नाम से शासकीय पट्टेदार के रूप में दर्ज किये जाने हेतु आवेदन पत्र प्रस्तुत किया है। 02. प्रकरण मद अ-6 अ में दर्ज किया जावे। 03. ग्राम एवं दैनिक समाचार पत्र में ईशतहार का प्रकाशन कराया जावे।</p> <p>दावा आपत्ति हेतु सुनवाई दिनांक: 28/07/2017</p>	<p>28/7/2017</p> <p>1835/18</p> <p>सत्य-प्रतिलिपि</p> <p>प्रभारी अधिकारी वास्ते, तहसीलदार भाटापारा जि.बलौदाबाजार भाटापारा</p>

Mahesh Singh Rajput

तहसीलदार
भाटापारा (छ. ग.)



Print

फार्म 'अ'

(परिपत्र बी-1 की कड़िका 6 देखिए)

राजस्व आदेश पत्र (रेवहेन्यू आर्डर शीट)

न्यायालय नायब तहसीलदार, भाटापारा



राजस्व प्रकरण क्रमांक: 201707212500001/11 सन:-

2016-2017

विषय:- अ-6 अ (खसरे में अथवा धारा-114 के अधीन तैयार किये गये किसी अन्य भू अभिलेख संबंधी कगमज में गलत प्रविष्टि का सुधार अथवा उसमें प्रविष्टि संबंधी विवाद।

वाद भूमि:

तहसील: भाटापारा ग्राम: देवरानी(प.ह.न.-

00037), मलदी(प.ह.न.- 00036),

मोपर(प.ह.न.- 00037) खसरे:

रमेश मिश्रा (प्रबंधक पिता/पति/विभाग-स्व. रवि शंकर मिश्रा पता-गाँधी चौक बलौदाबाजार

:-आवेदक

विरुद्ध

:-अनावेदक

आदेश अथवा कार्यवाही की तारीख	पीठासीन अधिकारी के हस्ताक्षर सहित आदेश अथवा कार्यवाही	जहां आवश्यक हो पक्षी/वकीलो / प्रस्तुतकार लिपिक के संक्षिप्त हस्ताक्षर
28/07/2017	<p>- प्रकरण प्रस्तुत। - आवेदक रमेश मिश्रा उपस्थित। - प्रकरण में ईशतहार सभी ग्रामो मलदी, मोपर, एवं देवरानी में प्रकाशन उपरांत तामिल प्रति प्राप्त होकर संलग्न है, जिसके परिपेक्ष्य में नियत पेशी तिथि तक कोई दावा आपत्ति प्राप्त नहीं हुआ है। - प्रकरण में ईशतहार दैनिक समाचार में प्रकाशन उपरांत प्राप्त होकर संलग्न है, जिसके परिपेक्ष्य में नियत पेशी तिथि तक कोई दावा आपत्ति प्राप्त नहीं हुआ है। - हल्का पटवारी से आवेदित भूमि के सम्बन्ध में जाँच प्रतिवेदन मंगायी जावे।</p> <p>पटवारी प्रतिवेदन हेतु सुनवाई दिनांक: 14/08/2017</p> <p style="text-align: right;">Mahesh Singh Rajput तहसीलदार भाटापारा</p>	<p style="text-align: center;">14/8/17</p>

सत्य-प्रतिलिपि

प्रभारी अधिकारी

वास्ते, तहसीलदार भाटापारा
जि. बलौदाबाजार भाटापारा

फार्म 'अ'
(परिपत्र बी-1 की कड़िका 6 देखिए)
राजस्व आदेश पत्र (रेव्यूएन्स आर्डर शीट)
न्यायालय नायब तहसीलदार, भाटापारा



प्रकार:- मूल मामला
मामले की श्रेणी:- राजस्व

वाद भूमि:
तहसील: भाटापारा ग्राम: देवरानी (प.ह.न.- 00037),
मलदी (प.ह.न.- 00036), मोपरा (प.ह.न.- 00037) खसरे:

राजस्व प्रकरण क्रमांक: 201707242500001/11; सन:- 2016-2017

विषय:- अ-6 अ (कलम में अथवा धारा 114 के अधीन लीया किसे मने किसी अन्य भू अधिकार संबंधी कानून में समत एलिमिनेट का सुधार अथवा अन्य एलिमिनेट संबंधी विवाद)

रमेश मिश्रा (प्रबंधक पिता/पति/विभाग-स्व. रवि शंकर मिश्रा पता-
गाँधी चौक बलौदाबाजार

-: आवेदक

विरुद्ध

-: अनावेदक

आदेश अथवा कार्यवाही की तारीख	पीठासीन अधिकारी के हस्ताक्षर सहित आदेश अथवा कार्यवाही	जहाँ आवश्यक हो पक्षी/वकीलो / प्रस्तुतकार लिपिक के संक्षिप्त हस्ताक्षर
28/07/2017	<p>- प्रकरण प्रस्तुत। - आवेदक रमेश मिश्रा उपस्थित। - प्रकरण में ईशतहार सभी ग्रामो मलदी, मोपरा, एवं देवरानी में प्रकाशन उपरांत तामिल प्रति प्राप्त होकर संलग्न है, जिसके परिपेक्ष्य में नियत पेशी तिथि तक कोई दावा आपत्ति प्राप्त नहीं हुआ है। - प्रकरण में ईशतहार दैनिक समाचार में प्रकाशन उपरांत प्राप्त होकर संलग्न है, जिसके परिपेक्ष्य में नियत पेशी तिथि तक कोई दावा आपत्ति प्राप्त नहीं हुआ है। - हल्का पटवारी से आवेदित भूमि के सम्बन्ध में जाँच प्रतिवेदन मंगायी जावे।</p> <p>पटवारी प्रतिवेदन हेतु सुनवाई दिनांक: 14/08/2017</p> <p style="text-align: right;">Mahesh Singh Rajput तहसीलदार भाटापारा</p>	
28/07/2017	<p>पुनश्च :- आपत्ति कर्ता रमेश वर्मा एवं तोरनलाल वर्मा द्वारा ईशतहार के सम्बन्ध में प्रारम्भिक आपत्ति दर्ज की गयी है जो प्रकरण में संलग्न है।</p> <p>दावा आपत्ति पर सुनवाई हेतु सुनवाई दिनांक: 14/08/2017</p> <p style="text-align: right;">Mahesh Singh Rajput तहसीलदार भाटापारा</p>	<p>तोरनलाल वर्मा रमेश वर्मा</p>





फार्म 'अ'

(परिपत्र बी-1 की कड़िका 6 देखिए)
राजस्व आदेश पत्र (रेवेन्यू आर्डर शीट)
न्यायालय नाथब तहसीलदार, भाटापारा

राजस्व प्रकरण क्रमांक: 201707212500001/11 सन्:- 2016-2017

विषय:- अ-6 अ (खसरी में अधिकांश भाग-112 के अधीन तैयार किये गये जिकी अग्रभू अधिकार संबंधी
काराज में तहसील अधिकारी का मुद्दा अग्रभू अग्रभू अधिकारी संबंधी विवाद।

रमेश मिश्रा (प्रबंधक पिता/पति/विभाग-स्व. रवि शंकर मिश्रा पत्नी-
गांधी चौक बलीदाबाजार

प्रकार:- मूल मामला

मामले की श्रेणी:- राजस्व

वाद भूमि:

तहसील: भाटापारा ग्राम: देवरानी(प.ह.न.- 00037),

मलदी(प.ह.न.- 00036), मोपरा(प.ह.न.- 00037) खसरे:

:-आवेदक

विरुद्ध

:-अनावेदक

आदेश अथवा कार्यवाही की तारीख	पीठासीन अधिकारी के हस्ताक्षर सहित आदेश अथवा कार्यवाही	जहां आवश्यक हो पक्षी/वकीलों / प्रस्तुतकार लिपिक के संक्षिप्त हस्ताक्षर
14/08/2017	<p>- प्रकरण प्रस्तुत। - आवेदक रमेश मिश्रा उपस्थित। उनकी ओर से आज दिनांक को अधिवक्ता श्री सत्यजीत सलूजा द्वारा वकालतनामा पेश किया जाकर उपस्थित। - आपति कर्ता रमेश वर्मा उपस्थित। आपत्तिकर्ता की ओर से आज दिनांक को अधिवक्ता श्री हेमन्त साहू द्वारा वकालतनामा पेश किया जाकर उपस्थित। - आपत्तिकर्ता के द्वारा प्रस्तुत प्रारम्भिक आपत्ति की प्रति आवेदक अधिवक्ता को दिया गया।</p> <p>आवेदक/अपीलार्थी का जवाब हेतु सुनवाई दिनांक: 06/09/2017</p> <p style="text-align: right;">Mahesh Singh Rajput तहसीलदार तहसीलदार भाटापारा</p>	<p>06/9/17 06/9/17 रमेश वर्मा 06/9/17</p>



फार्म 'अ'

(परिपत्र बी-1 की कड़िका 6 देखिए)

राजस्व आदेश पत्र (रेव्युन्यू आर्डर शीट)

न्यायालय नायब तहसीलदार, भाटापारा



राजस्व प्रकरण क्रमांक: 201707212500001/11 सन:-

2016-2017

प्रकार:- मूल मामला

मामले की श्रेणी:- राजस्व

विषय:- अ-6 अ (खसरे में अधिकांश भाग-114 के अधीन तैयार किये गये किसी अन्य भू

अधिकृत संबंधी कामकाज में गतत वदितिक का सुधार अथवा उनमें प्रतिष्ठा संबंधी विवाद)

वाद भूमि:

तहसील: भाटापारा ग्राम: देवरानी(प.ह.न.-

00037), सलदी(प.ह.न.- 00036), मोपर(प.ह.न.-

00037) खसरे:

रमेश मिश्रा (प्रबंधक पिता/पति/विभाग-स्व. रवि शंकर मिश्रा

पता-गाँधी चौक बलौदाबाजार

:-आवेदक

विरुद्ध

:-अनावेदक

आदेश अथवा कार्यवाही की तारीख	पीठासीन अधिकारी के हस्ताक्षर सहित आदेश अथवा कार्यवाही	जहाँ आवश्यक हो पक्षी/वकीलो / प्रस्तुतकार लिपिक के संक्षिप्त हस्ताक्षर
06/09/2017	<p>- प्रकरण प्रस्तुत - आवेदक रमेश मिश्रा सहित अधिवक्ता श्री सत्यजीत सलूजा उपस्थित - आपत्तिकर्ता रमेशवर्मा, तोरनवर्मा, मूलचंदवर्मा, चेतन वर्मा गुमान धुव द्वारा अधिवक्ता श्री हेमंत साहू उपस्थित उनके द्वारा आपत्तिकर्ता मूलचंदवर्मा, चेतन वर्मा गुमान धुव की ओर से प्रारम्भिक आपत्ति दर्ज की गयी एवं सूचि अनुसार दस्तावेज पेश किया गया, जो प्रकरण में संलग्न है, जिसकी प्रति आवेदक अधिवक्ता को पावती लेकर दी गयी - आवेदक अधिवक्ता द्वारा प्रारम्भिक आपत्ति का जवाब दिया गया, जो प्रकरण में संलग्न है, जिसकी प्रति अनावेदक अधिवक्ता श्री साहू को दिया गया आवेदक/अनावेदक तर्क हेतु</p> <p>सुनवाई दिनांक: 15/09/2017</p> <p>Mahesh Singh Rajput तहसीलदार भाटापारा</p>	<p>15/9/2017</p> <p>Adm 15.9.17</p> <p>रमेश मिश्रा</p> <p>चेतन वर्मा</p> <p>हेमंत साहू</p> <p>15/9/17</p>





फार्म 'अ'

(परिपत्र बी-1 की कड़िका 6 देखिए)

राजस्व आदेश पत्र (रेव्यू आर्डर शीट)

न्यायालय नायब तहसीलदार, भाटापारा

राजस्व प्रकरण क्रमांक: 201707212500001/11 सन:-

2016-2017

विषय:- अ-6 अ (खसरे में अथवा धारा-114 के अधीन तैयार किये गये किसी

अन्य भू अकितेय संबंधी कामज में गलत प्रविष्टि का सुधार अथवा उनमें प्रविष्टी संबंधी विवाद)

प्रकार:-मूल मामला

मामले की श्रेणी:- राजस्व

वाद भूमि :

तहसील: भाटापारा ग्राम : देवरानी(प.ह.न.-

00037), मलदी(प.ह.न.- 00036),

मोपर(प.ह.न.- 00037) खसरे :

रमेश मिश्रा (प्रबंधक पिता/पति/विभाग-स्व. रवि शंकर
मिश्रा पता-गाँधी चौक बलौदाबाजार

:-आवेदक

विरुद्ध

:-अनावेदक

आदेश अथवा कार्यवाही की तारीख	पीठासीन अधिकारी के हस्ताक्षर सहित आदेश अथवा कार्यवाही	जहां आवश्यक हो पक्षी/वकीलो / प्रस्तुतकार लिपिक के संक्षिप्त हस्ताक्षर
15/09/2017	<p>- प्रकरण प्रस्तुत । - आवेदक अनुपस्थित । - आपत्तिकर्ता रमेशवर्मा सहित एवं शेष द्वारा अधिवक्ता श्री ललित सोनी उपस्थित ।</p> <p>प्रारंभिक तर्क हेतु</p> <p>सुनवाई दिनांक: 09/10/2017</p> <p style="text-align: right;">Mahesh Singh Rajput</p> <p style="text-align: center;">तहसीलदार भाटापारा</p>	<p>N.F. 9/10/17 [Signature]</p>



न्यायालय नायब तहसीलदार, भाटापारा

राजस्व प्रकरण क्रमांक: 201707212500001/11

प्रकार:- मूल मामला

सन:- 2016-2017

मामले की श्रेणी:- राजस्व

विषय:- अ-6 अ (खसरे में अधदा धारा-114 के अधीन तैयार किये गये
किती अन्य भू अभिलेख संबंधी कारगज में गलत प्रविष्टि का सुधार अधदा उनमें
एकिकटी संबंधी विवाद)

वाद भूमि :

रमेश मिश्रा (प्रबंधक पिता-स्व. रवि शंकर मिश्रा
पता-गाँधी चौक बलीदाबाजार

तहसील: भाटापारा

ग्राम : देवरानी(प.ह.न.- 00037),

:-आवेदक

मलदी(प.ह.न.- 00036),

विरुद्ध

मोपर(प.ह.न.- 00037)

:-अनावेदक

खसरे :

आदेश अभिलिखित दिनांक : 03/03/2018

- प्रकरण पेश। - प्रकरण में आदेश पत्र दिनांक 03-03-2018 के अनुसार हल्का पटवारी को अभिलेख दुरुस्त किये जाने हेतु जापन जारी कर प्रकरण नस्तीबद्ध कर अभिलेख कोष्ठ भेजा जावे।

आज दिनांक 03/03/2018 को मेरे हस्ताक्षर एवं न्यायालय की पदमुद्रा से आदेश पारित एवं खुले न्यायालय में उद्घोषित किया गया।

Rajani Bhagat

तहसीलदार

भाटापारा





न्यायालय तहसीलदार भाटापरा

जिला- बलौदाबाजार-भाटापरा

(द० ग०)

श. प्र. क्र०:- 201707212500003/31

विषय:- अ-6-अ

वर्ष :- 2016-2017

ग्राम:- (1) देवराणी

(2) मलदी

(1) रमेश मिश्रा (प्रबंधक पिता/पति/

विभाग- स्व. रविशंकर मिश्रा

पता- गांधी चौक बलौदाबाजार



आवेदक

विरुद्ध

द्वितीयक शासन

आवेदक

1835/18

सत्य-प्रतिलिपि

प्रभारी अधिकारी
वास्ते, तहसीलदार भाटापरा
जि. बलौदाबाजार भाटापरा



आदेश

(पारित दिनांक 03/03/18)

(1) दिनांक 11/07/2017

को आदेशक रमेश मिश्रा पिता

स्व. रविशंकर मिश्रा प्रबंधक सं-

जुग सीमेंट कंपनी खान तखील-

बलौदाबाजार, जिला- बलौदाबाजार-

आटापारा (छत्तीसगढ़) के द्वारा ग्राम

मन्दी प.ह. नं. 36, रा.नि.मं.नि-



1825/18

सत्य-प्रतिलिपि

प्रमाणित

आटापारा

मिनिया, तहसील-आटापारा सिद्ध

अनसूचित जाति खसरा नंबर 910,

993, 1001, 858/1, 859, 858/2

रकबा फगवाड़ 0.640, 0.182, 0.162,

30.985, 2.423, 1.021 हे० जमि

ग्राम मोपर पं.ह.नं. 37 रा.

ति.मं. तिपनिया, तहसील भाटापारा

खिलत शासकीय भूमि खसरा नंबर

1107, 1137, 1205, 1215, 1217, 1218/1

रकबा रुबशः 0.101, 0.040, 0.081,

0.530, 0.474, 1.887 एवं ग्राम

देवरानी पं.ह.नं. 37, रा. ति.मं.

तिपनिया-तहसील भाटापारा खिल



1835/18

सत्य-प्रतिलिपि

प्रभारी अधिकारी
वास्ते, तहसीलदार भाटापारा
जि. मलौवाबाजार भाटापारा

शासकीय भूमि खसरा नंबर 335,

रकबा 0.012 हे. भूमि की रजिस्ट्री

कीज डीड में प्राप्त होने के कारण

खसरा के कॉलम नंबर 12 में भूदे-

दक रवेरा मित्रा (लेड ज्वंघक



अंशुजा) द्वारा कंपनी के नाम

से शासकीय पट्टेदार के रूप

में दर्ज करने काबज्जु छतीसगढ़

शु- राजस्व दंडित 1959 के

धारा 115 एवं 116 के तहत

में इजिस्ट्रीज लीज डीड एवं

आवश्यक दस्तावेज के माध्यम

लय में पेश किया गया।



(2) दिनांक 28/07/17

में गण मोपर एवं देवराजी

में- ईश्वर उकाशन परचात-उक्त:

दोनों राज्यों से आद अवधि

में किसी तरह का कोई दवा

आवृत्ति प्राप्त नहीं हुआ।



किंतु ग्राम मन्दी निवासी

रमेश वर्मा पिता जगन्नाथ वर्मा

ग्राम पटेल, निवासी मन्दी तथा

तेरनलाल वर्मा पिता कंशीराम

वर्मा, कृषक निवासी ग्राम मन्दी

द्वारा नीचे निम्न अंशों पर

लिखित आपत्ति दर्ज करवाई गई कि:-

अ) अवैधक रीति

मित्रा पिता स्व. रविशंकर मिश्रा

प्रबंधक अंबुजा सीमेंट कंपनी स्व.

तहसील - बल्लोद्वारा जिला बल्लोद्वारा

बाजार - भारापुरा वे द्वारा ग्राम

मन्दी ग्राम मोपर एवं ग्राम

देवराजी की वासकीय भूमि की

1835/18

सत्य प्रतिलिपि

हस्ताक्षर

ग्रामीण अधिकारी

ग्राम, तहसील, जिला भारापुरा
जि बल्लोद्वारा जिला भारापुरा





इजिस्टर्ड लीज डीड में प्राप्त होने
 के कारण खसरा के 12 कंलम
 में ^{रैमिग} कौवेदक कंपनी का नाम
 सामग्रीय पट्टेदार के नाम पर
 दर्ज कराना चाहता है जिस पर
 उन्हें आपत्ति है।



(क) अंबुजा सीमेंट की

लीज डीड किस दिनांक से खसरे
 तक के लिए प्रदान किया
 गया है—यह इतरहर में दर्शित
 नहीं है, तथा—चूंकि कुछ सामग्रीय
 भूमि के संबंध में अंबुजा
 सीमेंट द्वारा अन्य प्रकार भी
 प्रस्तुत किया गया है, जिसे भी

1835/18

1835/18

सत्य-प्रतिलिपि

प्रभारी अधिकारी
 वास्ते, सहस्रीलदार भाटापारा
 भाटापारा

अंजुन सीमेंट द्वारा अदला-बदली
में आजा किया गया है - जिन पर
उन्हें ग्राम पंचायत स्तर पर आपत्ति
है।

(C) प्रस्तुत प्रकरण के

संबंध में मूल आपत्ति प्रस्तुत
करने हेतु आपने अधिकार को
सुरक्षित रखते हुए प्रकरण में
ईश्वर प्रकाशन के संबंध में

प्रारंभिक आपत्ति है।

(1) आवेदन एवं

रजिस्टर्ड लीज डीड की कॉपी
आपत्तिकता एवं ग्राम पंचायत





को अवलोकन एवं पटवारी अभि-
लेखों में मिलान करने हेतु-
दिलवाई जावे ताकि सही आपत्ति-
प्राप्त किया जा सके।

- ठसत काजति के

जवाब में दिनांक 06/08/2012

को अखुजा सीमेंट्स लिमिटेड-

द्वारा शैश मिश्र अधिवक्ता

अधिवक्ता द्वारा नीचे निम्न

विंदुओं पर जवाब देना कि

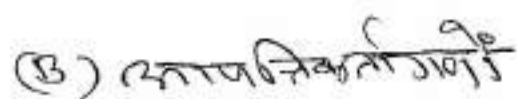


गया कि -

(A) - चूंकि भूमि की

खनिज पर अधिकार दलीला

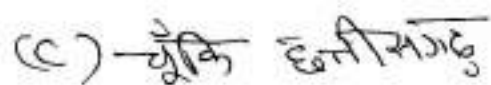
शामल का है तथा शामल



हम प्रकरण में सलम माइनिंग लीज

- डीड का अवलोकन विदे-बोरे

ही आपत्तिक रक्षा निराधार है।



शासन ने आइनिंग बीज डीड.

द्वारा भूमि परत उन्नयन के

लिख आम्बुजा श्रीमंदास लिमिटेड



को दिनांक 19/02/2009 पंजीकृत

कर प्रदान की गई है इसलिये

राजस्व अभिलेख में कॉलम

12 में बीजधारी के रूप में दर्ज

कर किया जाता राजस्व अधि-

1835/18

कारी का कर्तव्य है।

सत्य-प्रतिलिपि

प्रभारि अधिकारी
दास्ती, तहसीलदार भाटापारा
जि. बलीदादाजार भाटापारा

(1) आपत्तिकता-

उप पंजीयक कार्यालय से-

रजिस्टर्ड लीज डीड की कॉपी

सबि जमा कर प्राप्त कर लेता

है तथा आवेदन के सम्पन्न-

यालय में प्रस्तुत लीज डीड



की कॉपी का अवलोकन कर
 सकता है। चूंकि अनवदेकाण
 प्रकल्प में आवश्यक पदमार् नहीं
 है इसलिए लीज डीट निर्दिष्ट
 की प्रतिलिपि प्राप्त करने के अधि-
 कारी नहीं हैं।



(3) मेरे द्वारा आपत्ति
 का एवं जवाब का गहन अध्ययन
 किया गया। मम्बुजा सीमेंट्स



लिमिटेड द्वारा रजिस्ट्रार मिश्र अधि-
 कृत अधिकारी द्वारा प्रस्तुत

जवाब विधि कार्य के अंतर्गत
 तथा प्राकृतिक न्याय सिद्धांत की



सीमा से होने से आपत्ति-
नहीं रहती- (1) रमेश वर्मा पिता
अगन्नाथ वर्मा, ग्राम पटेल मन्दी,
तिवासी-मन्दी एवं तारनल्ल
वर्मा पिता काशीराम वर्मा,
कृषक, तिवासी-मन्दी-को-
आपत्ति को खारिज किया गया।

(4) दिनांक 27/2/18

को ही अवैधक रमेश कुमार
मिश्रा, पिता-श्व० श्री रविशंकर
मिश्रा, सहायकार (लैंड), अंबुजा
अंबुजा सीमेंट लिमिटेड रान
द्वारा दलीलागदु नू-राजस्थ



संहिता 1959 की धारा 32 के

तहत आवेदन वाले रिकॉर्ड पुनः

रूग्नी की कार्यवाही की शीघ्र

सुनवाई करने हेतु आवेदन पेश

किया गया; साथ ही उपबहार

प्रक्रिया संहिता 1908 को दख

18 नियम (04) के तहत एक

आवेदन रजिस्ट्रार मित्रा अद्वि

अद्विकारी अम्बुजा सीमैंट्स एवं

दो शक्कीयों (1) काह गुल्लुका राम

सेन एवं (2) सी० आबं वरमा

1825/18

सत्य-प्रतिलिपि

प्रभारी अधिकारी
वास्ते, तहसीलदार भाटापारा
जि. बलेश्वरभाजपुर भाटापारा





द्वारा शापक पर पेश किया
गया ।

उपरोक्त शापक पर

में स्पष्ट अंकित किया गया

कि - ' अंगुजा सीमेंट लिमिटेड

खान तहसील बर्होलीवाजार क्षेत्र

द्वारा 115 एवं 116 छत्तीसगढ़

शू- राजस्व संहिता 1959 के तहत

राजस्व अभिलेख में संशोधन

के लिए आवेदन पत्र दायरशालन

द्वारा आइटिंग लीज डीड एवं

औद्योगिक प्रयोजन हेतु किांक



18/02/2009 को ग्राम मल्दी

पं.नं. 36, रकबा 44.413 हे.

ग्राम मौपर पं.नं. 37, रकबा

3.113 हे. तया ग्राम देवानी

पं.नं. 37 रकबा 0.012 हे.

उक्त रकबा 47.538 हे. भूमि

शासन द्वारा प्रदान की गई है।

उक्त शासकीय भूमि

का अधिकार्य अंगुजा सीमेंट्स

लिमिटेड खान को प्रदान किया



1835/16

गया है, जिसका सीमांकन करया-

जाकर पिल्लर लगाया गया तथा

लीज डीड में दी गई भूमि





का लगान व जल्पाजी भी
कंपनी द्वारा जमा किया जा
चुका है जिले की प्रतिलिपि
(कमल पत्र) प्रकरण में दलगत
है। तथा पट्टे में दी गई

भूमि का पर्यावरण स्वीकृति
रुब इंडियन क्यूरो ऑफ माइल
द्वारा खनिज उत्खनन भी
स्वीकृति मिल चुकी है जिले की

जानकारी सीमान्त कलेक्टर महोदय,

अनुविभागीय अधिकारी तथा

म्यामालय तहसीलदार को भी

दिया जा चुका है।



1835/48

सत्य-प्रतिलिपि

प्रभाषी अधिकारी
वास्ते, तहसीलदार भाटापारा
जि. वलीदाबाद भाटापारा

(5) उपरोक्त समस्त

तथ्यों, दस्तावेजों (संलग्न दस्तावेजों)

18(04) में उल्लेखित सारगर्भित तथ्यों

के मद्देनजर मैं इस तिथि पर (बतौर

न्यायालय) पहुँचती हूँ कि - 'हत्तीम-

गढ़ शासन द्वारा मार्किंग लीज की

एवं औद्योगिक प्रयोजन हेतु विनांक

18/02/2009 को ग्राम-मन्दी, प.हं. 1825/18

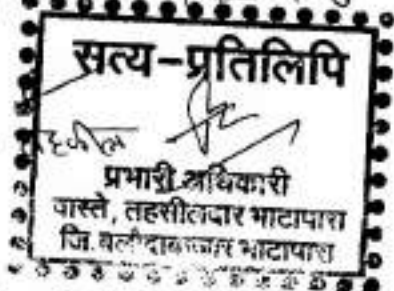
36, रा. नि. मन्दी निपनिया

भाटापारा स्थित शासकीय भूमि

नंबर 910, 993, 1001, 858/1, 859

तथा 858/2 रकबा क्रमशः 0.640,

0.182, 0.162, 39.985, 2.423 तथा





1.021 हे. अर्थात् कुल रकबा 44.413
हे०, ग्राम मोपर प० हे० नं० 37, रा०

नि० मं० लिपनिया तहसील भाटापारा

खिलत ब्राह्मणीय भूमि खसरा नंबर

1107, 1177, 1205, 1215, 1217 एवं

1218/1 हे० वितका रकबा क्रमशः 0.101,

0.040, 0.081, 0.530, 0.474 एवं

1.887 हे० अर्थात् कुल रकबा 3.113 हे०

तथा ग्राम देवानी प० हे० नं० 37, रा०

नि० मं० लिपनिया, तहसील- भाटापारा

खिलत ब्राह्मणीय भूमि खसरा नंबर

335, रकबा 0.012 हे०- इस प्रकार ग्राम

मन्दी, मोपर एवं ग्राम देवानी के

कुल रकबा 47.538 हे० भूमि जो

CANCELLED



1835/18

प्रतिलिपि

1 अधिकारी
मोहनदास भाटापारा
राजार भाटापारा

कि राजस्व द्वारा प्रदान की गई है,
जिसका कटिपत्र प्राप्त कर सीमाओं
पश्चात् पिल्लर भी लगाया जा चुका
है तथा बीज डीबु में दी गई भूमि
का लगान व प्रव्वाजी भी जमा किया
जा चुका है — का दस्तीसगद भू-

राजस्व संहिता 1959 की धारा 115, 116

के तहत खसरा नम्बों एवं संबंधित 1835/16

कम राजस्व अभिलेखों में पड़े हुए

की हैसियत से "कंजुजा सीमित

लिमिटेड" के नाम पर संबंधित खसरे

के कॉलम नंबर 12 में दर्ज करने

वाबत आदेश पारित किया जाता है।

सत्य-प्रतिलिपि
प्रभारी अधिकारी
वास्ते, सहस्रीसदार भाटापारा
जि. बलौदाबाजार भाटापारा





उम्मादय संबन्धित

ह.प. / रा. नि. के अग्रज जारी

है।

यह आदेशा व्यापार

के सील-मुहर एवं गैर हस्ताक्षर

से पारित एवं घोषित।

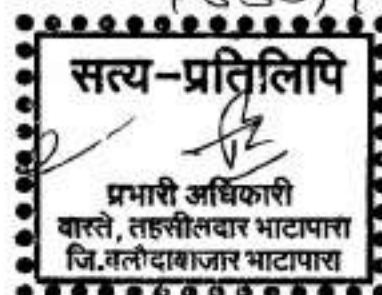


1835/18

आवेदन पत्र प्राप्त होने की तिथि	5/3/18
आवेदक को कब उपस्थित होने को कहा गया	8/3/18
आवेदक कब उपस्थित हुआ	—
आवेदक को अधिम राशि के लिए सूचना देने की तिथि	—
प्रतिलिपि कब तैयार हुई	8-3-18
प्रकरण कब प्राप्त हुआ	7/3/18
प्रतिलिपि कब दिया गया या कब भेजा गया	8/3/18
कितने रुपये का प्रतिलिपि शुल्क लगा	140=00
मिलान करने वाले का हस्ताक्षर	प्रभारी अधिकारी प्रतिलिपि शाखा- भाटापारा

तहसीलदार
भाटापारा

1835/18



**कार्यालय कलेक्टर (खनिज शाखा) जिला बलीदाबाजार-भाटापारा छ.ग.
आदेश**

क्रमांक 205/तीन-6/2003
प्रति,

बलीदाबाजार दिनांक 6/05/2014


मेसर्स अंबूजा सीमेंट्स लिमिटेड
युनिट भाटापारा
रवान तहसील बलीदाबाजार
जिला बलीदाबाजार-भाटापारा

विषय:- स्वीकृत क्षेत्र पर कार्य करने की अनुमति प्रदान करने बाबत ।

—0—

आपको ग्राम मल्दी, मोपर, देवरानी, तहसील भाटापारा एवं ग्राम करमंदी, बोईरडीह तहसील बलीदाबाजार जिला बलीदाबाजार- भाटापारा के रकबा 553.858 हेक्टर क्षेत्र पर दिनांक 18.02.2009 से 17.02.2039 तक अवधि के लिए खनिज चूनापत्थर खनिपट्टा स्वीकृत है।

स्वीकृत खनिपट्टा क्षेत्र पर आपके द्वारा कय निजी स्वामित्व की भूमि ग्राम मल्दी में ब्लॉक-एक एवं दो, रकबा 57.261 हेक्टर, ग्राम मोपर में रकबा 131.589 हेक्टर, ग्राम देवरानी में रकबा 24.089 हेक्टर, ग्राम करमंदी में रकबा 46.867 हेक्टर एवं ग्राम बोईरडीह में रकबा 24.715 हेक्टर कुल रकबा 284.521 हेक्टर क्षेत्र पर भू-राजस्व सहिता 1950 की धारा 247, (3) (5) के तहत भू-प्रवेश कर खनन प्रारंभ करने की अनुमति प्रदान की जाती है।
(कलेक्टर महोदय द्वारा अनुमोदित)


06/05/14
खनि अधिकारी

वास्ते कलेक्टर बलीदाबाजार

पृ क्रमांक 206/तीन-6/2003
प्रतिलिपि

बलीदाबाजार दिनांक 6/05/2014

1. तहसीलदार बलीदाबाजार/भाटापारा जिला बलीदाबाजार-भाटापारा को सूचनार्थ।
2. श्री अवधेश बारिक, खनि निरीक्षक बलीदाबाजार को सूचनार्थ।
3. सरपंच ग्राम पंचायत मल्दी/मोपर, देवरानी, विकासखंड भाटापारा एवं ग्राम दनदनी विकासखंड बलीदाबाजार जिला बलीदाबाजार-भाटापारा को सूचनार्थ।


06/05/14
खनि अधिकारी
वास्ते कलेक्टर बलीदाबाजार

Annexure II

Typical View of Green Belt Mine Photograph





Annexure 3

Typical View of Garland Drain



Annexure 3a

Typical View of Siltation Pond



Annexure 3b

Typical View of Water Harvesting Pit



Annexure 4

Typical View of Retaining Wall



कार्यालय वनमण्डलाधिकारी बलौदाबाजार वनमण्डल, बलौदाबाजार

E-Mail :- dfo_balodebazar@rediffmail.com, 07727-298526

क्रमांक/तकनीकी/विषय/2763
प्रति,

बलौदाबाजार, दिनांक 7/10/2022

✓ मे. अम्बुजा सीमेंट लिमिटेड
यूनिट-भाटापारा
पो.आ.-रवान, तहसील-बलौदाबाजार
जिला-बलौदाबाजार-भाटापारा (छ.ग.)

विषय :- Maldi Mopar Limestone mine of M/s Ambuja Cements limited for Expansion in Limestone Production capacity from 2.0 Million TPA to 6.3 Million TPA, (Rom 6.5 million TPA including 0.2 Million TPA screen rejects), sub grade 1.7 Million TPA, Top soil 0.27 Million TPA, waste 2.55 Million TPA (Total Excavation 11.02 Million TPA) along with the existing crusher of 1800 TPH with Screen and a proposed crusher of 1800 TPH in the mine lease area of 553.656 ha., located at village - Boirdih and Karmadih (Tahsil-Balodabazar) and Maldi, Mopar and Devrani, (Tehsil-Bhatapara) District-Balodabazar-Bhatapara, Chhattisgarh-For Terms of Reference (Tor) regarding.

संदर्भ :- आपका पत्र दिनांक 06.10.2022.

== : 00 : ==

उपरोक्त विषयांतर्गत संदर्भित पत्र द्वारा भारत सरकार पर्यावरण, वन एवं जलवायु परिवर्तन नई दिल्ली के पत्र क्रमांक/J-11015/252/2008-IA.II (M) दिनांक 13.08.2010 एवं क्रमांक/J-11015/252/2008-IA.II (M) दिनांक 24.08.2022 के अनुपालन में प्रस्तुत ग्रीन बेल्ट डेवलपमेंट प्लान अनुमोदन कर एक प्रति मूलतः आपके अवलोकनार्थ एवं आवश्यक कार्यवाही हेतु संलग्न है। नियमानुसार समय-समय पर आवश्यक प्रमाण पत्र उपलब्ध कराना सुनिश्चित करें तथा आवश्यकतानुसार वन विभाग के क्षेत्रीय अधिकारियों को स्थल निरीक्षण में आवश्यक सहयोग प्रदान करें।

सहपत्र :- उपरोक्तानुसार।

पू0 क्रमांक/तकनीकी/विषय/2764
प्रतिलिपि :-

उपवनमण्डलाधिकारी बलौदाबाजार/परिक्षेत्र अधिकारी बलौदाबाजार की ओर उपरोक्त संदर्भ में सूचनार्थ एवं आवश्यक कार्यवाही हेतु अग्रेषित।


वनमण्डलाधिकारी
बलौदाबाजार वनमण्डल, बलौदाबाजार
बलौदाबाजार, दिनांक 7/10/2022


वनमण्डलाधिकारी
बलौदाबाजार वनमण्डल, बलौदाबाजार

GREEN BELT DEVELOPMENT PLAN



**Ambuja
Cement**

BY

AMBUJA CEMENTS LIMITED

MALDI MOPAR LIMESTONE MINE
(Area- 553.656ha.)

PO- Rawan, Tehsil- Baloda Bazar, Distt- Baloda Bazar- Bhatapara
State- Chhattisgarh
493331

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1. SALIENT FEATURES OF THE PROJECTS

M/s. Ambuja Cements Limited (Unit-Bhatapara) is proposing expansion in Limestone Production Capacity from 2.0 Million TPA to 6.3 Million TPA, (ROM 6.5 Million TPA including 0.2 Million TPA screen rejects), Sub Grade 1.7 Million TPA, Top Soil 0.27 Million TPA, Waste 2.55 Million TPA (Total Excavation 11.02 Million TPA) along with existing crusher of 1800 TPH with screen and a proposed crusher of 1800 TPH with Screen in Maldi Mopar Limestone Mine (ML Area – 553.656 ha) in Villages- Boirdih and Karmandih (Tehsil - Baloda Bazar) and Maldi Mopar and Devrani (Tehsil: Balodabajar), District- Baloda Bazar- Bhatapara, State-Chhattisgarh. Environmental Clearance for existing 2.0 million TPA Limestone Production Capacity in favor of M/s. Ambuja Cements Limited vide letter no. J-11015/252/2008-IA-II (M) dated 13.08.2010.

The proposed Maldi-Mopar limestone mining project covers a lease area of about 553.656-ha of land (>100-ha) and thus it is scheduled under "Category-A" project, as per the EIA Notification dated 14th September 2006.

LAND BREAKUP

Govt. Waste Land (Ha.)	Private Agriculture Land (Ha.)	Total (Ha.)
53.686	499.970	553.656

LAND DETAILS - SUMMARY BLOCK 1

S.No.	Name of Village	Mining Lease Area (In Ha.)		
		Private	Govt.	Total
1	Maldi	126.943	0.984	127.927
2	Mopar	212.691	3.113	215.804
3	Devrani	62.582	0.012	62.594
4	Karmandih	48.116	5.120	53.236
5	Boirdih	35.050	4.468	39.518
	Total Land (Hect.)	485.382	13.698	499.079

LAND DETAILS - SUMMARY BLOCK 2

S.No.	Name of Village	Mining Lease Area (In Ha.)		
		Private	Govt.	Total
1	Maldi	14.592	39.985	54.577
	Total Land (Hect.)	14.592	39.985	54.577
	TOTAL BLOCK 1 + BLOCK 2	499.974	53.682	553.656

The land area for proposed integrated cement plan is 238.970 Hectare, ACL is having 79.48 ha i.e 33.26% of total area as greenbelt area. The land use pattern is given in Table 1.

TABLE 1: LAND USE BREAKUP

Sl.	Particulars	Available Area (In Ha.)	In %
1.	Area Occupied by Plant/ Equipment	24.11	10.09
2.	Area occupied by Thermal Power plant	4.26	1.78
3.	Area covered by Greenbelt	79.69	33.35
4.	Open Area (Roads, Storage, and Building etc.)	130.96	54.80
	Total available area of the plant	238.96	100.00

2. NEED FOR GREEN BELT DEVELOPMENT PLAN

Environmental protection has been considered as an important domain for industrial and other developmental activities in India. Ministry of Environment & Forests (MoEF) has taken several policy initiatives and promoted integration of environmental concerns in developmental projects. One such initiative is the notification on Environmental Impact Assessment (EIA) of developmental projects issued in 1994 and further revised notification in year 2006 under the provisions of Environment (Protection) Act, 1986 EIA Guidance Manual for building, construction, townships, and area development projects proactively talks about the importance of green belts in such projects.

Green belt in India refers to a buffer zone created beyond which industrial activity may not be carried on. This concept has developed through a long line of cases and today, green belts are present not only for the purpose of protecting sensitive areas to maintain ecological balance but are also be found in urban areas so as to act as a sink for the harmful gases released by vehicles and industries operating in the city area. In this regard, comprehensive Guidelines for Developing Green belts have been compiled by the Central Pollution Control Board.

GREEN BELT DEVELOPMENT PLAN

A large number of gaseous and particulate air pollutants are emitted in the air environment. The physical and chemical properties and effects of these pollutants vary a great deal individually and synergistically. The nature and quantum of pollutant depends on the type of industry and the kind of raw material and energy used in its operation.

The development of green belts, by using pollution tolerant plants, can add significantly towards air quality improvement. This involves selecting suitable plant species, determining climatic and edaphic parameters, studying wind and temperature probes, nature of pollutants to be ameliorated and general landscape of the locality. The design of the green belt and its composition may vary from place to place and industry to industry. Only the green belts designed on the basis of site geography, ecology meteorology, and industry can achieve the objective of significant pollution control. The planning of green belts, also involves facets of bio-aesthetics. Accordingly, the selection of plant species may involve plant characteristics, tolerance, canopy structure, foliage form, height of plant and its overall lowering and production potential. This involves careful scrutiny of plants in nature as well as in horticultural conditions, in order to assess their suitability and performance in a stressed ecological situation of polluted environment.

Plantations also generate recurring hidden profits in terms of better health and happiness of its workers which in turn leads to better harmony and increased production vis-a-vis profit in quantified figures.

According to Rao (1992), pollutants emanating from thermal power plants, cement factories, metal processing plants, lime and brick kilns, pulp and paper factories, fertilizer plants, mining area and quarries, oil refineries, etc., though varying in their physical and chemical properties, are similar with respect to their effects on plant, animal and human life.

The physical state of pollutants may be particulate or gaseous. The particulate ones may be either settle able or suspended (SPM). In either case, they may eventually fall out of surfaces of materials, plants and animals. The gaseous pollutants may also get absorbed on surfaces. The effect of a pollutant on the impinging surface is a function of the degree of toxicity of the pollutant.

The pollutants thus falling out may remain suspended for some time in the air shed. But they would eventually get deposited either as wet deposition or dry deposition on surfaces of vegetation, soil, water, buildings, roads etc. They may also be deposited on outer surfaces of animal bodies or inhaled in to their lungs.

The effect of the pollutants, either adsorbed on the surface or absorbed inside the system of plants and animals, or of inanimate objects, depends on the characteristics of the impinging surface and the chemistry of the pollutant. In case of plants all those external and internal factors which affect the stomata aperture also affect the level of pollution interacting with the plants.

Sl.	Botanical name	Common name
33	<i>Temredusindica</i>	Imli
34	<i>Ujiniatimholana</i>	Jamun
35	<i>Bauhinia variegata</i>	Kachanar
36	<i>Anthocepholuskadamba</i>	Kadamba
37	<i>Senegalia catechu</i>	Khair
38	<i>Pongamiaglabra</i>	Karanj
39	<i>Carissa carandus</i>	Karounda
40	<i>Artocarpusheterophyllus</i>	Kathal (Jack Fruit)
41	<i>Theveatiaperuviana</i>	Kaner (Oleander & Nerium)
42	<i>Gemelinaarborea</i>	Khamhar
43	<i>Mangiferaindica</i>	Mango
44	<i>Madhucalongifolia</i>	Mahua
45	<i>Ailanthus excelsa</i>	Maharukh (Mhaneem)
46	<i>Citrus sinensis</i>	Musambi
47	<i>Moringaoleifera</i>	Munga (Drum Stick)
48	<i>Mitragynaparvifolia</i>	Mudhi
49	<i>Citrus limon Burma</i>	Neebu
50	<i>Eucalyptus sp.</i>	Neel Giri (Safeda)
51	<i>Azadirachtaindica</i>	Neem
52	<i>Peltophorumenerme</i>	PeltoPhorum
53	<i>Buteafrandosa</i>	Palash (Dhak)
54	<i>Palm tree</i>	Palm tree (Bottel palm)
55	<i>Earythrenaindica</i>	Pangara
56	<i>Putrangivaroxburghi</i>	Putranjeeva (Luck Bean Tree)
57	<i>FicusReligiosa</i>	Pipal
58	<i>Bombaxceiba</i>	Samal tree (Semhra)
59	<i>Annonacherimola</i>	Seetaphal
60	<i>AlbiziaLabeck</i>	Siris
61	<i>Morus Alba / Nigra</i>	Shahtut (Mulberry)
62	<i>Dalbergiasisoo</i>	Sisoo
63	<i>Leucenaleucocehalla</i>	Subabool
64	<i>Terminaliatomentosa</i>	Saja
65	<i>Tectonagrandis</i>	Sagon (Teak)
66	<i>Albizziaprocera, benth</i>	Safedsiras (Karhi)
67	<i>Dhobi podha</i>	Tikoma
68	<i>Prosopisjuliflora</i>	Vilayatiker
69	<i>Ceibapentandra</i>	White semal (Kpok Tree)
70	<i>Simaroubaglauca</i>	Laxmitaru

The above suggested list covers species with thick canopy cover, perennial green nature, native origin and a large leaf area index. The proposed species will help in forming an effective barrier between the mines lease area and the surroundings.

These species should be planted in and around the mine site and integrated cement plant site to help absorb fugitive emissions and reduce the noise levels. All the open spaces, where tree plantation may not be possible, should be covered with shrubs and grass to prevent erosion of topsoil.

PLANTING TECHNIQUE AND AFTER-MANAGEMENT:

PREPARATION OF LAND:

1. Cleaning and levelling of area.
2. Stacking of area for digging of pits.
3. Digging of pits- For plantation of tree sapling spacing should be 3m x 3m x 3m and pit size 1m x 1m x 1m. For smaller size of tree and bushes sapling spacing should be 2m x 2m x 2m and pit size should be 45 cm x 45 cm x 45 cm.
4. Excavated soil should be sun dried thoroughly and to be mixed with farm yard manure in the ration of 2:1 along with bio-pesticide for controlling soil borne insects and pests.
5. Filling of pits by treated and manure mixed soils.

PLANTING OF SALPLINGS:

1. Planting od saplings should be done suring the monsoon season.
2. Sapling should be purchased from the local forest department/private nursery.
3. Healthy sapling having more than 1 meter height should be selected.
4. Company should develop irrigation facility prior to the planting of saplings.

MAINTENANCE OF PLANTATION:

1. Soil work, irrigation, weeding etc should be done for five years after plantation.
2. Preferably drip irrigation facility shall be developed by the company.
3. Replanting/casualty replacement should be done without delay.
4. Proper care and maintenance of saplings at the initial stage of 4 to 5 years is essential. It helps in quick development of canopy which provides for better chances of survival.
5. Proper fertilizer application is necessary for healthy and dense green belt development.
6. Close planting with three tier system keeping dwarf trees with round canopy exposed to the source of emission followed by medium and tall trees with cylindrical canopy

is ideal design for the industrial area because all plants are exposed to the pollutants. This helps to divert the emissions upward as plants act as a physical barrier.

7. Close planting also results in taller trees with deeper roots and ultimately yield more bio-mass per unit area and more efficient absorption of pollutants. Planting of trees in staggering arrangement in multiple rows across the direction of the wind is recommended for better trapping and absorption of the pollutants. Trees of the front rows act as absorptive layer while the core area (rear rows) cleans the air. Dwarf trees and shrubs in multiple rows should be planted all along the periphery by medium and tall trees gradually towards center so that all the plants can intercept from different directions.

BUDGETARY PROVISION FOR GREEN BELT DEVELOPMENT PLAN

The average cost of Green Belt development will be Rs 6 Lakhs per Hectare or Rs 300 per plant. Thus the total cost of Green Belt Development is:

Maldi Mopar Limestone Mine Provisionary Budgets:

$70.29 \text{ ha} \times \text{Rs. } 600000 = \text{Rs. } 42,174,000.00$ (Rupees- Four Crore Twenty One Lakh Seventy Four Thousand only).


Divisional Forest Officer
Bakota Bazar Division, Bakota Bazar


HAREESH CHANDRA IITM
MANAGING PARTNER
ENVIROGREEN



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HDD-272, PHASE III- NEAR JP CHOWK,

RING ROAD NO - 2, KAMR NAGAR, RAIPUR, C.G. -492099

PH - 0771 - 4027777 email - ultimatenviro@gmail.com

Name & Address Of The Customer

TO,
AMBUJA CEMENT LIMITED
(UNIT: BHATAPARA)
P.O. Rawan, Tehsil: Baloda Bazar,
Dist.: Baloda Bazar-Bhatapara-493331

SAMPLING MONTH

OCTOBER-2023 to MARCH-2024

TYPES OF REPORT

HALF YEARLY MONTH AVERAGE REPORT

SAMPLE DETAILS

MONITORING FOR	AMBIENT AIR QUALITY MONITORING	CUSTOMER REF. NO. & DATE	2800956665/NE08 Date: 10/06/2023
SAMPLING LOCATION	CORE ZONE MALDI MOPER LIMESTONE MINE FIELD OFFICE		
DURATION OF SAMPLING	24 HOURS		
SAMPLING PROCEDURE	AS PER METHOD REFERENCE		
SAMPLE QUANTITY/PACKING	FILTER PAPER (PM ₁₀): 1X1 NO., FILTER PAPER (PM _{2.5}): 1X1 NO. SO ₂ : 30MLX1 NO. PVC BOTTLE, NO ₂ : 30MLX1 NO. PVC BOTTLE RUBBER BLADDER: 1X1 NO.		

Test Method and NAAQM Standard for Ambient Air Quality Monitoring

Parameter	Method Reference	NAAQM Standard
Particulate Matter size less than 10 microns (PM ₁₀)	IS 5182 (Part 23): 2006 & CPCB Guidelines Vol.-I	100
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS 5182 (Part 24): 2019 CPCB Guidelines Vol.-I	60
Sulphur Dioxide (SO ₂)	IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines Vol.-I	80
Nitrogen Dioxide (NO ₂)	IS 5182 (Part 6): 2006 & CPCB Guidelines Vol.-I	80
Carbon Monoxide (CO)*	IS 5182 (Part 10): 1999, RA 2003	4.0

Sampling Location	Date of Sampling	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO* mg/m ³
MALDI MOPER LIMESTONE MINE FIELD OFFICE	OCT-2023	57.82	16.28	16.55	16.87	0.65
	NOV-2023	65.47	18.35	18.30	18.10	0.76
	DEC-2023	70.06	23.22	23.48	24.37	0.78
	JAN-2024	70.10	23.20	23.48	24.35	0.88
	FEB-2024	71.57	23.38	24.57	23.71	0.79
	MAR-2024	72.92	22.17	21.25	21.23	0.81

Terms & conditions

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-----End of the test report-----



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HDD-272, PHASE II- NEAR JP CHOWK,
HING ROAD NO - 2, KABIR NAGAR, RAIPUR, C.G. -492099
PH - 0771 - 4027777 email - ultimatenviro@gmail.com

Form No.: UES/FORM/08

Name & Address Of The Customer

TO,
AMBUJA CEMENT LIMITED
(UNIT: BHATAPARA)
P.O. Rawan, Tehsil: Baloda Bazar,
Dist.: Baloda Bazar-Bhatapara-493331

SAMPLING MONTH

OCTOBER-2023 to MARCH-2024

TYPES OF REPORT

HALF YEARLY MONTH AVERAGE REPORT

SAMPLE DETAILS

MONITORING FOR	AMBIENT AIR QUALITY MONITORING	CUSTOMER REF. NO. & DATE	2800956665/NE08 Date:10/06/2023
SAMPLING LOCATION	CORE ZONE MALDI MOPER LIMESTONE MINE WEIGHT BRIDGE		
DURATION OF SAMPLING	24 HOURS		
SAMPLING PROCEDURE	AS PER METHOD REFERENCE		
SAMPLE QUANTITY/PACKING	FILTER PAPER (PM ₁₀): 1X1 NO., FILTER PAPER (PM _{2.5}): 1X1 NO. SO ₂ : 30MLX1 NO. PVC BOTTLE, NO ₂ : 30MLX1 NO. PVC BOTTLE RUBBER BLADDER: 1X1 NO.		

Test Method and NAAQM Standard for Ambient Air Quality Monitoring

Parameter	Method Reference	NAAQM Standard
Particulate Matter size less than 10 microns (PM ₁₀)	IS 5182 (Part 23): 2006 & CPCB Guidelines Vol.-I	100
Particulate Matter size less than 2.5 microns (PM _{2.5})	IS 5182 (Part 24): 2019 CPCB Guidelines Vol.-I	60
Sulphur Dioxide (SO ₂)	IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines Vol.-I	80
Nitrogen Dioxide (NO ₂)	IS 5182 (Part 6): 2006 & CPCB Guidelines Vol.-I	80
Carbon Monoxide (CO)*	IS 5182(Part 10):1999, RA 2003	4.0

Sampling Location	Date of Sampling	PM ₁₀ µg/m ³	PM _{2.5} µg/m ³	SO ₂ µg/m ³	NO ₂ µg/m ³	CO* mg/m ³
MALDI MOPER LIMESTONE MINE WEIGHT BRIDGE	OCT-2023	59.23	16.53	16.68	16.90	0.65
	NOV-2023	62.82	17.91	18.31	18.56	0.78
	DEC-2023	73.01	24.98	22.71	21.42	0.75
	JAN-2024	75.90	25.02	23.42	23.31	0.77
	FEB-2024	77.0	24.83	23.28	22.95	0.74
	MAR-2024	74.90	21.87	22.06	20.66	0.73

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-----End of the test report-----

HDD-272, PHASE III- NEAR JP CHOWK,
RING ROAD NO - 2, KABIR NAGAR, RAIPUR, C.G. -492099
PH - 0771 - 4027777 | email - ultimatenviro@gmail.com

Name & Address of The Customer TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist.: Baloda Bazar-Bhatapara-493331		MONTH OF SAMPLING OCTOBER-2023 TO MARCH-2024
		TYPES OF REPORT HALF YEARLY MONTHLY AVERAGE REPORT
SAMPLE DETAILS		
SAMPLE TYPE	SURFACE WATER	ORDER /REFERENCE: 2800956665/NE08, Date 10/06/2023
CUSTOMER SAMPLE ID	RAWAN MINES GROUND WATER BORE WELL	MALDI MOPAR GROUND WATER BORE WELL
PACKING OF SAMPLE	3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE	SEALED
SAMPLING PROCEDURE	IS: 3025 (PART 1): 1987 RA 2003; APHA 22ND ED. 2012, 1060-B, 1-39	SAMPLE COLLECTED BY CHEMIST
	QUANTITY RECEIVED	5 LTR

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT	
				Acceptable Limit	Permissible Limit	RAWAN MINES GW BORE WELL	MALDI MOPAR GW BORE WELL
1	Colour	Bazen	IS:3025:(Part-4)	5	15	1	1
2	Odour	-	IS:3025:(Part-5)	Agreeable	Agree	Agree	Agree
3	Taste	-	IS:3025:(Part-8)	Agreeable	Agree	Agree	Agree
4	pH	-	APHA 23 rd Ed.2017,4500-H ⁺ -B, 4-92	6.5-8.5	No Relax	7.71	7.48
5	Turbidity	NTU	APHA 23 rd Ed.2017,2130-B,2-13	1	5	0.70	0.74
6	Electrical Conductivity	µS/cm	IS 3025(part-14):1984, RA 2013	-	-	475.6	387.8
7	Total Dissolved Solids	mg/Lit	IS 3025(part-16):1984, RA 2006	500	2000	284	232
8	Alkalinity Total (as CaCO ₃)	mg/Lit	IS 3025(part-23):1986, RA 2003	200	600	102	126.0
9	Total Hardness (as CaCO ₃)	mg/Lit	APHA 23 rd Ed.2017,2340-C, 2-44,45	200	600	164	148.0
10	Calcium (as Ca)	mg/Lit	APHA 23 rd Ed.2017,3500-Ca-B, 3-67	75	200	43.29	44.09
11	Magnesium (as Mg)	mg/Lit	APHA 23 rd Ed.2017,3500-Mg-B, 3-84	30	100	13.64	9.23
12	Chloride (as Cl)	mg/Lit	APHA 23 rd Ed.2017,4500-Cl-B, 4-72	250	1000	32.9	28.9
13	Sulphate (as SO ₄)	mg/Lit	APHA 23 rd Ed.2017,4500-SO ₄ -E, 4-190	200	400	24.75	32.02
14	Nitrate (as NO ₃)	mg/Lit	APHA 23 rd Ed.2017,4500-NO ₃ -B, 4-122	45	No Relax	4.32	6.9
15	Boron (as B)	mg/Lit	APHA 23 rd Ed.2017,4500-B-B, 4-25	0.5	1.0	BDL	BDL
16	Iron (as Fe)	mg/Lit	APHA 23 rd Ed.2017,3111-B,3-18	0.3	No Relax	0.03	0.01
17	Fluoride (as F)	mg/Lit	APHA 23 rd Ed.2017,4500-F-B & D, 4-84 & 87	1	1.5	0.01	0.02
18	Manganese (as Mn)	mg/Lit	APHA 23 rd Ed.2017,3111-B, 3-18	0.1	0.3	BDL	BDL
19	Lead (as Pb)	mg/Lit	APHA 23 rd Ed.2017,3111-B, 3-18	0.01	No Relax	BDL	BDL
20	Zinc (as Zn)	mg/Lit	APHA 23 rd Ed.2017,3111	5	15	BDL	BDL
21	Copper (as Cu)	mg/Lit	APHA 23 rd Ed.2017,3111-	0.05	1.5	BDL	BDL



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Format No.: UES/FORM/09

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT	
				Acceptable Limit	Permissible limit		
						RAWAN MINES GW BORE WELL	MALDI MOPAR GW BORE WELL
			B, 3-18				
22	Cadmium (as Cd)	mg/Lit	APHA 23 rd Ed.2017,3500-Cd, 3-105	0.003	No Relax	BDL	BDL
23	Mercury (as Hg)	mg/Lit	APHA 23 rd Ed.2017,3112-B, 3-23	0.001	No Relax	BDL	BDL
24	Arsenic (as as)	mg/Lit	APHA 23 rd Ed.2017,3114-C, 3-38	0.01	0.05	BDL	BDL
25	Aluminum (as Al)	mg/Lit	IS:3025:(Part-2)	0.01	No Relax	BDL	BDL
26	Total Chromium (as Cr)	mg/Lit	IS:3025:(Part-2)	0.05	No Relax	BDL	BDL

Microbiological Analysis

1	Total Coliform	MPN/100 ML	IS: 1622:1981:RA:2019	Shall not be detectable in any 100 ml sample	Absent	Absent
2	E. Coli	MPN/100ml	IS: 1622:1981:RA:2019	Shall not be detectable in any 100ml sample	Absent	Absent

Note: mg/lit.: milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

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AUTHORIZED SIGNATORY

-----End of the test report-----

HDD-272, PHASE II - NEAR JP CHOWK,

RING ROAD NO - 2, KANUN NAGAR, RAIPUR, C.G. - 492099

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Name & Address of The Customer TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist.: Baloda Bazar-Bhatapara-493331		MONTH OF SAMPLING OCTOBER-2023 to MARCH-2024
		TYPES OF REPORT HALF YEARLY MONTHLY AVERAGE REPORT
SAMPLE DETAILS		
SAMPLE TYPE	RO DRINKING WATER	ORDER /REFERENCE: 2800956665/WK08, Date 10/06/2023
CUSTOMER SAMPLE ID	RAWAN MINES RO DRINKING WATER	MALDI MOPAR RO DRINKING WATER
PACKING OF SAMPLE	3 L X 1 NO. PVC CAN 3 L X 1 NO. PVC CAN 3 L X 1 NO. GLASS BOTTLE	SEALING SAMPLE COLLECTED BY CHEMIST
SAMPLING PROCEDURE	IS: 3025 (PART I): 1987 RA 2003; APHA 22ND ED. 2012, 1060-B, 1-39	QUANTITY RECEIVED 5 LTR

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT	
				Acceptable Limit	Permissible limit		
						RAWAN MINES RO DRINKING WATER	MALDI MOPAR RO DRINKING WATER
1	Colour	Hazen	IS:3025:(Part-4)	5	15	1	1
2	Odour	-	IS:3025:(Part-5)	Agreeable	Agree	Agree	Agree
3	Taste	-	IS:3025:(Part-8)	Agreeable	Agree	Agree	Agree
4	pH	-	APHA 23 rd Ed.2017,4500-H ⁺ -B, 4-92	6.5-8.5	No Relax	7.61	7.56
5	Turbidity	NTU	APHA 23 rd Ed.2017,2130-B,2-13	1	5	0.48	0.56
6	Electrical Conductivity	µS/cm	IS 3025(part-14):1984, RA 2013	-	-	288.9	302.5
7	Total Dissolved Solids	mg/Lit	IS 3025(part-16):1984, RA 2006	500	2000	172	179.4
8	Alkalinity Total (as CaCO ₃)	mg/Lit	IS 3025(part-23):1986, RA 2003	200	600	84.0	62.0
9	Total Hardness (as CaCO ₃)	mg/Lit	APHA 23 rd Ed.2017,2340-C, 2-44,45	200	600	154	126
10	Calcium (as Ca)	mg/Lit	APHA 23 rd Ed.2017,3500-Ca-B, 3-67	75	200	42.48	18.95
11	Magnesium (as Mg)	mg/Lit	APHA 23 rd Ed.2017,3500-Mg-B, 3-84	30	100	11.66	11.66
12	Chloride (as Cl)	mg/Lit	APHA 23 rd Ed.2017,4500-Cl-B, 4-72	250	1000	9.9	8.9
13	Sulphate (as SO ₄)	mg/Lit	APHA 23 rd Ed.2017,4500-SO ₄ -E, 4-190	200	400	5.6	4.56
14	Nitrate (as NO ₃)	mg/Lit	APHA 23 rd Ed.2017,4500-NO ₃ -B, 4-122	45	No Relax	1.12	1.21
15	Boron (as B)	mg/Lit	APHA 23 rd Ed.2017,4500-B-B, 4-25	0.5	1.0	BDL	BDL
16	Iron (as Fe)	mg/Lit	APHA 23 rd Ed.2017,3111-B,3-18	0.3	No Relax	BDL	BDL
17	Fluoride (as F)	mg/Lit	APHA 23 rd Ed.2017,4500-F-B & D, 4-84 & 87	1	1.5	BDL	BDL
18	Manganese (as Mn)	mg/Lit	APHA 23 rd Ed.2017,3111-B, 3-18	0.1	0.3	BDL	BDL
19	Lead (as Pb)	mg/Lit	APHA 23 rd Ed.2017,3111-B, 3-18	0.01	No Relax	BDL	BDL



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Formal No. - UES/FORM/09

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT	
				Acceptable Limit	Permissible limit		
						RAWAN MINES RO DRINKING WATER	MALDI MOPAR RO DRINKING WATER
20	Zinc (as Zn)	mg/Lit	APHA 23 rd Ed.2017,3111-B, 3-18	5	15	BDL	BDL
21	Copper (as Cu)	mg/Lit	APHA 23 rd Ed.2017,3111-B, 3-18	0.05	1.5	BDL	BDL
22	Cadmium (as Cd)	mg/Lit	APHA 23 rd Ed.2017,3500-Cd, 3-105	0.003	No Relax	BDL	BDL
23	Mercury (as Hg)	mg/Lit	APHA 23 rd Ed.2017,3112-B, 3-23	0.001	No Relax	BDL	BDL
24	Arsenic (as as)	mg/Lit	APHA 23 rd Ed.2017,3114-C, 3-38	0.01	0.05	BDL	BDL
25	Aluminum (as Al)	mg/Lit	IS:3025:(Part-2)	0.01	No Relax	BDL	BDL
26	Total Chromium (as Cr)	mg/Lit	IS:3025:(Part-2)	0.05	No Relax	BDL	BDL
Microbiological Analysis							
1	Total Coliform	MPN/100 ML	IS: 1622:1981:RA:2019	Shall not be detectable in any 100 ml sample		Absent	Absent
2	E. Coli	MPN/100ml	IS: 1622:1981:RA:2019	Shall not be detectable in any 100ml sample		Absent	Absent

Note: mg/lit.: milligram per liter, N.D.: Not Detected.

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AUTHORIZED SIGNATORY

-----End of the test report-----



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HOD-272, PHASE III- NEAR JP CHOWK,

RING ROAD NO - 2, KAHIR NAGAR, RAIPUR, C.G. -492099

PH - 0771 - 4027777 :email - ultimatenviro@gmail.com

Name & Address Of The Customer TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist: Baloda Bazar-Bhatapara-493331		MONTH OF SAMPLING OCTOBER-2023 to MARCH-2024
		TYPES OF REPORT HALF YEARLY MONTHLY AVERAGE REPORT
SAMPLE DETAILS		
Monitoring For	Work Place Air Monitoring (MINES)	
Customer Ref. No. & Date	2800956665/NE08, Date:10/06/2023	
Duration Of Sampling	8 Hours	
Sample Collected By	Laboratory Chemist	
Sampling Procedure	As Per Method Reference	
Sample Quantity/Packing	GMF Filter Paper (8 X 10 Inch): 1x1 No.	

TEST REPORT

Parameter	Unit	Result (SPM)	The Environment (Protection) Rules, 1986 Standard	Method Reference
Rawan Mines South Block Field Office	$\mu\text{g}/\text{m}^3$	1598	2000	EPA Method Io - 2.1
Rawan Mines North Block Field Office	$\mu\text{g}/\text{m}^3$	1567		
Rawan Mines South Block Haulage Road	$\mu\text{g}/\text{m}^3$	1670		
Rawan Mines North Block Haulage Road	$\mu\text{g}/\text{m}^3$	1681		
Maldi Mines Workshop Area	$\mu\text{g}/\text{m}^3$	1561		
Maldi Mines Haulage Road	$\mu\text{g}/\text{m}^3$	1601		

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-----End of the test report-----



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RING ROAD NO - 2, KABIR NAGAR, RAIPUR, C.G. - 492099
PH - 0771 - 4027777 : email - ultimatenviro@gmail.com

Name & Address of The Customer

TO,
AMBUJA CEMENT LIMITED
(UNIT: BHATAPARA)
P.O. Rawan, Tehsil: Baloda Bazar,
Dist: Baloda Bazar-Bhatapara-
493331

MONTH OF SAMPLING

OCTOBER-2023 to MARCH-2024

TYPES OF REPORT

HALF YEARLY MONTHLY AVERAGE REPORT

SAMPLE DETAILS

MONITORING FOR	NOISE LEVEL MONITORING
CUSTOMER REF. NO. & DATE	2800956665/NE08, Date 10/06/2023
SAMPLING LOCATION	MINES (CORE ZONE)
SAMPLE COLLECTED BY	LABORATORY CHEMIST
SAMPLING PROCEDURE	IS 9989:1981:RA 2001

TEST REPORT

LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY TIME	NIGHT TIME	DAY TIME	NIGHT TIME
Industrial Area				75	70
MALDI MINES OFFICE	dB(A)	67.2	59.8		
RAWAN MINES NORTH BLOCK FIELD OFFICE	dB(A)	69.0	59.3		
RAWAN MINES SOUTH BLOCK FIELD OFFICE	dB(A)	70.8	52.9		
MALDI MINES CRUSHER AREA	dB(A)	71.0	62.7		

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RING ROAD NO - 2, KAMBI NAGAR, RAIPUR, C.G. -492099
PH - 0771 - 4027777 | email - ultimatenviron@gmail.com

Name & Address Of The Customer		DATE OF SAMPLING	OCTOBER-2023 to MARCH-2024
TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist: Baloda Bazar-Bhatapara-493331		TYPES OF REPORT	HALF YEARLY MONTHLY AVERAGE REPORT
SAMPLE DETAILS			
MONITORING FOR	SOIL	CUSTOMER REF. NO. & DATE	2800956665/NE08, Date 10/06/2023
SAMPLING LOCATION	1. RAWAN MINES 2. MALDI MINES		
SAMPLE COLLECTED BY	LABORATORY CHEMIST		
SAMPLING PROCEDURE	MANUAL ON SOIL, PLANT & WATER ANALYSIS		
SAMPLE QUANTITY/PACKING	3.0 KG (APPROX)		

TEST REPORT					
Sr. No	Parameter	Unit	Method Reference	Rawan Mines	Maldi Mines
A. PHYSICAL PROPERTIES					
1	Gravel	%	AGRICULTURE SOIL MANUAL	7.32	11.15
2	Moisture	%	AGRICULTURE SOIL MANUAL	19.23	18.20
3	Texture	-	AGRICULTURE SOIL MANUAL	CLAY LOAM	CLAY LOAM
4	Bulk density	g/cm ³	AGRICULTURE SOIL MANUAL	1.3	1.3
PARTICLE SIZE DISTRIBUTION					
5	Sand	%	AGRICULTURE SOIL MANUAL	42.4	45.2
	Silt	%	AGRICULTURE SOIL MANUAL	27.3	26.0
	Clay	%	AGRICULTURE SOIL MANUAL	20.3	30.2
6	Permeability	cm/sec	AGRICULTURE SOIL MANUAL	10 ⁻⁷	10 ⁻⁴
7	Water Holding Capacity	%	AGRICULTURE SOIL MANUAL	17.02	18.10
B. CHEMICAL PROPERTIES					
8	pH (1:2.5 Aq. Extract) At 25°C	-	IS: 2720: (PART-26):1987 RA 2011	7.20	7.26
9	Electrical Conductivity (1:2.5 Aq. Extract)	µs/cm	IS: 14767:2000 RA 2016	240	241
10	Total Organic matter	%	AGRICULTURE SOIL MANUAL	4.19	4.10
11	Total Organic Carbon	%	AGRICULTURE SOIL MANUAL	1.42	1.45
12	Available Nitrogen (as N)	Kg/hect	AGRICULTURE SOIL MANUAL	281	280
13	Available Phosphorous (as P)	Kg/hect	AGRICULTURE SOIL MANUAL	18.0	17.3
14	Available Potassium (as K)	Kg/hect	AGRICULTURE SOIL MANUAL	145.0	144.5
15	Water soluble Sulphate (as SO ₄ ²⁻)	mg/Kg	AGRICULTURE SOIL MANUAL	109.2	110.5
16	Available Boron (B)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL
17	Available Iron (Fe)	mg/Kg	AGRICULTURE SOIL MANUAL	0.36	0.37

TEST REPORT

Sr. No	Parameter	Unit	Method Reference	Rawan Mines	Maldi Mines
18	Available Copper (Cu)	mg/Kg	AGRICULTURE SOIL MANUAL	0.33	0.20
19	Available Zinc (Zn)	mg/Kg	AGRICULTURE SOIL MANUAL	0.30	0.36
20	Available Manganese (Mn)	mg/Kg	AGRICULTURE SOIL MANUAL	0.24	0.25
21	Total Chromium (Cr)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL
22	Molybdenum (Mo)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL
23	Total Lead (Pb)	mg/Kg	AGRICULTURE SOIL MANUAL	1.45	1.48
24	Total Cadmium (Cd)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL
25	Total Selenium (Se)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL
26	Total Nickel (Ni)	mg/Kg	AGRICULTURE SOIL MANUAL	BDL	BDL

N.D.: NOT DETECTED

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PH - 0771 - 4027777 email - ultimatenviro@gmail.com

Form No.: UEL/FORM/08

Name & Address Of The Customer		MONTH OF SAMPLING	OCTOBER-2023 to MARCH-2024
TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist: Baloda Bazar-Bhatapara-493331		TYPES OF REPORT	HALF YEARLY REPORT
SAMPLE DETAILS			
MONITORING FOR	STACK EMISSION MONITORING		
CUSTOMER REF. NO. & DATE	2800956665/NE08, Date 10/06/2023		
SAMPLE COLLECTED BY	LABORATORY CHEMIST		
SAMPLING PROCEDURE	IS 11255 PART 1,2:1985 REAFFIRMED 2009; PART 3:2008		
SAMPLE QUANTITY/PACKING	THIMBLE: 1 X 1 NO.,		

TEST REPORT

RAWAN MINES CRUSHER LINE 01			RAWAN MINES CRUSHER LINE 02			MALDI MOPAR MINES CRUSHER		
MONTH	UNIT	RESULT	MONTH	UNIT	RESULT	MONTH	UNIT	RESULT
OCTOBER	mg/Nm ³	15.18	OCTOBER	mg/Nm ³	13.29	OCTOBER	mg/Nm ³	18.19
NOVEMBER	mg/Nm ³	16.17	NOVEMBER	mg/Nm ³	15.23	NOVEMBER	mg/Nm ³	18.77
DECEMBER	mg/Nm ³	17.18	DECEMBER	mg/Nm ³	16.12	DECEMBER	mg/Nm ³	19.12
JANUARY	mg/Nm ³	17.22	JANUARY	mg/Nm ³	17.08	JANUARY	mg/Nm ³	18.01
FEBRUARY	mg/Nm ³	17.59	FEBRUARY	mg/Nm ³	17.93	FEBRUARY	mg/Nm ³	19.10
MARCH	mg/Nm ³	18.01	MARCH	mg/Nm ³	18.12	MARCH	mg/Nm ³	19.70

REMARKS: Results Are As Above

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Format No.: UES/FORM/08

Name & Address Of The Customer		MONTH OF SAMPLING	OCTOBER-2023 to MARCH-2024
TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist: Baloda Bazar-Bhatapara-493331		TYPES OF REPORT	HALF YEARLY MONTHLY REPORT
SAMPLE DETAILS			
MONITORING FOR	STACK EMISSION MONITORING		
CUSTOMER REF. NO. & DATE	2800956665/NE08, Date 10/06/2023		
SAMPLE COLLECTED BY	LABORATORY CHEMIST		
SAMPLING PROCEDURE	IS 11255 PART 1,2:1985 REAFFIRMED 2009; PART 3:2008		
SAMPLE QUANTITY/PACKING	THIMBLE: 1 X 1 NO.,		

TEST REPORT

RAWAN MINES CRUSHER LINE 01			RAWAN MINES CRUSHER LINE 02			MALDI MOPAR MINES CRUSHER		
MONTH	UNIT	RESULT	MONTH	UNIT	RESULT	MONTH	UNIT	RESULT
OCTOBER	mg/Nm ³	15.18	OCTOBER	mg/Nm ³	13.29	OCTOBER	mg/Nm ³	18.19
NOVEMBER	mg/Nm ³	16.17	NOVEMBER	mg/Nm ³	15.23	NOVEMBER	mg/Nm ³	18.77
DECEMBER	mg/Nm ³	17.18	DECEMBER	mg/Nm ³	16.12	DECEMBER	mg/Nm ³	19.12
JANUARY	mg/Nm ³	17.12	JANUARY	mg/Nm ³	17.08	JANUARY	mg/Nm ³	18.01
FEBRUARY	mg/Nm ³	17.59	FEBRUARY	mg/Nm ³	17.93	FEBRUARY	mg/Nm ³	19.10
MARCH	mg/Nm ³	18.01	MARCH	mg/Nm ³	18.12	MARCH	mg/Nm ³	19.70

REMARKS: Results Are As Above

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ENVIRONMENTAL SOLUTIONS

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PH - 0771 - 4027777 : email - ultimatenviro@gmail.com

Format No.- UES/FORM/09

Name & Address of The Customer		MONTH OF SAMPLING	OCTOBER-2023 to MARCH-2024
TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist.: Baloda Bazar-Bhatapara-493331		TYPES OF REPORT	HALF YEARLY MONTHLY AVERAGE REPORT
SAMPLE DETAILS			
SAMPLE TYPE	SURFACE WATER	ORDER /REFERENCE:	2800956665/ME08, Date 10/06/2023
CUSTOMER SAMPLE ID	RAWAN MINES SOUTH BLOCK PIT	RAWAN MINES NORTH BLOCK PIT	MALDI HOPAR MINES PIT
PACKING OF SAMPLE	3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE	SAMPLE COLLECTED BY	CHEMIST
SAMPLING PROCEDURE	IS: 3025 (PART 1): 1987 RA 2003; APHA 22ND ED. 2012, 1060-B, 1-39	QUANTITY RECEIVED	5 LTR

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT		
				Acceptable Limit	Permissible limit	RAWAN MINES S/BLOCK	RAWAN MINES N/BLOCK	MALDI MINES
1	Colour	Hazen	IS:3025:(Part-4)	5	15	1	1	
2	Odour	-	IS:3025:(Part-5)	Agreeable	Agree	Agree	Agree	Agree
3	Taste	-	IS:3025:(Part-8)	Agreeable	Agree	Agree	Agree	Agree
4	pH	-	APHA 23 rd Ed.2017,4500-H ⁺ -B, 4-92	6.5-8.5	No Relax	7.28	7.29	7.27
5	Turbidity	NTU	APHA 23 rd Ed.2017,2130-B,2-13	1	5	2.1	1.75	1.4
6	Electrical Conductivity	µS/cm	IS 3025(part-14):1984, RA 2013	-	-	269.5	271.3	319.2
7	Chemical Oxygen Demand	mg/Lit	IS:3025:(Part-58):2006, RA 2012	-	-	22.11	28.01	27.05
8	Bio-chemical Oxygen Demand at 27°C for three days	mg/Lit	IS:3025:(Part-44):1993 RA 2014	-	-	6.06	5.61	6.03
9	Total Dissolved Solids	mg/Lit	IS 3025(part-16):1984, RA 2006	500	2000	173.1	169.0	178.0
10	Alkalinity Total (as CaCO ₃)	mg/Lit	IS 3025(part-23):1986, RA 2003	200	600	110.2	109.0	111.3
11	Total Hardness (as CaCO ₃)	mg/Lit	APHA 23 rd Ed.2017,2340-C, 2-44,45	200	600	114.1	111.0	124.0
12	Calcium (as Ca)	mg/Lit	APHA 23 rd Ed.2017,3500-Ca-B, 3-67	75	200	24.09	29.02	25.10
13	Magnesium (as Mg)	mg/Lit	APHA 23 rd Ed.2017,3500-Mg-B, 3-84	30	100	7.13	10.01	11.23
14	Chloride (as Cl)	mg/Lit	APHA 23 rd Ed.2017,4500-Cl-B, 4-72	250	1000	17.2	23.03	16.6
15	Sulphate (as SO ₄)	mg/Lit	APHA 23 rd Ed.2017,4500-SO ₄ -E, 4-190	200	400	16.13	15.61	21.7
16	Nitrate (as NO ₃)	mg/Lit	APHA 23 rd Ed.2017,4500-NO ₃ -B, 4-122	45	No Relax	5.02	6.02	6.26
17	Boron (as B)	mg/Lit	APHA 23 rd Ed.2017,4500-B-B, 4-25	0.5	1.0	BDL	BDL	BDL
18	Iron (as Fe)	mg/Lit	APHA 23 rd Ed.2017,3111-B,3-18	0.3	No Relax	0.27	0.13	0.02
19	Fluoride (as F)	mg/Lit	APHA 23 rd Ed.2017,4500-F-B & D, 4-84 & 87	1	1.5	0.06	0.03	0.06



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Format No.: UES/FORM/09

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT		
				Acceptable Limit	Permissible limit	RAWAN MINES S/BLOCK	RAWAN MINES N/BLOCK	NALDI MINES
20	Manganese (as Mn)	mg/Lit	APHA 23 rd Ed.2017,3111-B, 3-18	0.1	0.3	BDL	BDL	BDL
21	Lead (as Pb)	mg/Lit	APHA 23 rd Ed.2017,3111-B, 3-18	0.01	No Relax	BDL	BDL	BDL
22	Zinc (as Zn)	mg/Lit	APHA 23 rd Ed.2017,3111-B, 3-18	5	15	BDL	0.8	BDL
23	Copper (as Cu)	mg/Lit	APHA 23 rd Ed.2017,3111-B, 3-18	0.05	1.5	BDL	BDL	BDL
24	Cadmium (as Cd)	mg/Lit	APHA 23 rd Ed.2017,3500-Cd, 3-105	0.003	No Relax	BDL	BDL	BDL
25	Mercury (as Hg)	mg/Lit	APHA 23 rd Ed.2017,3112-B, 3-23	0.001	No Relax	BDL	BDL	BDL
26	Arsenic (as as)	mg/Lit	APHA 23 rd Ed.2017,3114-C, 3-38	0.01	0.05	BDL	BDL	BDL
27	Aluminum (as Al)	mg/Lit	IS:3025:(Part-2)	0.01	No Relax	BDL	BDL	BDL
28	Dissolved Oxygen	mg/Lit	IS:3025:(Part-38)	-	-	3.8	3.1	4.8
29	Total Chromium (as Cr)	mg/Lit	IS:3025:(Part-2)	0.05	No Relax	BDL	BDL	BDL
Microbiological Analysis								
1	Total Coliform	MPN/100 ML	IS: 1622:1981:RA:2019	Shall not be detectable in any 100 ml sample		39.6	61.0	53.0
2	E. Coli	MPN/100ml	IS: 1622:1981:RA:2019	Shall not be detectable in any 100ml sample		26.3	20.0	37.3

Note: mg/lit.: milligram per liter, N.D.: Not Detected.

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 PH - 0771-4027777 | email - ultimatenviro@gmail.com

Name & Address Of The Customer

TO,
AMBUJA CEMENT LIMITED
(UNIT: BHATAPARA)
P.O. Rawan, Tehsil: Baloda Bazar,
Dist: Baloda Bazar-Bhatapara-493331

 Month of Sampling **OCTOBER-2023 TO MARCH-2024**

 Types of report **HALF YEARLY MONTHLY AVERAGE REPORT**

SAMPLE DETAILS

Sample Type	Effluent Water	Customer Ref. No. & Date	2800956665/NE08 Date 10/06/2023
Customer Sample Id	Rawan Mines Stp Inlet /Outlet	Sample Condition At Receipt	OK
Packing Of Sample	Jerry Cans (2.5 ltr.*1) Glass bottle (300ml*1)	Sample Collected By	Laboratory Chemist
Other Details	Sealed	Quantity Received	Approx. 5.0 ltr.

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER TREATED WATER	ETP INLET (UNTREATED)	ETP OUTLET (TREATED)
1	pH Value at 25.2°C	-	IS:3025: (Part-11): 1983, RA 2012	5.5 To 9.0	7.59	7.43
2	Total Suspended Solid	mg/L	IS:3025: (Part-17): 1984, RA 2012	100	269.0	59.2
3	Total Dissolved Solids	mg/L	IS:3025: (Part-16)	-	279.0	257.0
4	Chemical Oxygen Demand	mg/L	IS:3025: (Part-58): 2006, RA 2012	250	149.0	44.0
5	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025: (Part-44): 1993, RA 2014	30	42.1	11.04
6	Oil & Grease	mg/L	IS:3025: (Part-39): 1986	10	Absent	Absent

Note: mg/ltr.: milligram per liter. N.D.: Not Detected.

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PH - 0771 - 4027777 : email - ultimatenviro@gmail.com

Name & Address Of The Customer

TO,
AMBUJA CEMENT LIMITED
(UNIT: BHATAPARA)
P.O. Rawan, Tehsil: Baloda Bazar,
Dist: Baloda Bazar-Bhatapara-493331

Month of Sampling OCTOBER-2023 TO MARCH-2024

Date of Analysis HALF YEARLY MONTHLY AVERAGE REPORT

SAMPLE DETAILS

Sample Type	Effluent Water	Customer Ref. No. & Date	2800956665/NE08 Date 10/06/2023
Customer Sample Id	Maldi Mines Etp Inlet /Outlet	Sample Condition At Receipt	OK
Packing Of Sample	Jerry Can (2.5 ltr.*1) Glass bottle (300ml*1)	Sample Collected By	Laboratory Chemist
Other Details	Sealed	Quantity Received	Approx. 5.0 ltr.

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER TREATED WATER	ETP INLET (UNTREATED)	ETP OUTLET (TREATED)
1	pH Value at 25.2°C	-	IS:3025:(Part-11): 1983, RA 2012	5.5 To 9.0	7.52	7.39
2	Total Suspended Solid	mg/L	IS:3025:(Part-17): 1984, RA 2012	100	138.0	53.0
3	Total Dissolved Solids	mg/L	IS:3025:(Part-16)	-	264.0	249.0
4	Chemical Oxygen Demand	mg/L	IS:3025:(Part-58):2006, RA 2012	250	163.0	45.1
5	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025:(Part44):1993, RA 2014	30	49.7	12.1
6	Oil & Grease	mg/L	IS:3025:(Part39):1986	10	Absent	Absent

Note:mg/lit.: milligram per liter. N.D.: Not Detected.

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Format No.: UES/FORM/09

Name & Address Of The Customer

TO,
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(UNIT: BHATAPARA)
P.O. Rawan, Tehsil: Baloda Bazar,
Dist: Baloda Bazar-Bhatapara-493331

Month of Sampling

OCTOBER-2023 To MARCH-2024

Types of report

HALF YEARLY MONTHLY AVERAGE REPORT

SAMPLE DETAILS

Sample Type	Waste Water	Customer Ref. No. & Date	2800956665/NE08 Date 10/06/2023
Customer Sample Id	Maldi Mines STP Inlet/Outlet	Sample Condition At Receipt	Ok
Packing Of Sample	Jerry Cane (2.5 ltr.*1) Glass bottle (300ml*1)	Sample Collected By	Laboratory Chemist
Other Details	Sealed	Quantity Received	Approx. 5.0 Ltr.

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	LIMITS AS PER TREATED WATER	STP INLET (UNTREATED)	STP OUTLET (TREATED)
1	pH Value at 25.2°C	-	IS:3025: (Part-11): 1983, RA 2012	5.5 To 9.0	7.52	7.45
2	Total Suspended Solid	mg/L	IS:3025: (Part-17): 1984, RA 2012	100	143.0	47.4
3	Total Dissolved Solids	mg/L	IS:3025: (Part-16)	-	358.0	341.0
4	Chemical Oxygen Demand	mg/L	IS:3025: (Part-58): 2006, RA 2012	250	142.0	41.0
5	Bio-chemical Oxygen Demand at 27°C for three day	mg/L	IS:3025: (Part-44): 1993, RA 2014	30	46.2	11.3
6	Oil & Grease	mg/L	IS:3025: (Part-39): 1986	10	Absent	Absent

Note:mg/lit.: milligram per liter. N.D.: Not Detected.

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Mines Monitoring Typical View Photograph



Annexure 7

Typical View of Ground Water Structure



Ground Water Structure 01



Ground Water Structure 02



Ground Water Structure 03

Annexure 7a

Typical View of Digital Piezo Level Monitoring



Typical View of Constructed Rain Water Harvested Pit



Annexure 8

Typical View of Pipeline Conveyer Belt from Mine to Plant Project Site



LANDUSE LANDCOVER CHANGE DETECTION (2018-19) - (2021-2022)

Based on Geospatial Technology

for
THE MALDI-MOPAR LIMESTONE MINING PROJECT

Maldi, Mopar, Devarani,
Karmandih and Boirdih Villages,
Baloda Bazar-Bhatapara District, Chhattisgarh
Project Area =553.65 Ha

Project Proponent
M/s. Ambuja Cements
Limited .

P.O.-Rawan, Tehsil- Baloda Bazar,
Distt. Baloda Bazar- Bhatapara,
Pincode :493331



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April 2022



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CHAPTER -1: INTRODUCTION

1.1 The Project & Project Proponent:


Ambuja Cements Ltd is India's foremost cement company known for its hassle-free, home-building solutions. Unique products tailor-made for Indian climatic conditions, sustainable operations and initiatives that advance the company's philosophy of contributing to the larger good of the society, have made it the most trusted cement brand in India.

Ambuja Cements Ltd., a member of Holcim - global leader in innovative and sustainable building solutions, is among the leading cement companies in India. Ambuja Cement has provided hassle-free, home-building solutions with its unique sustainable development projects and environment-friendly practices since it started operations. Currently, Ambuja Cement has a cement capacity of 31 million tonnes with ~~six~~—integrated cement manufacturing Plant at Six Locations and eight cement grinding units across the country.

The company has many firsts to its credit – a captive port with four terminals that has facilitated timely, cost-effective, cleaner shipments of bulk cement to its customers. To further add value to our customers, the company has launched innovative products like Ambuja Roof Special, Ambuja Cool Walls, Ambuja Kawach and Ambuja Cement Compocem. The new products not only fulfil important customer needs but also help in significantly reducing carbon footprints.

Ambuja Cement is the industry leader in responsible use of resources, both natural and man-made. The company has been certified over eight times water positive, a feat achieved through conservation efforts and increasing water efficiency in its plants. It is also plastic negative, by burning as much as over 75,000 tonnes of plastic waste in its kilns, equivalent to 2.5 times of total plastic used. The company also generated 7.1% of its power needs from renewable resources.

Sustainable profitable growth is ingrained in the company's DNA. Ambuja Cement's multi-pronged strategy, including triple bottom line accounting method; True Value; good corporate governance practices; overarching corporate environment policy; and sustainable

Landuse/Landcover and Change Detection for Maldi-Mopar Limestone Mining Project Project Proponent : M/s. Ambuja Cement Ltd. Project Area = 553.65 Ha	
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supply chain policy have helped cement the company's credentials as a sustainable manufacturer. Ambuja Cement's Sustainable Development Ambition 2030 provides strategic direction to the company's long-term sustainability vision. All Ambuja Cement Plants are ISO 14001 certified.

Ambuja Knowledge Centres (AKCs), a unique initiative by the company, serves as a knowledge sharing platform for construction professionals that includes practical workshops on mix design and quality supervision. Currently, over 30 AKCs are functional across India.

The company also works closely with communities that live around its plants, through its CSR arm, the Ambuja Cement Foundation (ACF). ACF implements need-based and participatory programmes in the thematic areas of water resource development, health and sanitation, women empowerment, rural infrastructure, education and agro-based/skill-based livelihood creation.

The company's most distinctive attribute is its approach to business. Ambuja Cement follows a unique home-grown philosophy **I CAN** that gives people the authority to set their own targets and the freedom to achieve their goals. Its focus has been consistent on two major building blocks that has resonated through its daily operations – Quality (of products) and Safety (of all those involved in the creation of its products).

The company's quintessential **I CAN** spirit has ensured a product that embodies Giant Strength.

1.2 Brief details of Ambuja Cement Plant (ACL):



The Thermal Power Plant at Village Rawan, District Baloda Bazar-Bhatapara has been designed to operate on more clean Circulating Fluidized Bed Combustion (CFBC) technology for generating electrical power. This plant is pioneer in adopting this technology with such large capacity in India during the year of commissioning.

The Boilers are limestone fired and based on Environment friendly Circulating Fluidized Bed Combustion (CFBC) Technology, supplied by BHEL in technical collaboration with erstwhile LLB, Germany.



1.3 Abstract:

Change analysis acquires effective information in the form of maps and statistical data which becomes the central component in spatial planning, monitoring environmental changes, management and utilization of land. The present study focuses on the change detection for the mining area and the surrounding 10 Sq.km buffer around the ML area of Maldi Mopar Limestone mine. Here attempt is made to assess the changes in land use land cover using IRS-R2A satellite data with a gap of 3 Year timeline (2019-2021).


The earlier report generated with the help of satellite data of year 2019 was the baseline and now using the Indian Remote Sensing Satellite Imageries for the year 2021 the change detection exercise is executed. These maps are interpreted from digital False Colour Composites (FCC's) of IRS R2A satellite using GIS platform.

To assess the land use land cover (LULC) change in relation to limestone mining in Maldi-Mopar Limestone ML area, two time-series Landsat satellite images were compared using Remote Sensing (RS) and Geographical Information System (GIS). The satellite images were classified into 15 LULC classes namely; Active Mine, Ash Pond, Builtup, Canal, Cropland, Drainage, Fallow, Forest, Lignite Deposit, LWOS, Mine Area, Plantation, Ravine, Solar Plant, Water.

1.4 Objectives:

The core objectives for execution of the activity of the LULC change analysis at Maldi-Mopar Limestone buffer area are:

- 1) Has the environment around the ML area changed significantly in the period under consideration?
- 2) Does any change in the major Land Use / Land Cover types like Forest Cover, Agricultural Land, Water Bodies and Open Spaces noted any visible changes through the Geospatial technology-based Satellite Imagery?

<p>Landuse/Landcover and Change Detection for Maldi-Mopar Limestone Mining Project Project Proponent : M/s. Ambuja Cement Ltd. Project Area = 553.65 Ha</p>	
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1.5 Study Area (Project Appraisal) :

The Maldi-Mopar Limestone Mine is located in Baloda Bazar taluka of Balodabazar-Bhatpara district. The area falls between 82° 02' 10" to 82° 04' 30" Longitude(E) and 21° 38' 04" to 21° 39' 47" N" Latitude(N) covered by Survey of India toposheet no. 64/K/2 on 1:50,000 scale (Fig 2.2).

Location: The proposed Maldi-Mopar limestone mining project area falls under Maldi, Mopar, Devarani, Karmandih and Boirdih villages in Baloda Bazar/Bhatapara Tehsils of Balodabazar-Bhatapara district in Chhattisgarh state. The general location map of the proposed mining project is depicted in **Figure 1.1**.

The ML area is located at a distance of 1.5-Km, SW of ACL's Bhatapara Unit. The key map depicting project setting with respect to the Bhatapara Cement Plant and captive Rawan limestone mines of ACL are depicted in **Figure 1.2**.

The mining lease area is well connected by road and rail networks. An all-weather road connecting Baloda Bazar and Bhatapara runs at a distance of 2.5-Km, NE for the mining project site. Bhatapara Railway station, on the Mumbai-Howrah broad gauge main line of the Southeastern Railway (SER) runs at a distance of 21 Km, NW from the project site.

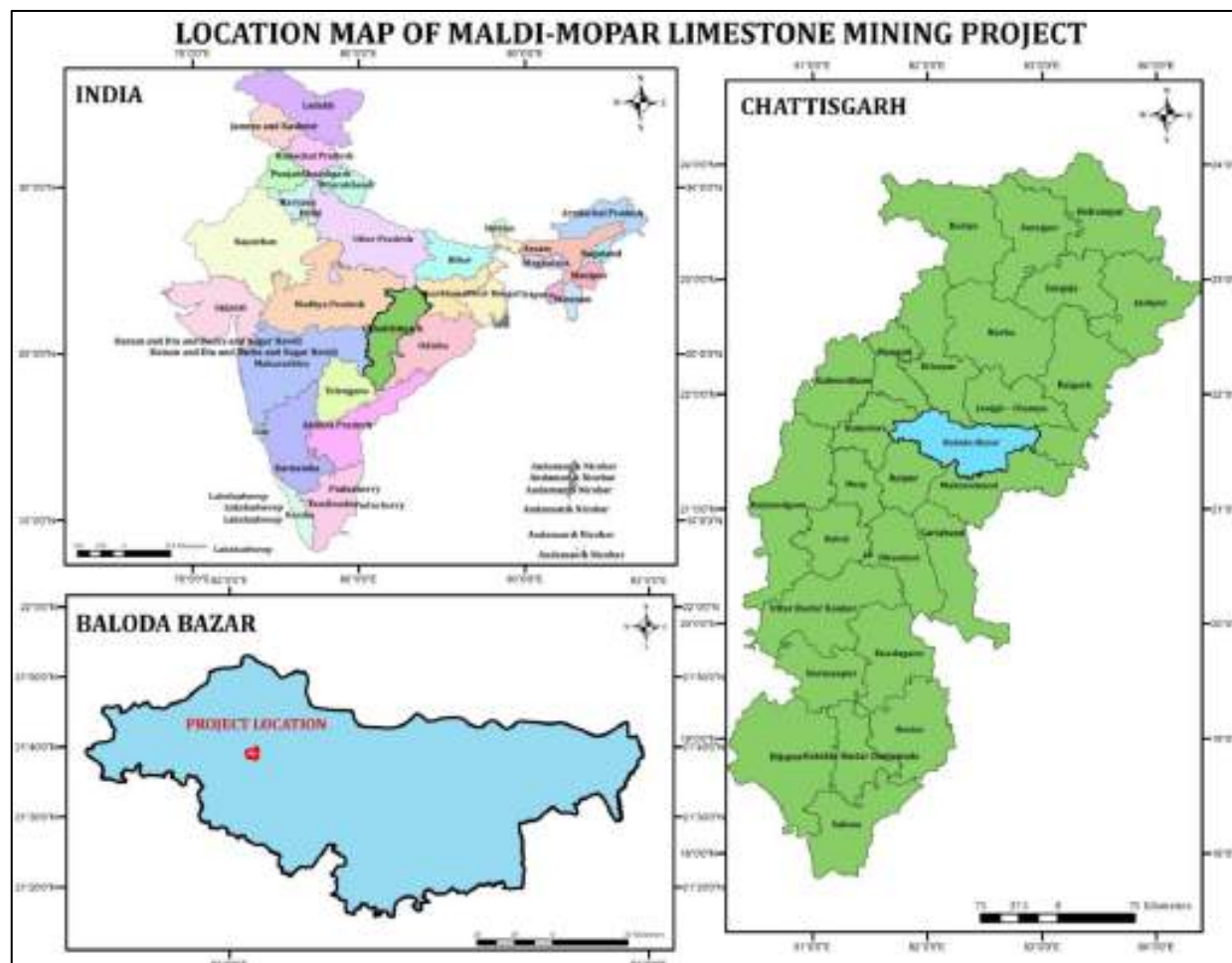


Figure 1.1: Location Map

Landuse/Landcover and Change Detection for Maldi-Mopar Limestone Mining Project
 Project Proponent : M/s. Ambuja Cement Ltd.
 Project Area = 553.65 Ha

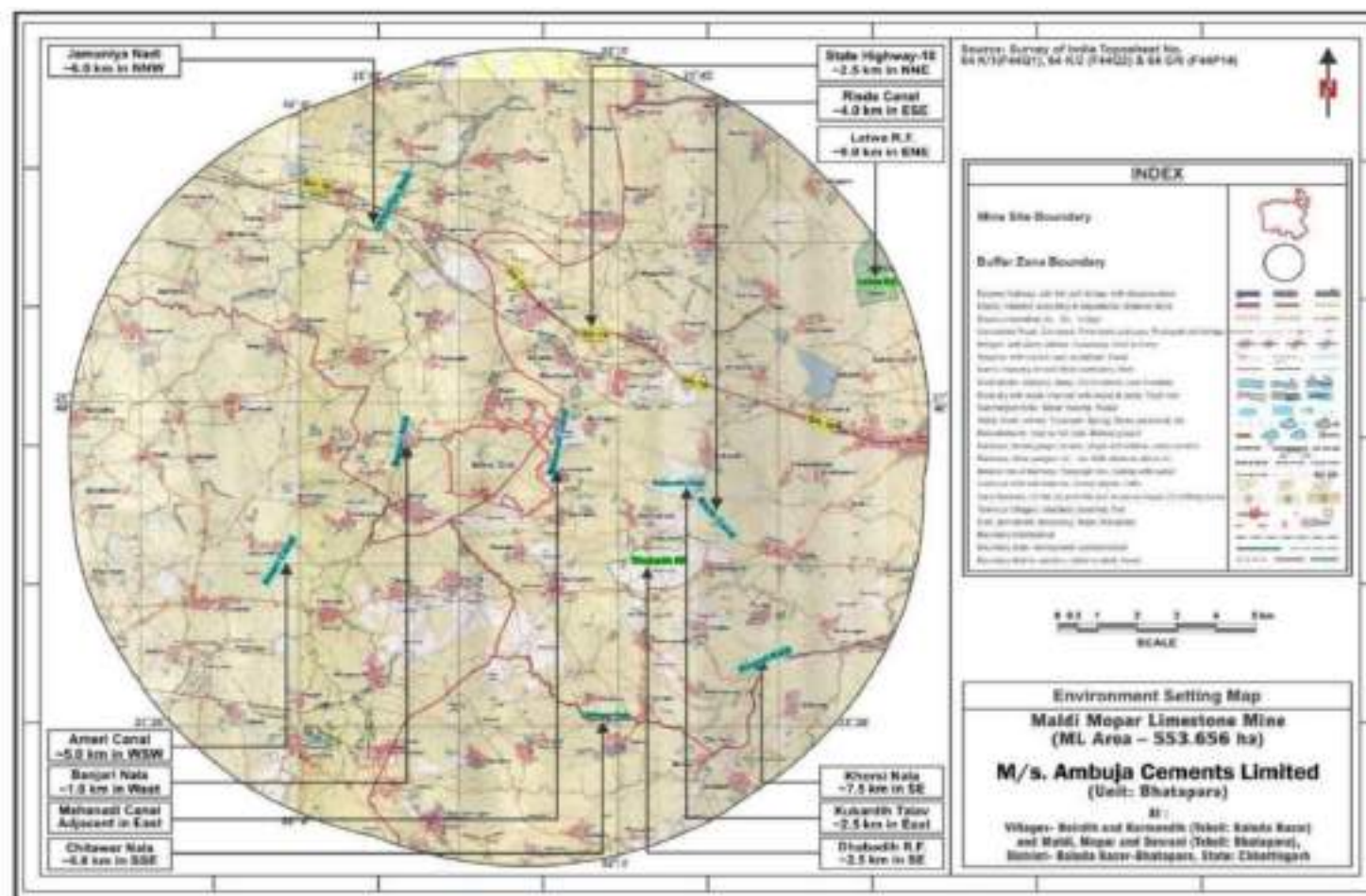



Figure 1.2: Study Area Map (10-km Radius from MI Boundary)



Landuse/Landcover and Change Detection for Maldi-Mopar Limestone Mining Project Project Proponent : M/s. Ambuja Cement Ltd. Project Area = 553.65 Ha	
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1.6 Brief Description of the Project:

Nature of the Project

The proposed Maldi-Mopar limestone mining project covers a lease area of about 553.656-ha of land (>100-ha) and thus it is scheduled under “Category-A” project, as per the EIA Notification dated 14th September 2006.


Size of the Project:

The proposed Maldi-Mopar mining project covers an area of 553.656-ha with an estimated mineable limestone reserves of 264.8 MT. The projected life of the mine is 42 years. The total cost of mining land and mining machinery for the proposed mining project is about Rs.291.0 Crores.

The mining lease area comprises of agricultural fields with partly rocky and barren waste land. The total mining lease area comprises of 499.974-ha (90.3%) of private land and 53.682-ha (9.7%) of government land.

Table 1.1: Brief Description of the Project

S. No.	Particulars	Details
A.	Nature of project	Opencast Mechanized Mining
B.	Size of project	
1	Mining Lease area	553.656 Ha
2	Proposed Limestone Production capacity	Expansion from 2.0 MTPA to 6.5 MTPA ROM
C.	Project Location	
1	Villages	Maldi, Mopar, Karmandih, Devrani, Boirdih
2	Tehsil	Baloda Bazar
3	District	Baloda Bazar- Bhatapara
4	State	Chhattisgarh
5	Latitude	21° 38' 04" to 21° 39' 47" N
6	Longitude	82° 02' 10" to 82° 04' 30"
7	Toposheet No.	64 K/2
8	Location Map of the Proposed Mine Site have been given in Figure 1.1	

8	Srushti Seva Private Ltd. NABET Accredited EIA Consultant Organization Certificate No. NABET/EIA/1821/SA 0107 Valid till 09.06.2022	
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S. No.	Particulars	Details
D.	Environmental Settings Details (<i>with approx. aerial distance & direction from the mining lease boundary</i>)	
1	Nearest Town	Baloda Bazar 9.3 Km, (E)
2	Nearest State / National Highway	NH-200 : 25 km (SE)
3	Nearest Railway Station	Bhatapara 21 km (NW)
4	Nearest Airport	Raipur 93 km (SW)
5	National Parks, Wild Life Sanctuaries, Biosphere Reserves etc., Reserved / Protected Forest within 10 Km radius study area	None
6	Water Bodies within 10km radius to study area	Mahanadi Irrigation Canal : Adjacent (E)
		Kukurdihi Pond 3.2-Km, (ENE);
		Jamuniya River : 8.0-Km, (NW);
		Kharsi Nala : 9.5-Km, (SE)
7	Seismic Zone	Zone II
E.	Cost Details	
1	Total Project Cost	291 crores
2	Cost for Environmental Protection Measures	10.59 Crores

Source: Toposheet, Site Visit and Pre- Feasibility Report

CHAPTER -2: LANDUSE LANDCOVER CHANGE DETECTION

2.1 Concept:

Land use/Land cover (LU/LC) is one of the most important aspects in managing the earth's resources and hence acquired much attention from the planners and decision makers. Utilization of land capital by humans according to their purposes give rise to "land use" which is influenced by human requirement, environmental processes and features. Land cover refers to the physical and biological cover over the surface of land, including water, vegetation, bare soil and/or artificial structures. Land use is the intended employment of land management strategy placed on the land cover by human agents or land managers to exploit the land cover and reflects human activities such as industrial zones, residential zones, agricultural fields, grazing, logging and mining among others. Since the 1970s, satellite remote sensing data has been used periodically for dynamic monitoring and quantitative analysis of spatial distribution, aerial extent, location, rate and pattern. India being a developing country has undergone a radical change in LU/LC since the onset of economic revolution in the early 1990s leading to urbanization, industrialization and other human activities at a rapid rate. Recently, studies related to LU/LC change has gained interest among a wide variety of researchers, ranging from those who favour modelling spatio-temporal patterns of land conversion to those who try to understand the causes and impacts.

With the increase in satellite imagery sensor capabilities in terms of spatial resolution, spectral variability and temporal frequency, even minute changes on the earth's surface can be observed and mapped fairly accurately. Analysis of LU/LC changes is perhaps the most prominent form of global environmental and ecosystem change since they occur at spatial and temporal scales immediately relevant to our daily existence.

The present study makes an attempt to utilize multi-temporal IRS data using Visual interpretation method to monitor and assess LU/LC changes in parts of Maldi-Mopar Limestone ML area and 10 km buffer surrounding it. The study area is known for limestone quarrying as it is enriched with rich geological resources. This industry has provided employment to thousands of skilled and unskilled workers of the region and also contributed significantly to the economy of the area. It is a known phenomenon that



mining and quarrying at a large scale significantly impact land, water and atmosphere that cause land degradation and landscape change and hence the change detection exercises carried out periodically shall decide a balance of mineral economy and ecology.

2.2 Material and Methods:

Multispectral Remote Sensing Data: The LULC change in the study area was evaluated using two time-series satellite images i.e. Indian Remote Sensing Satellite (IRS R2A), LISS-IV sensor imageries acquired on 6th March 2021. The time duration of change detection study is 4 years. The 2021 images were geometrically rectified to the common local UTM coordinate system and WGS 84 zone 43N. The area of interest was clip out for the respective images.

To carry out the land use land cover change detection, space borne data of best resolution has been used from Indian satellites. As optical data is likely to be affected by cloud cover and especially over the study area which is proximity to Arabian sea effort was made to get the best cloud free data keeping in mind the optimum satellite overpass date for classification. In the present study for rabi season the LISS-IV data of 22/10/2021 of 5.8 m resolution has been used which is the best available multi-spectral sensor from Indian satellite as a False Colour Composite. The date of over pass is optimum for the initiation of rabi crop / vegetation season.

Table 2.1: Characteristics of IRS Satellite Data

Satellite & Sensors	Path / Row	Date of Pass	Spectral Resolution (in meter)	No. of Band & Bandwidth (in micron)
RESOURCESAT-2 (IRS-R2) LISS-IV	94/57(C)	6 th March 2021	5.8 meters	G: 0.52 - 0.59
				R: 0.62 - 0.68
				NIR: 0.77 - 0.86
RESOURCESAT-2 (IRS-R2) LISS-IV	94/57(A)	6 th March 2021	5.8 meters	G: 0.52 - 0.59
				R: 0.62 - 0.68
				NIR: 0.77 - 0.86

2.3 Remote Sensing Technique :

Remote Sensing is the science (and to some extent, art) of acquiring information about the Earth's surface without actually being in contact with it. This is done by sensing and

recording reflected or emitted energy and processing, analysing, and applying that information. Satellite remote sensing is bestowed with capturing the object signature of the earth surface by virtue of its multi-spectral capability and synoptic viewing. The optical sensors capture the spectral reflectance emerging from the ground object in narrow bands viz. green, red, infrared and short-wave infrared. The extended sensitivity of the sensors augments the subtle information on the earth surface. Synergy of spectral signature along with other image characteristics viz. texture, pattern, association etc. is used in knowledge-based classification of different land use and their changes over time scale. Stages in remote sensing can be summarized as:

- I. The first requirement for remote sensing is to have an energy source which illuminates or provides electromagnetic energy to the target of interest;
- II. As the energy travels from its source to the target, it will come in contact with and interact with the atmosphere it passes through.
- III. Once the energy makes its way to the target through the atmosphere, it interacts with the target depending on the properties of both the target and the radiation (energy).
- IV. After the energy has been scattered by, or emitted from the target, a sensor is requiring a sensor (remote - not in contact with the target) to collect and record the electromagnetic radiation.
- V. The energy recorded by the sensor has to be transmitted, often in electronic form, to a receiving and processing station where the data are processed into an image.
- VI. The processed image is interpreted, visually and / or digitally, to extract information about the target which was illuminated.
- VII. The final element of the remote sensing process is information extraction, revealing some new information, or assist in solving a particular problem and decision making. Remote sensing has become a major technological and scientific tool for monitoring planetary surfaces and atmospheres. Much of this effort has been directed towards

practical applications, largely focused on environmental and natural resource management. Advantages of the remote sensing: The major advantages of remote sensing over ground-based methods are –

- a. **Synoptic view:** It facilitates the study of various features of earth surface in their spatial relation to each other & helps to delineate the required features & phenomenon.
- b. **Accessibility:** It makes it possible to gather information about inaccessible areas where it is not possible to gather information through ground surveys.
- c. **Time:** These techniques save time & efforts as information about large area can be gathered quickly.
- d. **Multidisciplinary applications:** Remote sensing data are useful to different disciplines such as geology, fisheries, forestry, land use etc.

2.4 Geographic Information System (GIS):

GIS is a computer-based information system used to digitally represent and analyse the geographic features present on the Earth's surface and the events (non-spatial attributes linked to the geography under study) taking place on it. GIS technology integrates common database operations such as query and statistical analysis with the unique visualization and geographic analysis offered by maps. These abilities distinguish GIS from other information systems and make it valuable to a wide range of public and private enterprises for explaining events, predicting outcomes, and planning strategies. The Geographic Information System has been an effective tool for implementation and monitoring of natural resources. The use of GIS has been in vogue primarily due to the advantage mentioned below:

1. Computerized mapping and spatial analysis have been developed simultaneously in several related fields. The present status would not have been achieved without close interaction between various fields such as utility networks, cadastral mapping, topographic mapping, thematic cartography, surveying and photogrammetry remote sensing, image processing, computer science, rural and urban planning, earth science, and geography.

2. The GIS technology is rapidly becoming a standard tool for management of natural resources. The effective use of large spatial data volumes is dependent upon the existence of an efficient geographic handling and processing system to transform this data into usable information.

3. The GIS technology is used to assist decision-makers by indicating various alternatives in development and conservation planning and by modelling the potential outcomes of a series of scenarios. It should be noted that any task begins and ends with the real world. Data are collected about the real world. Of necessity, the product is an abstraction; it is not possible (and not desired) to handle every last detail. After the data are analysed, information is compiled for decision makers. Based on this information, actions are taken and plans implemented in the real world.

4. Land use/land cover change: This technique is widely recognized as an important aspect of global environmental change, which plays a pivotal role in regional socioeconomic development (Chen 2002). To ensure a sustainable management of natural resources, it is necessary to understand and quantify the processes of landscape change (Petit et al. 2001). It is also necessary to develop a better understanding of the causes of land use change so that efficient counter-measures can be undertaken. Digital change detection is the process that helps in determining the changes associated with land use and land cover properties with reference to geo-registered multi-temporal remote sensing data in convergence with GIS & GPS. It helps in identifying change between two (or more) dates that is uncharacterized of normal variation. Change detection is useful in many applications such as land use changes, habitat fragmentation, rate of deforestation, coastal change, urban sprawl, and other cumulative changes through spatial and temporal analysis techniques such as GIS (Geographic Information System) and Remote Sensing along with digital image processing techniques.

2.5 Landuse / Landcover Classification:

Land use / land cover analysis was carried out using Visual Interpretation. Classification is performed in the following steps viz.

Loading of the multiple bands from the BSQ inputs received from NRSC, National Data Centre, Hyderabad. Later the 3 bands namely Green, Red and Infrared of the electromagnetic spectrum which were used for generation of individual reflectance spectra were layer stacked.

The next step involved passing the bands through the three colour filters as follows – Green, Red and Infrared Bands reflectance recordings were provide with Blue, Green and Red colour filters. This is made to make the Infrared band reflectance available to the bare human eyes range of visualization.

The new image which was formed was in non-projected domain. Hence the same was then Projected in Universal Transverse Mercator Projection System and the WGS-1984 Spheroid and Datum in 43N zone. With the advent of GPS and the correct projection implementation, the UTM and WGS84 is the preferred Earth Centric projection system advised. The outputs generated under the present study when provided as Geo PDF and or KML shall match exactly with the Open source visualization platforms like Google Earth. The measurements of the areas shall also be precise under the UTM/WGS84 projection system.

2.6 Details of the Heads-Up On-Screen Digitization of Cultural Features:

Using high resolution FCC product, extraction of the detailed cultural features was carried out. Village roads, exact extent of built-up areas, small rivulets etc. were digitized online as vector keeping the image in the back drop. The vectors viz. roads, rail, rivers, small drainages, canal and settlement were stored separately, assigned proper topology and some features were also converted to raster format for integrating with the digitally classified output.

The major categories of land use land cover were digitized based on the spectral signatures as deciphered by the FCC. The advantage of using the FCC in 3 bands namely Green, Red and Infrared, provided with filters Blue, Green and Red helps in significantly categorizing the individual units of the landscape owing to the differences in spectral reflectance, tone, texture, structure and association.



The various land use land cover categories present themselves uniquely in the individual bands of the electromagnetic spectrum and their inter-relationship as studied in the merged bands of FCC provides a useful image amenable for interpretation by the experts in the domain of remote sensing. In this study, the Anderson level-1 LULC classification scheme was adopted and fifteen LULC classes were identified as per the generic table below.

Open Spaces	Urban Built – Up Land + Barren Land	Residential, Commercial, Industrial, Transportation, Mixed Urban, Dry Salt Flats, Beaches, bare exposed rock, strip mines, quarries, gravel pits, mixed barren land.
Water Bodies	Water	Streams and Canals, Lakes, Reservoirs, Bays and Estuaries.
Forest Cover	Forest Land	Deciduous Forest Land, Evergreen Forest Land, Mixed Forest Land.
Agricultural Land (Cropped and Uncropped)	Agricultural Land	Cropland and pasture, orchards, groves, vineyards, nurseries, ornamental horticultural areas, confined feeding operations, other agricultural land.

Spatial Framework:

It is extremely important to decide the projection parameters prior to the work as every projection system has its own merits and demerits. The regional referencing scheme, which consists of lines joining longitudes and latitudes at 5 minutes interval are generated using FISHNET program of ArcGIS. The grid base is projected to Lambert Conformal Conic (LCC) projection system with central meridian for a region. The grid base is generated to register the scanned maps based on which the satellite data is registered so that the image data is assigned geographic coordinates.

Data Normalization:

The normalization is required when performing analysis with data sets of different dates and / or different sensors. Due to atmospheric conditions and sun illumination the spectral reflectance of the same object may significantly change e.g., Clean and deep-water body shows lowest DN (digital number) value under clear sky condition but in presence of



aerosols considerable scattering takes place and an increase in the DN values is observed. Besides different sensors are calibrated differently and the sensors response is also different under similar illumination and surface cover conditions. Hence all the data sets were normalized prior to analysis. There are several methods available for this purpose but in the present study Top of Atmosphere (TOA) correction was adopted. As the reflectance pass through the atmosphere the attenuation of EMR result into reflectance from the varying atmospheric constituents is added it is called 'path radiance' in remote sensing parlance. For this type of study such variations need to be removed by converting digital number into radiance above atmosphere. Correction factor is applied using the sun elevation, gain & bias of each band and Julian day of satellite data acquisition.

Registration of Satellite Data:

Scanned maps in .tiff format were converted to ArcGIS compatible .img format. The maps were registered with respect to the grid base in which all the 16 intersecting points of latitudes and longitudes of single top sheet were taken as Ground Control Points (GCPs). A second order polynomial model was generated with root mean square error of registration of 0.5 pixels. The remotely sensed data was checked for radiometry and any eventual error like line stripping, band to band co-registration etc. also called as Pre-processing. Once pre-processing is done, images are then geometrically corrected for removing geometric distortions. For this purpose, Ortho Rectification tool of Leica Photogrammetric Suite (LPS) has been used. It converts imagery into map-accurate form by removing camera and terrain related distortions from the imagery through the use of sensor and terrain elevation information. Resourcesat-2 rectification was carried out using bundle block adjustment. Necessary editing was done using the LPS Terrain Editor includes point, area, and geomorphic-based editing tools specially designed to edit DTMs in many formats like Leica Terrain Format (LTF). Auto Sync tool has been used to register IRS-LISS-III image using the rectified Resourcesat-2 image. The tool uses an automatic point matching algorithm to generate thousands of tie points, and produces a mathematical model to tie the images together. The resulting workflows significantly reduce or sometimes completely eliminate manual point collection. Only the sharp intersections of roads, stream-roads, road-rail etc. were accepted as ground control points (GCP). Care was taken to distribute the GCP's uniformly over the image for better tagging and uniform distribution of the transformation model. Altogether about 75 to 100 control points were acquired for each scene and RMS

error was kept minimum by thinning out of the points showing high error. A second order polynomial model with projective transformation was used for registration of scenes. After registration the rectified scenes were overlaid on the rectified Resourcesat reference image and checked for 1:1 correspondence especially over road, rail, river etc. Similarly, the other raw images were also registered and kept ready for further analysis. As the scene size is very big, a subset image was made for the area of interest for all the scenes.

On screen Digitization of Cultural Features:

Using high resolution merged product (panchromatic + multi-spectral data), extraction of the detailed cultural features was carried out. Village roads, exact extent of built-up areas, small rivulets etc. were digitized online as vector keeping the image in the back drop. The vectors viz. roads, rail, rivers, small drainages, canal and settlement were stored separately, assigned proper topology and some features were also converted to raster format for integrating with the digitally classified output.

Ground Truth:

Ground truth verification of doubtful areas and ground measurements is an important component of satellite based remote sensing studies, which enhances the interpretation accuracy. This has aided in increasing the reliability of remote sensed data by enabling verification of interpretation details and supplementing it with the information that cannot be obtained from satellite imagery. The doubtful areas were identified during the preliminary interpretation and marked on the map outputs for checking the details on the ground. Limited ground truth verification is done for land use/cover for the doubtful areas of the study area. The field observations about the terrain conditions were noted for use in the modification and to substantiate the thematic details.

Classification accuracy assessment:

Accuracy assessment allows evaluating a classified image file (thematic raster layer). The method follows listing of two sets of class values for the randomly selected points (random points) in the classified image. One set of class values is automatically assigned to these random points based on their corresponding class value in the classified image, and the other set of class values (reference values) corresponds to the original class values on

imagery, ground truth data, previously tested maps, aerial photos, or other data (assumed truth). Accuracy Assessment of classification was performed both overall and class wise.

Preparation of Classified Data:

The land use map is generated using ArcGIS where a look up table was generated using the codes of different land cover classes. Manual digitization of categories not separable through digital classification was carried out for updating.

Generation of Statistics:

Statistics for both Land use and vegetation vigour categories were generated using the study area masks (10 km circular buffer). The unit was kept as Km² and tabular data of ArcGIS was exported as *.dat files which was later taken to excel (spread sheet) for calculation.

CHAPTER -3: RESULT DISCUSSIONS AND CONCLUSION

3.1 Outputs and Statistics of the Landuse / Landcover mapping for the year 2021.

As per the revenue records out of Total Mining lease area of 553.656 ha the Government waste land is 53.686 and 499.970 ha Pvt Agriculture Land. This agricultural land 499.974 hectare lies at Villages Maldi, Mopar, Devarani, Karmandih and Boirdih villages in Baloda Bazar-Bhatapara District in Chhattisgarh state.

The study area consist of the 553.656 ha Mining lease considered as **Core Zone** and 10 Km boundary marked around the Core Zone as **Buffer Zone**. Using the available satellite images landuse / landcover analysis has been carried out separately for the core zone and Buffer Zone. With the availability of 2019 satellite image and its analysis a comparison of 2019-2021 Satellite is also made and presented in this Chapter.

The original satellite imagery which was used for visual interpretation for the year 2021 is presented as image below. Kindly refer **Figure 3.1** for Satellite Image procured on 6th March 2021 and its interpretation at **Figure 3.2**.



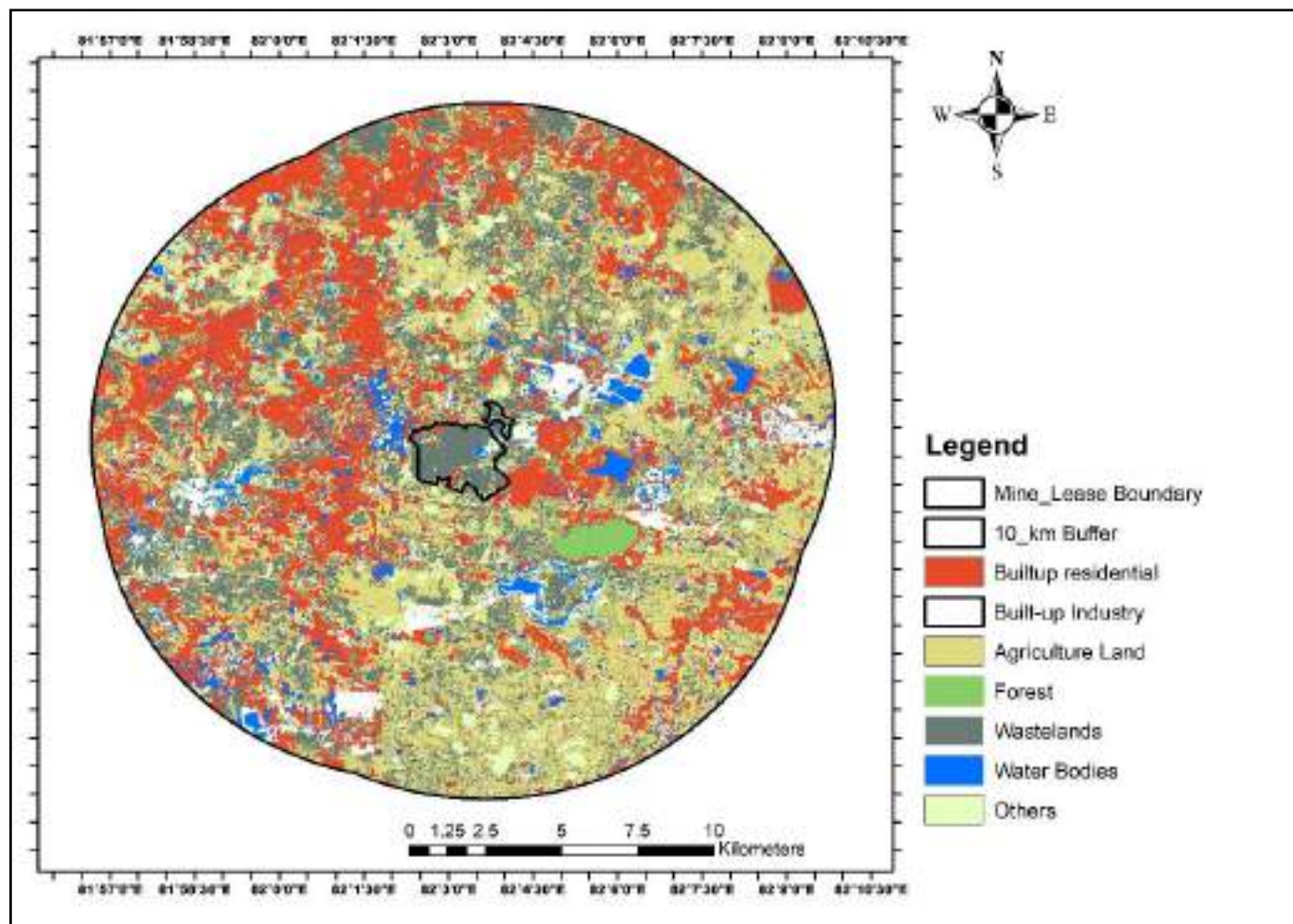


Figure 3.2: Mining Lease boundary marked on Satellite Image (10 km Buffer Zone)

The present map of DEM for the year 2021-2022 is presented as image below of 10 km Buffer Zone.as shown as **Figure 3.3**

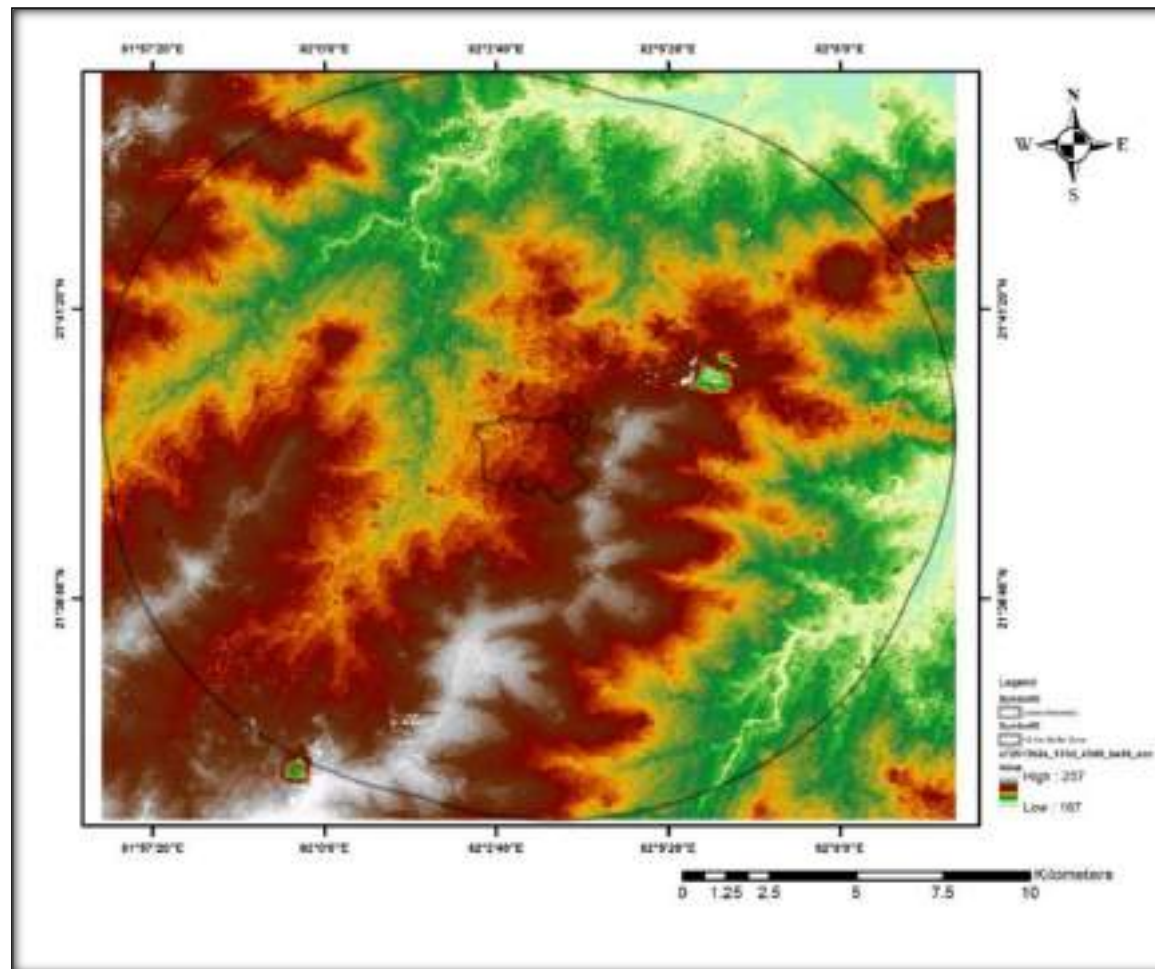


Figure 3.3: Digital Elevation Model

3.2 Land Use Enumerations for the Study Area.

3.2.1 Buffer Zone :

Description of different land use classes and their extent is described herewith. Study area contains 15 land use / land cover classes as described earlier. In the 10 km radius study area majority of the area is agricultural land comprising of standing crop and fallows. Another category is plantation, built-up, etc. The predominant category of mining and the related landuses like plantation, water bodies, etc. also are evident. The individual categories of Landuse Landcover are deliberated below.

- a. **Built-up land:** It is defined as an area of human habitation development due to intensive non-agricultural use. They appear in dark bluish green in core built-up area and bluish in the periphery irregular and discontinuous in appearance in satellite imageries. The major categories discernible on the satellite data within the study area include several rural residential areas. These are classified and mapped using satellite data and collateral information (SOI toposheet).

Rural settlements and factory premises including residential area and acquired land covers around. 6.58 % of the 10 Km buffer area around the lease areas and it forms a total of 2795.54 Ha.

- b. **Agricultural land:** Agricultural land use is largely dependent on agro-climatic condition prevalent in the area. Cropped areas appear in bright red in colour with varying shape and size in a contiguous to non-contiguous pattern. As only rabi season satellite data is analyzed, Agricultural land is the major land use class in the study area. The total agriculture area is 720.19 ha which forms 1.70 percent of the total 10 sq km area around the Maldi- Mopar Limestone Mine. Further, the fallow land observed is 4200 ha (13.9%) lying vacant during this cropping season of the total land cover. However, long fallow and some of the uncultivable wasteland which could not be separated based on spectral signature are also the part of this category.
- c. **Forest:** The forest cover appears dark red to red in tone of varying size. Further, crown density / canopy cover-based forest covers are designated as dense forest and degraded forest. The forest types in this area are basically Moist Deciduous Forest. The total forest



area within notified forest observed is 700.63 ha (1.65%) in the total study area of 10 sq km surrounding the ML.

- d. **Wasteland:** Wasteland is described as 'degraded land' which can be brought under vegetative cover with reasonable effort and which is currently under-utilized for the lack of appropriate water and soil management or on account of natural causes. In the study area existent wasteland classes are land with scrub and land without scrub and sandy areas. Land with and without scrub category appears on satellite imagery as light yellow to brown to greenish blue patches of varying sizes with irregular shapes and are usually associated with uplands and hills. Few patches of Ravenous lands (eroded area of intricate drainage pattern) are also seen that area along the river courses. Total area under wasteland has been 6639.56 ha. This covers 15.65 % of total geographical area of 10 km buffer zone.
- e. **Plantation:** Plantation appears in dark red to red tone of different sizes with regular and sharp edges in satellite images also typical dotted pattern. The area covered under Plantation is 335.02 ha which forms 0.78% of the total geographical area in the 10 sq km surrounding Maldi-Mopar Limestone Mine. This category includes the entire agricultural plantation, forest plantation and the plantation on the mining dump area. Extensive green belts are developed within the 7.5m along periphery of the lease area. Road side plantations are also observed within the study area.
- f. **Water Bodies:** River/streams, reservoirs and tanks are the important water bodies seen in the study area. These are clearly seen on the satellite image in blue to dark blue or cyan color depending on the depth of water according to the season. Canal networks is also visible which is the main irrigation source for the crops. The area covered under water bodies is 1423.61 ha which comprises of 3.35% of the total geographical area in the Maldi-Mopar Limestone Mine.
- g. **Mining Areas:** The mining area appears white and cyan in colour on the satellite imagery. The mining activities of the area are categorized into Mining Area, Excavated Mine Area, Dump and the Safety Barrier. As per the Landuse Landcover mapping in 2021, the mining area in buffer zone of 10 sq km surrounding the Maldi-Mopar Limestone Mine is provided in the table below. **Table 3.1.**



10 km Buffer Zone		
Mining Category	Area_Ha	% to Total
Excavated Mine	613.49	1.44
Dump	39.29	0.09
Safety /Barrier	17.54	0.04

Table 3.1: Landuse/Landcover of 10 km Buffer Zone

LEVEL -I	Level -II	Level -III	% Area	Area (ha)
Built-up	Residential		5.12	2174.88
	Industrial Area		1.46	620.66
Agriculture Land	Crop Land	Kharif Land	47.49	20153
		Rabi Crop	1.70	720.19
		Kharif+Rabi Crop	11.31	4800
	Fallow Land		9.90	4200
	Afforestation / Plantation		0.78	335.02
Forest	Very Dense Forest		0.97	412.95
	Dense Forest		0.30	127.02
	Open Forest		0.36	154.03
	Scrub Forest		0.02	6.63
Waste Land	dense Scrub		2.45	1039.53
	Open Scrub		13.20	5600.03
Water Bodies	River/Nala/Canal		0.71	302.86
	Lake/Pond/Reservoir		2.32	982.86
	Mine Sump		0.32	137.88
Others	Excavated Are (Mining, Pits, Stone Quarry)		1.45	613.49
	Dump		0.09	39.29
	Safety Barrier/ Embankment		0.04	17.54
		Total	100	42437.85





A comparison of the landuse has been made for the 2019 satellite image of the same area with the latest 2021 satellite image. This comparison is summarized at **Table 3.2** and graphically depicted at **Figure 3.4**

Table 3.2: Change detection of Landuse/Landcover OF 10 km Buffer Zone (2019-2021)

LEVEL -I	Level -II	Level -III	% Area (2021)	Area (Ha)(2021)	% Area (2019)	Area (Ha)(2019)
Built -up	Residential		5.12	2174.88	5.1	2163.22
	Industrial Area		1.46	620.66	1.5	618.3
Agriculture Land	Crop Land	Kharif Land	47.49	20153	45.4	19252.81
		Rabi Crop	1.70	720.19	1.8	766.88
		Kharif+Rabi Crop	11.31	4800	11.2	4763.90
	Fallow Land		9.90	4200	10.1	4269.11
	Afforestation / Plantation		0.78	335.02	0.7	287.77
Forest	Very dense Forest		0.97	412.95	0.8	312.95
	Dense Forest		0.30	127.02	0.2	66.02
	Open Forest		0.36	154.03	0.1	44.98
	Scrub Forest		0.02	6.63	0.0	3.56
Waste Land	Dense Scrub		2.45	1039.53	1.8	776.44
	Open Scrub		13.20	5600.03	16.5	7022.24
Water Bodies	River/Nala/Canal		0.71	302.86	0.7	308.61
	Lake/Pond/Reservoir		2.32	982.86	2.3	982.86
	Mine Sump		0.32	137.88	0.3	137.88
Others	Excavated Are (Mining, Pits, Stone Quarry)		1.45	613.49	1.4	604.68
	Dump		0.09	39.29	0.1	38.09
	Safety Barrier/ Embankment		0.04	17.54	0.0	17.54
		Total	100	42437.85	100	42437.85



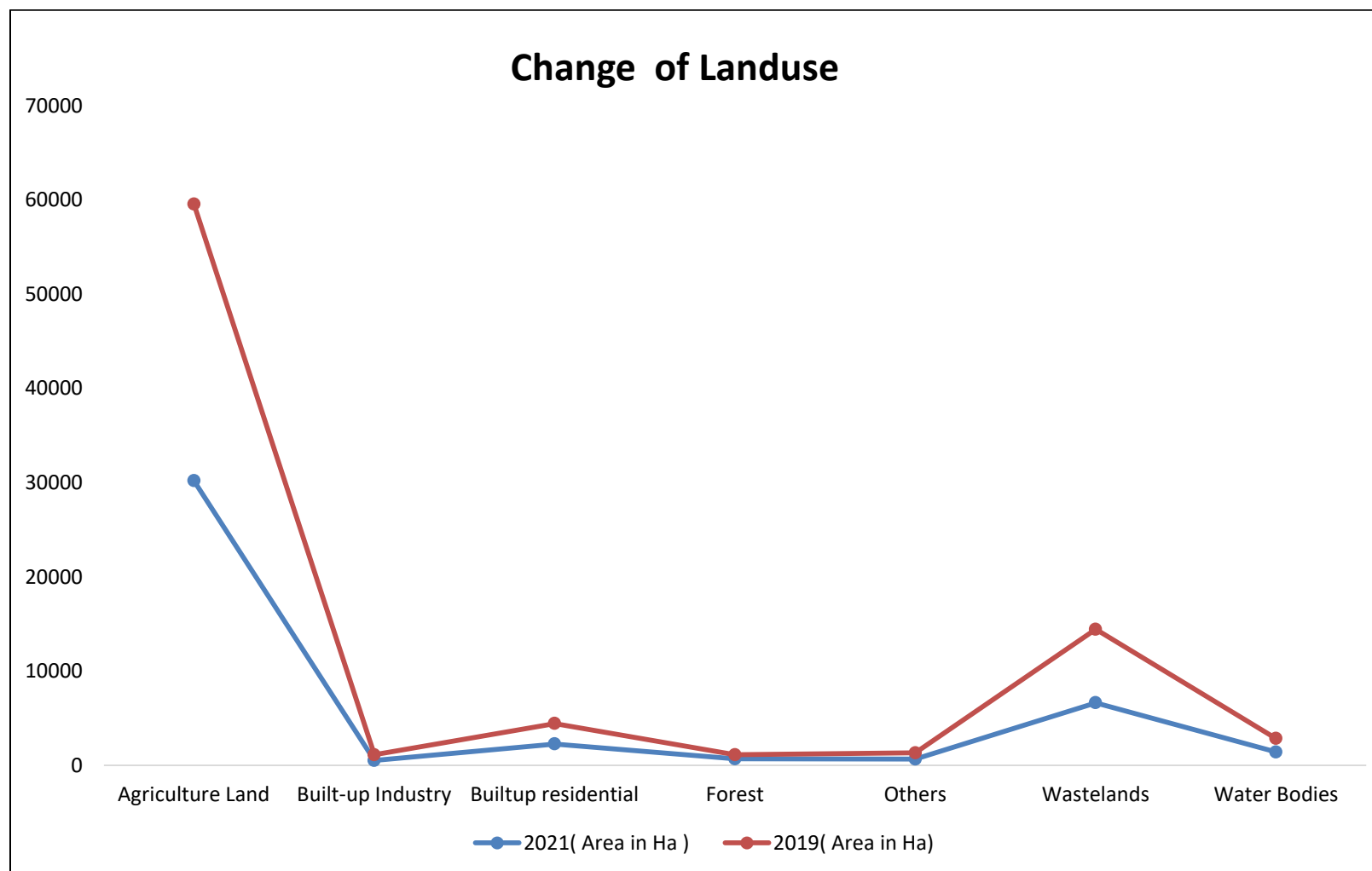


Figure 3.4: Landuse/Landcover Graph of 2019-2021

3.2.2 Core Zone:

The Satellite Image for the year 2021-2022 of core Zone. **Figure 3.5** and landuse on **Figure 3.6**.

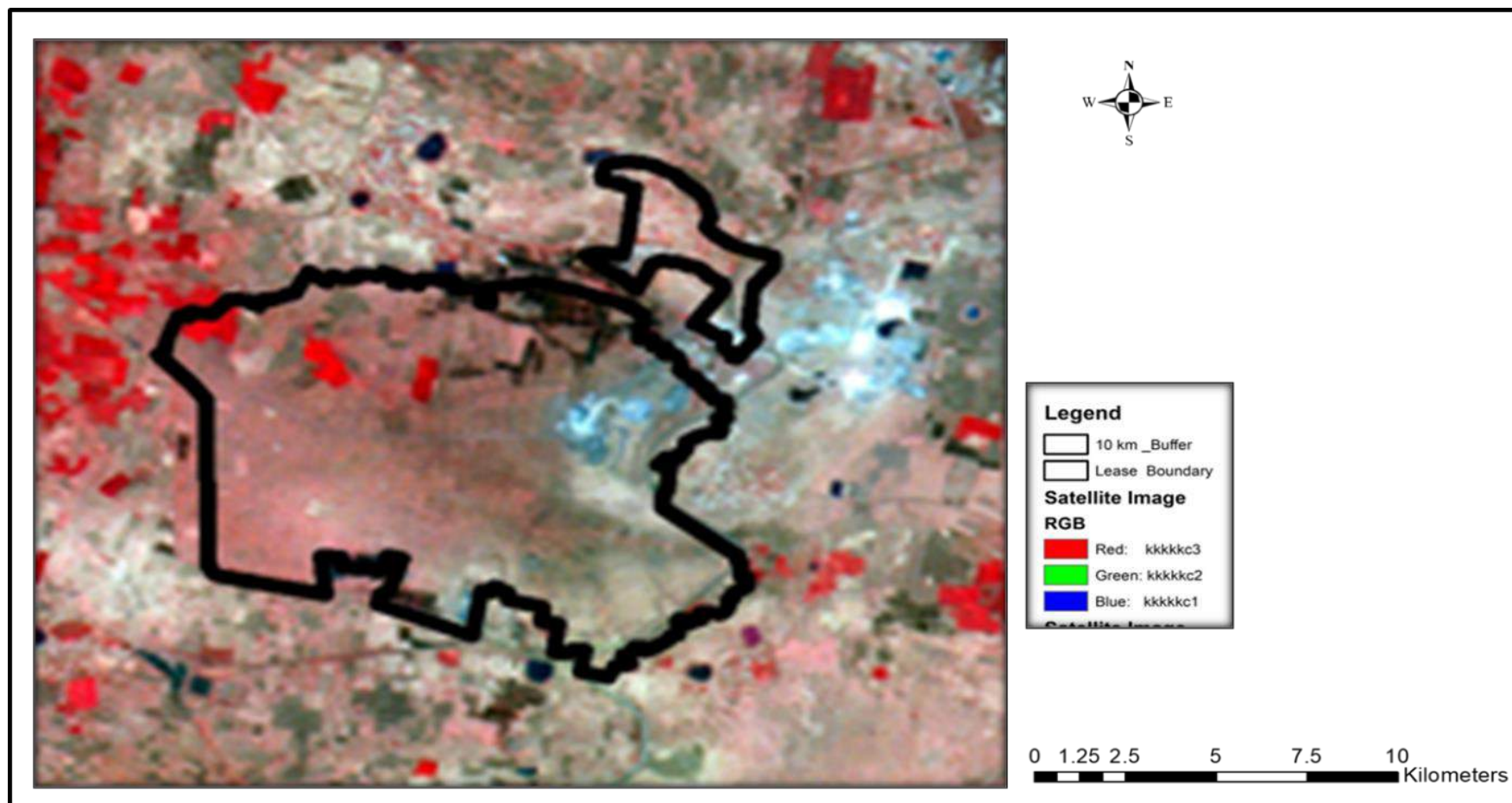


Figure 3.5: Core Zone Marked on the Satellite Image

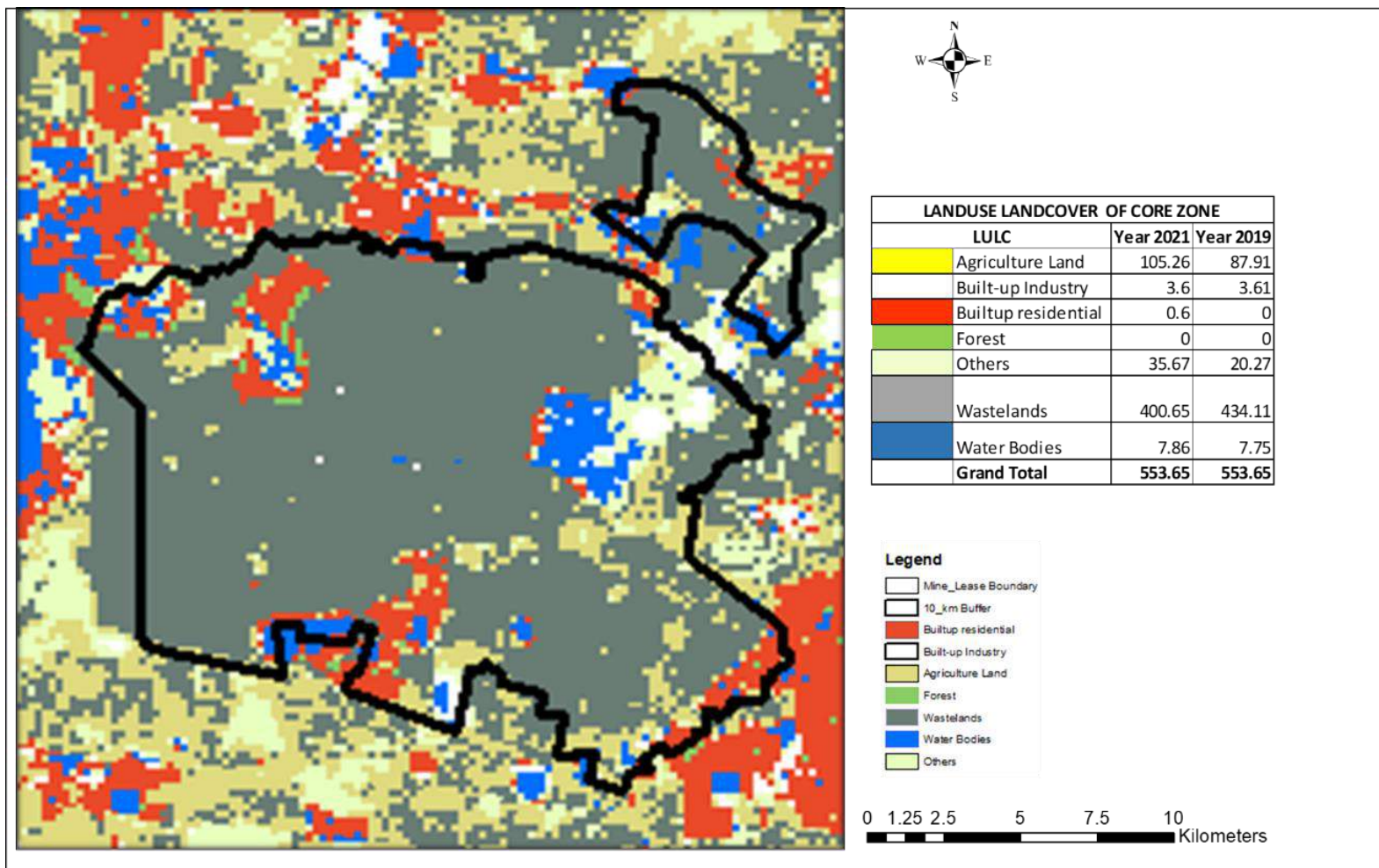


Figure 3.6: Core Zone Landuse/Landcover Image





The Landuse Landcover change for the year 2019-2021 are provided in the table below of core Zone **Table 3.3.**

Table 3.3: Landuse /Landcover Change in Core Zone 2019-2021

LEVEL -I	Level -II	Level -III	% Area (2019)	Area in Ha (2019)	% Area (2021)	Area in Ha (2021)
Built-up	Residential		0	0	0.11	0.6
	Industrial Area		0.65	3.61	0.65	3.61
Agriculture Land	Crop Land	Kharif Land	8.3	45.94	9.10	50.36
		Rabi Crop	0.18	0.97	0.22	1.23
		Kharif+Rabi Crop	1.55	8.61	1.76	9.77
	Fallow Land		5.49	30.37	7.28	40.3
	Afforestation / Plantation		0.36	2.02	0.65	3.6
Forest	Very Dense Forest		0	0	0.00	0
	Dense Forest		0	0	0.00	0
	Open Forest		0	0	0.00	0
	Scrub Forest		0	0	0.00	0
Waste Land	Dense Scrub		1.39	7.71	1.57	8.71
	Open Scrub		77.02	426.41	70.91	392.61
Water Bodies	River/Nala/Canal		0	0	0.00	0
	Lake/Pond/Reservoir		1.28	7.08	1.28	7.08
	Mine Sump		0.12	0.67	0.02	0.11
Others	Excavated Are (Mining, Pits, Stone Quarry)		2.02	11.18	4.64	25.68
	Dump		0.66	3.64	0.66	3.64
	Safety Barrier/ Embankment		0.99	5.46	1.15	6.35
		Total	100	553.65	100.00	553.65



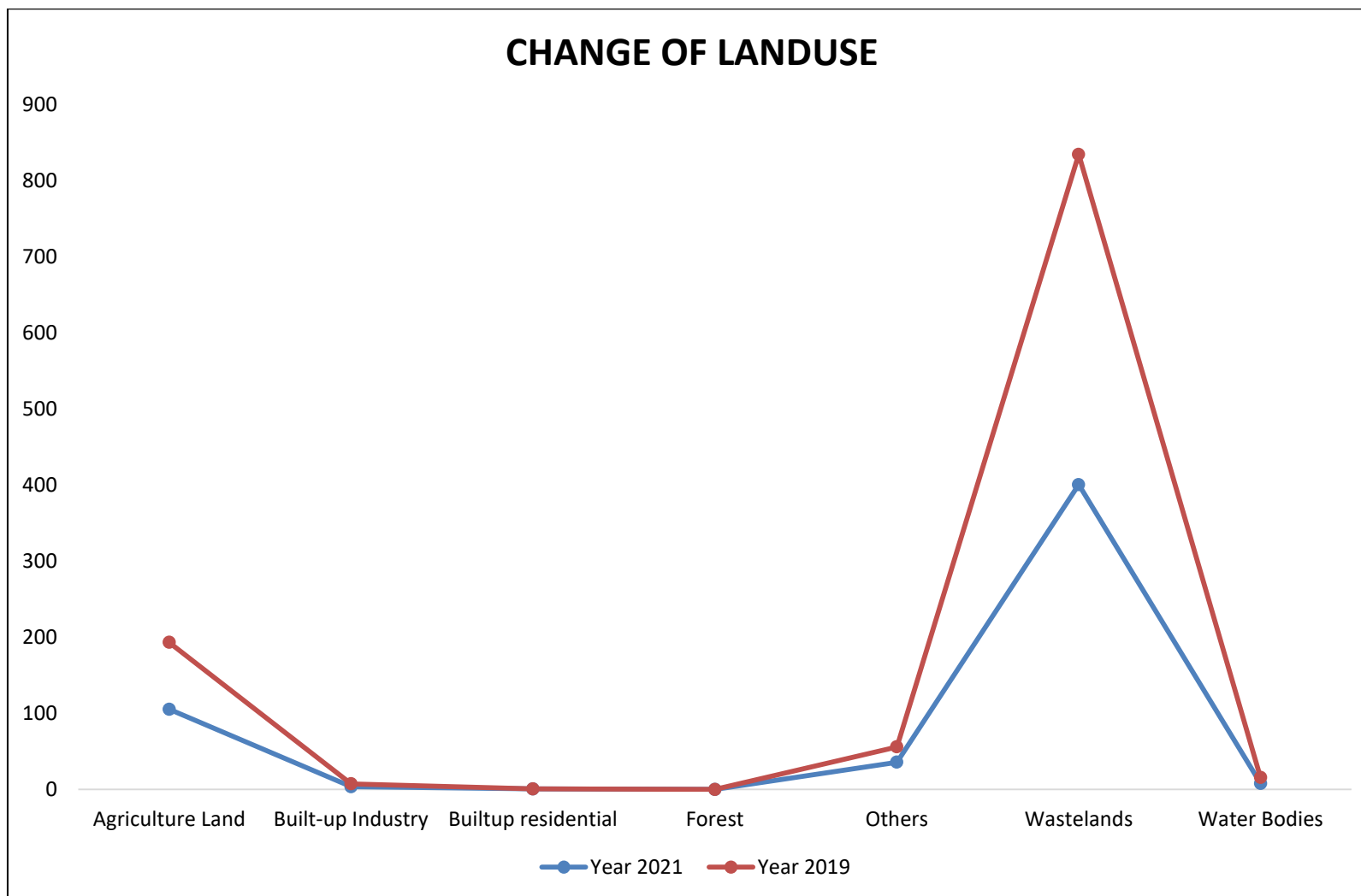


Figure 3.7: Landuse Landcover of 2019-2021

CHAPTER -4: CONCLUSION

The land use/cover assessment using satellite imagery provides reliable and accurate information, which is cost and time effective. It also offers a holistic view of large areas for better monitoring of land use/cover occurrence and distribution. Hence, satellite remote sensing and GIS techniques are useful tools for assessing the land use / land cover which is one of the important components for monitoring, planning and development of an area.

Based on the analysis of the two cycles of landuse landcover mapping for the specified years 2019 and 2021 spanning for a duration of 2 years, it can be concluded that the mining area is not impacting any major change on the surrounding ambient geo environment.

Since both the landuses have been carried out with single season satellite imagery, the cropland and fallow area statistics show certain variations. However, the total agricultural area does not show any remarkable increase or decrease.

The mining area statistics also show alterations in the intermittent categories namely active mine, Mining area and water stored in the excavations.

The plantation surrounding the ML areas are predominantly visible with the bright red tone and texture indicating well-maintained green belt surrounding the mine area.

The other relevant landuse landcover classes like water, canal, built up, etc. mapped in 2021 are in tune with the 2019 stature and do not show any major change.

The Plantation in the Core Zone has increased from 2.02 % to 3.6 % while plantation is also increased from 0.7 % to 0.78 % in buffer zone during the 2019 to 2021 Landuse change detection study.

The indicates incremental green belt within core Zone as well as within buffer Zone area. The efforts for development of plantation and its maintenance results in such incremental growth.

#####

LAND OUTSEE STUDY & SOCIAL SURVEY OF THE CORE ZONE VILLAGES

OF

THE MALDI-MOPAR LIMESTONE MINING PROJECT

AT

Maldi, Mopar, Devrani,
Karmandih and Boirdih Villages, Baloda Bazar & Bhatapara Tehsil,
Baloda Bazar- Bhatapara District, Chhattisgarh



FOR

M/s. Ambuja Cements Limited

P.O-Rawan, Tehsil- Baloda Bazar,
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MARCH 2022





ACRONYMS

ARO	:	Assistant Resettlement Officer
AWC	:	Anganwadi Centre
BDO	:	Block Development Officer
BPL	:	Below Poverty Line
BSR	:	Basic Schedule Rates
DGM	:	Deputy General Manager
DP	:	Displaced Person
DF	:	Displaced Family
EA	:	Executing Agency
FGD	:	Focus group discussions
GoI	:	Government of India
GoC	:	Government of Chattisgarh
GP	:	Gram Panchayat
GRC	:	Grievance Redressal Committee
HIV/AIDS	:	Human Immunodeficiency virus / Acquired immunodeficiency syndrome
HH/s		Household/s
ICDS	:	Integrated Child Development Services
KII	:	Key Informant Interview
MTPA	:	Million Tonnes Per Annum
NGO	:	Non-Government Organization
NH	:	National Highway
NTH	:	Non-Title Holder
OBC	:	Other Backward Castes
PIA	:	Project Impact Area
PHC	:	Primary health centre
PMU	:	Project Monitoring Unit
RFCTLARR		Right to Fair Compensation and Transparency in Land Acquisition Resettlement and Rehabilitation
Rs	:	Rupee, Indian currency
R&R	:	Resettlement and Rehabilitation
RP	:	Resettlement Plan
SH	:	State Highway
SC	:	Scheduled Castes
ST	:	Scheduled Tribes
TH	:	Title Holder



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EXECUTIVE SUMMARY

Project Description:

Ambuja Cements Limited (ACL) popularly known as 'Ambuja Cement' is a leading manufacturer of various types of cements in India. ACL is one of the largest integrated cement companies in the country. It owns and operates cement manufacturing plants at Six Locations, besides cement grinding units, located in various parts of India, with a total installed capacity of over 31.0 MTPA. The company has operating cement plants at Six Locations Namely Chhattisgarh, Gujarat, Himachal Pradesh, Rajasthan and Maharashtra. Besides, the company has clinker-grinding units at Ropar and Bhatinda in Punjab, Sankrail and Farakka in West Bengal, Roorkee in Uttarakhand and Surat in Gujarat. ACL presently has a total installed capacity of over 31.0 MTPA.

Scope of Land Acquisition and Land Outsee status

The Socio-Economic Survey carried out for 1862 Persons living in 405 household. The Census Survey was carried out for 138 household along with affected 186 private structures and 9 are common property resource. An identification survey of displaced persons was carried out by Consultant to identify the displaced persons and generate an inventory of losses, as well as a socio-economic profile of the project displaced person. The identification was based on detail measurement survey based on final Mine Plan. In addition, their perceptions about the project, rehabilitation and resettlement options were ascertained. The identification was carried out in the month of February 2022 to March 2022.

The Maldi-Mopar limestone mining project covers a lease area of about 553.656-ha of land (>100-ha) and thus it is scheduled under "Category-A" project, as per the EIA Notification dated 14th September 2006. The mining lease area comprises of agricultural fields with partly rocky and barren waste land. The total mining lease area is 553.656 ha which spreads in five villages Boirdih, Karmandih, Maldi, Mopar and Devrani . Out of Total Area, 53.686ha. Govt. waste Land and 499.970 Ha Pvt. Agriculture Land. 439.930 Ha Pvt. Land has already been acquired through direct purchase and only 60.040 Ha land will be acquired on one to one basis with individual farmer.



Socioeconomic Information and Profile

The project area falls under Baloda Bazar-Bhatapara district of the state of Chhattisgarh. According to the census of 2011, the population of Chhattisgarh was 2,55,45,198. Male to female ratio in the state is 991 females per 1000 males, while in 2001 it was 989 females per 1000 males. The total area of the Chhattisgarh state is 135192 sq.km.

Baloda Bazaar-Bhatapara District is an administrative district of Chhattisgarh in central India. The city of “Baloda Bazaar” is the district head-quarter. The district comes under Baloda Bazar - Bhatapara and is inhabited mainly by ST including the protected tribe Korwas (Pahadikorwa). Korba is blessed with lush green forest cover, where a sizable no. of ST population is found. The Adivasis in the forest areas live in tandem with the environment and have retained their distinctive cultural characteristics and traditional observances.

The primary PIA or the Core area consists of five impacted villages namely Maldi, Mopar, Devarani, Karmandih and Boirdih. Number of households in the Maldi, Mopar, Deorani, Karmandih, Sarkipar, Mudhipar villages is 1653 and population is 8326 as per Census 2011 and average family size comes out to be 5.04 persons per household.

During preparation of the report about 405 HHs data were available and taken up for preparation of SES. The Statistical Methodology used for estimation of the sample size is Multistage Stratified Proportional Random Sample Survey with replacement at 95% confidence level with sample.

Consultation and Participation

Consultations with stakeholders were carried out during various phases of project preparation. The stakeholders in the project are both primary and secondary. The primary stakeholders are Project Affected Persons (PAPs), Project Beneficiaries, Executing Agency, Implementing Agency. The secondary stakeholder includes district magistrates and the revenue official's, village heads, head of Gram Panchayat, village administrative officers, village council, district council, NGO and business communities in the area.

During the course of the social assessment, public consultation held to inform the communities and population about the positive as well as negative impacts of the Project. Consultations and discussions were held along the project with the displaced households and



other stakeholders including village head men, gram panchayat members, head of households, women's groups, shopkeepers, tenants etc. These meetings were used to get wider public input from both the primary and secondary stakeholders.

Acquisition of land for its limestone mine project is an ongoing process and would always be site specific. The land acquisition (more commonly termed as land purchase) is based on compensation arrived through legal process and discussion with land owners. Acquisition of land for proposed project is voluntary, since the land owners have willingly agreed to sell their land at DLC rate and provision of Chhattisgarh Rehabilitation Policy 2007, Chhattisgarh Mutual Consent Policy 2016 & LARR Act, 2013. The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (LARR Act, 2013), Chhattisgarh mutual consent policy (2016) serve as a guiding factor in purchase of land. So far ACL has been able to avoid expropriation setting compensation through mutually agreed rates. However, in order to comply with the LARR Act, 2013, to address these directives, ACL will pursue the following Resettlement Policy for purchase of land for proposed project.

The budget is indicative of outlays for the different expenditure categories and is calculated. The costs are based on the information collected by the socio-economic and Census of the PAPs and from the Revenue departments. The total cost for compensation of the Land Oustees is estimated at Rs. 2.97 crore.

Organization of the Report

The Report starts with the Introduction and objectives followed by details of Impacts of the outsees at the Core villages. Subsequently there are three sections on Socio Economic Impact, Consultations and Conclusion.



CHAPTER -1: INTRODUCTION

M/s Ambuja Cements Limited (ACL) is operating cement plants of 4.42 (Line I- 1.7+ Line-II - 3.10) MTPA clinker at Balodabazar-Bhatapara. The limestone requirement for this plant is being met with the captive Rawan Limestone Mine & partly from Maldi Mopar Limestone Mine.

M/s. Ambuja Cements Limited (Unit –Bhatapara) has proposed Expansion of Integrated Cement Plant- Clinker (4.8 to 8.1 MTPA), Cement (3.5 to 6.5 MTPA), and WHRS (18 to 43 MW) by installation of Line- III at Village: Rawan, Tehsil: Balodabazar, District: Balodabazar - Bhatapara (Chhattisgarh).

In order to meet the raw material requirement (limestone) M/s. Ambuja Cements Limited (Unit – Bhatapara) is proposing expansion in Limestone Production Capacity from 2.0 Million TPA to 6.3 Million TPA, (ROM 6.5 Million TPA including 0.2 Million TPA screen rejects), Sub Grade 1.7 Million TPA, Top Soil 0.27 Million TPA, Waste 2.55 Million TPA (Total Excavation 11.02 Million TPA) along with existing crusher of 1800 TPH with screen and a proposed crusher of 1800 TPH in Maldi Mopar Limestone Mine (ML Area – 553.656 ha) in Villages- Boirdih and Karmandih (Tehsil: Baloda Bazar) and Maldi Mopar and Devrani (Tehsil: Bhatapara), District- Baloda Bazar-Bhatapara, State: Chhattisgarh. Environmental Clearance for existing 2.0 million TPA Limestone Production Capacity in favor of M/s. Ambuja Cements Limited vide letter no. J-11015/252/2008-IA-II (M) dated 13.08.2010

1.1 Profile of Project Proponent:

Ambuja Cements Ltd is India's foremost cement company known for its hassle-free, home-building solutions. Unique products tailor-made for Indian climatic conditions, sustainable operations and initiatives that advance the company's philosophy of contributing to the larger good of the society, have made it the most trusted cement brand in India.

Ambuja Cements Ltd., a member of Holcim - global leader in innovative and sustainable building solutions, is among the leading cement companies in India. Ambuja Cement has provided hassle-free, home-building solutions with its unique sustainable development projects and environment-friendly practices since it started operations. Currently, Ambuja Cement has a cement capacity of 31 million tonnes with six integrated cement manufacturing plants at Six Locations and eight cement grinding units across the country.

The company has many firsts to its credit – a captive port with four terminals that has facilitated timely, cost-effective, cleaner shipments of bulk cement to its customers. To further



add value to our customers, the company has launched innovative products like Ambuja Roof Special, Ambuja Cool Walls, Ambuja Kawach and Ambuja Cement Compocem. The new products not only fulfil important customer needs but also help in significantly reducing carbon footprints.

Ambuja Cement is the industry leader in responsible use of resources, both natural and man-made. The company has been certified over eight times water positive, a feat achieved through conservation efforts and increasing water efficiency in its plants. It is also plastic negative, by burning as much as over 75,000 tonnes of plastic waste in its kilns, equivalent to 2.5 times of total plastic used. The company also generated 7.1% of its power needs from renewable resources.

Sustainable profitable growth is ingrained in the company's DNA. Ambuja Cement's multi-pronged strategy, including triple bottom line accounting method; True Value; good corporate governance practices; overarching corporate environment policy; and sustainable supply chain policy have helped cement the company's credentials as a sustainable manufacturer. Ambuja Cement's Sustainable Development Ambition 2030 provides strategic direction to the company's long-term sustainability vision. All Ambuja Cement plants are ISO 14001 certified.

Ambuja Knowledge Centres (AKCs), a unique initiative by the company, serves as a knowledge sharing platform for construction professionals that includes practical workshops on mix design and quality supervision. Currently, over 30 AKCs are functional across India.

The company also works closely with communities that live around its plants, through its CSR arm, the Ambuja Cement Foundation (ACF). ACF implements need-based and participatory programmes in the thematic areas of water resource development, health and sanitation, women empowerment, rural infrastructure, education and agro-based/skill-based livelihood creation.

The company's most distinctive attribute is its approach to business. Ambuja Cement follows a unique homegrown philosophy **I CAN** that gives people the authority to set their own targets and the freedom to achieve their goals. Its focus has been consistent on two major building blocks that has resonated through its daily operations – Quality (of products) and Safety (of all those involved in the creation of its products).

The company's quintessential **I CAN** spirit has ensured a product that embodies Giant Strength.



1.2 Genesis and Objectives of the Project:

To meet the demand of eastern market, ACL is operating an integrated cement plant of 4.42 MTPA clinker and 2.4 MTPA cement production capacity at Rawan village in Baloda Bazar/Bhatapara Tehsils, Baloda Bazar- Bhatapara district of Chhattisgarh. This plant is referred to as Bhatapara Unit of ACL. ACL already holds a captive limestone mining lease to meet the requirement of the cement plant. To meet the requirement of further plant expansion, ACL proposes to open the new mines at Maldi, Mopar, Devarani, Karmandih and Boirdih villages in close vicinity of the cement plant.

The proposed Maldi-Mopar limestone mining project covers a lease area of about 553.656 ha of land (>100-ha) and thus it is scheduled under “Category-A” project, as per the EIA Notification dated 14th September 2006. The mining lease area comprises of agricultural fields with partly rocky and barren waste land. The total mining lease area is 553.656 ha which spreads in five villages Boirdih, Karmandih, Maldi, Mopar and Devrani .Out of Total Area, 53.686 ha Govt waste Land and 499.970 ha Pvt Agriculture Land.439.930 Ha Pvt land has already been acquired and 60.040 ha land will be acquired on the basis of One to one purchase with Farmers.

Table 1.1: Land Breakup

Govt. land (ha)	Private land (ha)	Total (ha)
53.686	499.970	553.656

1.3 Brief Description of the Project:

Nature of the Project

The proposed Maldi-Mopar limestone mining project covers a lease area of about 553.656-ha of land (>100-ha) and thus it is scheduled under “Category-A” project, as per the EIA Notification dated 14th September 2006.

Size of the Project:

The proposed Maldi-Mopar mining project covers an area of 553.656-ha with an estimated mineable limestone reserves of 264.8 MT. The projected life of the mine is 42 years. The total cost of mining land and mining machinery for the proposed mining project is about Rs.291.0 Crores.

**Location of the Project:**

The proposed Maldi-Mopar limestone mining project area falls under Maldi, Mopar, Devarani, Karmandih and Boirdih villages in Baloda Bazar Tehsils of Baloda Bazar - Bhatapara district in Chhattisgarh state. The general location map of the proposed mining project is depicted in **Figure 1.1**.

The ML area is located at a distance of 1.5-Km, SW of ACL's Bhatapara Unit. The key map depicting project setting with respect to the Bhatapara Cement Plant and captive Rawan limestone mines of ACL are depicted in **Figure 1.2**.

The mining lease area is well connected by road and rail networks. An all-weather road connecting Baloda Bazar and Bhatapara runs at a distance of 2.5-Km, NE for the mining project site. Bhatapara Railway station, on the Mumbai-Howrah broad gauge main line of the Southeastern Railway (SER) runs at a distance of 21 Km, NW from the project site.

The mining lease area comprises of agricultural fields with partly rocky and barren waste land. The total mining lease area comprises of 499.974-ha (90.3%) of private land and 53.682-ha (9.7%) of government land.

Table 1.2: Brief Description of the Project

S. No.	Particulars	Details
A.	Nature of project	Opencast Mechanized Mining
B.	Size of project	
1	Mining Lease area	553.656 Ha
2	Proposed Limestone Production capacity	Expansion from 2.0 MTPA to 6.5 MTPA ROM
C.	Project Location	
1	Villages	Maldi, Mopar, Karmandih, Devrani, Boirdih
2	Tehsil	Baloda Bazar
3	District	Baloda Bazar- Bhatapara
4	State	Chhattisgarh
5	Latitude	21° 38' 04" to 21° 39' 47" N
6	Longitude	82° 02' 10" to 82° 04' 30
7	Toposheet No.	64 K/2
8	Location Map of the Proposed Mine Site have been given in Figure 1.1	
D.	Environmental Settings Details (with approx. aerial distance & direction from the mining	



S. No.	Particulars	Details
		<i>lease boundary)</i>
1	Nearest Town	Baloda Bazar 9.3 Km, (E)
2	Nearest State / National Highway	NH-200 : 25 km (SE)
3	Nearest Railway Station	Bhatapara 21 km (NW)
4	Nearest Airport	Raipur 93 km (SW)
5	National Parks, Wild Life Sanctuaries, Biosphere Reserves etc., Reserved / Protected Forest within 10 Km radius study area	None
6	Water Bodies within 10km radius to study area	Mahanadi Irrigation Canal : Adjacent (E)
		Kukurdi Pond 3.2-Km, (ENE);
		Jamuniya River : 8.0-Km, (NW);
		Kharsi Nala : 9.5-Km, (SE)
7	Seismic Zone	Zone II
E.		Cost Details
1	Total Project Cost	291 crores
2	Cost for Environmental Protection Measures	10.59 Crores

Source: Toposheet, Site Visit and Pre- Feasibility Report

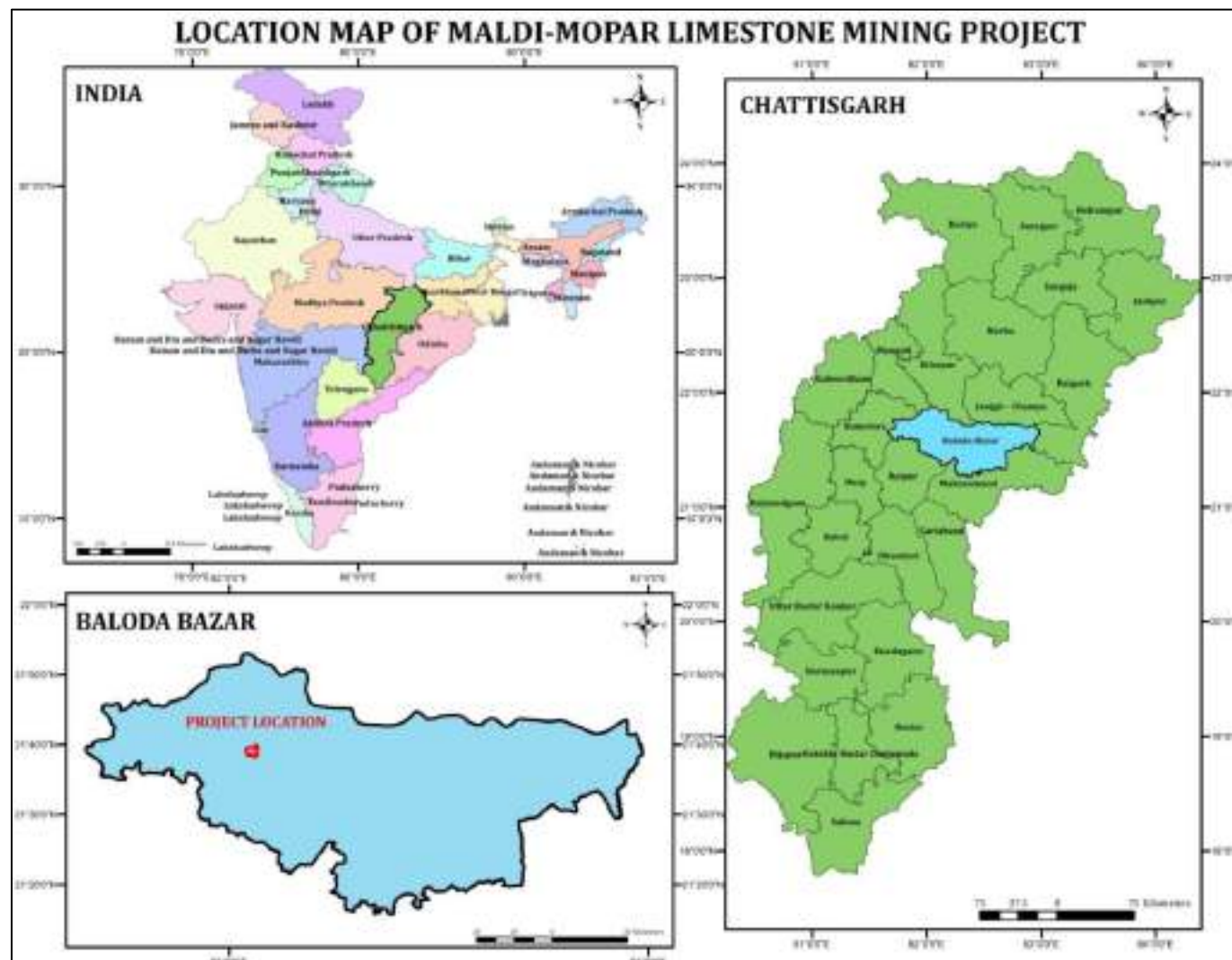


Figure 1.1: Location map of the mine site

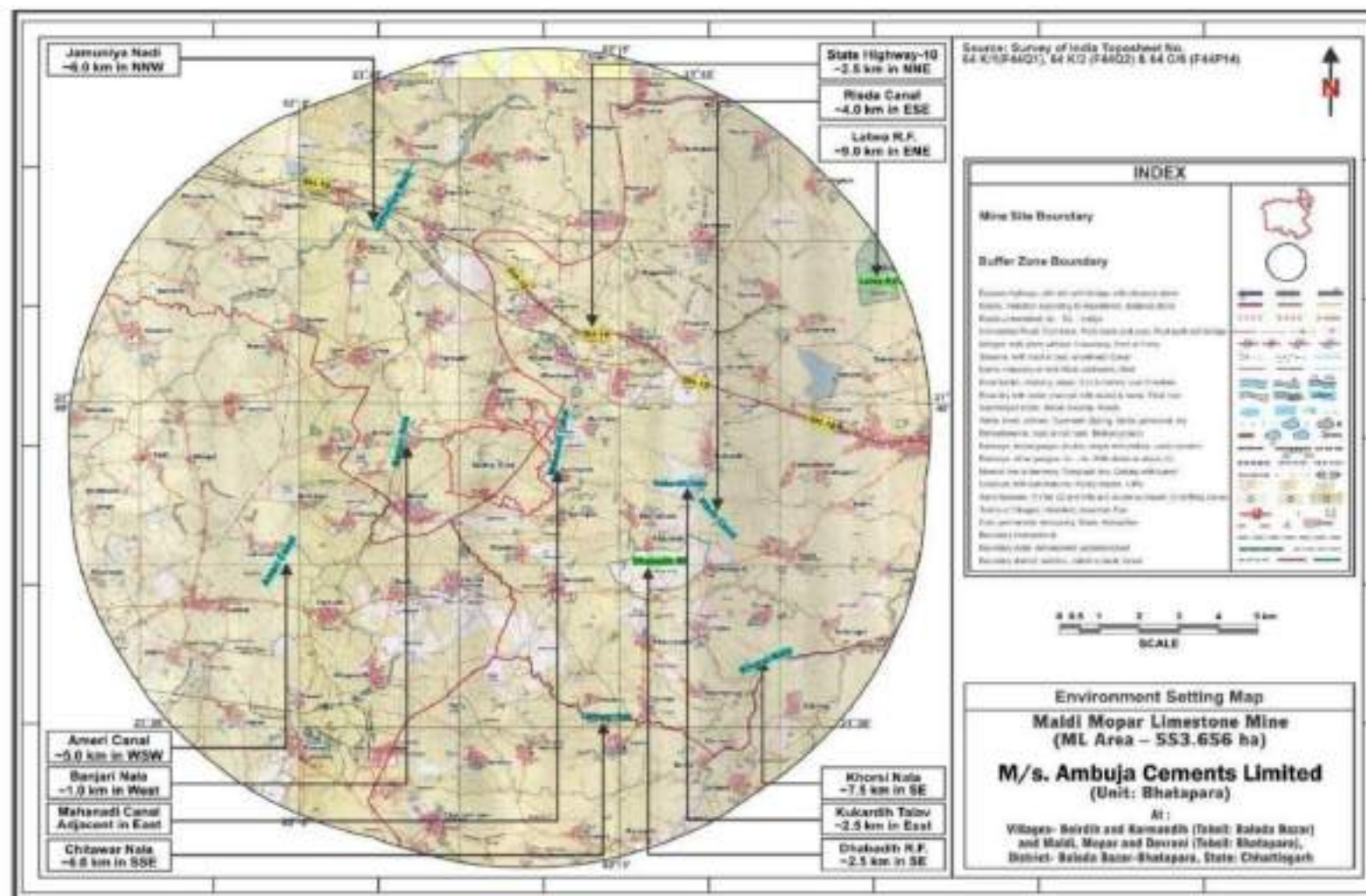


Figure 1.2: Study Area Map (10-km Radius from MI Boundary)



1.4 Scope of the Study:

On the basis of analysis of data, details and information collected, the study provides directional inputs with cost estimates and budgetary allocations for the resettlement and rehabilitation of the project affected families (PAFs). The study, in particular, provides the following:

- I. Details of land which would be acquired/purchased for the project;
- II. Details of land to be acquired/ purchased, number of PAFs, their land holding and land remuneration;
- III. Assessment of the socioeconomic conditions of the PAFs with their demographic, educational and economic profile;
- IV. Need based assessment/choices expressed by the PAFs for their resettlement and rehabilitation and for improving the socioeconomic conditions of the PAFs;
- V. Institutional arrangement for effective implementation of the RP so that the socioeconomic conditions of the PAFs could be improved with their own participation.

1.5 Methodology for Baseline Data

The baseline data collection and Need Assessment survey was carried out in a combination of primary and secondary source in the study area.

Primary Source: Household survey, Personal Interview, Group Discussion in community meetings etc. *Secondary Source:* Revenue department, Census 2011, LARR Act, 2013, District Census Handbook etc. The questionnaires were designed to suit the subjects considering their rural background enabling to furnish correct information and data as far as possible. Format of Questionnaire is annexed with this Report as Annexure 1. Additionally, public consultations and focus group discussions were held during the fieldwork to understand views of people affected, with reference to purchase of land, its due compensation, benefits of the project, opinion about health and safety issues due to the project to ensure participation of community in project implementation, monitoring and to develop a comprehensive coordination amongst the stakeholders for successful implementation of the project.

The collected data was further analyzed and presented in tabular/ diagrammatic/ graphic form for better understanding. These tabulated data were interpreted and evaluated with the help of various qualitative/ quantitative techniques and ideographic approaches.



Secondary Source: Remote Sensing and GIS based Decision Support System (DSS) for resettlement and rehabilitation is an efficient means of implementing R&R as scientific decisions. The diversity of parameters mapped with the help of Remote Sensing Imagery in the GIS domain highlights the complexity of the program and underlines the necessity of developing a Scientific and Structured methodology for assisting the decision makers in choosing the most appropriate and optimal solution for R&R program.

1.6 Outline of the Report:

The present report details the Resettlement Action Plan (RAP) for the PAFs whose land is being acquired/ purchased for the proposed mining project. The contents of this report are organized as follows:

- Chapter 1:** Gives an overview of the project background, description of project site/location details; Brief description of project; scope of study, methodology for baseline data/information and need assessment, chapter-wise report layout.
- Chapter 2:** Details the land to be acquired/ purchased, description of land holding, status of land acquisition, and compensation for the acquisition along with the status of Land Outsees.
- Chapter 3:** Delineates the profile of the village, socio-economic status of PAFs, mapping based on the socio-economic survey including the public consultations with the PAFs.
- Chapter 4:** Describes the details of homestead living within the lease area.
- Chapter 5:** Outlines Rehabilitation Policy details (national/state), ACL's Resettlement Policy framework with compensation, actions and activities proposed for the Land Outsees.
- Chapter 6:** Outlines the implementation schedule of RP.
- Chapter 7:** Includes the Monitoring and Evaluation framework for providing in-process inputs for monitoring and evaluation.
- Chapter 8:** Summarizes the cost required for implementation of the RP which includes cost of land acquisition, need based and social development initiatives, monitoring and evaluation framework for the proposed Limestone mining project.
- Chapter 9:** Provides the proposed Grievance Redressal System for the project.



CHAPTER -2: LAND REQUIREMENT AND PURCHASE

2.1 Introduction:

Out of Total Mining lease area of 553.656 ha the Government waste land is 53.686 and 499.970 ha Pvt Agriculture Land. This agricultural land 499.974 hectare lies at Villages Maldi, Mopar, Devarani, Karmandih and Boirdih villages in Baloda Bazar Tehsils of Baloda Bazar - Bhatapara district in Chhattisgarh state. The detailed classification of 499.974 ha land for the mining project has already depicted in **Table 1.1**.

ACL has gathered the information of survey numbers and sub-division numbers of the plots proposed for acquisition/ Purchase and the names of owners of these lands along with a cadastral map showing the proposed lands for acquisition/ Purchase. Copy of the khasra map is enclosed with this report as Annexure II.

2.2 Plan for Purchase of Land:

Various acts related to acquisition of land serve as a guide for purchasing of land from the land holders whose lands are falling in the ML area. These are listed below:

- I. The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act 2013 with amendments (LARR Act, 2013).
- II. Chhattisgarh Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Social Impact Assessment, Consent and Public Hearing) Rules, 2016
- III. Chhattisgarh Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Determination of Multiplying Factor in case of Rural Areas) Act, 2019.

The land for the proposed mine is being acquired /purchased as per provisions of above mentioned act which entitles the lease holder to purchase land from private owners on a Government DLC rate. ACL has following options for purchase of land for its proposed mining project: Acquire land falling in the mining lease area through provisions of LARR Act, 2013 with amendments time to time & Chhattisgarh rehabilitation policy 2007 and Chhattisgarh mutual consent policy 2016. Purchase land through mutual agreement with the land holders falling in the mining lease area at negotiated rates and terms and conditions.



ACL adopted the methods which are mentioned in the above point to fulfill its land requirement, as the experience related to acquisition tells that land acquisition is a long, tiresome and time taking process, on the other hand purchase of land through DLC rates of land are beneficial to land holders and company, it is time saving and develop confidence in all the stake holders.

ACL initiated efforts for purchase of land and approached Village Panchayat, District Collector and Tehsildar to issue NOC for the purchase of land falling in the mining lease area. Purchase of lands for the mines under the above said method is voluntary, since the land owners have willingly agreed to sell their land at Government DLC rates as per the guidelines of LARR Act, 2013. No involuntary land purchasing for the project is proposed by the ACL from the private owners as the land is being/will be purchased/acquired only from the landowners willingly to sell their land after fulfilling legal formalities. In case it doesn't occur smoothly then ACL will adopt the alternative of taking surface right for such a land under LARR, 2013 with amendments and Chhattisgarh state policy.

The compensation rate proposed by ACL for purchasing /acquisition will be as per the rates notified by Registration and Stamps Department, Government of Chhattisgarh R & R policies and Chhattisgarh mutual consent policy 2016 benefits to affected persons according to LARR, 2013.

2.3 Stepwise Procedure for Land Purchase:

The following steps will be followed all throughout the period for the land acquisition /purchase for the proposed mining project:

- I. Identification of the exact area and rightful land owners and demarcation of the areas to be acquired /purchased, through Revenue/Tehsil office of Baloda Bazar/ Bhatapara.
- II. Carrying out the Socio-Economic Survey of the Project Affected Persons (PAFs).
- III. Discussions with landowners from time to time to offer the applicable rates to land owners on the prevailing DLC rates decided by the State Government.
- IV. To sign the agreement with land owners to purchase their land, after getting their consent and to submit the application to the revenue authorities for registration of Lands.



- V. Part of the agreed compensation amount to be released immediately after registration of the land by the Tehsil Office and receipt of the documents. The payments to the land owners are to be made through cheques directly.
- VI. Final payment of compensation to be released only after physical possession of the land & Registration of land in the name of ACL at the DLC rate.
- VII. To set up a Grievance/Dispute Redressal System, so that the land holder/land loser can approach the project proponent for his/her grievances.

2.4 Avoidance of Involuntary Resettlement:

Most of the land to be acquired/ purchased is private land. The land purchase activity will follow the provisions of RFCTLARR, 2013 with amendments to keep transparency and to avoid involuntary resettlement of land holders. This will be achieved by Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement through the process of consent and mutual agreement whereby the buyer is responsible for economic rehabilitation of land losers.



CHAPTER -3: SOCIO-ECONOMIC PROFILE OF THE AFFECTED VILLAGE

3.1 Location and Project Area Profile:

The proposed Maldi-Mopar limestone mining project area falls under Maldi, Mopar, Devarani, Karmandih and Boirdih villages in Baloda Bazar/Bhatapara Tehsils of Baloda Bazar- Bhatapara district in Chhattisgarh state. The mining lease area is well connected by road and rail networks. An all-weather road connecting Baloda Bazar and Bhatapara runs at a distance of 2.5-Km, NE for the mining project site. Bhatapara Railway station, on the Mumbai-Howrah broad gauge main line of the Southeastern Railway (SER) runs at a distance of 21 Km, NW from the project site.

3.2 Socio-Economic Survey:

The socio-economic survey of an area provides an assessment of the demographic structure of the area, provision of basic amenities viz., housing, education, health and medical services, occupation, water supply, sanitation, communication, transportation, prevailing diseases pattern at the baseline level. The Objectives & scope of work of the survey are given as under:

Objectives:

- To conduct socio-economic assessment study in the lease area.
- To know the current socio-economic situation in the region to cover the sub sectors of education, health, sanitation, and water and food security.
- To assess the needs of the PAFs.
- To help in further planning for providing better living standards to the PAFs based on their needs identified during survey.

Scope of work:

- To study the Socio-economic environment of the area from the secondary sources.
- Analysis of the data with qualitative and quantitative approaches to know the current socio- economic situation in the region to cover the sub sectors of education, health, sanitation, and water and food security.
- To identify the potential impacts of the proposed project and their mitigation measures.
- To recommend practical strategic interventions in the sector

3.3 Methodology Adopted for Collection of Data & Presentation of Data & Analysis:

Primary Source: Household survey, Personal Interview, Group Discussion in community meetings etc. **Secondary Source:** Revenue department, Census 2011, LARR Act, 2013, District Census Handbook etc.



Secondary Source using Integrated Geospatial Satellite technology : The Lease boundary marked on a moderate scale map is now refined and it is perfectly matching with the 1:500 scale map. This is derived from the georeferencing of the boundary with the VHR (Very High Resolution) satellite data of 50 cm resolution. The use of VHR satellite data of 50 cm has been augmented with the timeline studies. This has helped in mapping the development of the Built-up assets like Residential Buildings, Permanent Roads, Waterbodies, Dam walls for water conservation structures, etc. to perfection on a very high scale.

The Land Properties like Agricultural lands have been demarcated along with the field boundaries. The Non Agricultural usages like Forest lands and the Wasteland have been demarcated by taking the help of SOI toposheets, as the forest lands are the proprietary ownerships and are delineated on the toposheets with the Green Bands for the Notified and Reserved forests. The Ground water Wells have also been inventoried from the VHR satellite data of 50 cm resolution. The use of this Integrated approach has yielded a very effective, transparent, and rapid mechanism to assess the entire area for generation of the R& R plan for the study area.

The Satellite imagery and the deliverables generated from its analysis are always available as a ready reckoner for calculation of the total budgetary estimates. Further the budgetary estimates are available as the area of each category and individual features wise basis is available to plan in detail the R&R program.

The VHR satellite imagery-based survey is augmented by field-based validation and the Ground survey is also aligned with the satellite-based R&R master Plan. New and advance tools of GPS based Geotagging Photographs snapped at the field can be supplemented as corroborative Scientific evidences in such an integrated approach.

Further the integrated approach of using Satellite survey and ground survey in sync will generate deliverables which are amenable for cross verification by any of the systems like Satellite images, DRONE images, Field visit and cross verification using the Latitude and Longitude values associated with each individual feature mapped and provided as master plan for the R&R program

All the value-based deliverables like VHR satellite imagery (50cm), Georeferenced Toposheet, holistic Master plan indicating the properties and assets in the study area, Ground field survey based Geotagged photographs are provided in a single integrated file.



The preliminary survey and secondary data collection helped to understand the physical, social, economic and cultural setup of the area before undertaking the field survey. The Census-cum- socioeconomic survey was conducted of the PAFs using a well-structured questionnaire prepared in local language enabling subjects to reply appropriately.

3.4 Land Use and Demographic Profile of Revenue Village Land Use:

Total geographical area of the villages of the core zone viz., Maldi, Mopar, Devarani, Karmandih and Boirdih is 2229 ha of which mining lease is a part. Out of total geographical area, 1530 ha is cultivable irrigated land, remaining 232 ha land is un-irrigated land. There is no forest land involved in this ML area. The detailed information has been mentioned in the table given below:

Table 3.1: Land Use Details of Revenue Village

S. No.	Particular	Maldi	Mopar	Devarani	Karmadih	Boirdih
1	Geographical Area of the Village (in hectares)	690	805	286	240	208
2	Irrigated Land (Of the total Cultivable Land) (in hectares)	521	621	238	53	97
3	Un-irrigated Area (in hectares)	40	53	10	119	10
4	Forest Land (in hectares)	0	0	0	0	0

Source: Census of India, 2011

The area falling in the mining lease i.e. 499.974 ha consists of private land and Govt. land is 53.682-ha.

3.5 Demography:

Number of households in the Maldi, Mopar, Deorani, Karmandih, Sarkipar, Mudhipar villages is 1653 and population is 8326 and average family size comes out to be 5.03 persons per household. The male population in the village is 4189 and female population is 4137. The male population in the village is more than the female population. Most of the people are Hindu and schedule castes are also present in the study area. The literacy rate of the village is 55.26% the detailed information is mentioned in the table given below:-

**Table 3.2: Demographic Characteristics of Revenue Villages**

Name of Village	Total HH	Total Population	Total Male	Total Female	Total SC	SC Male	SC Female	Total ST	ST Male	ST Female
Maldi	510	2365	1178	1187	139	73	66	881	415	466
Mopar	496	2527	1272	1255	216	108	108	104	51	53
Deorani	224	1190	609	581	263	126	137	278	141	137
Karmadih	178	1022	506	516	986	485	501	0	0	0
Sarkipar	146	717	372	345	385	199	186	121	58	63
Mudhipar	99	505	252	253	0	0	0	140	71	69
Total	1653	8326	4189	4137	1989	991	998	1524	736	788

*Source: Census 2011***3.6 Identification of Project Affected Families:**

As mentioned earlier, the total mining lease area is 553.656 ha which spreads in five villages Boidih , Karmandih,Maldi, Mopar and Devrani .Out of Total Area, 53.686 Ha Govt waste Land and 499.970 Ha Pvt Agriculture Land 439.930 Ha Pvt land has already been acquired and 60.040 Ha land will be acquired on the basis of one to one negotiation with for the project The Scheduled Tribes affected families will be resettled preferable in the same Scheduled Area in a compact block so that they can retain their ethnic, linguistic and cultural identity. One-third of the compensation amount due will be paid to the affected families at the outset as first installment and the rest will precede the taking over of the possession of the land.

3.7 Socio-Economic Profile of PAFS:

Socio-economic survey and verification of the affected persons were undertaken to address the possible adverse impacts if any that may emerge during and after the course of the project implementation. The socio-economic survey carried out, acts as base line information and provides a cut off point for eligibility to compensation or assistance for losing assets in the process of land purchase. The detailed questionnaires were designed to suit the subjects considering their rural background enabling them to furnish correct information and data as far as possible. Formats included questions on concerns of affected families towards problems, their choices for infrastructure improvement, additional facilities required. It was decided that as far as possible each of the selected PAF should be interviewed at the time convenient to them. Before embarking on data collection, family members including heads of families of affected families were briefed about need and procedure of the study (**Figure 3.1**). A few focused group discussions involving representative members of 5-6 families were

conducted to understand their concerns and awareness regarding the project. Photographs of such discussion have been given below.



Figure 3.1: Photographs showing discussion with the villagers



In the public consultations undertaken by organizing Focus Group Discussions (FGDs) in the village, people participating in the group discussions were informed about the project and then members were asked to provide their concerns regarding the project activities. Their participation helped in identifying social issues and incorporating suggestions in the R&R measures wherever feasible. Therefore the objective of the public consultation was to inform, make them aware and participate in the project planning. The focus group discussion were conducted to elicit the views of the affected persons and other stakeholders on displacement, compensation, employment, gender issue, infrastructure, education, health care, sanitation and any other advised/raised by the stakeholders. Views expressed by participants have been incorporated in the project design wherever feasible. On an average 10-15 persons including women of the village who are likely to be affected participated in the focus group discussion. The number of participants increased as the discussion progressed. The issues were raised, views were expressed and suggestions were provided by the participants. Summary of discussion is as below:

- Employment opportunities will increase for local people with the development work.
- Price of land will increase.
- Loss of land properties and disruption of livelihood of those close to the project area.
- Majority people preferred Cash for land compensation.

In some cases, people were interested to get employment for their survival and betterment. The PAF survey was undertaken during the February, 2022 to March, 2022. Efforts were made to contact all land owners as identified through khasras.

3.7.1 Population Distribution:

Total 3 villages have been affected as a source of primary data. Average household size is 5.01 the detail is given in **Table 3.2** and as shown in below **Figure 3.2**.

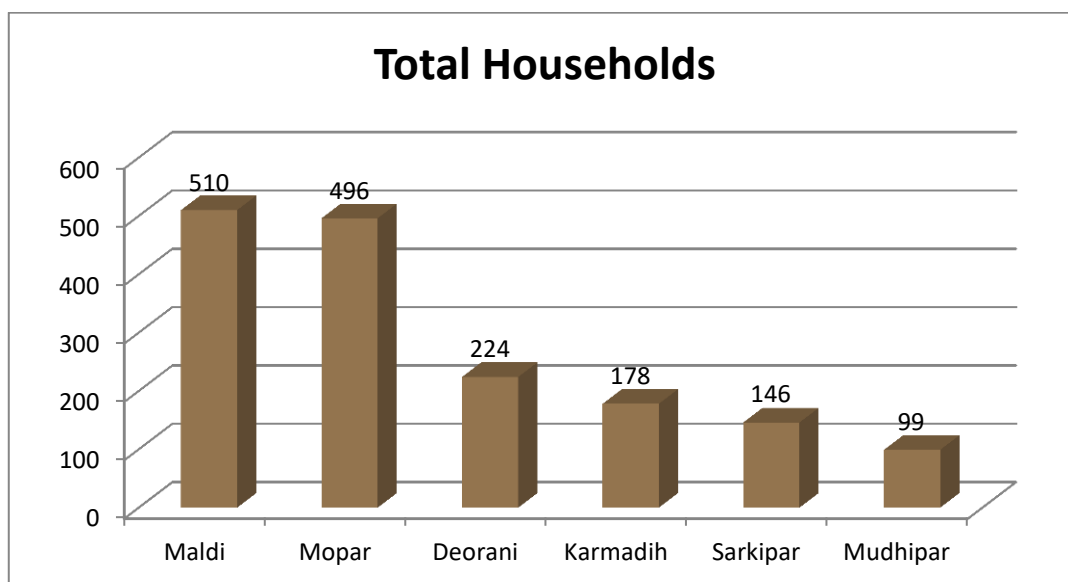


Figure 3.2: Population Distributions of the Revenue Village

3.7.2 Vulnerable Group

While developing an Action Plan, it is very important to identify the population who fall under the marginalized and vulnerable groups and special attention has to be given towards these groups while making action plans. Special provisions should be made for them. On the bases of surveyed village we have observed that the population of the schedule Caste (S.C.) 1989 (24 %), schedule tribe population 1524 (18%) & other population 4813 (58%) in affected village (**Table 3.3**) of the study area.

Table 3.3: SC and ST population in the Revenue village

No. of Villages	Total Population	SC Population	ST Population	Other Population
6	8326	1989	1524	4813

Source: Census of India, 2011

Social Stratification

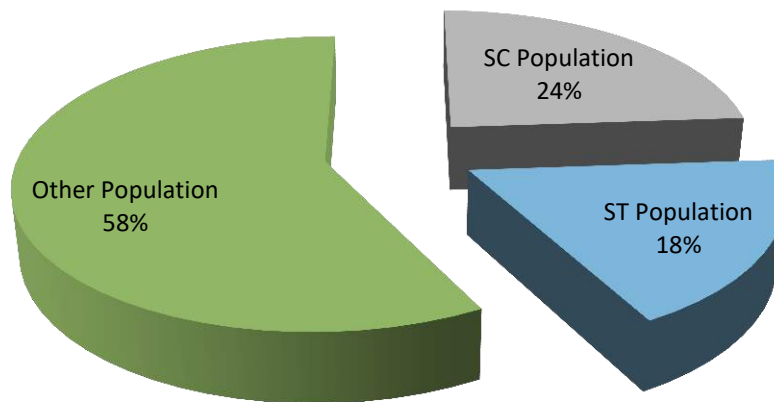


Figure 3.3: SC and ST Population of Revenue village

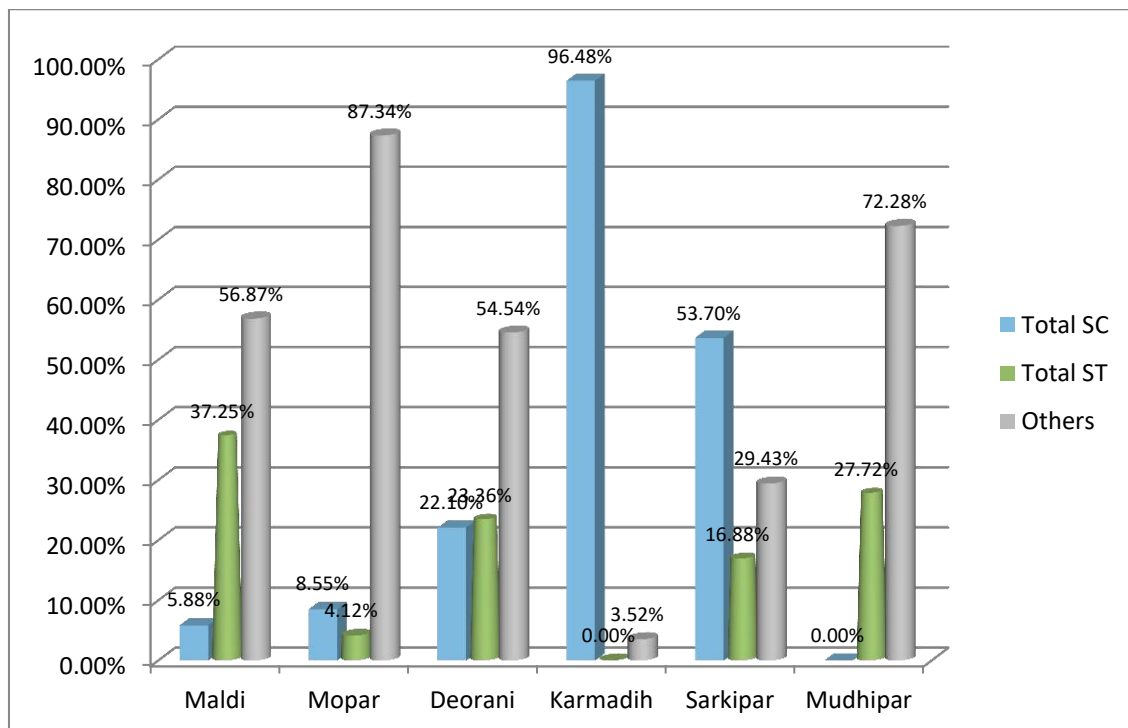


Figure 3.4: Village-wise SC / ST Population in the Revenue Villages

3.7.3 Religion

The religion of the majority of the population in the affected villages is Hindu.



3.7.4 Literacy Rate and Occupation Pattern of Surveyed Village

Literacy Rate is the amount of people in a country with the ability to read and write. The analysis of the literacy levels is done in the affected area. The distribution of literates and literacy rates in the affected village is given in **Table 3.4**.

Table 3.4: Literacy Rate of Revenue Village

Name of Village	Total Literate	Male Literate	Female Literate	Total Illiterate	Male Illiterate	Female Illiterate
Maldi	1367	778	589	998	400	598
Mopar	1498	905	593	1029	367	662
Deorani	587	356	231	603	253	350
Karmadih	454	275	179	568	231	337
Sarkipar	386	241	145	331	131	200
Mudhipar	309	182	127	196	70	126
Total	4601	2737	1864	3725	1452	2273

Source: Census of India, 2011

In the present study, the literacy rate is average in the surveyed village due to lack of education awareness and poor higher education facility. Male and Female literacy rate of affected village varies from place to place. Female literacy is low in this region. **(Figure 3.4)**.

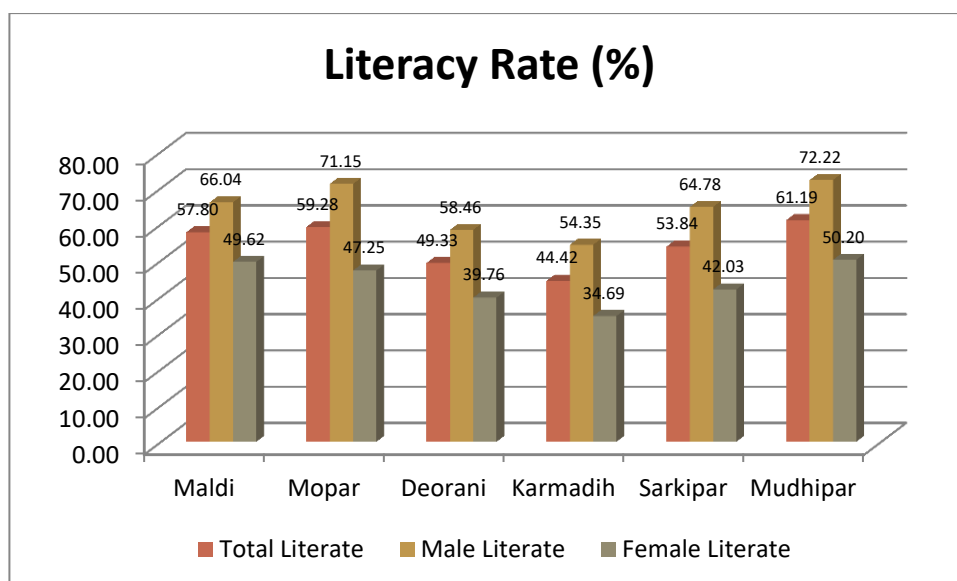


Figure 3.5: Literacy rate in Villages



3.7.5 Economic Activities:

The economy of an area is defined by the occupational pattern and income level of the people in the area. The occupational structure of residents in the study area is studied with reference to work category. The population is divided occupation wise into three categories, viz., main workers, marginal workers and non-workers. The workers include cultivators, agricultural laborers, those engaged in household industry and other services.

The marginal workers are those workers engaged in some work for a period of less than 180 days during the reference year. The non-workers include those engaged in unpaid household duties, students, retired persons, dependents, beggars, vagrants etc. besides institutional inmates or all other non-workers who do not fall under the above categories. **Table 3.5** shows the distribution of workers in the affected villages in area.

Table 3.5: Work Forces of the Revenue Villages

S. No.	Village Name	Total Worker	Main worker	Marginal worker	Non worker
1	Maldi	1092	857	235	1273
2	Mopar	1252	1243	9	1275
3	Deorani	607	597	10	583
4	Karmadih	487	394	93	535
5	Sarkipar	440	378	62	277
6	Mudhipar	270	133	137	235
Total		4148	3602	546	4178

Source: Census of India, 2011

The above table shows that the percentage of total working population and non-working population of whole population of village.

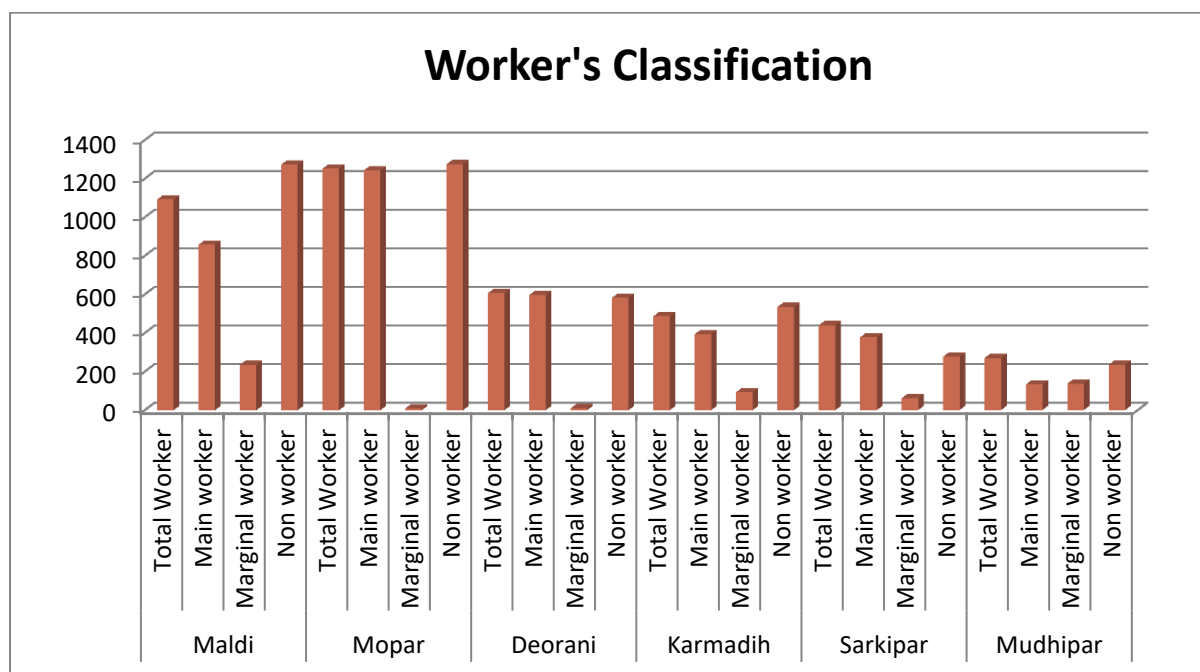


Figure 3.6: Work Forces of the Affected Villages

As per the surveyed village analysis most of them are non-working population. A major portion of working age people is not ideal worker because of limited sectors in which they are engaged with less training and non-awareness of latest sectors in which may be they can do better than other traditional work. (Figure 3.7)

3.8 Demographic Detail of Surveyed PAFS:

Table 3.6: Detail of Surveyed PAFS

S. No.	Name of Villages	Total Family of Census -2011	Socio-economic Surveyed Family	Census Surveyed Family
1	Maldi	510	127	136
2	Mopar	496	124	-
3	Devarani	224	49	-
4	Karmadih	178	45	59
5	Sarkhipar	146	37	-
6	Mudhipar	99	23	-
Total		1653	405	195

3.8.1 Family Type of PAFs:

On the basis of primary data, family type of the project affected families can be classified into two categories- joint family and nuclear family. The Affected families comprise of 32 % of Joint families, 65% of Nuclear families and only 3% of Extended type.

Table 3.7: Family Type

Name of Village	Joint	Nuclear	Extended	Total
Maldi	32	93	2	127
Mopar	40	79	5	124
Devarani	22	26	1	49
Karmadih	15	28	2	45
Sarkhipar	13	24	0	37
Mudhipar	7	15	1	23
Total	265	129	11	405

Source: Census & SES Survey

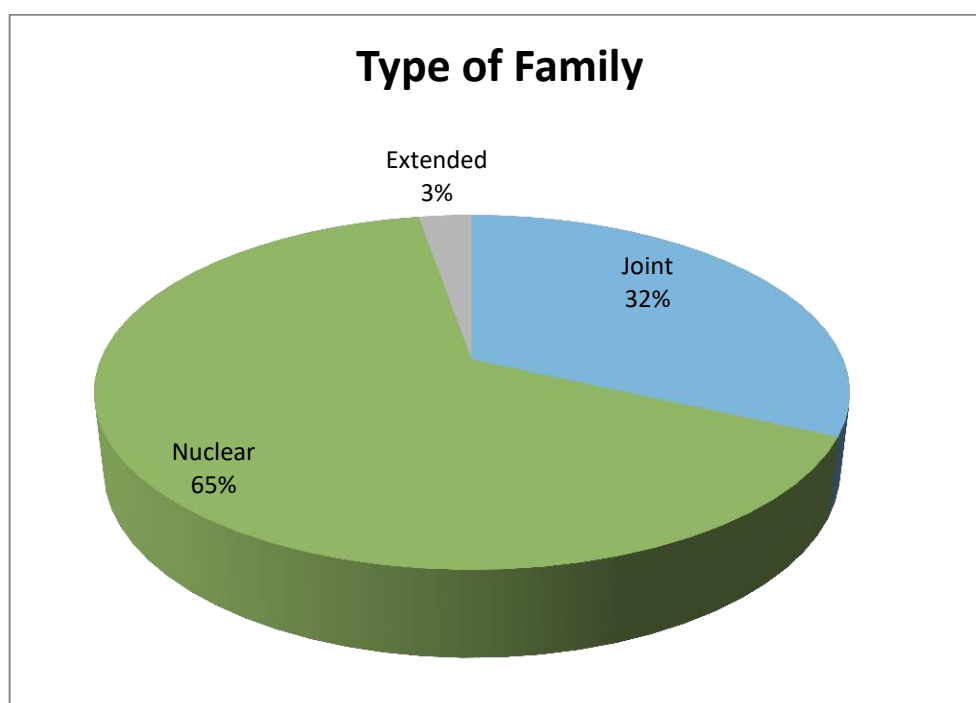


Figure 3.7: Family Type of PAFs

On looking carefully at the data, it was also noticed that more than 51.93% of the affected families have male member as the head of the family whereas less than 48.07% have the Female as the head.

Table 3.8: Head Distribution of Surveyed Family

S. No.	Name of Village	Male	Female	Total
1	Maldi	303	281	584
2	Mopar	297	274	571
3	Devarani	118	108	226
4	Karmadih	108	98	206
5	Sarkhipar	86	82	168
6	Mudhipar	55	52	107
Total		967	895	1862

Source: Census & SES Survey

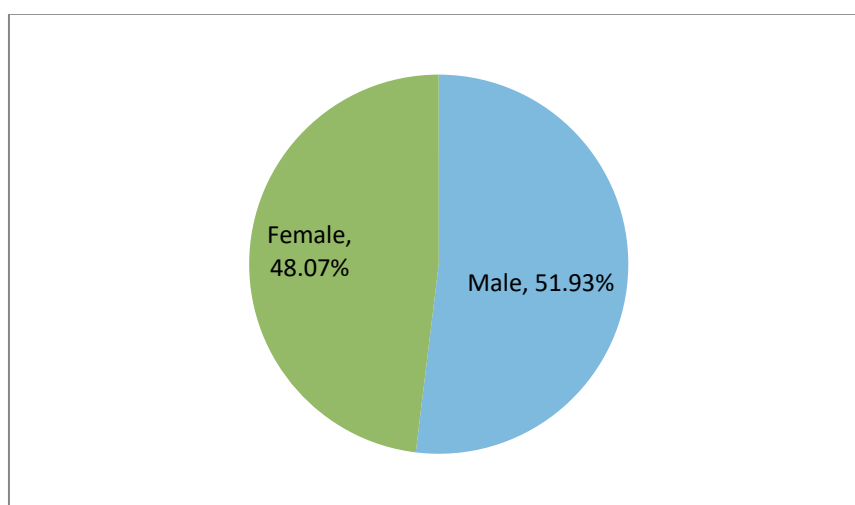


Figure 3.8: Household's composition of PAPs

3.8.2 Marital Status of PAFs:

On the basis of observations of surveyed data, it was also found that 894 of PAPs were married, 968 were un-married. Village wise Marital Status is given in **Table 3.9**.

Table 3.9: Marital Status of the of Surveyed Family

S. No.	Name of Village	Married	Unmarried	Total
1	Maldi	280	304	584
2	Mopar	274	297	571
3	Devarani	108	118	226
4	Karmadih	99	107	206
5	Sarkhipar	81	87	168
6	Mudhipar	51	56	107
Total		894	968	1862

Source: Census & SES Survey

3.8.3 Literacy among PAPs:

Literacy rate was found to be average, in the affected villages. Details of Education level of the PAPs is given in **Table 3.10**.

Table 3.10: Educational Details of Surveyed Family

S. No.	Name of Village	Total Number			
		Primary	Sec/ Senior Secondary	Upper Graduate	Total
1	Maldi	231	278	12	521
2	Mopar	223	265	16	504
3	Devarani	68	112	8	188
4	Karmadih	54	101	5	160
5	Sarkhipar	51	87	2	140
6	Mudhipar	32	58	1	91

Source: Census & SES Survey

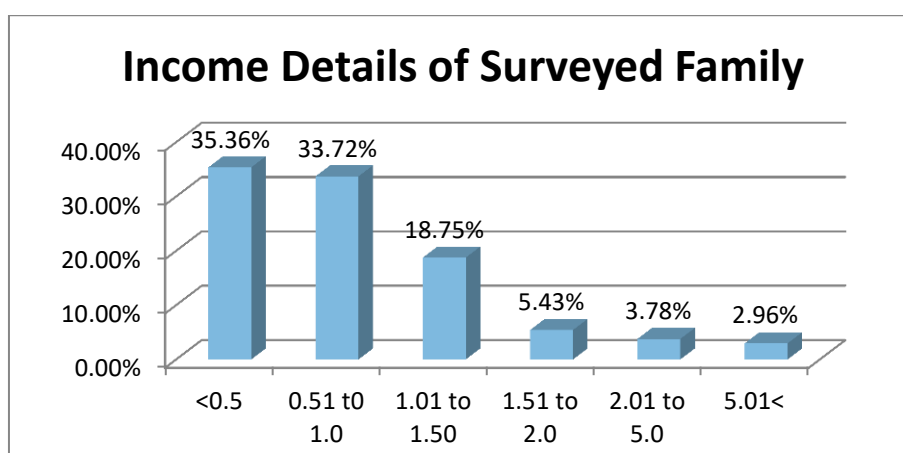
3.8.4 Income Impacts:

Annual Income details of AFs are given in below Table. On the basis of range of annual income, AFs have been divided into four categories. Annual Income of PAFs was calculated on the basis of income derived from primary and secondary sources by the PAFs. Out of the total, it was found that 69.08 % PAFs have an annual income of less than one lakh. Details of total income of PAFs are given in **Table 3.11**.

**Table 3.11: Income Details of Surveyed Family**

Sl. No	Income Range (in lakh)	Total PAFs
1	<0.5	215
2	0.51 to 1.0	205
3	1.01 to 1.50	114
4	1.51 to 2.0	33
5	2.01 to 5.0	23
6	5.01<	18
Total		608

Source: Census & SES Survey

**Figure 3.9: Income of PAPs****3.9 Possession of Assets:****3.9.1 Household Assets:**

Household assets such as electric fan, bike, cars, sewing machine, etc. are possessed by the PAFs.

3.9.2 Agricultural Assets:

The affected families are mostly engaged in the agricultural activities, i.e. farming. Agricultural machineries like tractors, ploughs, etc. are used by them. Few farmers have to borrow tractors and other agriculture equipment during harvesting as they do not possess those.

3.9.3 Utilization of Compensation:

A number of families expressed that they wish to purchase land with the land compensation amount. This is because of agriculture being the main livelihood source. Some of them want to start their own business setups like shops in the village and in Bhatapara district headquarter to serve their livelihood.

CHAPTER -4: CHAPTER-IV DETAILS OF HOMESTEAD WITHIN THE LEASE AREA

4.1 Details of Habitation adjoining the Lease Area:

Remote Sensing and GIS based Decision Support System (DSS) for resettlement and rehabilitation provided realistic database of the landuse within the mining lease area of Maldi Mopar Limestone Mine. The DGPS approved lease was superimposed on the Satellite image as can be seen from the **Figure 4.1**.

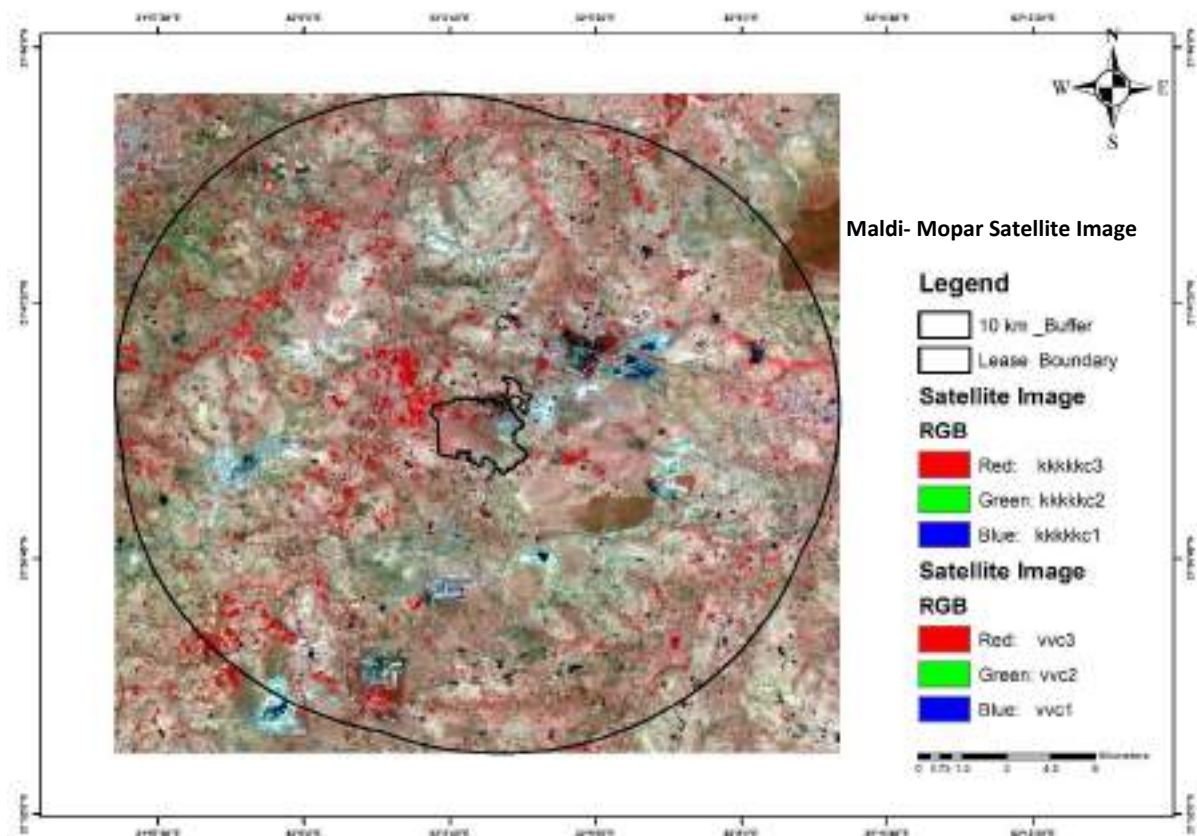


Figure 4.1 : Mining Lease Marked on Satellite Image

As may be observed the Northern part and South East habitations of villages Maldi and Kamardih respectively lies adjoining the Mining Lease boundary. Hence, each of the structure was carefully mapped from the satellite image. To effectively address the ground-based action plan for implementation of the R&R program, each individual asset and properties are provided with unique codes. Figure 4.2 and Figure 4.3 provides details of the habitations adjoining the Mining lease of village Maldi and Village Kamardih.

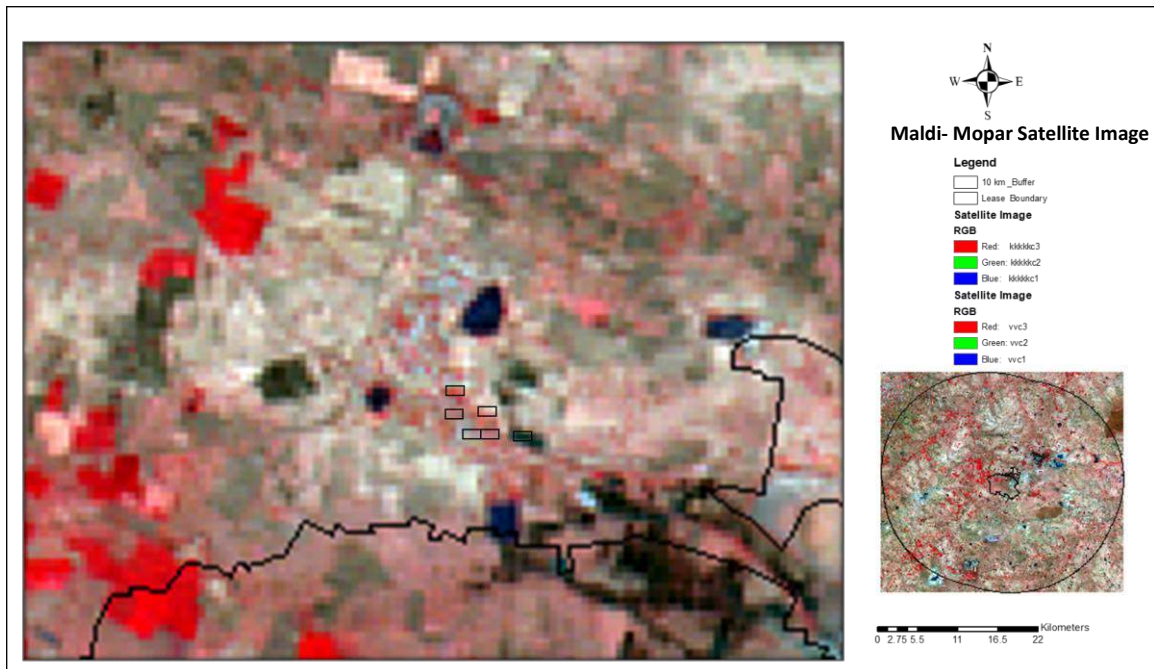


Figure 4.2: Maldi village situated 200m away from the lease area south block Northern direction

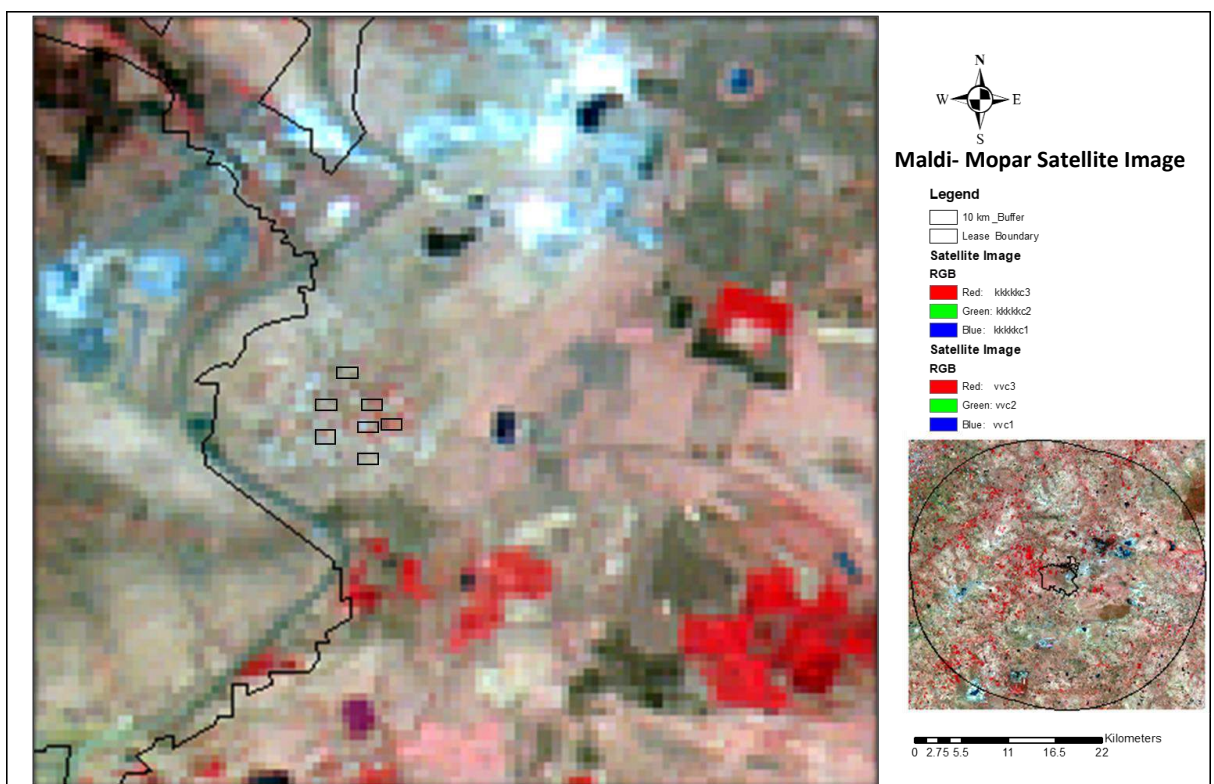


Figure 4.3 : Karmrdih village situated 250m away from the lease area south block South East direction.



As per the analysis of the above database a total number of structure in Both the villages viz, Maldi and Kamardih are 195. Out of 195 structures 174 are residential, 3 commercial, 9 others and 9 structures CPR type outside the mine lease area as details are given in following table (4.1) and details of structure is **Annexure 4**.

Table 4.1: Affected Structure of the Mine Lease

Sl. No.	Village name	Affected Family	Project affected Structure	Residential	Commercial	Others	Common property Resource
1	Maldi	96	136	123	3	6	4
2	Kamardih	42	59	51	0	3	5
Total		138	195	174	3	9	9

4.2 Entitlement Matrix:

Type of loss and compensation have been shown in the table below:

Table 4.2: Entitlement Matrix

Type of Loss	Entitlement	Details
<ul style="list-style-type: none"> Loss of Houses and Agricultural Land 	<ul style="list-style-type: none"> Compensation value through consent mechanism to all PAFs 	<ul style="list-style-type: none"> The PAFs want at least 25% more than the government rate as compensation for their agriculture all and houses. They want PP's aid in purchasing new land in the nearby regions. PAFs have demand of employment opportunities in the Proposed project.



CHAPTER -5: REHABILITATION POLICY AND LEGAL FRAMEWORK

5.1 Resettlement Policy and Legal Framework:

Acquisition of land for its limestone mine project is an ongoing process and would always be site specific. The land acquisition (more commonly termed as land purchase) is based on compensation arrived through legal process and discussion with land owners. Acquisition of land for proposed project is voluntary, since the land owners have willingly agreed to sell their land at DLC rate and provision of Chhattisgarh Rehabilitation Policy 2007, Chhattisgarh Mutual Consent Policy 2016 & LARR Act, 2013.

The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (LARR Act, 2013), Chhattisgarh mutual consent policy (2016) serve as a guiding factor in purchase of land. So far ACL has been able to avoid expropriation setting compensation through mutually agreed rates. However, in order to comply with the LARR Act, 2013, to address these directives. The acquisition, compensation, rehabilitation and resettlement of land for mining purpose is mentioned in the section 2 (3) of the LARR Act-2013. Further section 2(2)(b)(i) of LARR Act,2013 mentions when appropriate Government can acquire land, according to this in case of acquisition for private companies, the prior consent of at least eighty percent, of those affected families, as defined in the sub-clause (i) and (v) of clause (c) section 3.

5.2 Resettlement Policy of ACL:

- Land Purchase on DLC rate and provision of LARR Act: Land will be acquired by legal process (according to DLC rate), No Involuntary displacement (ID) is anticipated.
- Assistance in Re-establishment: Affected Persons will be assisted to re-establish themselves, if required, in order to at least restore the pre-project income or improve their living standards.
- Gender Equality: Gender equality will be ensured and adhered to; and vulnerable AFs will be favorably considered for restoring their livelihoods.
- RP and project related information will be informed to PAFs from time to time.
- Land for Land: Replacement land if available near the project site shall also be an option for compensation if desired by PAFs. In the absence of replacement land and PAFs not opting for land, option for cash-for-land.



- Compensation for loss of land: Compensation for loss of land, trees, other assets (Structure & standing crops) and income will be based on market value and full replacement cost will be paid before taking physical possession of the land. Compensation will include transaction cost also.
- Compensation payments prior to the commencement of project: All compensation payments and related activities will be completed prior to the commencement of project activities;
- Transparency in Payments: All compensation will be paid by Cheque or Bank Transfer only to ensure the PAPs are getting compensation in full.
- Grievance Redress Mechanism: A Grievance Redress Mechanism will be set up at the unit level;
- Involvement of women and vulnerable APs: Project will ensure involvement of women and vulnerable PAPs also in all activities related to resettlement planning, implementation, and monitoring.
- Adequate Budget: ACL will ensure adequate budgetary support to cover implementation cost.
- Monitoring: ACL will conduct external monitoring and evaluation of the implementation of RP.

5.3 Eligibility for Compensation and Entitlement:

Compensation for purchase of land for the project is fixed according to LARR Act, 2013 considering the market price cost of resettlement and alternate income generation of PAFs. Consequent to its Resettlement Policy and considering socio-economic profile and impacts, eligibility and entitlement matrix has been drawn for the project to ensure that affected persons have a better economic and social status. This matrix takes into consideration provisions not only for land compensation but also entitlements for the families whose livelihood is primarily dependent on land and provisions for infrastructural facilities and basic minimum amenities for population. Compensation for land according to Schedule It has been given in **Table 5.1**.



Table 5.1: Compensation Policy Matrix

S. No.	Type of Loss	Applicat ion	Definition of Entitled Person	Compensation Policy	Responsible Agency
1.	Loss of Private Land	Agricultural Land Homestead Land or vacant plot	Legal title holders/PAPs with customary land right/PAPs with Permit from local authority	<ul style="list-style-type: none"> • Compensation at market value or • Transitional allowance • Notice to harvest standing seasonal crops. If notice cannot be given, compensation for share of crops will be provided • Additional compensation for Vulnerable household. 	ACL representatives with the help of appropriate government officials (District magistrate office/ Revenue office) will determine value. ACL will ensure provision of notice. ACL will verify the extent of impacts through a 100% survey of PAPs determine assistance, and identify vulnerable household.



S. No.	Type of Loss	Applicat ion	Definition of Entitled Person	Compensation Policy	Responsible Agency
2.	Loss of structure	Residential/co mmercial buildings and other assets	Legal title holders	<ul style="list-style-type: none"> • Compensation at Replacement value based on current market rate of the structure and other assets, if remainder is viable • Fees, taxes, and other changes related to replacement structure. • Shifting assistance • Right to salvage materials from structure and other assets with no deductions from replacement value. • Additional compensation for Vulnerable households. 	<p>ACL representatives or the appropriate government officials (District magistrate office/ Revenue office) will determine value. ACL will ensure provision of notice.</p> <p>ACL will verify the extent of impacts through a 100% survey of Aps determine assistance, and identify vulnerable household.</p>
3.	Loss of livelihood	Livelihood	Legaltitleholder/tenant/le aseholder/employeeofco mmercialstructurefarmer /agriculturalworker	<ul style="list-style-type: none"> • Assistance for lost income based on three months minimum wage rates. • Additional compensation for vulnerable households. • Consideration for project Employment. 	<p>ACL will verify the extent of impacts through a 100% survey of Ahs determine assistance, and identify vulnerable household.</p>



S. No.	Type of Loss	Applicat ion	Definition of Entitled Person	Compensation Policy	Responsible Agency
4.	Loss of trees and crops	Standing trees and crops Single Crop & DoubleCrop	Legal titleholder/ tenant/lease holder/sharecropper	<ul style="list-style-type: none"> • Notice to harvest standing seasonal crops • If notice cannot be provided, compensation for standing crop (or share of crop for share croppers) at market value. • Compensation for trees based on timber value at market price, and compensation for perennial crops and fruit trees at annual net product market value multiplied by remaining productive years; to be determined in consultation with the Forest Department for timber trees and the Horticulture Department for other trees/crops. 	ACL will ensure provision of notice.ACL representatives and appropriate department / valuation committee will undertake valuation of standing crops, perennial crop sand trees, and finalize compensation rates in consultation rates in consultation with APs.



S. No.	Type of Loss	Applicat ion	Definition of Entitled Person	Compensation Policy	Responsible Agency
5.	Impacts on vulnerable PAPs	All Impacts	Vulnerable APs	<ul style="list-style-type: none"> Additional one time financial assistance Vulnerable households will be given priority in project Construction employment 	ACL will verify the extent of impacts through a 100% survey so hAHs determine assistance, verify and identify vulnerable households.
6.	Community Property	Schools, Hospitals, Religious structures etc.	Community and government	<ul style="list-style-type: none"> Shifting of the property to its original use Proper Restoration of these properties If not possible then cash compensation 	ACL through proper consultation with respective community and government
7.	Any other loss not identified	—	—	<ul style="list-style-type: none"> Unanticipated involuntary impacts will be documented and mitigated based on the principles of the Resettlement Framework. 	ACL will ascertain the nature and extend of such loss and will finalize the entitlements in line with the RR Principles



The Entitlement Matrix has been derived on the basis of LARR Act 2013 and survey carried out for purchase of land for Limestone mine. During implementation, if additional impacts are identified, the Entitlement Matrix will be updated by including compensation and assistance. The proposed Entitlement Framework will be applicable only in the case of land acquisition for mining lease area.

5.4 Initiatives for Income Restoration of PAFs:

Major impacts identified for the land acquisition project is related to loss of income of PAFs. Loss of income may then affect socio cultural systems of affected families. Thus restoration of pre-project levels of income is an important part of restoring socio-economic and cultural systems of affected persons. Income restoration interventions are much more complex. This complex nature of occupational diversity and income variation poses a problem for mitigation measures in the context of economic rehabilitation. However, the Entitlement Matrix proposed for the project has adequate provisions for restoration of livelihood of affected persons/families. The focus of restoration of livelihoods is to ensure that the PAFs are able to at least regain their living standards.

Income Generation Programme: To restore and further enhance the economic conditions of the PAFs, certain income generation and income restoration programs are incorporated by ACL as part of the RP. Salient essentials of these initiatives are listed below:

- I. **Employment:** Apart from payment of compensation for the land, jobs will be offered to the PAFs by ACL according to availability of jobs and their skills;
- II. **Compensation for Land:** Aside from payment of full compensation for acquired/ purchased land at negotiated rates, vulnerable PAFs who are to lose all their land will be assisted by ACL to provide skill training for income generation to the interested PAFs.
- III. **Compensation for Crop:** Compensation for the standing crop and for the land acquired by the project will be paid at the market value.
- IV. **Assistance in Alternate Land:** ACL would advise PAFs for purchase of alternative land as well as to invest in fixed deposit in banks, so that they are assured of good return of income.
- V. **Productivity Enhancement:** ACL will provide facilities for availing consultations and advice from experts through ACF (Ambuja Cement Foundation) on best practices for improving productivity and to optimize requirement of fertilizers, water and manpower and information on market for the produce.
- VI. **Vocational Training:** The Company will organize vocational training, entrepreneur development



programmes through SEDI a wing of ACF for the PAFs including women members and will provide advice for starting suitable small scale industry. ACL will encourage entrepreneurship amongst PAFs or their qualified family members by awarding services, contracts for activities such as canteens, vehicle hiring, maintenance of gardens, office services and cleanliness, courier services, and material supplies.

Further, ACL has a well-planned Corporate Social Responsibility Policy (CSR) and the same will be implemented for this mining project also. Since very beginning CSR of the company will focus on public private partnership with well-defined controls and processes for the best use of resources for social change believing that the social reforms driven by the community will bring people together, turn the attention of the masses to tasks that benefit society, and reinforce peace and harmony. Some key initiatives for the forthcoming CSR includes:

- a) Direct interaction with the community to develop a positive rapport.
- b) Assessment of the issues/risks faced by those living in the surrounding areas which helps in delivering a community focused CSR programme.
- c) Mitigating project impacts and developing a program for livelihood restoration in consultation with the PAFs & the communities.
- d) Need based training programmes will be organized for Sericulture, Dairy, poultry, and handicrafts etc. which are one of the most viable rehabilitation options.

Such projects offer a good market for dairy and poultry products and this option is expected to prove beneficial. To encourage the PAFs for taking these useful vocational projects ACL will provide rehabilitation assistance as per the category of entitlement that will preferably be channelized through banks.

Training – If the head of the family who is eligible for rehabilitation allowance as per entitlement frame work wants to nominate its dependence for vocational training course in lieu of rehabilitation assistance offered to them, ACL may arrange for imparting suitable training. Such training will be imparted through SEDI. The project authority may meet the cost of training of the persons who are nominated by the head of the eligible Affected Families in writing; selected from amongst the land ouster families.

Apart from above, ACL will organize need based short training for development of required skill and entrepreneurship development for the selected Income Generation Scheme (IGS) in the revenue village through state Government/institutions.



Community development works: In addition to above measures, ACL based on the outcome of social assessment will also undertake need based development work like construction of roads, drinking water facility, community center etc. for overall upliftment of surrounding, village and community. These works shall be carried out in association with local authorities.

5.5 Continuation of Public Consultation

The effectiveness of the RP program is directly related to the degree of continuing involvement of those affected by the project. During the preparatory stage, consultations were held at local level. Several additional rounds of consultations with PAPs have been planned in the action plan during RP implementation. Consultations during RP implementation will involve agreements on compensation, assistance options, and entitlement package and income restoration. The other round of consultations will occur when compensation and assistance are provided. For continued consultations, following steps have been envisaged in the project:

- There will be Grievance Redressal Committees (GRCs) in the district. The PAPs will be associated with such committee.
- Key features of the entitlements will be displayed in billboards on the project site office.
- ACL with the help of the local community leaders will encourage the participation of the PAPs in RP implementation.
- Attempt shall be made to ensure that vulnerable groups understand the process and their needs are specifically taken into consideration.

5.6 Information Campaign & Future Plans

PAFs will be invited to the proposed Redressal System for a quick, inexpensive and amicable settlement of claims. They will also be advised to get their records of rights updated. All possible efforts will be put forth to motivate the affected landowners and structure owners for a voluntary and amicable settlement of their claims outside the court.

Most of the issues will be settled, out of court as far as possible. Handouts will be distributed by NGOs among all the affected persons highlighting the prospects of amicable settlement of disputes outside the court for speedy settlement and in a less expensive way along with the timetable of inquiries and spot inspections of the committee. Besides this, public announcements will be made in affected areas and Press notes will be released in local newspapers to aid publicity.



CHAPTER -6: COST & BUDGET OUTLAYS

6.1 Introduction:

The budget is indicative of outlays for the different expenditure categories and is calculated. The costs are based on the information collected by the socio-economic and Census of the PAPs and from the Revenue departments. These costs will be updated and adjusted to the inflation rate as the project continues and more specific information, such as extra number of PAPs during the implementation. Unit cost will be updated if the findings of the district level committee on market value assessment justify it.

6.2 Value of Land & Other Assistance:

6.2.1 Economic rehabilitation grant:

M/s. ACL follows for value of land The Chhattisgarh Rehabilitation Policy 2007 with amendment, Chhattisgarh mutual consent policy 2016 and the Right to fair compensation and Transparency in Land Acquisition, Rehabilitation & Resettlement Act, 2013 (LARR Act 2013)(no.30 of 2013). The objective of this Act is to provide guidelines to support to the vulnerable families whose land is to acquire/purchase so that their livelihood is not affected.

A. Land Compensation:

As per the LARR, 2013 (with amendment) land compensation calculation is given below. Accordingly, the price per unit has been worked out as given below:

- I. Value of land in affected villages is taken from RFCTLARR Act, 2013 and Chhattisgarh Rehabilitation
- II. Factor - According to the notification issued by Chhattisgarh Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Determination of Multiplying Factor in case of Rural Areas) Act, 2019 and Chhattisgarh Mutual consent Policy 2016. (Copy attached as Annexure II)
- III. Solatium - 100% of the market value & factor multiplication as per Schedule I of RFCTLARR Act, 2013. Based on these determinants the land compensation rate per acre works out.

As per the land compensation calculation is given below.

In the provision for the barren land 6 Lakh/ acre. In the provision for non-irrigated land (single crop) 8 Lakh/ acre. In the provision for Irrigated land (Double Crop) 10 Lakh/ acre.



Table 6.1: Compensation as per Schedule I of RFCTLARR Act, 2013

S. No.	Component of compensation package in respect of land acquired under the Act	Manner of determination of value	Value
1.	Market value of land	To be determined as provided under section 26	RFCTLARR Act 2013, DLC Rates 2021-2022 of Registration and stamps department Govt. of Chhattisgarh.
2.	Factor by which the market value is to be multiplied in the case of rural areas	1 (One) to 2.00 (Two) based on the distance of project from urban area as may be notified by the appropriate Government	1 (one) as per Chhattisgarh Mutual consent Policy 2016
3.	Factor by which the market value is to be multiplied in the case of urban areas	1 (One).	Not applicable
4.	Value of assets attached to land or building	To be determined as provided under section 29.	For value of assets attached to land or building ACL will pay as per section -29 as decided by the Collector of district.
5.	Solatium	Equivalent to one hundred per cent. of the market value of land mentioned against serial number 1 multiplied by the factor specified against serial number 2 for rural areas or serial number 3 for urban areas plus value of assets attached to land or building mentioned against serial number 4 under column(2) plus solatium mentioned against serial	ACL will give Solatium as per the provision. Solatium - 100% of value & factor multiplication as per Chhattisgarh Govt. Policy. Rs. 7 lacs is being/will be given by ACL as Solatium.



S. No.	Component of compensation package in respect of land acquired under the Act	Manner of determination of value	Value
		number 5 under column (2)	
6.	Final award in rural areas	Market value of land mentioned against serial number 1 multiplied by the factor specified against serial number 2 plus value of assets attached to land or building mentioned against serial number 4 under column(2) plus solatium mentioned against serial number 5 under column(2)	According to DLC Rates 2021-2022 of Registration and stamps department Govt. of Chhattisgarh. 5 lakh or 50% of compensation whichever is less, will applicable
7.	Final award in urban areas	Market value of land mentioned against serial number 1 multiplied by the factor specified against serial number 3 plus value of assets attached to land or building mentioned against serial number 4 under column(2) plus solatium mentioned against serial number 5 under column(2)	Not applicable
8.	Other component if any to be included		
9.	Provision of housing units in case of displacement	If a house is lost in rural areas, a constructed house shall be provided as per the Pradhanmantri Awas Yojana (earlier it was Indra awas yojna) specification. If a house is lost in urban areas. A constructed house shall be provided, which will be not less than 50 sqmts in plinth area. The benefits listed above shall also be extended to any affected	The ML area is Rural area and hence, if a constructed house shall be provided as per the Pradhanmantri Awas Yojana (earlier it was Indra awas yojna) specification The benefits listed above shall also be extended



S. No.	Component of compensation package in respect of land acquired under the Act	Manner of determination of value	Value
		<p>family which is without homestead land and which has been residing in the area continuously for a period of not less than three years preceding the date of notification of the affected area and which has been involuntarily displaced from such area.</p> <p>Provided that any such family in urban areas which opts not to take the house offered, shall get a one- time financial assistance for house construction, which shall not be less than one lakh fifty thousand rupees</p> <p>Provided further that if any affected family in rural areas so prefers, the equivalent cost of the house may be offered in lieu of the constructed house:</p> <p>Provided also that no family affected by acquisition shall be given more than one house under the provisions of this Act.</p> <p>Explanation- The house in urban areas may, if necessary, be provided in multi- storied building complexes.</p>	to any affected family which is without homestead land and which has been residing in the area continuously for a period of not less than three years preceding the date of notification of the affected area and which has been involuntarily displaced from such area.
10.	Land of Land	In the case of irrigation project, as far as possible and in lieu of compensation to be paid for land acquired, each affected family owning	Not applicable



S. No.	Component of compensation package in respect of land acquired under the Act	Manner of determination of value	Value
		<p>agricultural land in the affected area and whose land has been acquired or lost, or who has, as a consequence of the acquisition or loss of land, been reduced to the status of a marginal farmer or landless, shall be allotted, in the name of each person included in the records of rights with regard to the affected family, a minimum of one area of land in the command area of the project for the which the land is acquired.</p> <p>Provided that in every project those persons losing land and belonging to the Scheduled Castes or the Scheduled Tribes will be provided land equivalent to land acquired or two and a one-half areas, whichever is lower.</p>	
11.	Offer for Developed Land	<p>In case the land is acquired for urbanization purposes, twenty per cent. of the developed land will be reserved and offered to land owning project affected families, in proportion to the area of their land acquired and at a price equal to the cost of acquisition and the cost of development.</p> <p>Provided that in case the land owning project affected family wishes to avail of this offer, an equivalent amount will be deducted from the land</p>	Not applicable



S. No.	Component of compensation package in respect of land acquired under the Act	Manner of determination of value	Value
		acquisition compensations package payable to it.	
12.	Choice of Annuity or Employment	<p>The appropriate Government Shall ensure that the affected families are provided with the following options:</p> <p>(a) Where jobs are created through the project, after providing suitable training and skill development in the required field, make provision for employment at a rate not lower than the minimum wages provided for in any other law for the time being in force, to at least one member per affected family in the project or arrange for a job in such other project as may be required; or</p> <p>(b) Onetime payment of five lakhs rupees per affected family; or</p> <p>(c) Annuity policies that shall pay not less than two thousand rupees per month per family for twenty years, with appropriate indexation to the Consumer Price Index for Agricultural Laborers.</p>	As per Chhattisgarh mutual consent 2016 ACL Provide onetime payment 5 lakh to project affected family.
13.	Subsistence grant for displaced families for a period of one year	<p>Each affected family which is displaced from the land acquired shall be given a monthly subsistence allowance equivalent to three thousand rupees per month for a period of one year from the date of award.</p> <p>In addition to this amount, the Scheduled Castes and the Scheduled</p>	<p>ACL will give three thousand rupees per month for a period of one year from the date of award.</p> <p>ACL will give fifty thousand rupees to the SC & ST displaced.</p>



S. No.	Component of compensation package in respect of land acquired under the Act	Manner of determination of value	Value
		<p>Tribes displaced from Scheduled Area shall receive an amount equivalent to fifty thousand rupees.</p> <p>In cases of displacement from the Scheduled Areas, as far as possible the Affected families shall be relocated in a similar ecological zone, so as to preserve the economic opportunities, language, culture and community life of the tribal communities.</p>	
14.	Transportation cost for displaced families	Each affected family which is displaced shall get a one- time financial assistance of fifty thousand rupees as transportation cost for shifting of the family, building materials, belongings and cattle.	ACL will give onetime fifty thousand to displaced PAFs
15.	Cattle shed/petty shops cost	Each affected family having cattle or having petty shops shall get one-time financial assistance of such amount as the appropriate Government may, by notification, specify subject to a minimum of twenty- five thousand rupees for construction of cattle shed or petty shop as the case may be.	ACL Limited will give a minimum amount of twenty- five thousand rupees for construction of cattle shed or petty shop as the case may be



S. No.	Component of compensation package in respect of land acquired under the Act	Manner of determination of value	Value
16.	One-time grant to artisan, small traders and certain others	Each affected family of an artisan, small trader or self- employed person or an affected family which owned non-agricultural land or commercial, industrial or institutional structure in the affected area, and which has been involuntarily displaced from the affected area due to land acquisition, shall get one-time financial assistance of such amount as the appropriate Government may, by notification, specify subject to a minimum of twenty- five thousand rupees.	ACL Limited will give as per govt. notification
17.	Fishing rights	In case of irrigation or hydel projects, the affected families may be allowed fishing rights in the reservoirs, in such manner as may be prescribed by the appropriate Government.	Not applicable
18.	One-time Resettlement Allowance	Each affected family shall be given a one-time “Resettlement Allowance” of fifty thousand rupees only.	ACL Limited will pay as fifty thousand per PAFs



S. No.	Component of compensation package in respect of land acquired under the Act	Manner of determination of value	Value
19.	Stamp duty and registration fee	<ol style="list-style-type: none"> 1. The stamp duty and other fees payable for registration of the land or house allotted to the affected families shall be borne by the Requiring Body. 2. The land for house allotted to the affected families shall be free from all encumbrances. 3. The land or house allotted may be in the joint names of wife and husband of the affected family. 	ACL will give as per the notification



Table 6.2: Land and Structure Compensation Matrix

Item	Rate(in Rs. Per Ha)	Total Area (Ha)/ Number	Cost (in Rs.)
I. Compensation for losses of Private Property			
1. Loss of Land (agricultural, homestead, commercial or otherwise)			
Land Acquisition Cost	2,47,000.00	60.04	1,48,29,880.00
Sub Total (A)			14,829,880.00
100% Solatium for Structure B			14,829,880.00
Total(C) = (A&B)			29,659,760.00

RP Budget Prepared for PAFs as per the discussions and responses with the PAFs during the field survey and the FGDs. ACL has provisioned a budgetary amount of Rs. 2.97 Cr.

Project Management Cell:

The RP implementation for the project will be closely monitored by the duly constituted Project Management Cell (PMC) of ACL. PMC will be at the helm of all activities related to the RP implementation. For setting up and operating this PMC, a budgetary provision of Rs. 5 lakhs will be provided.



CHAPTER -7: MONITORING AND EVALUATION

6.1 Methodology for Assessment of LA Impacts:

Monitoring is a periodic assessment of planned activities providing midway inputs, facilitates changes and gives necessary feedback of activities and the directions in which they are going, whereas evaluation is an activity aimed at assessing whether the activities have actually achieved their intended goals and purposes. The monitoring and evaluation (M&E) mechanism will measure project performance and fulfillment of the project objectives. RP implementation for the project will be closely monitored by the duly constituted Project Management Cell (PMC) of ACL. PMC will be at the helm of all activities related to the RP implementation. Components of monitoring include performance monitoring, impact monitoring and external evaluation. Monitoring and evaluation will be carried out post-implementation and social audits in consultation with the Gram Sabha. Two broad categories of indicators are to be monitored during the project are:

- I. Input and output indicators and
- II. Outcome and impact indicators. Input and output indicators related to physical progress of the work should include items such as:
 - Census, assets inventories, assessments and socio-economic studies completed.
 - Training of PMC and associated will be done
 - Monitoring Agency (MA) will be recruited within schedule.
 - Meetings of GRCs.
 - Grievance redress procedures will be finalized
 - Entitlement Matrix will be effectively used for ascertaining compensation
 - Corporate Social Responsibility activities are designed and will be implemented on schedule for the benefits of PAPs and outcome recorded.
 - Infrastructure facilities and community welfare activities as arising out of public consultation will be implemented and records will be maintained.
 - Training of PAPs will be done.
 - Income restoration activities will be done.
 - Information and data on alternate lands acquired/ purchased and income generated due to newly purchased land by PAPs be obtained and recorded.
 - Monitoring and Evaluation reports will be timely submitted.



The monitoring will be carried out by the company. ACL will form a Monitoring Cell to monitor and proactively evaluate the RP objectives. The Monitoring Agency (MA) will be required to submit biannual monitoring reports and a final evaluation report before the due date.

6.2 Methodology for Monitoring:

- Random sample of PAPs to be interviewed by Monitoring Cell.
- Participatory rapid appraisal of the RP implementation in the revenue village.
- Consultations with senior community members.
- Review of grievance appeals.
- Comparison of standard of living of PAPs before and after implementation of land acquisition project

6.3 Input and Outputs Monitoring:

Internal monitoring will be the responsibility of the Project Management Cell (PMC). On a monthly basis, the PMC will report on each of the indicators stated herein and other indicators that might emerge as project implementation proceed forward. PMC will monitor the following activities:

- I. Verification exercise (final number of PAPs and affected households (AH))
- II. Progress of land acquisition.
- III. Consultations on entitlements (no. of consultations, number of PAPs/s attended).
- IV. Training of staff and PAPs (number of PAPs and staff trained, type and effectiveness of skills/livelihood training provided), (staff for PMC recruited, office facilities provided, vehicles provided).

6.4 Role of Monitoring Agency:

M/s. ACL may engage the services of an independent agency not associated with the project execution to carry out Monitoring & Evaluation of the project. The Monitoring Agency will be appointed after approval of RP. Criteria for selecting an external agency for M&E should be based on their experience in the field and comprehensive knowledge of Resettlement &



Rehabilitation needs of the PAPs. The independent Monitoring Agency (MA) will monitor the following:

- I. Reactions from PAPs; information from PAPs on entitlements, options, alternatives and relocation related issues.
- II. Visits to sites.
- III. Valuation of property.
- IV. Use of grievance procedure.
- V. Disbursement of compensation.
- VI. Behavior of staff.
- VII. Changes in land assets status.
- VIII. Annual incomes, assets, capabilities of family members to contribute to the family income, impact of training availed etc. to compare economic & social status with pre acquisition

6.5 Reporting:

Reports documenting progress on resettlement implementation and completion reports will be submitted by the PMC to the Chief Executive/Corporate Office of ACL.



CHAPTER -8: IMPLEMENTATION SCHEDULE

8.1 Implementation:

Implementation is a critical activity in a rehabilitation operation. The implementation of RP is to be carried out by M/s. ACL for which an environment and social management (E&S) team is constituted. The E&S team will take up the implementation. The key function of the E&S team as follows:

- Conduct surveys on environmental and social aspect to finalize the route for the projects.
- Interact with revenue authorities for land acquisition and follow it up with authorized agencies for implementation of RP.
- Implementation of Rehabilitation and Resettlement Plan
- The implementation of RP will be following these 9 activities:
- Identifying the project affected persons
- Awareness campaign at project site
- Finalization of bank for providing rehabilitation assistance
- Mobilization for IGS (Income Generation Scheme)
- Implementation of IGS (Income Generation Scheme)
- Implementation of other development works
- Review process
- Evaluation and assessment

The implementation of RP has been divided into above 9 basic activities and each activity has been identified as specific mile stone on which implementation of RP is based.

Table 8.1: Scheduled for Implementation of Rehabilitation Plan

Activity	Target/Completion Date
A. Socio-Economic Survey & Impact Assessment	February, 2022 to March, 2022
B. Land Acquisition, Physical Possession of all the lands and Disbursement of Compensation amounts	Continuous Process
C. Public Consultation and Disclosure	Continuous Process
D. Implementation of Training Programs, advice for purchase of alternative lands and investment of compensation amounts.	To be continued till a satisfactory outcome is obtained.
E. Evaluation & Monitoring	After Land Acquisition every year.

All these activities are quite crucial for successful implementation of RP in the project area.



CHAPTER -9: GRIEVANCE REDRESSAL SYSTEM

9.1 Need for Grievance Redressal:

In case of projects involving Land Acquisition (LA), the grievance procedure and appeal mechanism are an important aspect related to RP of the PAFs. The LARR Act has provisions at different stages of land acquisition, for the affected party, to object to the Award announced by the acquiring authority. They can also receive compensation under protest and move to the court for enhancement of the Award. Experience shows that litigation causes unnecessary delay and cost overrun of the project. Keeping in mind legal procedures involving such cases Chhattisgarh Government would have provision for Grievance redress mechanism which will provide a forum for people to express their dissatisfaction over compensation and R & R provisions. It does not imply that the affected will be debarred from moving to the court on compensation. Company will adopt land acquisition.

9.2 Grievance Redress Committee:

According to the ACL Policy, Grievance Redressal Committee shall be formed at ACL's internal level comprising following members:

- I. Functional Head
- II. Head of Department- Land & Liaising
- III. Head of Department – Mines
- IV. District Administrative in case of land acquisition

9.3 Grievance Redress Mechanism

The main objective is to provide a step by step process for registering and addressing the grievances. It is expected that this mechanism will ensure Redressal to the aggrieved party. The PAFs will have access to the committee which will function throughout the project period.

9.4 Response Time:

The Grievance Redressal Cell (GRC) will hear grievances once in 30 days. Since the entire rehabilitation process has be completed before construction work starts the Grievance Redressal Cell may meet more than once in every 15 days depending upon the number of such cases. The GRC (Grievance Redressal Cell) will inform the concerned Entitled Person of their decision within 15 days of the hearing of grievance.



Annexure 1: Census & Socio-Economic Survey

FORMAT FOR SOCIO-ECONOMIC SURVEY: HOUSEHOLD LEVEL	
A	Questionnaire No. : <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
B	Date of Census/ Survey : <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> / <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> d d m M y y y y
C	Name of the Investigator : _____
1.0 GENERAL IDENTIFICATION	
1.1	Place of Survey (Locality / Cluster) : _____
1.2	Village / Mouza / Ward : <input type="text"/> <input type="text"/> Mouza no / Ward no. _____
1.3	Name of Gram Panchayat/ Town : <input type="text"/> <input type="text"/> _____
1.5	Name of Tehsil/ Nagar Parishad : <input type="text"/> <input type="text"/> _____
1.6	Name of Police Station : _____
1.7	Name of District : <input type="text"/> <input type="text"/> _____
2.0 HOUSEHOLD CHARACTERISTICS – The Respondent should be preferably the Head of Household (HOH)	
2.1	Name of the HOH : _____
2.2	Father's Name : _____
2.3	How long (years) you are residing here : <input type="text"/> <input type="text"/> <input type="text"/> Please assign 25 yrs for each generation
2.3	Name of the Respondent : _____
2.4	Relationship with the HOH : <input type="text"/> <input type="text"/> 01 Self 02 Spouse 03 Parents 04 Brother/ Sister 05 Son/ Daughter 06 Son/Daughter-in-law 07 Nephew/ Niece 08 Grandson/ GrandDaughter 09 Uncle/ Aunt 10 Grand Father/ GrandMother 11 Father/ Mother-in-law 12 Brother/ Sister-in-law 99 Others, Specify _____
2.5	Land/ Structure Ownership Status : <input type="text"/> <input type="text"/> 01 PWD/999 02 Government/ Municipality 03 Community 04 Trust 99 Others, Specify _____
2.6	Status of Land/ Structure User : <input type="text"/> <input type="text"/> 01 Legal Title Holder (TH) 02 Encroacher 03 Squatter 04 Tenant 99 Others, Specify _____
1	



HOUSEHOLD PARTICULARS											Socioeconomic survey					
1	2	3	4	5	6	7	8	9			10			11		12
Sl. No.	Name of the members of the Family (IN BLOCK CAPITAL) Name	Relati on with HOH Code	Sex Code	Age Yrs.	Marital status Code	Educ ation Code	Dette renty Able Code	Occupational Status			Annual Involvement (Months x Days)			Annual Income from Occupations		Remarks
								Main Code	Subsidiary 1 Code	Subsidiary 2 Code	Main Days	Subsidiary 1 Days	Subsidiary 2 Days	Main Rs.	Subsidiary Rs.	
1.																
2.																
3.																
4.																
5.																
6.																
7.																
8.																
9.																
10.																

Please see Clarifications & the Codes for different Columns in the previous page.

2

4.0 SOCIAL GROUP**4.1 Family Type**
☐ 01 Joint

☐ 02 Nuclear

☐ 03 Extended
4.2 Community

What category do you belong to

☐ 01 SC

☐ 02 ST

☐ 03 OBC

☐ 04 General

☐ 05 Minority

☐ 99 Any other(specify)
4.3 Vulnerability

What category do you belong to

☐ 01 SC

☐ 02 ST

☐ 03 OBC

☐ 04 WHH

☐ 05 Differently Able

☐ 99 Others, Specify
4.4 Which Ration Card do you hold
☐ 01 BPL Card

☐ 02 BPL Land

☐ 03 Antodaya

☐ 04 Entitled in BPL

☐ 05 Entitled in Antodaya

☐ 99 Any other
5.0 LAND DETAILS

Sl.	Total Land (Acre)	Homestead Land (Acre)	Cultivated land (Acre)		Cultivable Wasteland (Acre)	Orchard Land (Acre)	Remarks
			Irrigated	Non Irrigated			
1.							
2.							
3.							

6.0 CROP DETAILS

Sl.	Crops Name	Total Yield (Qtl.)	For HH consumption (Qtl.)	For Sale (Qtl.)	Average Unit Sell Price (Rs./ Qtl.)	Remarks
1.						
2.						
3.						
4.						
5.						

7.0 LIVESTOCK ASSETS

Cattle	Nos.	Product/ By-product (Name)	Household Consumption (Kg/ Litre)	Quantity Sold/ Distributed (Kg/ Litre)	Avg. Unit Price for Selling (Rs.)	Remarks
Buffalo						
Cow						
Bull						
Goat						
Sheep						
Chicken						
Pig						

**8.0 OTHER HOUSEHOLD INCOMES**

Source of Income	Annual Household Income (Rs.)	Remarks
Rent out Agr. & Irrgn. Machinery/ Car/ Tractor etc.		
Rent out Residential/ Commercial Space		
Selling of Livestock/ Products/ Byproducts		
NTFP: Sale of Firewood/ Mahua/ Lantana/ Tendu/ Flower/ Fruits etc.		
Other Sources of Income		
TOTAL		

9.0 ASSET HOLDINGS (OTHER THAN LAND)

Sl.	Type of Assets	Number / Area	Use of Assets	Remarks
1	Structure			
2	Well/ Borewell / Tube well/ Handpump			
3	Agricultural Machinery/ Tractor/ Thresher etc.			
4	Cycle, Bullock cart			
5	Mobile			
6	Motor cycle, Scooter			
7	TV/ VCD/ Refrigerator/ Electronic Appliances			
8	Electronic Gadgets (Other than Mobile)			
9	Computer/Laptop / Digital Camera			
10	Car / Van /Carriage vehicle			
11	Any others			

* USE OF ASSET: e.g. House; own use or rented, Well/TW etc. if rented for irrign. Structure – if residence / shop

10.0 SKILL PROFILE

Name of Skill	Skill Possess	Skill Desired	Remarks
Special Agricultural Skill (Other than traditional)			
Livestock Rearing/ Poultry/ Animal Husbandry Skill			
Building Construction Skill			
Health Care Skill			
Driving Skill			
Bidi binding skill			
Handicrafts/ Pottery Skill			
Weaving/ knitting/ Sewing/ Tailoring Skill			
Carpentry/ Blacksmith Skill			
Plumbing / Masonry Skill			
Cycle Repair/ Machine/ Motor Mechanic			
Drill/ Machine Operator Skill			



Small Entrepreneurship Skill			
Surveyor/ Mining Operation Skill			
Laboratory Assistant Skill			
Computer Hardware/ Software/ Operation Skill			
Electrician/ TV Radio Repair/ Mobile Phone Repairing Skill			
Tourist Guide/ Photography/ Videography/ Amateur Journalist			

Codes

Skill Possess 01 Excellent 02 Good 03 Average
 04 Poor 05 Positive Advantage 99 Others, Specify

Skill Desired 01 Influenced 02 Rising Market Demand 03 Special Personal Interest
 04 Can not opt for Money 05 Lack of Training Facility 99 Others, Specify

11.0 HOUSEHOLD EXPENDITURE

Kindly give details of your expenditure of total household for various items during the last one year.

Sl.	Items of expenses	Annual Expenditure (Rs.)	Remarks
1.	Food Items		
2.	Clothing		
3.	Medical		
4.	Education		
5.	Regular Household Expenditure (Electric/ Telephone Bill/ Rent for Land/ Structure etc.)		
6.	Social Functions (L/S)		
7.	Durable Assets purchase		
8.	Agriculture inputs		
9.	Drinking water carriage		
10.	Communication		
11.	Transport		
12.	Smoking/ Pan/ Tobacco Chewing/ Liqueur etc.		
	TOTAL		

12.0 SAVINGS

12.1 Do you save for future?

☐ ☐
 01 Regularly 02 Occasionally 03 Not yet

12.2 Where do you Save?

☐ ☐ ☐
 01 Personal 02 Bank/State 03 Co-operative
 04 Bank/ Post Office 05 LIC Insurance 06 Financial Institutions
 99 Others, Specify

12.3 Purpose of Savings

☐ ☐ ☐
 01 Agt. Investment 02 HH Investment 03 Bus. Investment
 04 Child Education 05 Social Events 06 Medical & Emergencies
 99 Marriage 99 Others, Specify

**13.0 INDEBTEDNESS**

Sl.	Loan Source	Purpose	Annual Rate of Interest (%)	Remarks
1				
2				
3				
4				
5				

Codes

Loan Source	01 Bank	02 Post Office	03 Other Financial Institutions
	04 Private Money Lender	05 Input Provider	99 Others (Specify)
Purpose	01 Consumption	02 Household Investment	03 Agricultural Investment
	04 Business Investment	05 Child Education	06 Electronics Appliances & Gadgets
	07 Medical Emergencies	08 Social Events	99 Others (Specify)

14.0 MIGRATION PATTERN

14.1 What is your place of Origin

:			Mention
01	Other Village	02 Other Block	03 Other District
04	Other State	05 Other Country	99 Others

14.2 When did you/ your ancestors settled

:			
01	< 5 years	02 5 – 10 years	03 10 – 20 years
04	25 – 50 years	05 > 50 years	99 Others

14.3 Purpose of your In-Migration

:			
01	Land/tenantry	02 Agri. productivity	03 Income opportunity
04	Professional/ Personal Binding		99 Others

Sl. Nos. of Migrating Members	Migrate as Individual or With Family	Season of Migration	No of Month	Place of Migration	Type of Jobs	Annual Retained Earnings (Rs.)
14.4	14.5	14.6	14.7	14.8	14.9	14.10

Codes:

Column 14.4 Write down the Serial Number from Table 3.0

Column 14.5	01 Individual	02 With Family	99 Others
Column 14.6	01 Annual	02 Seasonal	03 Occasional
Column 14.8	01 Outside Village	02 Outside Block	03 Outside District
	04 Outside State	05 Outside Country	99 Others
Column 14.9	01 Casual Labour	02 Skilled Labour	03 Contractual Service
	04 Trade & Business	05 Professional	99 Others

15.0 REMARKS OF THE ENUMERATOR, IF ANY:



CODE LIST FOR HOUSEHOLD PARTICULARS		
COLUMN 3	RELATION WITH THE HEAD OF THE HOUSEHOLD	
	01 Self	
	04 Brother/ Sister	
	07 Nephew/ Niece	
	10 Grand Father/ Grand Mother	
	99 Others, Specify	
	02 Spouse	
	05 Son/ Daughter	
	08 Grand Son/ Grand Daughter	
	11 Father/ Mother-in-law	
	03 Parents	
	06 Son/ Daughter-in-law	
	09 Uncle/ Aunt	
	12 Brother/ Sister-in-law	
COLUMN 4	SEX	
	01 Male	
	02 Female	
	99 Others, Specify	
COLUMN 6	MARITAL STATUS	
	01 Married	
	04 Divorced	
	02 Unmarried	
	05 Separated/ Deserted	
	03 Widow	
	99 Others, Specify	
COLUMN 7	EDUCATION	
	01 Illiterate	
	04 Middle Educated (upto Class 8)	
	07 Graduate	
	10 Professional (Doctor, Engineer etc.)	
	99 Others (Specify)	
	02 Informally Literate (without attending school)	
	05 Secondary Educated (upto Class 10)	
	08 Post Graduate	
	11 Child (< 6 yrs.) not attending any Institution	
	03 Primary Educated (upto Class 5)	
	06 Higher Secondary Educated (upto Class 12)	
	09 Professional Diploma/ Trade Certificate	
	12 Child (< 6 yrs.) attending Balwad/ IGDS/ KG	
COLUMN 8	DIFFERENTLY ABLE	
	01 Yes	
	02 No	
	03 Yes, but no Disability Card	
COLUMN 9	OCCUPATION	
	01 Cultivation	
	04 Non-Agricultural Labour (daily waged)	
	07 Casual Private Service (Un-organised Sector)	
	10 Trade & Business	
	13 Employee of other shop/business	
	16 Bidi Binding	
	02 Agricultural Labour	
	06 Government/ Panchayat/ Municipal Service	
	08 Self Employed/ Professional (Doctor, Engineer etc.)	
	11 Collection/sale of Non-Timber Forest Products (NTFP)	
	14 Rickshaw Puller/Auto Rickshaw driver	
	17 Money Lender	
	03 Allied agricultural activities (e.g., dairy/ poultry/ animal husbandry/ Fishing)	
	06 Regular Private Service (Organised Sector)	
	09 Traditional HH Industries (weaver, potter, carpenter, blacksmith, goldsmith, mechanic)	
	12 Employee in Kiosk/ Pan/ Tea Stall	
	15 Household Maid/Assistants	
	18 Pension/ Earnings from remittances	
	99 Others	



Chhattisgarh Mutual Consent Policy 2016

Land purchase policy CG

Translated English version

Land Purchase Policy with Mutual Consent 2016

1. Various Department undertakings/ Institutions of state government need private lands time –to-time for implementation of their infrastructure’s constructions and development projects. The requisite lands may be acquired with natural consent of land owners by making the payment of consideration for implementing the government projects within prescribed time with a view to safeguard the additional time to be consumed in the process of land-acquisition and cost as well. May a times, the private land owners keep interest to sell their land(s) to state Govt. for the above said purposes, because the residents residing in those said land’s vicinity get may socioeconomic benefits with rapid implementation of proposed Infrastructure construction, Development Projects having secured certainly the development of local area. Along with this this option of land sale attracts them also with the causes of procedural accessible, saving of time and early receipt of sale value. To purchase lands from land owners by state Government with mutual consent also remains beneficial in any circumstances in extensive public interest along with both the parties.
2. Therefore, in exercise of powers conferred by context SI. No. 18 (Land Transfer) of State list of the Constitution, the state Government has hereby taken decision to make the policy for the purchase of land with mutual consent for the implementation of projects of Public Interest. The state Government do hereby issue following the consent land purchase policy with mutual consent of private land owners :-
 - a. This policy shall apply to planned projects of various Departments, undertakings/Institutions of State Govt. And central Govt. only. Apart from these planned projects, the land of maximum 100 Hectare area may be purchased under this policy for other development projects.
 - b. On need of land for planned projects and development works of various departments undertakings/Institutions of State Govt. firstly the collector shall transfer the above said land out of available Govt. Land, to Administrative Department.
 - c. If suitable Government lands are not available in the district for this purpose, then based on requisition of Administrative Departments undertakings/Intuitions minimum Essential land may be purchased based on mutual consent from private land owners for the said projects or a part of if by acting under this policy.
 - d. The private land of land owner shall be purchased by paying the sum equivalent to the cost of said assets situated on the land and cost of land computed as per the rate effective at that time according to the guidelines issued by collector on the date of purchase of land as consideration.



- e. Apart from the above said, an amount equivalent to consideration shall be given to the seller as solatium. Thus, the seller shall obtain double amount of the cost of land for his private land and the assets established on it.
- a. But, apart from the consideration prescribed as above, the land owner shall be paid a sum so that (s) he obtains a sum of Rs. 6.00 lakhs per acre for fallow land a sum of Rs. 8.00 lakhs per acre for non-irrigated land (single crop) and Rs. 10.00 Lakhs per acre for irrigated land (Bi-crop) as a minimum amount.
After the assessment of above said land cost, each seller family shall be given separately a sum of Rs 5.00 lakhs or 50% of the amount which is lesser as rehabilitation grant.
- b. The payable amount of the land to be purchased for the project of said Departments/undertakings/ for the project of said departments/ undertakings/ Institutions, the cost of assets existing on that land and additional amount payable as per Rehabilitation grant and as per Para – 5 shall be borne by concerned government department, undertaking /Institution. The provision for the necessary budget for this purpose shall be made by concerned department/undertaking /institution.
- c. The Department /undertaking Institution shall firstly mark the land to be purchased from private land owner(s) by evaluating minimum requirement and thereafter, accordingly shall be submitted application to the collector by Authorized officer of concerned Department/undertaking/Institution for the purchase of land as per need.
- d. The following details shall be given in the application for the purchase of land:
- (1) Name and purpose of the project
 - (2) Area of land to be purchased;
 - (3) Details of availability of amount in the essential budget Head for the purchased of land for the Project.
 - (4) Details of land (Khasara No. / Plot No. / Najool Sheet No/ Area, name of Village Tehsil District and Map of the said land)
 - (5) Details of known land owner(s) of land if available;
 - (6) Estimated Cost of land with reference to the rates of guidelines effective at that time.
 - (7) Details and estimated cost of assets existing on the said land, and
 - (8) Other details, which concerned department(s)/ undertaking(s)/ Institution(s) may desire to furnish.



- e. The collector shall: (i) obtain the report from Tehsildar based on clear title of land and record(s) in relation to possession of land on receipt of application; (ii) make valuation of Asset(s) existing on said land e.g. well house tree(s) etc. from the officer(s) of concerned department(s) e.g. PWD Horticulture Department, forest Department etc.; and (iii) consider total valuation by summing up the value / cost of both land and asset(s) existed on the same. The solatium amount equivalent to total valuation shall be determined. Apart from the above said sum, an amount of Rs. 5.00 Lakhs or

50% of the amount which is lesser shall be paid to the seller's Family as rehabilitation grant.

- f. After Examining the applications(s) of Department (s) / undertaking(s) / Institution (s) if collector finds the desired land purchasable, then he shall expect the acceptance from possessor in format – B by allowing 15 days period to owner by sending proposal of land purchase in format – A. The collector may extend the above said stipulated time if so needed.
- g. The collector shall obtain this undertaking from land owner(s) along with his acceptance that the land proposed for the purchase is under clear title in all respect and neither any case is pending/running regarding ownership and possession with regard to this land before any Court / Authority nor the proposed land is disputed in any way. If there is any dispute over this land, then he shall furnish its brief descriptions/ details. Apart from this, the land – owner shall also submit that the proposed land is free from all encumbrances. Such type of acceptance letter shall be signed by land owner or his authorized agent.
- h. After having obtained acceptance from owner / possessor the collector shall issue public notice with such intention by granting 15 days period, that the purchase of land from those land owners (with full name and address) for the said project in favour of concerned department(s) / undertaking(s) / institution (s) of state Government. Apart from issuing notice, the collector shall also determine from Tehsildar or other competent Authority that the land proposed for the purchase has no any dispute pending in any Hon. Court and the land is free from all encumbrances. The public Notice issued as above shall be exhibited by pasting in the notice Board of the office of the collector, SDO, BDO, Tehsil office, Gram panchayat or in the office of municipal corporation. Committee. The said public notice shall be published in at least one newspaper and in a state level daily Newspaper and shall also be uploaded on the website of the district.
- i. Based on objections obtained with stipulated time, the collector shall not proceed to buy such land if such land bears defective title. If no objection has been received



within stipulated time of issued public notice, then the collector shall proceed to the purchase of land from land owner/possessor in favour of concerned Department (s) / Undertaking(s) / Institution (s) of State Government.

- j. Within a period of one year from the date of receipt of written acceptance from land owner/possessor, the collector shall purchase the said land in favour of concerned Department(s) / undertaking(s) / Institution (s) of State Government and shall make the payment, to land owner(s) / possessor (s) of specified land/ cost of assets existed on it and additional grant amount.
- k. Stamp duty Registration fee payable for the Registration of said land and other requisite expenses shall be borne by concerned Department/ undertaking / Institution.
- l. The purchase of land under this policy shall be executed in the name of "Collector on behalf of Governor of Chhattisgarh" The Tehsildar Divisional Office Revenue of the concerned Region / area is hereby authorized to sign on sale deed.
- m. After the registration of purchase deed, the transfer of land shall be endorsed in Revenue records in favour of Govt. of Chhattisgarh. Wherein, the name concerned department/ undertaking / Institution shall also be endorsed. Such as Chhattisgarh Govt. water Resources. Department or Govt. of Chhattisgarh, Public Works Department etc.
- n. After the purchase of land as above, if the project is withdrawn or become unsuccessful, and because of this, this land becomes no more in need, then the land so purchased shall be handed over to revenue Department by concerned department/ undertaking / Institution. The land so handed over to Revenue Department may be allotted in future for any other government purpose or development projects etc.
- o. In case of need of any government land given on lease for forming by Govt. for any project, the collector may, under this policy, examine the essentiality of lease and by evaluating the cost as like land of ownership and computing the amount of grant, the equivalent amount may be granted to lesser as grant on handing over of lease willingly by him.



Annexure 3:

Consent Form

Form A

Collector

Sl. No.

Date:

Land Purchase Proposal

To

Sub: Proposal for purchasing land of your lien due to land requirement for the project of PWD Chhattisgarh Road Project.

PWD, Chhattisgarh Government wants to buy your lien land because of the requirement of the land for the project of.....

Description of the Land and Asset

1. Detail of land (Khasra, Plot No., area, village and tehsil with chauhaddi)
2. Market value of the land calculated on the basis of the guideline issued by the collector for the year.....
3. Detail of the real estate situated on the said land, if any.
4. Value calculated by the respective department of real estate.
5. Total value (2+4)
6. Solatium equivalent to the total value.
7. Total proposed purchase price.
8. Resettlement grant as 50% of compensation amount or Rs. 5 Lacs whichever is less.

According to the above details, the total market value of the land / plots held by you and the total assets on it are Rs. If you agree to sell in favor of the PWD, Chhattisgarh Government then in the form of the consideration, you will be given the value mentioned in the above given amount and the amount of solatium Rs... and resettlement grant Rs. total Rs..... is proposed to be given. It is expected that, in accordance with the above details, you submit your consent to sell the land/plot and the real estate located on it, in the "form B" attached with this proposal, in my office by yourself or through authorized representative, within 15 days of the receipt of the proposal, in the favor of PWD Chhattisgarh.

If the proposal is submitted on your behalf in "form B", then your lien land /plots with the real estate located on it will be bought in favour of PWD, Chhattisgarh Government for the subject project.

Upon receipt of your acceptance, a lien will be checked and if the land/plot is found in your clean lien, you have to execute a sales deed within 12 months. Payment will be made at the time of execution of sale deed



Form B

Consent Letter

I/we..... s/oage.....year, permanent address.....tehsil district present address.....district, letter no. of Collector..... dated.....the land of my lien whose details are given in the schedule below, according to the proposal received by the Collector to the land for the project of the the compensation mentioned in the proposal with solatium Rs.....(in words.....)and equivalent resettlement grant, give acceptance for the sale.

2. I /we declare that the proposed land is in all my/our clean lien and there is no prevalence of any prejudice related to any court / authority concerning this land and the proposed land is free from all encumbrances.

3. Proposed land is not controversial

(If there is a dispute then its details should be given.)

Schedule

Land Details

Signature

Acceptor Landlord

Place Date

Witness:

.....
.....



भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केंद्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Maldi Mopar Limestone Mine		
Project Address:	M/s Ambuja Cements Limited, Unit Bhatapara, Po- Rawan, District – Balodabazar : Bhatapara, Pin ; 493331.		
Village:	Maldi	Block:	Bhatapara
District:	Baloda Bazar	State:	Chhattisgarh
Pin Code:			
Communication Address:	Shri Rajoo Joshi,(avp), M/s Ambuja Cements Limited, Unit Bhatapara, Po- Rawan, District – Balodabazar : Bhatapara (chhattisgarh) Pin 493 331., Baloda Bazar, Baloda Bazar, Chhattisgarh - 493331		
Address of CGWB Regional Office :	Central Ground Water Board North Central Chhattisgarh, 2nd Floor, Lk Corporate And Logistic Park, Dhamtari Road, Nh-30, Dumartarai, Raipur, Chhattisgarh - 492015		

1. NOC No.:	CGWA/NOC/MIN/REN/2/2023/8680	2. Date of Issuance	07/12/2023
3. Application No.:	21-4/427/CT/MIN/2017	4. Category: (GWRE 2022)	Safe
5. Project Status:	Existing With Additional Ground Water Requirement	6. NOC Type:	Renewal
7. Valid from:	26/10/2023	8. Valid up to:	25/10/2025
9. Ground Water Abstraction Permitted:			

Fresh Water		Saline Water		Dewatering		Total	
m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year
50.00	18250.00			317.00	115705.00		

10. Details of ground water abstraction /Dewatering structures

	Total Existing No.:2						Total Proposed No.:1					
	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
Abstraction Structure*	0	0	1	0	0	0	0	0	1	0	0	0
Dewatering Structure*	0	0	0	0	1	0	0	0	0	0	0	0

*DW- Dug Well, DCB-Dug-cum-Bore Well; BW-Bore Well, TW-Tube Well, MP-Mine Pit,MPu-Mine Pumps

11. Ground Water Abstraction/Restoration Charges paid (Rs.):	249660.00	
12. Environment Compensation (If applicable) paid (Rs.):	0.00	
13. Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism.	No. of Piezometers	Monitoring Mechanism
	Manual	DWLR** DWLR With Telemetry

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011

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Website: cgwa-noc.gov.in

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(Compliance Conditions given overleaf)

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Validity of this NOC shall be subject to compliance of the following conditions:

Mandatory conditions:

- 1) Installation of tamper proof digital water flow meter with telemetry on all the abstraction structure(s) shall be mandatory for all users seeking No Objection Certificate and information regarding their installation shall be communicated to the CGWA within 30 days of grant of No Objection Certificate.
- 2) Proponents shall mandatorily get water flow meter calibrated from an authorized agency once in a year.
- 3) Construction of purpose-built observation wells (piezometers) for ground water level monitoring shall be mandatory as per Section 14 of Guidelines. Water level data shall be made available to CGWA through web portal. Detailed guidelines for construction of piezometers are given in Annexure-3 of the guidelines.
- 4) Proponents shall monitor quality of ground water from the abstraction structure(s) once in a year. Water samples from bore wells / tube wells / dug wells shall be collected during April/May every year and analysed in NABL accredited laboratories for basic parameters (cations and anions), heavy metals, pesticides/ organic compounds etc. Water quality data shall be made available to CGWA through the web portal.
- 5) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWA for ground water level monitoring four (4) times a year (January, May, August and November) in case as well as buffer zones of the mine.
- 6) In case of mining project the firm shall submit water quality report of mine discharge/seepage from Govt. approved/ NABL accredited lab.
- 7) The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
- 8) Industries abstracting ground water in excess of 100 m³ d shall undertake annual water audit through certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 25% over the next three years through appropriate means.
- 9) Application for renewal can be submitted online from 60 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986.
- 10) This NOC is subject to prevailing Central/State Government rules/notifications or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.

General conditions:

- 11) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
- 12) The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
- 13) Proponents shall install roof top rain water harvesting in the premises as per the existing building bye laws in the premises.
- 14) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises falling which the firm shall be responsible for any consequences arising thereupon.
- 15) In case of industries that are likely to contaminate the ground water, no recharge measure shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
- 16) Wherever feasible, requirement of water for greenbelt (horticulture) shall be met from recycled / treated waste water.
- 17) Whenever the NOC is for abstraction of saline water and the existing well (s) is / are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
- 18) Unreported variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
- 19) In case of violation of any NOC conditions, the applicant shall be liable to pay the penalties as per Section 16 of Guidelines.
- 20) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
- 21) The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of this NOC.
- 22) In case of change of ownership, new owner of the industry will have to apply for incorporation of necessary changes in the No Objection Certificate with documentary proof within 60 days of taking over possession of the premises.
- 23) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/Court orders in cases related to ground water or any other related matters.
- 24) Proponents, who have installed/constructed artificial recharge structures in compliance of the NOC granted to them previously and have availed rebate of upto 50% (fifty percent) in the ground water abstraction charges/ground water restoration charges, shall continue to regularly maintain artificial recharge structures.
- 25) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, pharmaceutical, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution as per Annexure III of the guidelines.
- 26) In case of new infrastructure projects having ground water abstraction of more than 20 m³/day, the firm/industry shall ensure implementation of dual water supply system in the projects.
- 27) In case of infrastructure projects, percolating area must be covered with interlocking/perforated tiles or other suitable measures to ensure groundwater infiltration/harvesting.
- 28) In case of coal and other base metal mining projects, the project proponent shall use the advance dewatering technology (by construction of series of dewatering abstraction structures) to avoid contamination of surface water.
- 29) The NOC issued is conditional subject to the conditions mentioned in the Public notice dated 27.01.2021 falling which penalty/cancellation of NOC shall be imposed as the case may be.
- 30) This NOC is issued subject to the clearance of Expert Appraisal Committee (EAC) (if applicable).
- 31) In the self-compliance report, the PP shall submit details of Drilling Agency/ Agencies, which has/ have constructed B/W(s)/ T/W(s) along with undertaking to the effect that all necessary measures have been taken as per directions of Hon'ble Supreme Court provided in Annexure-VII of guidelines dated 24.09.2020 in respect of abandoned/ failed B/W(s)/ T/W(s)/ Piezometer(s), if any. The PP is advised to engage registered drilling agency/ agencies. In the event of any mishap/ unfortunate incident due to negligence in taking measures for prevention of accident due to falling in Bore Well, both PP and concerned drilling agency shall jointly be held responsible and penal action as per extant Government rules shall be taken.

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)

CENTRAL GROUND WATER AUTHORITY
Department of Water Resources, River Development and Ganga Rejuvenation
Ministry of Jal Shakti, Govt. of India

18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18/11, Jamnagar House, Mansingh Road, New Delhi-110011

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Receipt

(As per the guideline Gazette Notification S.O. 3281(E) regarding the New Guidelines dated 24.09.2020 of CGWA, MoJS, Govt. of India)
<https://cgwa-moj.gov.in>

Application No.: 21-4/427/CT/MIN/2017 Date of Issuance: 07/12/2023
Name of Firm: MALDI MOPAR LIMESTONE MINE
AppType Category: Limestone
Application Type: Mining
PAN/GSTIN No. of Firm/Individual: /

S N	Description	Amount (Rs.)
1.	Application Processing Fee	5000.00
2.	Ground Water Abstraction /Restoration charges	249660.00
3.	Environmental Compensation Charges (ECRGW) (Date From to) Days-	
4.	Penalty for non-Compliance of NOC conditions Condition to be mentioned	
Rs. Rupees Two Lakh Fifty Four Thousand Six Hundred Sixty Only		254660.00

This is an system generated invoice, hence, does not require ink signed.



REPORT ON NEED BASED ASSESSMENT



for

MALDI-MOPAR LIMESTONE MINING PROJECT

of

Maldi, Mopar, Devarani,
Karmandih and Boirdih Villages, Baloda Bazar/Bhatapara
Tehsils,
Raipur District, Chhattisgarh

for

M/s. Ambuja Cements Limited

Rawan, Tehsil Baloda Bazar, Dist Raipur
Bhatapara, PIN: 493331

Prepared by

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APRIL 2022



ACRONYMS

AWC	:	Anganwadi Centre
BDO	:	Block Development Officer
BPL	:	below poverty line
BSR	:	Basic Schedule Rates
DGM	:	Deputy General Manager
FGD	:	focus group discussion
GoI	:	government of India
GRC	:	grievance redress committee
GRM	:	grievance redress mechanism
HIV/AIDS	:	Human Immunodeficiency virus / Acquired immunodeficiency syndrome
ICDS	:	Integrated Child Development Services
KII	:	Key Informant Interview
NGO	:	Non-Government Organization
OBC	:	Other Backward Castes
NTFP	:	non timber forest produces
PIA	:	Project Impact Area
PHC	:	Primary health center



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CHAPTER -1: INTRODUCTION

1.1 Project Background:

M/s Ambuja Cements Limited (ACL) is operating cement plants of 4.42 (Line I- 1.7+ Line-II - 3.10) MTPA clinker at Balodabazar - Bhatapara. The limestone requirement for this plant is being met with the captive Rawan Limestone Mine & partly from Maldi Mopar Limestone Mine. M/s. Ambuja Cements Limited (Unit – Bhatapara) has proposed Expansion of Integrated Cement Plant- Clinker (4.8 to 8.1 MTPA), Cement (3.5 to 6.5 MTPA), and WHRS (18 to 43 MW) by installation of Line- III at Village: Rawan, Tehsil: Baloda Bazar, District: Balodabazar - Bhatapara (Chhattisgarh).

In order to meet the raw material requirement (limestone) M/s. Ambuja Cements Limited (Unit – Bhatapara) is proposing expansion in Limestone Production Capacity from 2.0 Million TPA to 6.3 Million TPA, (ROM 6.5 Million TPA including 0.2 Million TPA screen rejects), Sub Grade 1.7 Million TPA, Top Soil 0.27 Million TPA, Waste 2.55 Million TPA (Total Excavation 11.02 Million TPA) along with existing crusher of 1800 TPH with screen and a proposed crusher of 1800 TPH with Screen in Maldi Mopar Limestone Mine (ML Area – 553.656 ha) in Villages- Boirdih and Karmandih (Tehsil: Baloda Bazar) and Maldi Mopar and Devrani (Tehsil: Bhatapara), District- Baloda Bazar-Bhatapara, State: Chhattisgarh. Environmental Clearance for existing 2.0 million TPA Limestone Production Capacity in favor of M/s. Ambuja Cements Limited vide letter no. J-11015/252/2008-IA-II (M) dated 13.08.2010.

1.2 Profile of Project Proponent:

Ambuja Cements Ltd is India's foremost cement company known for its hassle-free, home-building solutions. Unique products tailor-made for Indian climatic conditions, sustainable operations and initiatives that advance the company's philosophy of contributing to the larger good of the society, have made it the most trusted cement brand in India.

Ambuja Cements Ltd., a member of Holcim - global leader in innovative and sustainable building solutions, is among the leading cement companies in India. Ambuja Cement has provided hassle-free, home-building solutions with its unique sustainable development projects and environment-friendly practices since it started operations. Currently, Ambuja Cement has a cement capacity of 31 million tonnes with integrated cement manufacturing plant at Six Locations and eight cement grinding units across the country.



The company has many firsts to its credit – a captive port with four terminals that has facilitated timely, cost-effective, cleaner shipments of bulk cement to its customers. To further add value to our customers, the company has launched innovative products like Ambuja Roof Special, Ambuja Cool Walls, Ambuja Kawach and Ambuja Cement Compocem. The new products not only fulfill important customer needs but also help in significantly reducing carbon footprints. Ambuja Cement is the industry leader in responsible use of resources, both natural and man-made. The company has been certified over eight times water positive, a feat achieved through conservation efforts and increasing water efficiency in its plants. It is also plastic negative, by burning as much as over 75,000 tonnes of plastic waste in its kilns, equivalent to 2.5 times of total plastic used. The company also generated 7.1% of its power needs from renewable resources.

Sustainable profitable growth is ingrained in the company's DNA. Ambuja Cement's multi-pronged strategy, including triple bottom line accounting method; True Value; good corporate governance practices; overarching corporate environment policy; and sustainable supply chain policy have helped cement the company's credentials as a sustainable manufacturer. Ambuja Cement's Sustainable Development Ambition 2030 provides strategic direction to the company's long-term sustainability vision. All Ambuja Cement plants are ISO 14001 certified.

Ambuja Knowledge Centres (AKCs), a unique initiative by the company, serves as a knowledge sharing platform for construction professionals that include practical workshops on mix design and quality supervision. Currently, over 30 AKCs are functional across India.

The company also works closely with communities that live around its plants, through its CSR arm, the Ambuja Cement Foundation (ACF). ACF implements need-based and participatory programmes in the thematic areas of water resource development, health and sanitation, women empowerment, rural infrastructure, education and agro-based/skill-based livelihood creation.

The company's most distinctive attribute is its approach to business. Ambuja Cement follows a unique homegrown philosophy **I CAN** that gives people the authority to set their own targets and the freedom to achieve their goals. Its focus has been consistent on two major building blocks that has resonated through its daily operations – Quality (of products) and Safety (of all those involved in the creation of its products).

The company's quintessential **I CAN** spirit has ensured a product that embodies Giant Strength.

1.3 Genesis and Objectives of the Project:

To meet the demand of eastern market, ACL is operating an integrated cement plant of 4.42 MTPA clinker and 2.4 MTPA cement production capacity at Rawan village in Baloda Bazar/Bhatapara Tehsils, Raipur district of Chhattisgarh. This plant is referred to as Bhatapara Unit of ACL. ACL already holds a captive limestone mining lease to meet the requirement of the cement plant. To meet the requirement of further plant expansion, ACL proposes to open the new mines at Maldi, Mopar, Devarani, Karmadih and Boirdih villages in close vicinity of the cement plant. The proposed Maldi-Mopar limestone mining project covers a lease area of about 553.656 ha of land (>100 ha) and thus it is scheduled under “Category-A” project, as per the EIA Notification dated 14th September 2006. The mining lease area comprises of agricultural fields with partly rocky and barren waste land. The total mining lease area is 553.656 ha which spreads in five villages Boirdih, Karmandih, Maldi, Mopar and Devrani. Out of Total Area, 53.686 Ha Govt waste Land and 499.970 Ha Pvt Agriculture Land. 439.930 Ha Pvt land has already been acquired and 60.040 Ha land will be acquired on the basis of Negotiation with Individual Farmer.

Table 1.1: Land Breakup

Govt. land (Ha.)	Private land (Ha.)	Total (Ha.)
53.686	499.970	553.656

1.4 Brief Description of the Project:

Nature of the Project:

The proposed Maldi-Mopar limestone mining project covers a lease area of about 553.656-ha of land (>100-ha) and thus it is scheduled under “Category-A” project, as per the EIA Notification dated 14th September 2006.

Size of the Project:

The proposed Maldi-Mopar mining project covers an area of 553.656-ha with an estimated mineable limestone reserves of 264.8 MT. The target ROM production capacity of the proposed mining project is about 6.5 MTPA. The projected life of the mine is 42 years. The total cost of mining land and mining machinery for the proposed mining project is about Rs.291.0 Crores.

Location of the Project:

The proposed Maldi-Mopar limestone mining project area falls under Maldi, Mopar, Devarani, Karmandih and Boirdih villages in Baloda Bazar/Bhatapara Tehsils of Raipur district in Chhattisgarh state. The general location map of the proposed mining project is depicted in **Figure 1.1**. The ML area is located at a distance of 1.5-Km, SW of ACL’s Bhatapara Unit. The key map depicting project



setting with respect to the Bhatapara Cement Plant and captive Rawan limestone mines of ACL are depicted in **Figure 1.2**. The mining lease area is well connected by road and rail networks. An all-weather road connecting Baloda Bazar and Bhatapara runs at a distance of 2.5-Km, NE for the mining project site. Bhatapara Railway station, on the Mumbai-Howrah broad gauge main line of the Southeastern Railway (SER) runs at a distance of 12-Km, NW from the project site. The mining lease area comprises of agricultural fields with partly rocky and barren waste land. The total mining lease area comprises of 499.974-ha (90.3%) of private land and 53.682-ha (9.7%) of government land.

Table 1.2: Brief Description of the Project

S. No.	Particulars	Details
A.	Nature of project	Opencast Mechanized Mining
B.	Size of project	
1	Mining Lease area	553.656 Ha
2	Proposed Limestone Production capacity	Expansion from 2.0 MTPA to 6.5 MTPA ROM
C.	Project Location	
1	Villages	Karmandih, Devrani, Boirdih
2	Tehsil	Baloda Bazar
3	District	Balodabazar-Bhatapara
4	State	Chhattisgarh
5	Latitude	21° 38' 04" to 21° 39' 47" N
6	Longitude	82° 02' 10" to 82° 04' 30
7	Toposheet No.	64 K/2
8	Location Map of the Proposed Mine Site have been given in Figure 1.1	
D.	Environmental Settings Details (with approx. aerial distance & direction from the mining lease boundary)	
1	Nearest Town	Baloda Bazar 9.3 Km, (E)
2	Nearest State / National Highway	NH-200 : 25 km (SE)
3	Nearest Railway Station	Bhatapara 12 km (NW)
4	Nearest Airport	Raipur 93 km (SW)
5	National Parks, Wild Life Sanctuaries, Biosphere Reserves etc., Reserved / Protected Forest within 10 Km radius study area	None
6	Water Bodies within 10km radius to study area	Mahanadi Irrigation Canal : Adjacent (E)
		Kukurdi Pond 3.2-Km, (ENE);
		Jamuniya River : 8.0-Km, (NW);
		Kharsi Nala : 9.5-Km, (SE)
7	Seismic Zone	Zone II
E.	Cost Details	
1	Total Project Cost	291 crores
2	Cost for Environmental Protection Measures	10.59 Crores

Source: Toposheet, Site Visit and Pre- Feasibility Report

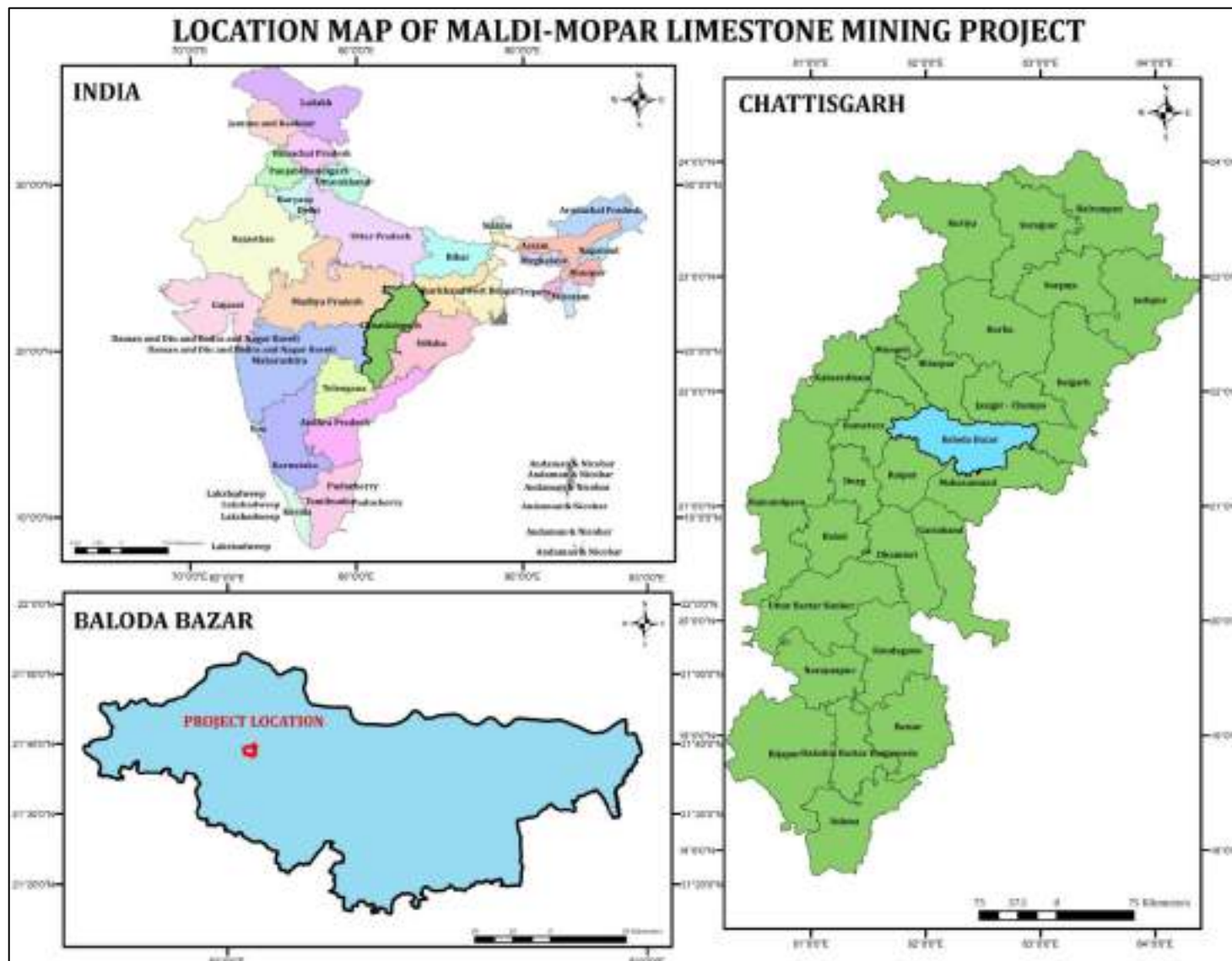


Figure 1.1: Location map of the mine site

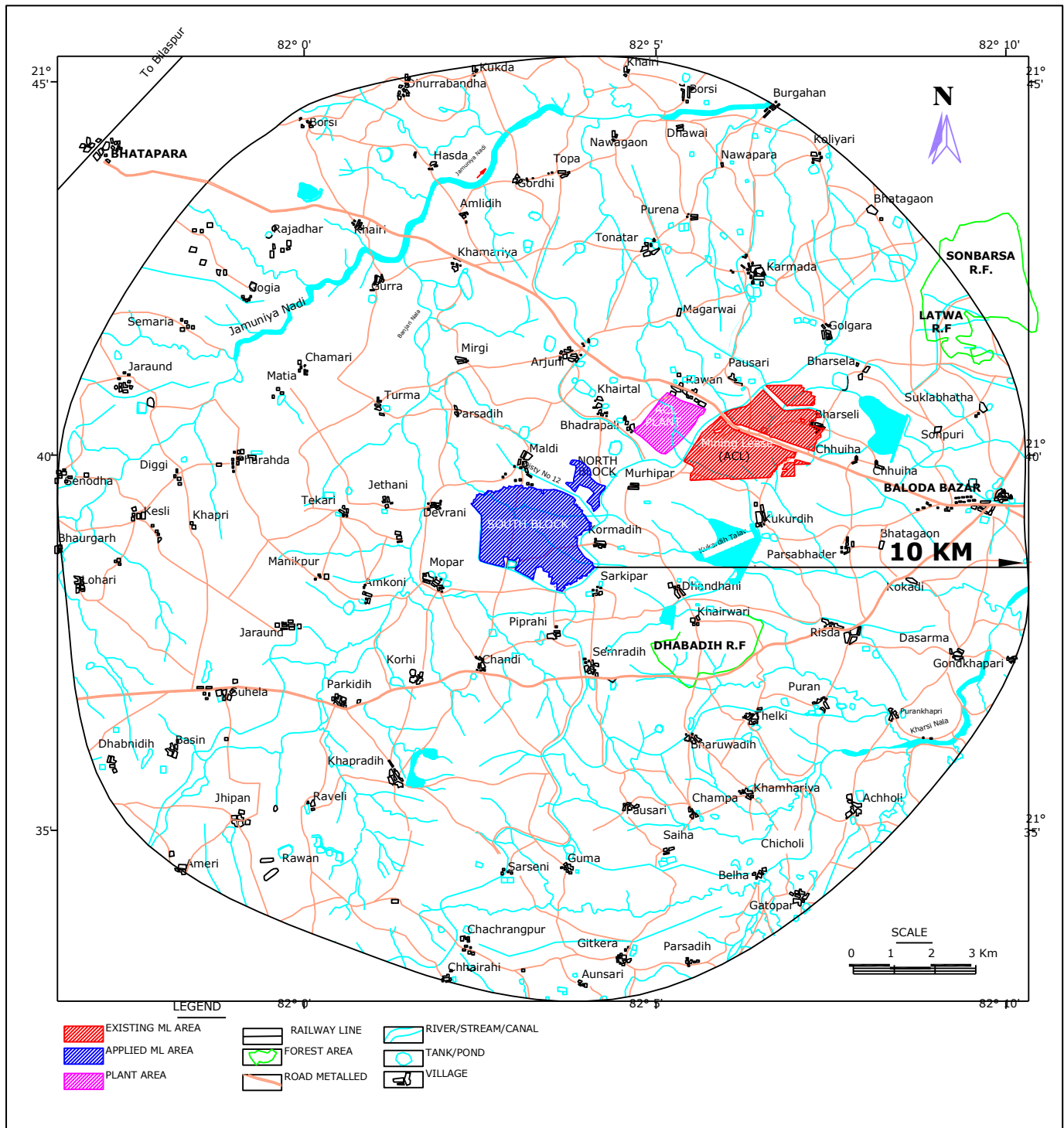


Figure 1.2: Study Area Map (10-km Radius from MI Boundary)

1.5 Scope of the Study:

On the basis of analysis of data, details and information collected, the study provides directional inputs with cost estimates and budgetary allocations for the need based assessment of the project Impact area. The study, in particular, provides the following:

- i. Assessment of the socioeconomic conditions of the PIA with their demographic, educational, economic profile and the infrastructural facilities available at the PIA.
- ii. Need based assessment/choices expressed by the different groups of PIA for their need based assessment and for improving the socioeconomic conditions as well as quality of life of the PIA;
- iii. Institutional arrangement for effective implementation of the CSR Plan so that the socioeconomic conditions of the PIA could be improved with their own participation (sustainable development).

1.6 Project proponent: - Ambuja Cements Limited (ACL):

Ambuja Cements Limited (ACL) popularly known as 'Ambuja Cement' is a leading manufacturer of various types of cements in India. ACL is one of the largest integrated cement companies in the country. It owns and operates cement manufacturing plants at Six Locations, besides cement grinding units, located in various parts of India, with a total installed capacity of over 31 MTPA. The company has Operating cement plants at Six Locations at Chhattisgarh, Gujarat, Himachal Pradesh, Rajasthan and Maharashtra. Besides, the company has clinker-grinding units at Ropar and Bhatinda in Punjab, Sankrail and Farakka in West Bengal, Roorkee in Uttarakhand and Surat in Gujarat. ACL presently has a total installed capacity of over 31.0 MTPA.

ACL has an excellent track record with respect to productivity, energy conservation, quality control and environmental pollution control. It has also won a number of National Awards for all these parameters.

ACL is continuously modernizing and expanding its various production facilities to keep abreast of the latest industrial production standards. Apart from manufacturing cement, ACL also introduced the concept of bulk transportation of cement through sea route for the first time in India. ACL has established bulk cement facilities at strategic locations and set-up sea ports at Surat in Gujarat and New Panvel in Maharashtra. Uniquely designed ships have also been acquired for captive cargo



movement by sea. ACL is the first company in India to have introduced such facilities. ACL transports naked cement to the Terminals at Surat in Gujarat and New Panvel in Maharashtra by utilizing its own fleet of ships.

ACL has captive limestone mines at respective Units for meeting the prime raw material requirement. ACL also has captive power generation facilities at respective plant locations.

1.7 Objective of Study:

This report is prepared to portray baseline socioeconomic status of the people living in villages surrounding the Mine lease boundary within a distance of 10 km through need based assessment. This is prepared with a view to ascertain existing social and civic infrastructures and any potential impact of mining on the people living in and around mine lease area. As per directive issued by MOEF it is mandatory to prepare CSR plan detailing items of expenditure necessary for social development of the people inhabiting the villages surrounding a proposed mine lease area. The objective of preparing such budget is an equitable development on social, economic and peripheral infrastructures that will bridge the gap of inequity among various strata of the society. The study would primarily concentrate on base line survey and need assessment in order to prepare an appropriate planned structure for sustainable development. The present study also includes various socio-economic components on which impact of the proposed mining activity is expected and suitable mitigation measures are suggested for sustainable development.

1.8 Organization of the Report:

The present report details the need assessment of the PIA and process of a sustainable development plan in the form of Corporate Social Responsibility plan (CSR) for the PIA. The contents of this report are organized as follows:

Chapter 1	Gives an overview of the project background, description of project site/location details; Brief description of project; scope of study, methodology for baseline data/information and need assessment, chapter-wise report layout.
Chapter 2	Statutory, Regulatory and Corporate Compliance Framework
Chapter 3	Methodology, Selection of sample villages for household survey, Socio Economic, Health and Environment Related Parameters
Chapter 4	Socioeconomic and need based assessment
Chapter 5	Stakeholders' Consultation
Chapter 6	Social Management Plan
Chapter 7	Corporate Social Responsibility
Chapter 8	Grievance Redress Mechanism, Monitoring and Implementation
Chapter 9	Conclusion

CHAPTER -2: STATUTORY, REGULATORY AND CORPORATE COMPLIANCE FRAMEWORK

2.1 Mining Laws and National Policy on Land Acquisition and Resettlement

Some statutory laws and Regulatory provisions exist for mining project such as The Mines Act, 1952, (Act. No. 35 of 1952), (15 March, 1952) and The Mines Rules, 1955, notification, New Delhi, the 2nd July, 1955.

The Mines and Minerals (development and regulation) Act, 1957 Act no. 67 of 1957 [28th December, 1957.]

An Act to provide for the 1 [development and regulation of mines and minerals] under the control of the Union. Be it enacted by Parliament in the Eighth Year of the Republic of India as follows:—

1. This act may be called the mines and minerals 2 [(development and regulation)] act, 1957.
2. It extends to the whole of India.
3. It shall come into force on such date³ as the central government may, by notification in the official gazette, appoint.
4. It is hereby declared that it is expedient in the public interest that the union should take under its control the regulation of mines and the development of minerals to the extent provided in the act.

The Mines and Minerals (Development and Regulation) Amendment Act, 2015. An Act further to amend the Mines and Minerals (Development and Regulation) Act, 1957.

1. This act may be called the mines and minerals (development and regulation) amendment act, 2015.
2. It shall be deemed to have come into force on the 12th day of January, 2015.

But none of these prescribes conducting social impact assessment for mining impact assessment either prior to inception of the project or as a post project evaluation.

There are a number of other acts, such as, The Trade Unions (Amendment) Act, 2001, Contract Labour (Regulation & Abolition) Act, 1970, National Policy on Safety, Health and Environment at

¹ Subs. by Act 38 of 1999, s. 2, for “regulation of mines and the development of minerals

² Subs. by s. 3, *ibid.*, for “(Regulation and Development)” (w.e.f. 18-12-1999)

³ 1st June, 1958, vide notification No. G.S.R. 432, dated 29th May, 1958, see Gazette of India, Extraordinary, Part II, sec. 3(i)

Work Place. All these are in place to guarantee workers' safety and health, proper wages, healthy work environment. However, none of these acts stipulates preparation of SIA.

2.2 National Policy on Land Acquisition and Resettlement:

In case of land acquisition, Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCT in LARR Act - 2013) and the Chhattisgarh Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement (Social Impact Assessment, Consent and Public Hearing) Rules, 2016 will be followed to identify project affected persons and appropriate compensation will be provided according to the Act. However, it is understood that no revenue land belong to individuals or families are being acquired for construction /exploration or execution of mining activities in the leasehold area. So, implementation of RFCTLARR act is not being contemplated.

2.3 Ambuja Cement Group (ABG) policies and Guidelines:

Ambuja Cement Group (ACG) reaches out to underserved communities with foundation based on trusteeship concept. This entails transcending business interests and grappling with the "quality of life" challenges that underserved communities face, and working towards making a meaningful difference to them. Their vision is to actively contribute to the social and economic development of the communities among whom they operate. Their goal is to build a better, sustainable way of life for the weaker sections of society and raise the country's human development index.

Social Impact Assessment Guidance provides assessment of hypothesized risk to the affected communities arising from proposed business activities and recommends mitigation strategies to minimize social risk. The document suggests establishing a socioeconomic baseline of the communities and analysis of potential effects on socio-economic, cultural and environmental changes, health issues and human rights of the concerned people. Resettlement Guidance document summarizes potential resettlement issues, identification of physical and economic displacement, key principals of successful resettlement, eligibility, compensation, development of a well-prepared resettlement plan.

Compensation and Benefits for Land Access Guidance gives insight into importance of compensation and benefits to the affected communities and how to determine eligibility and compensation amount without causing inflated cost of compensation. This policy also mentions of dispute resolve issue which is an integral and important part of resettlement implementation. Ambuja Cement Group (ACG) has prepared a guidance manual on socioeconomic impact

assessment (SIA) study and its scope and content. One important purpose that SIA serves, is to prepare a baseline database of the community on social, economic and cultural frontiers apart from being a regulatory document necessary for government compliance.

2.4 Requirement of Social Impact Assessment and Corporate Social Responsibility

As per the direction of MoEF vide No.J-11013/25/2014/IA.I dated 11.08.2014 regarding Environment sustainability and CSR related issues and guidelines depicts that Sustainable development has three components, viz., social, economic and environmental. All the three components are closely inter-related and mutually re-enforcing. Considering this, the general structure of EIA document, under Appendix-III to the notification, prescribes inter-alia public consultation, social impact assessment and R&R action plan besides environment management plan (EMP).

The Companies (CSR Policy) Amendment Rules, 2021 wef **22/01/2021**- In exercise of the powers conferred by section 135 and sub-sections (1) and (2) of section 469 of the Companies Act, 2013 (18 of 2013), the Central Government hereby makes the following rules further to amend the Companies (Corporate Social Responsibility Policy) Rules, 2014, namely:- the Companies (Corporate Social Responsibility Policy) Amendment Rules, 2021. (2) They shall come into force on the date of their publication in the Official Gazette unless explicitly provided elsewhere in this notification. (Explicitly dealt in Annexure 1 & 2).

The matter has been further examined in the Ministry of Environment, Forests & Climate Change (MoEF&CC). It has been decided that in respect of valid concerns expressed during the public consultations, mitigation issues emerging from social impact assessment and R&R Plan, the project proponents, in EIA / EMP report will clearly state the activity-wise costs involved (both capital as well as recurring costs), the phasing of these activities along with costs and also as to how such expenditure would be met. The costs and the timelines for various activities as prepared by the project proponent may be looked into by the concerned Expert Appraisal Committee (EAC) for their reasonableness and appropriate recommendations in the matter reflected in the minutes of EAC meeting. In case these activities (or some of these activities) are proposed to be covered by the project proponent under CSR activities, the project proponent should commit providing for the same. In either case, the position regarding the agreed activities, their funding mechanism and the phasing should be clearly reflected in the EC letter. The obligation on part the project proponents, should be stated at the TOR stage itself as one of the TORs for the project itself.

CHAPTER -3: METHODOLOGY

3.1 Sample selection:

3.1.1 Selection of sample villages for household survey:

The baseline data collection and Need Assessment survey was carried out in a combination of primary and secondary source in the study area. Primary Source: Household survey, Personal Interview, Group Discussion in community meetings etc. Secondary Source: Revenue department, Census 2011, LARR Act, 2013, District Census Handbook etc. The preliminary survey and secondary data collection helped to understand the physical, social, economic and cultural setup of the area before undertaking the field survey.

The Census-cum-socioeconomic survey was conducted of the PIA using a well-structured questionnaire prepared in local language enabling subjects to reply appropriately. The questionnaires were designed to suit the subjects considering their rural background enabling to furnish correct information and data as far as possible.

Additionally, public consultations and focus group discussions were held during the fieldwork to understand views of people affected, with reference to purchase of land, its due compensation, benefits of the project, opinion about health and safety issues due to the project to ensure participation of community in project implementation, monitoring and to develop a comprehensive coordination amongst the stakeholders for successful implementation of the project.

The collected data was further analyzed and presented in tabular/ diagrammatic/ graphic form for better understanding. These tabulated data were interpreted and evaluated with the help of various qualitative/ quantitative techniques and ideographic approaches.

3.1.2 Selection of sample households:

Sample households were selected based on the principle of “Multi Layered Stratified Random Sample survey with replacements”. The total estimated sample size was calculated as 405 in six villages.

Apart from all the parameters and factors stated above, consideration of the current COVID 19 pandemic situation, and associated safety rules, logistic arrangement, acceptance of/access to the

villagers and cost efficiency were important factors for the survey design, time line and successful completion of focus group discussion (FGD) and key persons' interviews.

3.2 Socio Economic, Health and Environment Related Parameters

Parameters selected for studying present Socio Economic, Health and Environment status of the study of the area includes:

- a. Demographic characteristics including age structure and sex ratio, social stratification, density and distribution of population
- b. Literacy status of various age groups, and level of education
- c. Occupation and livelihood pattern, income and expenditure level
- d. Land and other assets
- e. Health status and healthcare facilities
- f. Existing social & civic infrastructure in respect of health, education, transport, drinking water, irrigation, electrification and other civic amenities and people's access to these facilities and gaps, if any

3.3 Data Collection method for Baseline survey and Need assessment

The baseline survey and perceived need assessment study were conducted to analyse envisaged impacts of proposed mining & planning of sustainable development with the help of corporate social responsibility plan. The methodology that had been followed to prepare the socioeconomic baseline study and CSR plan is mentioned below:

3.3.1 Core method of baseline survey:

- a. Stakeholder analysis
- b. Direct observations
- c. Structured Questionnaire and surveys
- d. Focus Group Discussion (FGD) with selected groups and separately with women
- e. Open ended interview with key persons, like Gram Panchayat Sarpanch/ secretary, teacher, senior citizens, Anganwadi/ASHA workers

Apart from the primary baseline survey at household level, FGDs were organised at different locations within the study area, with specific purpose of deciphering the perceived need of the poor and vulnerable groups such as schedule castes, schedule tribes, BPL families, women headed households & youth groups.

3.3.2 Assessment of Perceived Need:

To prepare effective CSR plan, people felt needs have to be assessed and a set of Quality-of-Life Indicators were prepared for group discussion and interviews to measure adequacy or lack of facilities for the villagers under study. These are:

- Access to educational institutions especially for the children of 6 -11 years
- Access to health care facilities, particularly for women and children
- Availability of health workers in each village
- Access to Anganwadi and ICDS centres for pre-nursery children
- Access to market, district administration centres, Block Development Office for availing of Government schemes
- Availability of agricultural and irrigational schemes, alternate job opportunity and livelihood training programmes
- Availability of transport and communication linkages

To identify preferred income generation livelihoods, especially for the poorer and unemployed section of the society, options were discussed which are consistent with the traditional skills and business opportunities available in the area. Opinion was also gathered from the youths affected due to COVID 19 pandemic situation.

Training based action plans for local employable youths based on their education, available skills and expectations and motivation for a sustainable development were also discussed during FGD sessions.

3.4 Questionnaire for Survey:

Several sets of questionnaires were prepared to conduct household level survey, collection of infrastructural facilities, socio economic information at village / town level, to interview key informants and conduct focus group discussion (FGD). Data / information/facts received through which will be analyzed for preparation of SEIA and need assessment reports. Questionnaires and formats are attached for review.

A few focused group discussions involving representative members of 5-6 families were conducted to understand their concerns and awareness regarding the project. Photographs of such discussion have been given below.





Figure 3.1: Photographs showing discussion with the villagers

In the public consultations undertaken by organizing Focus Group Discussions (FGDs) in the village, people participating in the group discussions were informed about the project and then members were asked to provide their concerns regarding the project activities. Their participation helped in identifying social issues and incorporating suggestions in the R&R measures wherever feasible. In FGDs participation of local communities also involved community who have and are benefitting from interventions of ACF. ACF is working on the issues of Health, Women Empowerment, Agriculture, Water Resources, Rural Infrastructure, Education and Skill Training. All these interventions have been completely masked in the report which should be highlighted in the context of report. Therefore the objective of the public consultation was to inform, make them aware and participate in the project planning. The focus group discussion were conducted to elicit the views of the affected persons and other stakeholders on displacement, compensation, employment, gender issue, infrastructure, education, health care, sanitation and any other advised/raised by the stakeholders. Views expressed by participants have been incorporated in the project design wherever feasible. The number of participants increased as the discussion progressed. The issues were raised, views were expressed and suggestions were provided by the participants. Summary of discussion is as below:

- Employment opportunities will increase for local people with the development work.
- Price of land will increase.
- Loss of land properties and disruption of livelihood of those close to the project area.
- Majority people preferred Cash for land compensation.

In some cases, people were interested to get employment for their survival and betterment.

The PAF survey was undertaken during the February, 2022 to March, 2022. Efforts were made to contact all land owners as identified through khasras.

3.5 Socio –Economic Status:

Growth and the development of any region often depend on introducing in a planned way urban and industrial activities. But the interior rural regions, where people subsist on agricultural and allied economy.

Demographic characteristics of the study area are represented by a number of criteria, namely population composition, sex ratio, family structure, and age distribution pattern. Attempt has been made to compare the demographic features between the census data whenever

corresponding data are available. The area selected for the study constitutes 94 inhabited villages. The village size as estimated from the number of inhabitants as per the 2011 census indicated that majority of the villages i.e. 7 villages fall within 1-500 population size, while 35 villages fall in range of 501-1000 population size, 36 villages falls within 1000-2000 range , only 12 villages having population in the range of 2001-5000 population, only 3 villages having population in the range of 5001-6000 and one town having population of more than 40,000. Village Khairwardih with population of 121 is the least populated while Baloda Bazar with population 40,716 is the most populated town.

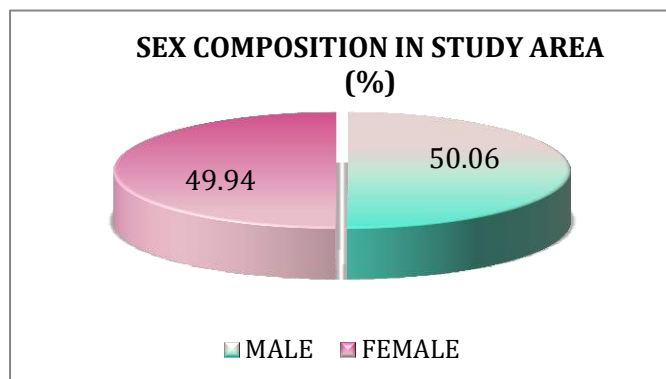
Socio-economic survey has been conducted in all the villages identified in the study area. Survey was carried by using probability census method. The unit of population like, literate, illiterate employed, unemployed, males and females were included in the survey. The survey was conducted with the help of pre- designed set of interview schedule to assess opinion of the population regarding the project and to know their expectations. Based on primary and secondary data available with various Govt. Departments, like census data, PHC records, literatures, and published information analysis has been done. Probability sampling methods has been used for sample collection during survey.

3.5.1 Methodology:

A socio-economic survey was carried out by probability census method in all the villages identified in the study area. Varies categories of population like, literate, illiterate employed, unemployed, males and females were included in the survey. The survey was conducted with the help of a pre designed questionnaire based interview to record opinion of the people regarding the project and to know their expectations. Based on the primary and secondary data available with various govt. departments, like census office PHC records, and other sources like literature, published information, an analysis was done.

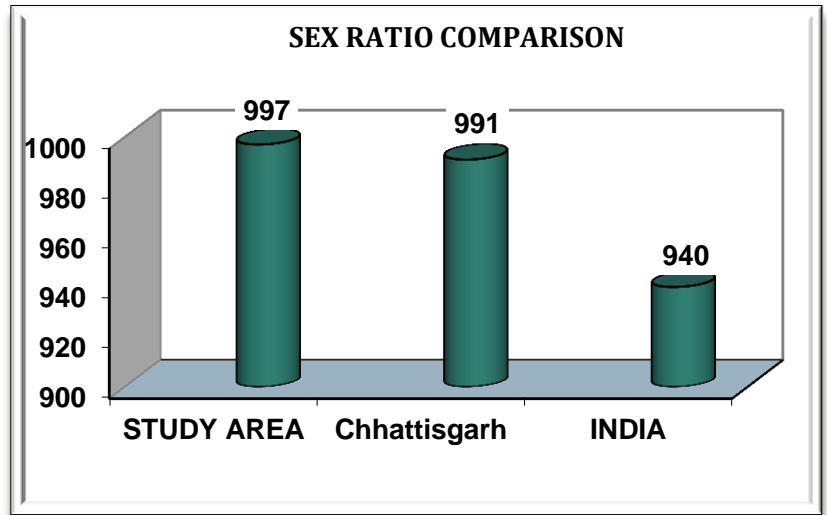
3.5.2 Community Profile:

Community Profile: The population is distributed among 33,369 households in the study area. The 94 inhabited villages have a population of 1, 66,178 comprising of 83,193 males and 82985 females. As may be observed from the graph the composition of the society as



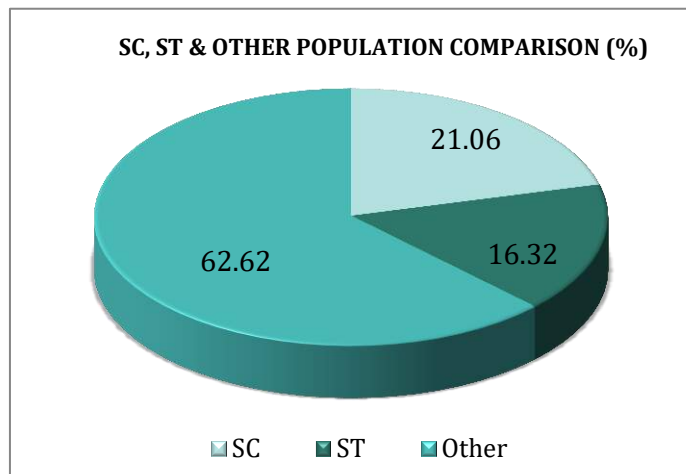
far as males and their counterpart's female are concerned indicates healthy distribution.

The number of females per 1000 males is 997 when compared with the figures of the Chhattisgarh State 991 and for the nation 940 the study area found to be greater than State as well as National figures.



3.5.3 Scheduled Caste Population:

The Scheduled Caste population of the study area on percentage basis is 21.06% of the total population and Scheduled Tribe population is 16.32%. Comparison with the State level figures indicates percentage of SC as well as ST population in study area is more than that of State level. The distribution as depicted in the graph.

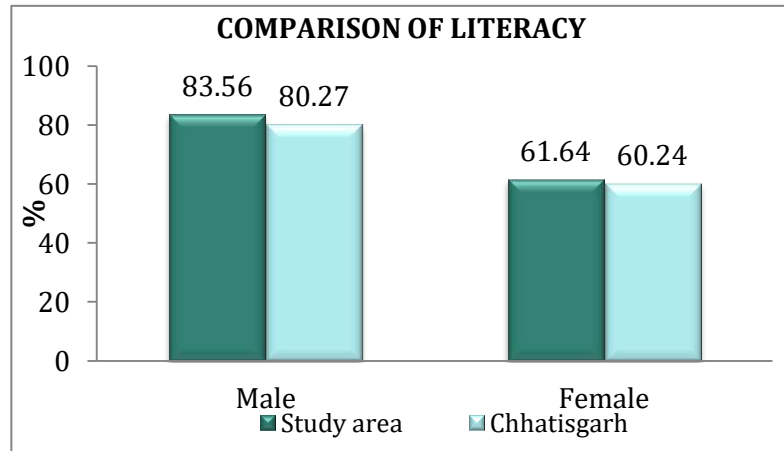


3.5.4 Socio-Religious Groups:

In the project area, the predominant community is of Hindus. The community is divided into several castes and sub-castes. They are engaged in agriculture, animal husbandry, weaving and craft-related activities. Some of them sell vegetables and work as laborers. They share similar kind of interdependency, kinship relation and strong identity with the all community. There is communal harmony in the region.

3.5.5 Literacy:

The overall literacy in the 94 villages of the study area was 72.58%. The male literacy in the study area was 83.56% as compared with State was 80.27% in this period, and the female literacy was 61.64% while it was 60.24% for the State. The graphical representation illustrates

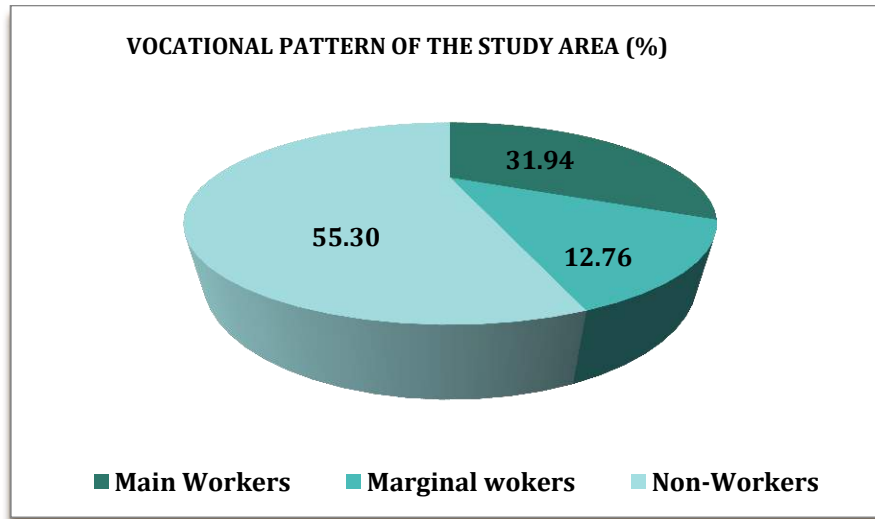


comparative literacy of the study area and Chhattisgarh. It may be noted that percentage of literacy of study area was more as compared with State in both male and female.

3.5.6 Vocation-wise distribution:

Vocation-wise distribution of the population based on 2011 census data of the study area is graphically represented below indicate that about 50.65% non-working population is dependent on 49.35% working population.

	Profession	Percentage
1.	Total Main Workers	31.94
	* Cultivators	(29.24)
	* Agricultural Labour	(41.70)
	* House Hold industry	(1.41)
	* Other Workers	(27.65)
2.	Marginal Workers	12.76
3.	Non-Workers	55.30



As may be seen from these data, the percentage of main workers in the study area was 31.94%, in 2011. The percentage of Cultivators was 29.24% in the study area. On the other hand, percentage of Agricultural Laborers was 41.70% and 27.65% people were engaged in other activities. The percentage of Household Industries was lowest 1.41% in the study area. The Marginal Workers in the study area were 12.76%. The non-workers were 55.30 % in the study area; it shows that dependency of non-working population on the working population in the area is much more that of corresponding working population.

Since agriculture is the main activity in the project area, a large number of poor and land less people work as agricultural laborers and live on subsistence level. The marginal and small farmers are likely to get non-farm employment, which provide low income. Although they are above poverty line, at times they find in difficult to make both ends meet. Many of them take loans for consumption purposes and are in perpetual indebtedness.

CHAPTER -4: SOCIOECONOMIC ASSESSMENT

4.1 Project State and District Profile:

The project area lies within Balodabazar - Bhatapara district of Chhattisgarh state, and forms part of Baloda Bazar/Bhatapara Tehsils. A comparative statement of key demographic characteristics of the state and district per 2011 census are shown below to portray relative socioeconomic condition of the project area vis-à-vis Chhattisgarh state and Balodabazar-Bhatapara district. (Table 4.1)

Table 4.1: Key socio-demographic data of the state and the Project district

District	Population 2011	Decadal growth Rate		Sex Ratio		Density	
		2001	2011	2001	2011	2001	2011
Balodabazar- Bhatapara	4,063,872	19.29%	34.70%	980	984	231	328
Chhattisgarh State	2,55,45,198	18.06%	22.61%	989	991	154	189

SOURCE: CENSUS OF INDIA 2011

The state of Chhattisgarh is bordered by Jharkhand, Madhya Pradesh, Maharashtra, Telangana and to its north, west, south and east respectively. The state is bordered by the state of Odisha towards the eastern side. The state is heavily forested in the central part of India, it is mainly known for its temples and waterfalls.

According to the census of 2011, the population of Chhattisgarh State was 2,55,45,198. Male to female ratio in the state is 991 females per 1000 males, while in 2001 it was 989 females per 1000 males. The total area of the new state is 135,198 sq.km. As discussed in Table 12, the sex ratio as on 2011, is 969, which is almost same as that of the State, just a fraction smaller.

In 2011, Raipur had population of 4,063,872 of which male and female were 2,048,186 and 2,015,686 respectively. In 2001 census, Raipur had a population of 3,016,930 of which males were 1,523,925 and remaining 1,493,005 were females. Raipur District population constituted 15.91 percent of total Maharashtra population. In 2001 census, this figure for Raipur District was at 14.48 percent of Maharashtra population.

4.2 Project Impact Area (PIA) Profile:

Socio-economic survey and verification of the affected persons were undertaken to address the possible adverse impacts if any that may emerge during and after the course of the project implementation. The socio-economic survey carried out, acts as base line information and provides a cut off point for eligibility to compensation or assistance for losing assets in the process of land purchase.

The detailed questionnaires were designed to suit the subjects considering their rural background enabling them to furnish correct information and data as far as possible. Formats included questions on concerns of affected families towards problems, their choices for infrastructure improvement, additional facilities required. It was decided that as far as possible each of the selected PAF should be interviewed at the time convenient to them. Before embarking on data collection, family members including heads of families of affected families were briefed about need and procedure of the study area. A few focused group discussions involving representative members of 5-6 families were conducted to understand their concerns and awareness regarding the project. In the public consultations undertaken by organizing Focus Group Discussions (FGDs) in the village, people participating in the group discussions were informed about the project and then members were asked to provide their concerns regarding the project activities. Their participation helped in identifying social issues and incorporating suggestions in the R&R measures wherever feasible. Therefore the objective of the public consultation was to inform, make them aware and participate in the project planning. The focus group discussion were conducted to elicit the views of the affected persons and other stakeholders on displacement, compensation, employment, gender issue, infrastructure, education, health care, sanitation and any other advised/raised by the stakeholders. Views expressed by participants have been incorporated in the project design wherever feasible. On an average 10-15 persons including women of the village who are likely to be affected participated in the focus group discussion. The number of participants increased as the discussion progressed. The issues were raised, views were expressed and suggestions were provided by the participants. Summary of discussion is as below:

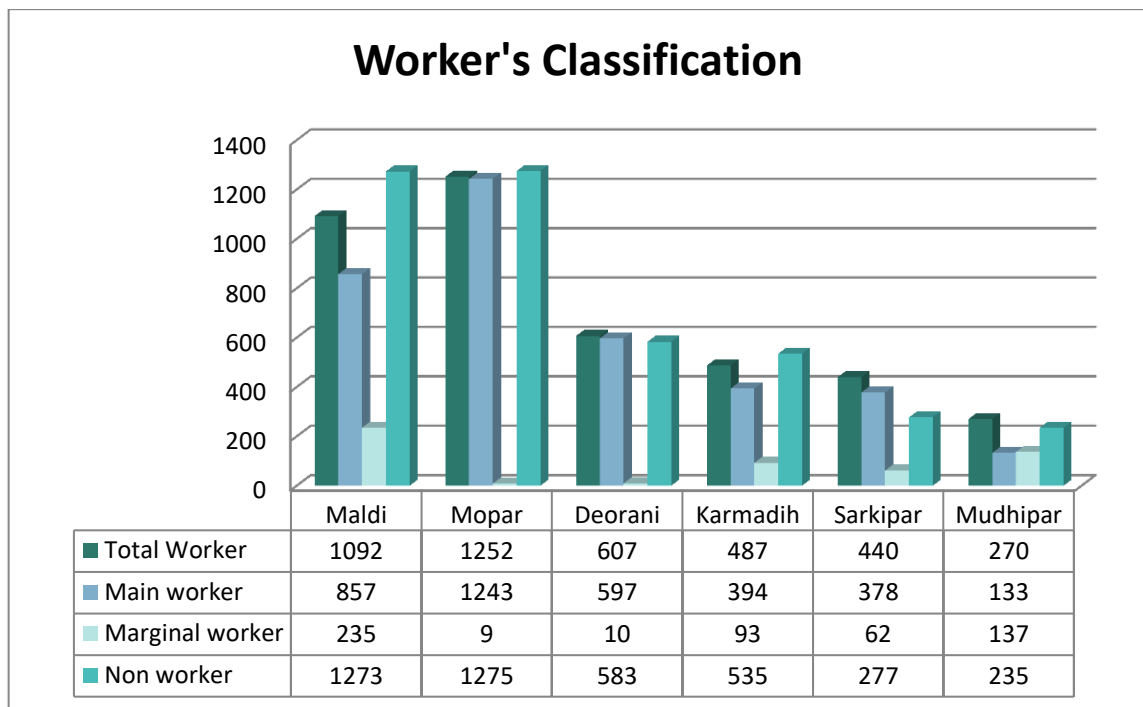
- Employment opportunities will increase for local people with the development work.
- Price of land will increase.
- Loss of land properties and disruption of livelihood of those close to the project area.
- Majority people preferred Cash for land compensation.

4.3 Economic Activities:

The economy of an area is defined by the occupational pattern and income level of the people in the area. The occupational structure of residents in the study area is studied with reference to work category. The population is divided occupation wise into three categories, viz., main workers, marginal workers and non-workers. The workers include cultivators, agricultural laborers, those engaged in household industry and other services.

The marginal workers are those workers engaged in some work for a period of less than 180 days during the reference year. The non-workers include those engaged in unpaid household duties, students, retired persons, dependents, beggars, vagrants etc. besides institutional inmates or all other non-workers who do not fall under the above categories. the distribution of workers in the affected villages in area. **Figure 4.1.**

The above table shows that the percentage of total working population and non-working population of whole population of village.



(Source: Primary Survey 2021)

Figure 4.1: Work Forces of the Affected Villages

4.4 Demographic Detail of Surveyed PIA:

The primary PIA consists of Six core villages namely Maldi, Mopar, Devarani, Karmadih, Sarkhipar, Mudhipar are 1653 residing, out of 1653 (HH) the socio-economic survey carried out 405 (HH).

Table 4.2: Detail of Surveyed

S. No.	Name of Villages	No of HH as per Census -2011	Socio-economic Surveyed Family
1	Maldi	510	127
2	Mopar	496	124
3	Devarani	224	49
4	Karmadih	178	45
5	Sarkhipar	146	37
6	Mudhipar	99	23
Total		1653	405

Source: Census & SES Survey

4.5 Income Impacts:

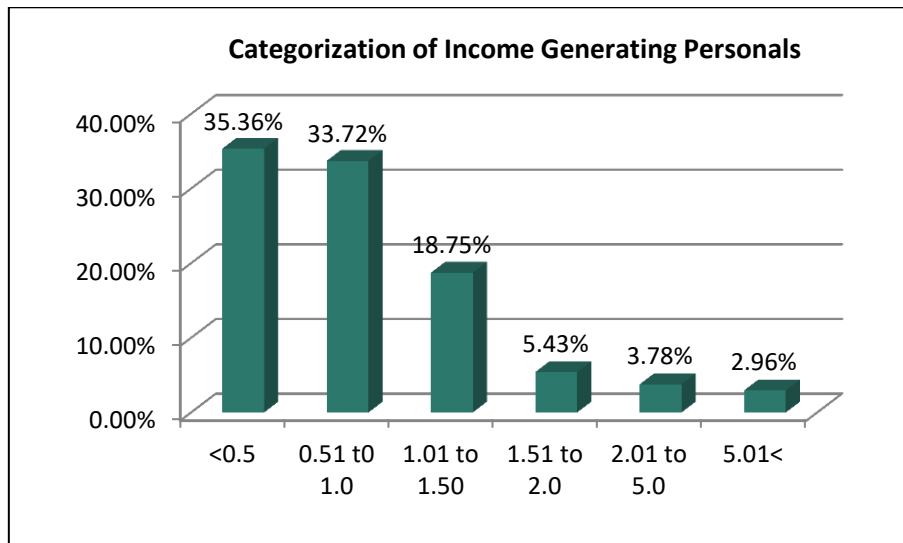
There are 608 individuals having various sources of income from the above surveyed 405 families. Annual Income details of them are given in below Table. On the basis of range of annual income, they have been divided into six categories.

Annual Income of PIA was calculated on the basis of income derived from primary and secondary sources. Out of the total, it was found that 69.08 % PIA have an annual income of less than one lakh. Details of total income of PIA are given in **Table 4.3**.

Table 4.3: Categorization of Income Generating Personals

Sl. No	Income Range (in lakh)	Total No
1	<0.5	215
2	0.51 to 1.0	205
3	1.01 to 1.50	114
4	1.51 to 2.0	33
5	2.01 to 5.0	23
6	5.01<	18
Total		608

Source: Census & SES Survey



(Source: Primary Survey 2021)

Figure 4.2: Income of PAFs

4.6 Possession of Assets:

4.6.1 Household Assets:

Household assets such as electric fan, bike, cars, sewing machine, etc. are possessed by the PIA.

4.6.2 Agricultural Assets:

The affected families are mostly engaged in the agricultural activities, i.e. farming. Agricultural machineries like tractors, ploughs, etc. are used by them. Few farmers have to borrow tractors and other agriculture equipment during harvesting as they do not possess those.

4.6.3 Land Use and Demographic Profile of Revenue Village Land Use:

Total geographical area of the villages of the core zone viz., Maldi, Mopar, Devarani, Karmandih and Boirdih is 2229 ha of which mining lease is a part. Out of total geographical area, 1530 ha is cultivable irrigated land, remaining 232 ha land is un-irrigated land. There is no forest land involved in this ML area. The detailed information has been mentioned in the table given below:

Table 4.4: Land Use Details of Revenue Village

S. No.	Particular	Maldi	Mopar	Devarani	Karmandih	Boirdih
1	Geographical Area of the Village (in hectares)	690	805	286	240	208
2	Irrigated Land (Of the total Cultivable Land) (in hectares)	521	621	238	53	97
3	Un-irrigated Area (in hectares)	40	53	10	119	10
4	Forest Land (in hectares)	0	0	0	0	0

Source: Census of India, 2011

The area falling in the mining lease i.e. 499.974 ha consists of private land and Govt. land is 53.682-ha.

4.7 Basic Problems / Needs of the Revenue Village:

Basic problems and needs of the affected villagers have been given as under:

Table 4.5: Basic Problems / Needs in the Revenue Village

Basic Problem	Need
<ul style="list-style-type: none"> • Improper drainage system • Drinking water problem • Improper Medical Facilities • Lack of job opportunities 	<ul style="list-style-type: none"> • Proper maintenance of village roads and drainage system • Free medical campaigns for diseases : Health checkup camps are organized periodically in villages. There is a cadre of Sakhis in all villages who work as health facilitators in villages. ACF is already working on this and also worked during difficult phase of Covid • Medical facilities: Health Department is functional in the area. ACF Health project assists in linking patients, expecting mothers and children with hospitals and referral services • Hospitals and health centers • Employment opportunities: Skills & Entrepreneurship Development Institute is a flagship project of ACF for providing adequate skills and employment to rural youth in different vocations. This is functional in core area with proper infrastructure • Proper educational infrastructure • Free medical campaigns for checkup: Organized by ACF Health team and Doctors from Health department • Set up water treatment plant for the supply of safe drinkingwater

The socio economic study of the village gives clear picture of its population, average household size, literacy rate, sex ratio etc. The literacy rate is moderate among surveyed PAPs. The village possesses average infrastructural facilities in comparison to the facilities available in other parts of the district; this area lacks higher level of amenities like medical facilities, drinking water and higher education. Villagers have to commute outside from their village for higher education.

Medical facilities need to be strengthened. However, the area is well connected with road transport and communication facilities.

4.7.1 Employment:

ACL will provide employment to PAPs according to their education and skills. The potential employment opportunities have been given in the table below.

Table 4.6: Proposed Potential Employment in Mines

S. No.	Designation	Number of persons
1.	Manager	1
2.	Assistant Manager	2
3.	Mining Engineer	1
4.	Geologist	1
5.	Blasting incharge	1
6.	Blasting foreman	1
7.	Surveyor	1
8.	Foreman	2
9.	Mate	2
10.	Maintenance Engineer	1
11.	Maintenance foreman	2
12.	Skilled (Operator, Mechanics)	23
13.	Semi-skilled	56
14.	Unskilled (Helpers, mazdoors)	5
Total		99

Source: Approved Mining Plan with Progressive Mine Closure Plan

The company will generate direct and indirect employment. Preference will be given to the local people for employment based on their educational qualifications and experience. The total man power requirement after the expansion in Limestone production capacity will be 99 persons. Unskilled /semi-skilled manpower is being/ will be sourced from the local area and skilled manpower is being/ will be sourced from outside. Preference is being/ will be given to the locals as per their eligibility criteria.

4.7.2 Utilization of Compensation:

A number of families expressed that they wish to purchase land with the land compensation amount. This is because of agriculture being the main livelihood source. Some of them want to start their own business setups like shops in the village and in Bhatapara district headquarter to serve their livelihood.

4.7.3 Need Based Initiatives of PIA:

A Need based assessment is a tool to identify the gap between problems and basic need of the project affected people and families. A need assessment is a focused on the things currently is and the way things can be in order to fill the gap of specific need and problems.

4.7.4 Scope of Need Based Assessment

- Collecting information about a target population or community
- Deciding what needs are being met and what resources exist
- Determining what needs are not being addressed

4.7.5 Methodology for Need Based Assessment

Method using in need based data collection carried out in primary survey are given below:

Table 4.7: Methodology for Need Based Assessment

Focus Group	<ul style="list-style-type: none"> • A method of interviewing a carefully selected small group of people, who participate in a pre- determined, focused discussion led by an experienced evaluator • Helpful when working to collect specific in-depth thoughts and opinions on a topic
Key Informant Interviews	<ul style="list-style-type: none"> • Intensive interviewing with an individual who meets specific selection criteria based on their personal experience. • A way to obtain in-depth information about feelings and perspectives.
Community Meetings	<ul style="list-style-type: none"> • Community meetings include gathering information about individuals in a target population or community. • Does not provide as in-depth information as a focus group or key informant interview but is a way to gather information from larger groups.
Surveys	<ul style="list-style-type: none"> • A method of data collection that provides evaluators with specific information that can be used to create a statistical summary of the thoughts, beliefs, feelings, and opinions of a target population.

4.7.6 Short term Activities

Short term activities help in restoring PIA income during the resettlement and relocation. The activities that will be implemented during this period are:

- Ensuring to provide safe drinking water in the PIA
- According to the skills set of the PIA, the PP will provide employment to them.
- The people at the PIA will have access to necessities either free of cost or at subsidized rates.
- Bank facilities will be made available to the PIA

4.7.7 Long term Activities

In the long term the PP will arrange the following activities to uplift the living standards of the PIA. The proposed long term activities are:

- Setting up of dairy or poultry farm, goatary, oil seed promotion, wheat along with paddy with AWD technique. Sericulture can be promoted as a new intervention for affected population as there is a scope for animal husbandry.
- School will be developed for providing better educational facilities.

4.7.8 Capacity Building and Training

Livelihoods Restoration Plan is an integral component of the capacity building. Based on the skills and needs of the PIA training and restoration plan has been set up.

4.7.9 Financial Management Training

PP will set training sessions on financial management to the PIA as they will be receiving cash compensation. This training will be designed in such a way that the affected households learn to manage their compensatory amount wisely. Bank facilities will be made available at the PIA so that they can improve the standard of living on the existing income.

The focused areas of financial management training will include the following:

- Financial Literacy
- Income Management and Household Budgeting Investment and Saving Schemes
- Financial Advisory Services

CHAPTER -5: STAKEHOLDERS' CONSULTATION

Among the project stakeholders first and foremost important partner is the people of the Project Impact Area who stand to be affected directly or indirectly due to the mining project. People's representatives often voice people's concern and issues and become active stakeholders in the developmental process. They are Gram Panchayat *Sarpanch*,⁴ Block Samitee *Sabhapati*⁵, Member of Legislative Assembly apart from teachers senior leaders who help to form people's opinion, perceived need of the villagers and prioritize various segments of development plan in the interest of the people.

Village authority is another stakeholder who can provide insight into people's need, can act as agent of developmental change and can coordinate with Ambuja Cements Limited (ACL) on various social economic, and infrastructural development. In fact, the Town Municipality would be an effective partner of the Company in guiding and implementing selected development programme. Besides, involving local government will highlight Company's transparency, well intention and enable smooth passing over of reign of development at the time of closure or if the project faces difficulty in execution and implementation of planned activities.

The main objective for conducting stakeholder consultation is to understand the people's perception of the project, their expectations and to identify their needs for sustainable development in the existing environment. To achieve this objective a series of focus group discussions (FGD) was planned to be held in all the villages under study. The program for conducting the FGD was taken in accordance with the people's convenient time and place. While arranging the FGD sessions special care was taken to hold secluded session with the women and the marginalised groups away from the menfolk of the villages. This helped to bring out the basic and often untold concerns and issues particularly affecting the women and the poor /marginalised groups, which otherwise would have been remain buried. For inclusive development planning it is essential to have views and opinion of all strata of the society so that corporate social responsibility plan may be prepared to cater to the need of all groups of people in the mine impact areas. The FGD sessions were organised with a view to identify issues faced by different sections of the society and their respective perceived needs can be recorded. The feedback received from these stakeholder consultation sessions is briefly summarised below.

⁴Elected Head of the Village Level committee, "Gram Panchayat", which is the lowest level of 3-tier Local Self Government

⁵Elected Head of Block level committee, which is the 2nd level of 3-tier Local Self Government at Block Level

1.1 Perceived Needs and Envisaged Impact:

To record people's needs, concerns and issues semi-structured open ended questionnaire were prepared which helped to conduct the discussion in an organised manner. The FGD sessions were recorded in some places and in rest of the villages written notes were made. These feedbacks formed the basis of need assessment analysis which again was utilized to shape the fundamental strategy of CSR plans. A summarised need assessment and issues discussed is excerpted from the detailed FGD report annexed and placed below.

Table 5.1: Summary of FGD with identified issues and needs expressed

Sl. No.	Topics discussed	Issues Identified	Expressed needs
1	Employment opportunity	<ul style="list-style-type: none"> Local youth uneducated, unskilled Lack of job for all in the local areas Agricultural productivity less due to loss of crops, lack of irrigation Loan from private money lender leads them to a trap of vicious circle Local youth not educated in technical /professional education / skill Job options are much less in the local areas 	<ul style="list-style-type: none"> ACL. can provide employment to many local youth Youth can be trained in appropriate technical skill education Many can also be given chances of self- employment/ small time business / enterprises ACL. can arrange for appropriate skill training free of cost / at a low affordable cost Women can also have training – preferably within villages/ accessible distance
2	Education	<ul style="list-style-type: none"> Secondary schools are as per Government norms Most of the school have not water connection. Quality of teaching and regularity of teachers' attendance not satisfactory in all villages 	<ul style="list-style-type: none"> ACL may like to provide additional teachers ACL provide additional learning materials and tuition for first generation learners ACL support for providing sports material to play items for school children on the regular basis
3	Drinking water supply	<ul style="list-style-type: none"> Supply sources – HP/TW not sufficient in no. and some are ineffective. Supply 	<ul style="list-style-type: none"> Secured source of water supply, like TW /Borewell dug



Sl. No.	Topics discussed	Issues Identified	Expressed needs
		inadequate.	with depth <ul style="list-style-type: none"> • Ensure repair within shortest possible time in order to resume water supply regularly
4	Health Care facility	<ul style="list-style-type: none"> • No primary health centre (PHC) in most villages/areas. • People have to visit Baloda Bazar, Bhatpara for health care facility • Women specially afflicted - their health issues often not taken care of • ASHA / ANM available. But ambulance service poor and not accessible for all villages with kutcha road 	<ul style="list-style-type: none"> • Chemist shops are available at Rawan however, qualified entrepreneur may be encouraged to start chemist shop within accessible distance • Mobile health care facility is already introduced by ACF. Benefits to be extended to needy persons. • Women's health checkup, other RCH issues to be exclusively taken up by gynecologist at special health camp • Awareness for RCH to be organized by ACL/NGO • Mobile veterinary doctor is arranged near / within villages having cattle rearing community
5	Irrigation water	<ul style="list-style-type: none"> • All villages lack water for irrigation • Some built private dug well, but not affordable for poor small/marginal farmers 	<ul style="list-style-type: none"> • Provide linkages with the Government Departments for building a wide scale irrigation water network to get water in drought also and in winter – for crop security • Some villages have river/stream nearby identified as potential source of irrigation.



Sl. No.	Topics discussed	Issues Identified	Expressed needs
			<ul style="list-style-type: none"> • People like to have sincere efforts of tapping prospect of these sources
6	Migration	<ul style="list-style-type: none"> • Most youth are unemployed • Many are migrant labourers – now either returned from work place outside, or didn't go due to Covid 19 situation • Poor / tribal families and landless farmers are major migrant labour force • Some very poor families migrate with families in search of job/labour • Labour rate in the village/ surrounding places is much less than that received outside • Major place of migration – Delhi, Punjab, Gujarat, Maharashtra • Income earned from place of migration often spent to pay loan, investment in cultivation 	<ul style="list-style-type: none"> • During the operation of the proposed project, the Employment opportunities at home area/ district will increase manifold. • Introduction of modern Agricultural techniques the productivity will increase to gain food security • More skill training to be received for better job opportunity in nearby areas • Increase educational qualification • Irrigated cultivation to be ensured for better return of investment on agriculture

SOURCE: SIA SURVEY IN DECEMBER 2020

The need identification for each individual was also enquired through household survey. However, discussion in a structured manner brings out issues, causes, mitigation measures and necessary skill development training and employment options during FGD sessions. A tentative impact assessment and probable mitigation measures are worked out taking cue from FGD sessions' feedback and interview with key persons. These are mentioned as below.



Table 5.2: Assessment of Envisaged impact of the project

Parameter	Existing condition	Envisaged impact assessment	Mitigation measures
Socio- Economic Condition			
Economy/ Employment / Livelihood	<p>A brief socioeconomic profile:</p> <ul style="list-style-type: none"> • Dependency ratio in the project impact area (PIA) is 41%; • Work force is about 49%, although women's work participation is poor (14%only). • Sex Ratio is 1069, higher than the state of 931 females per 1000 males. • About 88% sample families are vulnerable • About 80% of sample population are literate and 18% have attained secondary level of education. • This makes them eligible for both unskilled and semi-skilled work. • Cultivation and Agricultural labour together account for 59% 	<ul style="list-style-type: none"> • The proposed of mining project will require some unskilled labours. • Development of ancillary & accessory industries is foreseen. • Potentiality for transport and other service sector is likely to increase. • Considering employment generation project will have positive impact on local economy. 	<ul style="list-style-type: none"> ✚ Training in various trades may be introduced for the youth so that possibility of semi-skilled job opportunity is increased. ✚ Also alternative employment opportunity in the study area may be encouraged. For that vocational training/ skill development is needed. ✚ Woman's/girls' education/literacy standard is poor, making then unsuitable for semi-skilled work. Non formal and bridge courses of education may be introduced. ✚ Young girls with minimum education of class Xth standard, may be provided suitable vocational training according to need and cultural acceptability of the particular vocations.



Parameter	Existing condition	Envisaged impact assessment	Mitigation measures
	of sample population		
Socio-Cultural Aspects	<ul style="list-style-type: none"> Schedule Tribe population consists about 19% of all sample population with core zone having 52%. There are no major ancient cultural heritage sites. ST people perform traditional rites & festivals in the villages. 	<ul style="list-style-type: none"> No cultural heritage sites are likely to be affected within the core zone. No places of cultural sensitivity have been identified which can be adversely impacted. 	<ul style="list-style-type: none"> Boosting of traditional cultural programmes & customary festivals Cultural heritage of the people to be sponsored for communal harmony and bringing marginalised people within the main community fold.
Health, Water & Sanitation:			
Health care Facilities	<ul style="list-style-type: none"> Access to PHC/ hospital / subcentre within an average distance of 10 km. Although child immunization & care of pregnant / lactating women taken under ICDS greater emphasis on RCH facility needed 	<ul style="list-style-type: none"> Quality of health care facility is not adequate. The ACL. will have its own health care facility for the own staff, but not for common people. Potential threat of spread of HIV/AIDS need to be explored. No qualitative change in plant and animal products that are produced as food is envisaged. Mining activity will cause 	<ul style="list-style-type: none"> Health care facilities at subsidized cost for the local people may be set up. Regular & periodic health check- up for men, women, school children may be done as part of CSR plan Eye check-up camp for elderly people to be organized with cataract operation & after care facility. Virtual blood bank may be introduced. Compulsory blood identification to be conducted at school level.



Parameter	Existing condition	Envisaged impact assessment	Mitigation measures
		environment pollution – this potential risk may be examined	<ul style="list-style-type: none"> This will create a good relation with the community at large which will secure bondage of mutual trust.
Sanitation	<ul style="list-style-type: none"> Private individual toilet facility in most of the villages Open defecation is still practiced by the some. Good sanitation and hygienic habits to be developed. The sense of health and hygienic habit is lacking among the people. 	<ul style="list-style-type: none"> High level of hygienic practice and sanitation will be maintained in Mining Lease Area operation complex. This will illustrate hygienic standard desired among people and will bring positive change 	<ul style="list-style-type: none"> Introduction of sanitation program in collaboration with govt. schemes. Special programme on education and awareness campaign targeting women & school children. NGOs to be engaged for proper implementation of the sanitation programmes/ and awareness campaign for good health. Regular Sanitation & health campaign to be organised
Drinking Water	<ul style="list-style-type: none"> Private handpump, bore well are the main source of drinking water. Bt TW / HP dry up in summer The people are unaware of the proper & hygienic storage of drinking water. Piped water supply is available in few places. 	<ul style="list-style-type: none"> People are skeptical about decrease in water table post mining period. Water security issue may arise. 	<ul style="list-style-type: none"> Scientific knowledge of storing water at household & community level should be developed. Low cost simple operational water filter can be introduced Water conservation technique at household level to be taught. Education for water conservation and awareness campaign to be introduced at community level



Parameter	Existing condition	Envisaged impact assessment	Mitigation measures
Agriculture & Allied Agriculture			
Agriculture	<ul style="list-style-type: none"> About 59% of the population is cultivators & agricultural labour Majority are marginal /small farmers (52%). 58% land is irrigated, but owned by mostly large farmers About 3% land is cultivable waste 	<ul style="list-style-type: none"> There is a propensity to change occupation from agriculture to daiy waged labor or other sectors leading to reduced agricultural labour force. Lack of irrigation water is major cause of less productivity and shifting from cultivation to industrial labour People are worried about loss of irrigation water (from sources like river, canal, wells) after mining 	<ul style="list-style-type: none"> Underground water is reportedly available for irrigation. Better agricultural training for the farmers along with post-training hand holding support for marketing Fruits & vegetables can be grown in the area round the year for sale in wholesale market. SHGs may be formed who can be motivated to grow vegetables, fruits, produce milk and milk product for sale among colony residents. SHGs may be formed of farmers who will be trained in better agricultural techniques. NGO to be engaged to facilitate formation, growth of SHGs and capacity development of the farmers for better production.
Allied Agriculture (Dairy, Poultry) Pastureland	<ul style="list-style-type: none"> Allied agricultural activity is in rudimentary stage. Dairy products are mostly for local consumption. Govt. may be motivated to 	<ul style="list-style-type: none"> A trend in favour of shifting from labour to allied agricultural livelihood may be expected, if dairy / poultry products are encouraged after mining 	<ul style="list-style-type: none"> ACL. may promote/ facilitate growth of the allied agriculture activities – dairy / poultry Cattle farmers /poultry owners may be introduced with modern animal rearing/ business of operation Women SHGs to be formed and nurtured by the



Parameter	Existing condition	Envisaged impact assessment	Mitigation measures
development	introduce maintenance measures for pastures and stop encroachment on pasture land, especially after mining is introduced	<ul style="list-style-type: none"> Pasture land will not be affected so grazing can continue Increased demand for animal products will bring in investors Creating interest in allied agriculture is needed. 	<p>NGO who would act as motivator & facilitator for growing Agro-dairy-poultry as major livelihood.</p> <ul style="list-style-type: none"> ACL. may provide services of veterinary doctor for treatment / vaccination of the animals Training in animal rearing, identification of diseases Better dairy farming to be introduced: like good breed of cattle, stall feeding, fodder production in the grassland, maintaining pasture land
Other Social Issues			
Women's empowerment & gender issues	<ul style="list-style-type: none"> Low female work participation ratio Low female literacy Women's voice never raised 	<ul style="list-style-type: none"> With introduction of mining women may find more jobs as unskilled labour, manual labour, manual staff in the industry Exposure to outside people/culture/customs possible that may be in contrast to traditional culture Individual job opportunity may bring in women's dignity and vocal power 	<ul style="list-style-type: none"> Intervention of the local government in formation of SHGs & micro credit institution Involvement of Gram Panchayat is of paramount importance in spreading education among women. Awareness campaign, skill training, entrepreneurship development training, accounting etc. important educational training for empowerment Engage NGOs to facilitate, motivate, form & nurture women's SHGs for capacity development training in group economic activities.

SOURCE: SIA SURVEY IN DECEMBER 2020

CHAPTER -6: SOCIAL MANAGEMENT PLAN

The aim of this Social Management Plan (SMP) is to mitigate all such unavoidable negative impacts caused due to the project and resettle the displaced persons and restore their livelihoods. This (SMP) Plan will be prepared on the basis of project SES findings and consultation with various stakeholders. The plan complies with Chhattisgarh State Laws, the Mines and Minerals Act and Regulations for Corporate Act.

Socio-economic mitigation measures will consist of policies and actions taken before the implementation of the project with the intention of minimizing the extent of impact under operational process. The first step of such mitigation will be to avoid unnecessary activities that might have any negative impact on the Livelihood of the villagers and then decide about the mitigation for the damage which is unavoidable through CSR activities. Mitigation is a long-term effort for reduction of socio-economic impacts on the affected population. The outcome of SIA will be guided by the CSR Plan as per the provisions of Section 135 of Corporate Rules. The CSR will focus on three generics as in implementation of mitigation measures, Institutional strengthening and training and monitoring. The CSR will include proposed work programme, budget estimates, schedules, staff and training requirements and other necessary support services to implement the mitigation measures. Institutional arrangements required for implementing this management plan will be provided by the Project Proponent. The cost of implementing the monitoring and evaluation including staffing, training and institutional arrangements will also be specified where monitoring and evaluation requires inter-agency collaboration/association.

In order to conduct socio-economic mitigation, it is necessary to acknowledge the grievance/ dissatisfaction among the affected persons, identify the genuine grievances, finding the facts behind the grievances, and finally finding out ways to address those grievances.

The main responsibilities of the GRC at both the levels will be to : (i) provide support to villagers on problems arising from accessibility; (ii) record villager's grievances, categorize, and prioritize grievances and resolve them; (iii) immediately inform the Project Proponent of serious cases; and (iv) report to villagers on developments regarding their grievances and decisions of the GRC. Disputes relating to common property rights will be reviewed and necessary decision/planning will be done by the GRC.

6.1 Corporate Social Responsibility:

The Project Proponent is one of the leading mining companies in the country. It has its own standard and ethics. The Company already has a CSR Plan and Budget for its operation. The Project Proponent has already created an indirect impact over the people of the study area, although direct employment opportunity will be provided to few local residents. Nevertheless, the Project Proponent with its CSR plan will contribute on raising the standard of living and quality of life by improving the economic and cultural life.

6.2 Recommendation of SIA to be implemented:

Some key informants and representatives of various groups/organizations have presented some recommendations for implementation of SCR so that the project's adverse impact will be minimized. These are noted below.

- a) There should be proper awareness campaign at the project sites regarding health and hygiene, awareness about HIV/AIDS, drug and human trafficking with details of the mode of operation, kind of people at high risk and method of mitigation. IEC materials in local language & in picture to be displayed and distributed at the sites, major settlements, Block and ULBs.
- b) There are other issues that cropped up during FGD sessions. The traders are struggling with proper storage capacity due to lack of multi facility warehouse and cold storages for milk and milk products. Lack of consistent and adequate electricity supply is another issue afflicting the traders.
- c) Villagers bring marketable NTFP and agricultural products all at one go, thus with the increase in supply and without proper marketing and storage facilities the price of the products fall below the production cost and there might be distress sale.
- d) During the FGD sessions many have suggested that Government should start mobile medical units for rural people, as per the provision of the National Rural Health Mission (NRHM), as the reliable and affordable medical facilities are out of reach of the common people living in interior places.



- e) The country in recently has passed though the pandemic effect of Corona Virus and many activities are now operated through online mode. Students, school children, farmers, entrepreneurs and government officials are linked through the online mode on digital platform. The rural area of the study area though connected by network but the connectivity is very poor which affects the communication of the users on significant manner. An intervention by ACF by providing at least 10-12 mobile towers will be a boon to all particularly to the school children and entrepreneurs. We can include this in our CSR Budget after obtaining estimated cost for the same.

6.3 Recommendation of the vulnerable groups:

- a) Provision of the Government Schemes like PMAY (Pradhan Mantri Awas Yojana) etc. for homeless families.
- b) Provision for institutional credit for the reviving new ventures for livelihood.
- c) Skill development training to the villagers with priority to the core villages.
- d) Employment opportunity in the project on priority basis.
- e) Linkages of the villagers with the available schemes sponsored by the State and the Central Government.

6.4 Recommendation for Gender Sensitization:

- a) Implementation of the Vishakha Guidelines as amended as The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 in case of sexual harassment against women should be displayed at the project gates and other important location.
- b) Making Sulabh toilets for women workers, with fittings for pregnant and disabled women at the project site.
- c) Ensuring police check posts that are accessible to women to report cases at key villages and towns.
- d) Better maintenance of street lighting and roads, especially near education institutions and workplaces.
- e) Provision of quality drinking water and sanitation services, including menstrual hygiene facilities for women workers at the project office and other offices.



- f) Need for more public transport with expanded outreach, particularly for women, students and low-income migrant workers. Availability of adequate, frequent, women and disabled friendly public transport services.
- g) Conduct regular trainings of drivers, conductors, auto-drivers and traffic police on sexual harassment in public spaces and what support systems can be accessed.
- h) Develop protocols and response systems to address sexual harassment in transport facilities and display police and women's helpline numbers prominently in all project offices, public places and in all the villages
- i) Ensure presence of visible security, including CCTV at all important and vulnerable locations of the project site. Build trust and confidence among female citizens.
- j) Ensure effective operation of the women's helpline and registering FIRs and other complaints.
- k) Ensure effective functioning of Sexual Harassment Committees in all institutions and Local Complaint Committees at local, block/district level that can be accessed by women workers in the informal sector.

6.5 Recommendation for Water security Plan

Water security in these villages by implementation of various water conservation measures in scientific and systematic manner by way of implementation of *Water Security Plan* will significantly change them to water abundant villages. This can be carried out by awareness camps for adoption of various rainwater measures by individuals in residential areas, open areas and drainage line treatment methods. Adoption of the principal of Watershed management is the best method for conservation of water using Ridge to Valley treatment methods. Rainwater harvesting has assumed significance as it artificially augments the recharging to the depleted aquifers and facilitates them to restore over period of time. The surplus runoff generated during monsoon is to be conserved and recharge to augment ground water resources.

The Water Security Plan will include current requirement of water for the villages, practices of water management, and influence of the award on all other sanitation related activities and overall development of the awarded village in terms of water management. WSP aims for drinking water security in selected these villages by means of

- Ensuring Quality and quantity of water supply, storage management (aquifer management, demand management), capacity building and training.
- Providing futuristic plan in maintaining sustainable use of water for at least for next 10 years.
- Avoid duplicity of different schemes and provide scope of participation of the local public for their self-reliance.
- Lack of water literacy is prominent among the masses and huge efforts are needed to educate people about qualitative and quantitative aspects of water.

Thus, a holistic model is proposed for the Drinking Water Security Plan (WSP) with six key features as under:

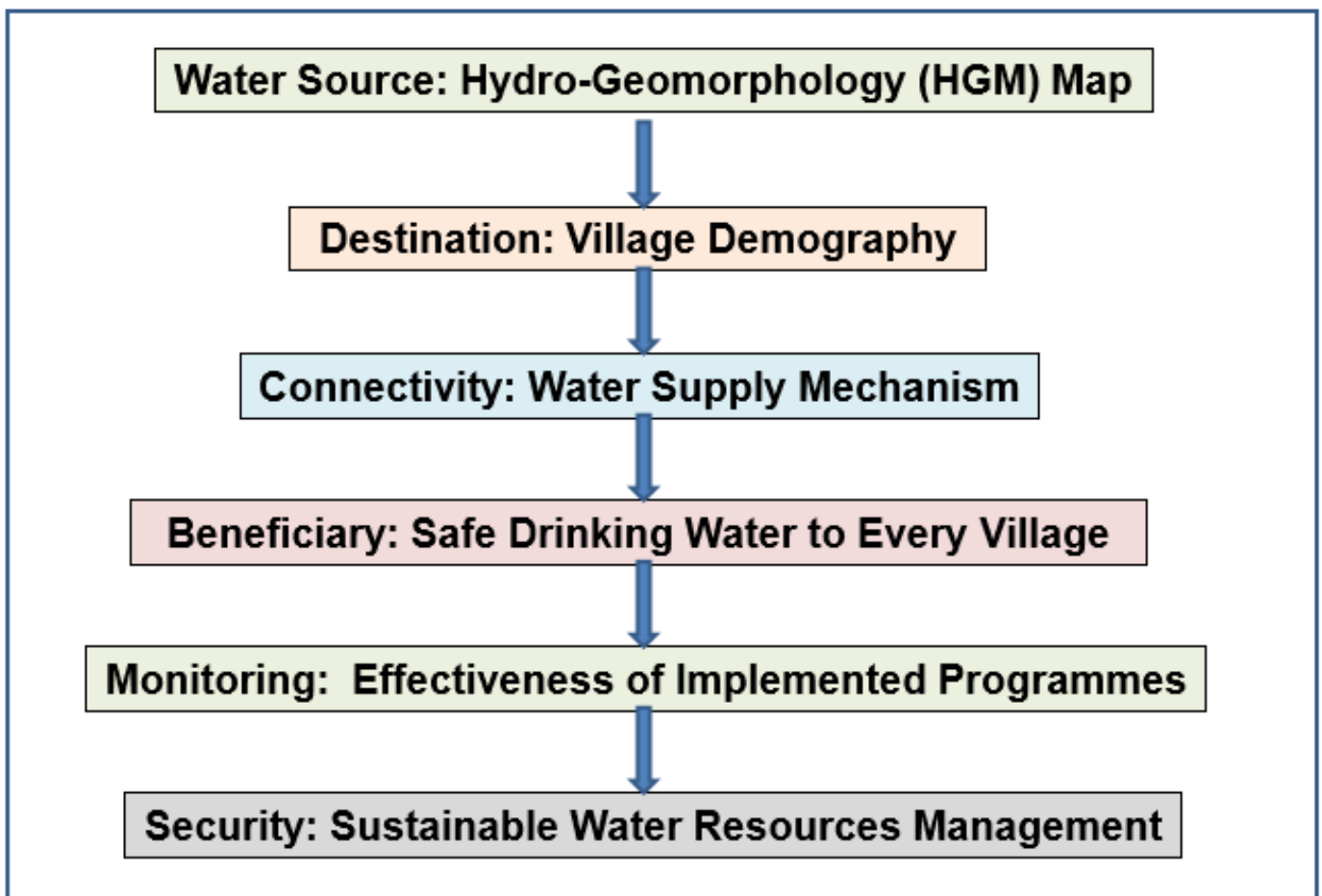


Figure 6.1: Holistic Model for Drinking Water Security Plan



The Government of India - subscribing to the statement - '***It is difficult to manage what is not measured***', has been developing its Drinking Water Security Plan with an inventory of drinking water resources, systems, institutional arrangements, energy charges, sanitation aspects, etc., in an integrated participatory way under its pilot project National Drinking Water Security Pilot Project (NDWSPP). The Water Security Plan for the four villages falling within the Core zone will be prepared through an experienced institution. The planning of the Water Security Plan will *inter alia* involve the stakeholders and implementation of the same will also be carried out with active involvement of the respective villagers with partial financial and allied support by ACF.

6.6 Recommendation for Intervention in adverse situation due to COVID 19

The country has recently experienced the pandemic effect of Corona Virus and many activities are now operated through online mode. Graduation / High school students, school children, farmers, entrepreneurs and government officials are linked through the online mode on digital platform. The rural area of the study area although connected by network cannot fully take the advantage of digital platform and online facility. Apart from the fact that the villagers are lacking in appropriate training and digital savvy technical knowledge except for common conversation and communication, required existing infrastructural facility is also absent. The connectivity is very poor which affects the communication of the users in a significant way. An intervention by ACF by providing at least 10-12 mobile towers will be a boon to all - particularly to the school children and the entrepreneurs. Construction of this infrastructure facility can be incorporated in the CSR budget for a better economic future and sustained well-being of the people in general. The impact of this intervention will go a long way in building a rapport with the villagers and an overall development of the area which would boost the business of the proponent without doubt.

CHAPTER -7: CORPORATE SOCIAL RESPONSIBILITY

The proposed of the project of Bhatpara may induce significant changes in the socio-economic and cultural environment of the project impact area. Though assessment of standard of living of the people in the project area at pre & post project phase is an accepted practice of measuring change in the socio-economic aspects and this requires establishment of benchmark for socio-economic attributes of the population under baseline study. As assessment of change in living standard, it is mostly linked with gross family income of the population group who experienced substantial growth in various economic activities. In order to ascertain the present socio-economic profile of the study area, primary & secondary data from the project area & census records of 2011 were collected and analyzed. To access the present specific need of the study area various strata of the society were consulted with the help of Socio-Economic Survey, Participatory Rural Appraisal (PRA) technique and Stakeholders' Consultation for all the villages.

The vision for the development of the study area is as per the standard of Millennium Development Goal and Human Development Index. It may be noted that, India climbed one step to 131 ranks out of 189 countries with the HDI value of 0.648 in 2020.

In an ideal situation for a new mining lease (not in this situation), mitigation measures should be built into the project planning process, but it is appropriate to identify measures against the perceived needs and envisaged adverse impact before the initiation of the project. Regardless of any governmental intervention, the project proponent could act in a proactive manner and adopt appropriate measures to avoid or minimize adverse impacts. This way a good relation between the society and Miners can be established by upholding positive effects of the project and negating any adverse impact by timely measures. The two steps of sequencing – avoiding and minimizing - can apply to the project itself or to the community of the study area.

Since it is an existing project and SIA planning is being prepared for proposed of the said project there will be least chances for change or remodel any section of the project policy. The project has already created an indirect impact over the people of the study area, although direct employment opportunity has not been availed of by majority. Nevertheless, the entrepreneur will contribute about Rs.30 lacs for raising the standard of living and quality of life by effecting improvement in economic and cultural life as depicted in Annexure 3 and 4.

7.1 Significance of the Primary Survey and linking it with the CSR action plan

Prior to preparing Corporate Social Responsibility (CSR) plan it is imperative to appraise baseline socioeconomic situation of project impact area and the people directly or indirectly affected due to project implementation. The primary survey was conducted with that objective in view and existing social, economic, and infrastructural condition visa-a-vis requirement of the people in those fields were identified. A brief note on significance of the socioeconomic parameters in portraying existing status against specific needs as perceived by the people is presented here.

The important demographic parameters were: (i) social stratification in terms of various communities living in the PIA, (ii) age and gender distribution pattern of the population groups – particularly dependency ratio and sex ratio, (iii) general literacy status and educational achievement especially of the student / young age group population, (iv) working population disintegrated into age and sex of work force.

The major economic parameters that were considered were: (i) occupational types and livelihood options available, (ii) income groups, (iii) expenditure pattern, (iv) indebtedness, (v) land holding status.

Important social and civic infrastructural facilities include: (i) education, (ii) health care, (iii) drinking water, (iv) irrigation facility, (v) common resources for economic and cultural uses, and others.

The rationale behind selecting these parameters for primary survey is to identify the social fabric of the people of the PIA and spread over various mine impact zones. Before selecting any developmental plan it is important to know who are the recipients of the planned activities and who are the end users of the programmes/schemes. In a rural society, one type of solution may not satisfy the need of all. Besides, planning must be commensurate with local need and capability of the concerned population groups. To highlight linking of socioeconomic parameters with CSR action plans as few examples are mentioned in this context. Present demographic structure broadly indicates that young age group's (up to 14 years of age) proportion to the active age group consisting of persons of 15-64 years is quite high (74%). Moreover, gender gap shows inequality in proportion of male population, educational achievement and work force participation. However, women's involvement in subsidiary occupation, assisting in agricultural and day labour work, collection of NTFP and even in migrating out in search of livelihood. It indicates that women can be employed in any type of work with appropriate training and some

education, since women in the impact zones have shown absence of inhibition to adopt any kind of employment. Data from primary survey reveals the families possessing land that promises to grow more with irrigation. Few have also attempted new technique with good result. However, lack of continued guidance and getting connected with outside market have played negative role and all initiatives are lost. To win back farmers' confidence it is time to showcase good lessons followed elsewhere. Basic health care and high school level education are two most important pillars of strength of any developed society. The project impact area lacks in both factors miserably which are the primary barriers for the area's development schemes to succeed. The survey showed how people, the youth particularly, are deprived of better opportunity being unqualified in education and deprived in health. So, action plan should be oriented towards an overall development with a holistic approach and keeping the need of the poorest and most vulnerable families in top priority. Besides, the schemes / programmes will be oriented according to need and capacity. Where capacity is lacking special plans will be made to upgrade the beneficiaries / end users to the minimum required qualification. The CSR plans cover a wide range of planned activities with varying time lines suitable for the people to adopt.

7.2 Livelihood Restoration Initiatives

The impact on socio economic of surrounding area will be positive, as Mining Lease Area will directly and indirectly employ both skilled and un-skilled labourers. Preference will be given to the local resident of the area for employment. There will be multiple employment generation in secondary and tertiary sectors. There is no displacement of any habitation or personnel. There would be backward linkages in the economy with the production of the cement which would allure further economic development of the state and country. As the Mining Lease Area will be used for production of the finished and semi-finished products, it would triggers huge forward linkages in the construction and other related industry.

7.3 The Economic Opportunities

The economic opportunities include preference to persons of the PIA and its surrounding area:

- a) Job opportunities in the Mining Lease Area
- b) Employment with contracting agencies and through other sources
- c) Allotment of shops/ kiosks
- d) Award of petty contracts
- e) Vehicle hiring
- f) Vendor permit
- g) Any other opportunity deemed fit by the project

- h) Other than the direct and indirect economic activities where Company will help in linkages of the Schemes and policies already available in the area.

7.3.1 Name of the Scheme Provisions:

- a) Atal Pension Yojana Social Sector Scheme pertaining to Pension Sector
- b) Pradhan Mantri Suraksha Bima Yojana Accidental Insurance with a premium of Rs. 12 per year.
- c) Pradhan Mantri Jeevan Jyoti Bima Yojana Life insurance of Rs. 2 Lakh with a premium of Rs. 330 per year.
- d) Pradhan Mantri Jan Dhan Yojana National Mission for financial Inclusion to ensure access to financial services, namely Banking Savings & Deposit.
- e) Pradhan Mantri Kaushal Vikas Yojana To provide encouragement to youth for development of employable skills by providing monetary rewards by recognition of prior learning or by undergoing training at affiliated centres.
- f) Deen Dayal Upadhyay Grameen Kaushalya Yojana GOI project to engage rural youth specially BPL and SC / ST segment of population in gainful employment through skill training programmes.
- g) Sukanya Samridhi Yojana (Girl Child Prosperity Scheme) The scheme primarily ensures equitable share to a girl child in resources and savings of a family in which she is generally discriminated as against a male child.
- h) Beti Bachao Beti Padhao Yojana GOI programme for Improvement in the Child Sex Ratio.
- i) Pradhan Mantri Jan Aushadhi Scheme to provide quality generic medicines at affordable prices to the masses through Jan Aushadhi Stores.

7.3.2 Impact on Adjoining Area

Developmental activities from Mining Lease Area project will lead to development of adjoining area with integrated approach for overall development of human and natural resources. The villages of the study area will act as a potential place to understand the impact of integrated approach of village development. Infrastructure and site services would be established around the Mining Lease Area's boundary. These will include store, workshop, office, power substation etc.

7.3.3 Environment Management

The plant being Mining Lease Area, the environmental impacts will be of lower order. The plant will have 'State of Art' dust suppression system. The Mining Lease Area will have green belt around it. The suspended particles will have to be removed. The workshop effluent will be treated to remove oils and greases.

7.3.4 Post Mining Lease Area Land Use

Surface audit on all surface structures and site services will be undertaken. Those which cannot be used by surrounding community will be dismantled. Most of the land would be converted into water storage reservoirs which in turn shall act as source of ground water also. At the surplus Mining Lease Area, the workers will be redeployed, if possible, in other business activities of the company.

7.4 CSR Budget

The total project cost is INR 291 crore, hence taking 0.5% of the total project cost the estimated budget outlay of the CSR activities of the project will be about INR 1.45 crore. A capital expenditure of INR 1.25 Crores is proposed and the recurring expenditure of INR 30 lakh is also proposed for five year which comes to INR 1.55 core for five years. The recurring expenditure is an abdicative average expenditure for one year and usually it increases with the increase in depreciation and maintenance cost. The details of the Budget are apprehended as Annexure 3 & 4.

CHAPTER -8: GRIEVANCE REDRESS MECHANISM, MONITORING AND IMPLEMENTATION

8.1 Grievance Redressal Mechanism:

There is a need for an efficient grievance redressal mechanism, which will assist the Villagers in resolving queries and complaints. Any disputes will be addressed through the grievance redressal mechanism.

Formation of Grievance Redressal Cell (GRC) is most important for grievance redressal and it is anticipated that most, if not all grievances, are settled by the GRC. Detailed investigation will be undertaken which may involve field investigation with the concerned Villagers. The GRCs are expected to resolve the grievances of the eligible persons within a stipulated time.

The GRCs will continue to function, for the benefit of the Villagers, during the entire life of the project including the defects liability period. The response time prescribed for the GRCs is 30 days. The GRC will meet once in a fortnight to expedite redressal of grievances. It is expected that the GRCs will play a very crucial role in redressing grievances of the Villagers, and will help the implementation of the project as scheduled.

One Grievance Redress Committee (GRC) will be formed at government level under the chairmanship of the CEO, Nagar Panchayat, with GP *Sarpanchs* and Ward councilors as members while one responsible person from the company will be the Convener. The implementing NGO's team leader will also be inducted as and when required. The GRC will convene one meeting each month as per convenience of all members, and if necessary, at more frequent interval. This will address speedy resolve of issues and progress of the mining project will also not be affected. The detailed constitution of the GRC will be decided after initiation of the project.

8.2 Constitution of Grievance Redressal Committee (GRC)

The committee will comprise of representatives of PROJECT OFFICE; public representatives from respective district; representative of women group, vulnerable villagers; representatives of the project proponent as well as the representative of respective Town/Village Administration. Participation of atleast one women member in GRC is necessary. The functions of the GRC will be: To provide support for the Villagers on problems arising out of Land/ Property/Livelihood.

To record the grievances of the Villagers, categorizes and prioritize and solve them within a month.

To inform District/Town/Village Administration and Project Proponent of serious cases within an appropriate time frame; and

To report to the aggrieved parties about the development regarding their grievance and decision of GRC.

8.3 Operational Mechanism:

It is proposed that GRC will meet regularly (at least once in 15 days) on a pre-fixed date (preferably on first 7th day and 21st day of the month). The committee will look into the grievances of the people and will assign the responsibilities to implement the decisions of the committee. The committee will deliver its decision within a month of the case registration.

The mechanism will be based on proposed laws. Grievance not resolved amicably at the site level will be routed through village authorities to the GRC. Arbitrator may also be appointed for unresolved cases.

The various queries, complaints and problems that are likely to be generated among the Villagers will primarily relate to disputes of ownership of assets, identification of common property, prevalence of customary rights and other non-land related issues.

Through public consultations, the Villagers will be informed that they have a right to grievance redressal. The Villagers can present their grievances or queries to the GRC. The GRC will act as an in-built grievance redressal body.

8.4 Need for Monitoring and Reporting:

Monitoring and Evaluation (M&E) are critical activities in CSR in order to ameliorate problems faced by the Villagers and develop solutions immediately. Monitoring is a periodic assessment of planned activities providing midway inputs. It facilitates change and gives necessary feedback of activities and the directions on which they are going, whereas evaluation is a summing up activity at the end of the project assessing whether the activities have actually achieved their intended goals and purposes. In other words, M&E apparatus is a crucial mechanism for measuring project performance and fulfilment of the project objectives.

8.5 Internal Monitoring:

One of the main roles of Project Office will be to see proper and timely implementation of all activities in CSR. Monitoring will be a regular activity for Project Proponent and Village/Town authorities at this level will see the timely implementation of CSR activities. Monitoring will be carried out by the Project Office and its agents, such as NGOs and will prepare monthly reports on the progress of RP Implementation. Project Office will collect information from the project site and assimilate in the form of monthly report to assess the progress and results of CSR implementation and adjust work program where necessary, in case of delays or any implementation problems as identified. This monitoring will form parts of regular activity and reporting on this will be extremely important in order to undertake mid-way corrective steps. The monitoring by Project Office will include:

Supervision and monitoring are important components to make any programme successful or not. The Client should be at the helm of the monitoring team with assistance from NGO. It would be more appropriate to form separate Supervision & Monitoring Team consisting of members from Gram Panchayat, community, NGO and one official of relevant government line department. There should be periodic meeting with regular interval which will discuss of the progress and any issues arising to hinder the progress. In the matter related to land and forest, issues should be brought to the notice of responsible officials from line deptt. One monthly meeting (or as per convenience) can be held in the chamber of District Collector to inform and update on the progress of the activities.

8.5.1 Administrative monitoring

Daily planning, implementation, feedback and troubleshooting, individual village database maintenance, and progress reports;

8.5.2 Socio-economic monitoring

Case studies, using baseline information for comparing villagers' socio-economic conditions, morbidity and mortality, community relationships, dates for consultations, and number of appeals placed.

8.5.3 Impact monitoring

Income standards restored/improved and socioeconomic conditions of the villagers. Monitoring reports documenting progress on CSR implementation and completion reports will be provided by the Project Office to Project Proponent for review and approval from Gram Sabha/Town Council/Block / District Authorities.

The following should be considered as the basis for indicators in monitoring of the project: Socio-economic conditions of the villagers in the post-resettlement period; communication and reactions from villagers on alternative livelihood developments and alternative livelihood prospects etc.; changes in expenditure and income levels; grievance procedures and level of satisfaction of villagers in the post inception stage

8.5.4 Stages of Monitoring

Considering the importance of the various stage of project cycle, the Project Proponent will handle the monitoring at each stage as stated below:

8.6 Preparatory Stage

During the inception phase of operation, monitoring is concerned with administrative issues such as, establishment of GRC unit, budget, consultation with villagers in the preparation of CSR plan, grievance redressal, and so on. The key issue for monitoring will be:

Conduct of baseline survey

Consultations

Valuation of different common assets and Budgeting Information dissemination Institutional arrangements

Implementation schedule review, budgets etc.

8.7 Operational Stage

Monitoring during the operational phase covers such issues as site selection in consultation with Villagers, development of operational sites, assistance to Villagers (especially to vulnerable groups) in physically moving to the new site, if required. The focus of monitoring will be acceptance of new schemes by Villagers, impact of income restoration measures on living standards. The key issue for monitoring will be:

Preparation of site, including civic amenities (water, sanitation, drainage, paved streets, electricity), if required

Consultation Operational of CSR activities

Initiation of income generation activities

Assistance to enhance livelihood and quality of life

8.8 Closure Stage

Once the mine closure has begun, the focus of monitoring will shift to issues of economic recovery programs including income restoration measures and the sustainability of the new livelihood patterns. The key issue for monitoring will be Initiation of income generation activities and Sustainability

8.9 Monitoring Indicators

The most crucial components/indicators to be monitored are specific contents of the CSR activities. The indicators and benchmarks are of three kinds:

- Process indicators including project inputs, expenditures, staff deployment, etc.
- Output indicators indicating results in terms of numbers of villagers trained, training held, credit disbursed for CSR activities, etc. and
- Impact indicators related to the longer-term effect of the project on people's lives.

Input and output indicators related to physical progress of the work will include items as following:

- Training of Project Office staff completed
- Public meetings held
- Census, assets inventories, assessments and socio-economic studies completed
- NGO recruited and trained
- Meetings of GRC
- Grievance redress procedures in-place and functioning
- Employment provided to Villagers,
- Training of Villagers initiated
- Income restoration activities initiated

8.10 Reporting Requirements:

Project Division Office responsible for supervision and implementation of the CSR will prepare monthly progress reports on resettlement activities and submit to Project Proponent.

All the CSR monitoring reports will be disclosed to Villagers as per procedure followed for disclosure of documents by the Project Proponent.

8.11 Implementation Mechanism:

Preparation of an elaborate work plan with all possible details to be noted with time frame for each of the activities in consultation with the Ambuja Cement Group, Gram Panchayat *Sarpanchs*, and if possible some senior and responsible villagers. One Action Plan Committee will be established for each village, composed of members from concerned village/Ward, GP Sarpanch and Gram Sansad member, representative from mining company. This committee will be given some administrative authority to supervise & monitor execution, especially of sustainable agriculture and skill training programme. The Company should coordinate/ collaborate with the

government functionary at Block, Nagar Panchayat, Tehsil and District level, if necessary and keep close liaison with the government line department such as, Forest Range Office, Land Revenue Office, Agriculture and Irrigation department and ICDS project office and school education Department.

8.12 Livelihood Restoration Initiatives

The impact on socio economic of surrounding area will be positive, as Mining Lease Area will directly and indirectly employ both skilled and un-skilled labourers. Preference will be given to the local resident of the area for employment. There will be multiple employment generation in secondary and tertiary sectors. There is no displacement of any habitation or personnel. There would be backward linkages in the economy with the production of the Steel which would allure further economic development of the state and country. As the Mining Lease Area will be used for production of the finished and semi-finished products, it would triggers huge forward linkages in the construction and other related industry.

8.13 The Economic Opportunities

The economic opportunities include preference to persons of the PIA and its surrounding area:

- a) Job opportunities in the Mining Lease Area
- b) Employment with contracting agencies and through other sources
- c) Allotment of shops/ kiosks
- d) Award of petty contracts
- e) Vehicle hiring
- f) Vendor permit
- g) Any other opportunity deemed fit by the project
- h) Other than the direct and indirect economic activities where Company will help in linkages of the Schemes and policies already available in the area.

8.13.1 Name of the Scheme Provisions:

- j) Atal Pension Yojana Social Sector Scheme pertaining to Pension Sector
- k) Pradhan Mantri Suraksha Bima Yojana Accidental Insurance with a premium of Rs. 12 per year.
- l) Pradhan Mantri Jeevan Jyoti Bima Yojana Life insurance of Rs. 2 Lakh with a premium of Rs. 330 per year.
- m) Pradhan Mantri Jan Dhan Yojana National Mission for financial Inclusion to ensure access to financial services, namely Banking Savings & Deposit.

- n) Pradhan Mantri Kaushal Vikas Yojana to provide encouragement to youth for development of employable skills by providing monetary rewards by recognition of prior learning or by undergoing training at affiliated centres.
- o) Deen Dayal Upadhyay Grameen Kaushalya Yojana GOI project to engage rural youth specially BPL and SC / ST segment of population in gainful employment through skill training programmes.
- p) Sukanya Samridhi Yojana (Girl Child Prosperity Scheme) The scheme primarily ensures equitable share to a girl child in resources and savings of a family in which she is generally discriminated as against a male child.
- q) Beti Bachao Beti Padhao Yojana GOI programme for Improvement in the Child Sex Ratio.
- r) Pradhan Mantri Jan Aushadhi Scheme To provide quality generic medicines at affordable prices to the masses through Jan Aushadhi Stores.

8.14 Impact on Adjoining Area

Developmental activities from Mining Lease Area project will lead to development of adjoining area with integrated approach for overall development of human and natural resources. The villages of the study area will act as a potential place to understand the impact of integrated approach of village development. Infrastructure and site services would be established around the Mining Lease Area's boundary. These will include store, workshop, office, power substation etc.

8.15 Environment Management

The plant being Mining Lease Area, the environmental impacts will be of lower order. The plant will have 'State of Art' dust suppression system. The Mining Lease Area will have green belt around it. The suspended particles will have to be removed. The workshop effluent will be treated to remove oils and greases.

8.16 Post Mining Lease Area Land Use

Surface audit on all surface structures and site services will be undertaken. Those which cannot be used by surrounding community will be dismantled. Most of the land would be converted into water storage reservoirs which in turn shall act as source of ground water also. At the surplus Mining Lease Area, the workers will be redeployed, if possible, in other business activities of the company.



CHAPTER -9: CONCLUSION

The socioeconomic impact assessment is a prerequisite study for preparing Corporate social responsibility (CSR) plan that are mandatory for mining project implementation. The main objective behind is to counter negative impact of the mining activity in an environment that might suffer in various ways – health, livelihood, cultural intrusion and others, most important being interference in agricultural pursuits. The greatest challenge is posed by the people themselves, either due to ignorance, or previous experience or even traditional conservative mindset. Therefore, knowing the people and their social, economic, cultural status, beliefs and existing infrastructural facilities (or inadequacy of these) is the first threshold to step into. Apart from primary survey with the help of structured questionnaire, focus group discussions, key persons' interviews revealed more insight into the apparently passive world of the people of the PIA. All these helped to draw a basic structure of the society that is old, lacking in many facets of quality life, and this structure needs to be fulfilled with required inputs to do away with probable adverse impact of mining and bring forth potential inherent quality of the area and the people. The CSR action plans are prepared to achieve that goal.

The primary survey conducted in the area has helped to understand the felt needs of the society which requires specific attention. The CSR plan prepared under this report is an attempt to fulfill these needs. In addition to the proposed CSR activities village sanitation has been express by all the surveyed villages. An engineering survey can establish details of such sanitation and can be taken of in future. Need for awareness on de-addiction is another area where focus is required to divert the addicted person for some constructive activities. Ambuja Cement Ltd. has always provided assistance in various fields of education, health, employment generation, conservation of natural resources, harnessing non-conventional energy sources, water conservation programs, awareness programs & capacity building activities in the vicinity of all their units. Ambuja Cement Ltd. hereby ensures to implement the CSR program in phase wise manner and monitor its results for improving the social status of nearby villages.

There is also another aspect which is interwoven with the people of the area and the mine proponent who - although have a basic objective of flourishing business - would gain nevertheless - once a rapport with the people is established. That will ensure a good relation for peaceful business and industrial operation and overall development for all. That will become a win-win situation for all.

Annexure - 1: Highlighted Points of Companies (CSR Policy) Amendment Rules, 2021 w.e.f. 22/01/2021

Sl No.	Subject	Key Changes
1.	<i>Quantum of spending (Sec 135-5)</i>	Now every company which has not completed the period of 03 Financial years will have to spend 2% during such preceding Financial Years.
2	<i>CSR Spending (Section 135-7)</i>	CSR spending made Mandatory from Voluntary. Hence now it is Spend or penalized. Earlier it was spend or explain.
3.	<i>Treatment of unspent amount (Section 135-6)</i>	<ul style="list-style-type: none"> Not relating to ongoing Project: In case of failure to spend the same, will require carry forward of the same to a Fund specified in Schedule VII, within 6 months of close of financial year, in addition to disclosure of reasons for not spending in Board Report. So amount remaining unspent (other than ongoing project) for the financial year 2020--21 shall be transferred to Schedule VII fund latest by September 30, 2021. Relating to Ongoing Project: To be transferred within a period of 30 days from the end of the financial year to a special account to be opened by the company in that behalf for that financial year in any scheduled bank to be called the Unspent Corporate Social Responsibility Account (UCSRA). So amount remaining unspent (ongoing project) for the financial year 2020---21 shall be transferred to UCSRA latest by April 30, 2021. Extended time for spending unspent amount relating to ongoing Project. Such amount shall be spent within a period of 3 financial years from the date of such transfer, failing which, the company shall transfer the same to a Fund specified in Schedule VII, within a period of thirty days from the date of completion of the third financial year. So amount remaining unspent transferred for FY 2020--21 to UCSRA,



Sl No.	Subject	Key Changes
		has to be utilized for the project up to FY 2023--24, otherwise shall be transferred to a fund specified in Schedule VII. Hence every project period should not exceed 03 years.
4.	<i>Consequence of non-transfer in aforesaid manner(Sec 135-5)</i>	<ul style="list-style-type: none"> • Offence decriminalized vide CAA, 2020 • Company liable to pay penalty twice the amount of default or Rs. 1 cr, whichever is less • Every officer liable to pay penalty @ 10% of default or Rs. 2 lacs, whichever is less
5.	<i>Setoff of excess amount spend towards CSR in immediate succeeding three financial years subject succeeding years(Sec 135-5)</i>	<p>Excess amount may be set off against the requirement to spend under section 135(5) up to immediate succeeding 03 financial years subject to the conditions that –</p> <ul style="list-style-type: none"> • The excess amount available for set off shall not include the surplus arising out of the CSR activities, if any, in pursuance of sub- rule (2) of this rule. • The Board of the company shall pass a resolution to that effect.
6.	<i>Administrative Definition added. Overheads(CSR Rule)</i>	<ul style="list-style-type: none"> • Definition added. • Only the expenses incurred by the company for general management and administration' of Corporate Social Responsibility functions classified as Administrative overheads. • The expenses directly incurred for the designing, implementation, monitoring, and evaluation of a particular Corporate Social Responsibility project or programme specifically excluded. • The administrative overheads not to exceed five percent of total CSR expenditure of the company for the financial year.
7.	<i>CSR definition(CSR</i>	<ul style="list-style-type: none"> • Inclusive definition now made exclusive and activities not

Sl No.	Subject	Key Changes
	<i>Rule)</i>	<p>considered as CSR specified clearly. Accordingly the following activities shall not be considered CSR:</p> <ul style="list-style-type: none"> Activities undertaken in pursuance of normal course of business of the company (except COVID 19 related R & D up to the financial year 2022--23, subject to certain conditions); Any activity undertaken by the company outside India (except for training of Indian sports personnel representing any State or Union territory at national level or India at international level); Contribution of any amount directly or indirectly to any political party under section 182 of the Act. activities that significantly benefit the employees of the company as defined in clause (k) of section 2 of the Code on Wages, 2019 (29 of 2019); activities supported by the companies on sponsorship basis for deriving marketing benefits for its products or services; activities carried out for fulfillment of any other statutory obligations under any law in force in India;
8.	<i>CSR Policy(CSR Rule)</i>	<p>CSR Policy to include:</p> <ul style="list-style-type: none"> approach and direction given by the board of a company, taking into account the recommendations of its CSR Committee; guiding principles for selection, implementation and monitoring of activities; Formulation of the annual action plan.
9.	<i>CSR Committee(Sec 135-9)</i>	<ul style="list-style-type: none"> CSR Committee not required, if amount to be spent by a company does not exceed fifty lakh rupees. In such cases Board shall discharge all functions of CSR Committee.
10.	<i>Ongoing Project(CSR</i>	<ul style="list-style-type: none"> Ongoing Project means a multi-year project having timelines



Sl No.	Subject	Key Changes
	<i>Rule)</i>	<p>not exceeding 03 years excluding the financial year in which it was commenced.</p> <ul style="list-style-type: none"> Project that was initially not approved as a multi-- year project can be made ongoing by extending the duration beyond one year by the board based on reasonable justification. It looks that CSR Project duration cannot be more than 03 years.
11.	<i>Implementing Agency(CSR Rule)</i>	<ul style="list-style-type: none"> Companies can do CSR either on its own or through Implementing Agency. Three major changes had been made: w.e.f. 01.04.2021 registration of such entity shall be mandatory by filing form CSR 1. Unique CSR Registration Number shall be generated for each entity. Only registered public trust now allowed as against any registered trust, except in case established by CG/SG. In addition to registration under respective act, registration under the provisions of section 12A & 80 G of the Income Tax has been made mandatory.
12.	<i>Engagement of International Organisations(CSR Rule)</i>	<ul style="list-style-type: none"> A company may engage international organisations for designing, monitoring and evaluation of the CSR projects or programmes as per its CSR policy as well as for capacity building of their own personnel for CSR. Only Central Government notified organisations shall qualify as International Organisation
13.	<i>Responsibility of a Board and CFO(CSR Rule)</i>	<ul style="list-style-type: none"> The Board shall be responsible to: Satisfy it that the funds so disbursed have been utilised for the purposes and in the manner as approved by it. monitor the implementation of the project with reference to the approved timelines and year--wise allocation



Sl No.	Subject	Key Changes
		<ul style="list-style-type: none"> to make modifications, if any, for smooth implementation of the project within the overall permissible time period. CFO or the person responsible for financial management shall certify to the effect.
14.	<i>Annual Action Plan(CSR Rule)</i>	<ul style="list-style-type: none"> The CSR Committee shall formulate and recommend to the Board, an annual action plan in pursuance of its CSR policy. Annual Action Plan to include: <ul style="list-style-type: none"> List of CSR Projects approved Manner of execution modalities of utilisation of funds and implementation schedules monitoring and reporting mechanism On recommendation of CSR Committee Annual Action Plan may be altered by the Board.
15.	<i>Treatment of surplus arising out of CSR activities(CSR Rule)</i>	<ul style="list-style-type: none"> Any surplus arising out of the CSR activities shall not form part of the business profit of a company. Such surplus shall be ploughed back into the same project or shall be transferred to the Unspent CSR Account and spent in pursuance of CSR policy / Annual action plan of the company or transfer such surplus amount to a Fund specified in Schedule VII, within a period of six months of the expiry of the financial year
16.	<i>Capital Assets(CSR Rule)</i>	<ul style="list-style-type: none"> The CSR Assets to be held by a Section 8 Company, or Registered Public Trust, or registered society with charitable objects, having CSR registration number or beneficiaries of the said CSR project, in the form of self--help groups, collectives, entities or a public authority. Any CSR asset created prior to these Rules, required to comply within a period of 180 days (Board may extend by 90 days).



Sl No.	Subject	Key Changes
17.	<i>CSR Reporting(CSR Rule)</i>	<ul style="list-style-type: none"> From financial year starting on or after April 01, 2020 CSR report shall be in Annexure – II, previous years Annexure I shall continue. Annexure II mandates additional disclosures regarding: Impact assessment Amount available for Setoff CSR amount spent against ongoing project/other than ongoing project Administrative overhead Unspent amount against ongoing project/other than ongoing project Details regarding capital assets
18.	<i>Impact Assessment(CSR Rule)</i>	<ul style="list-style-type: none"> A company having the obligation of spending average CSR amount of Rs 10 Crore or more in the three immediately preceding financial years in pursuance of Section 135(5) of the Act, shall undertake impact assessment. Impact assessment to be done by an independent agency. Impact assessment to be done in respect of CSR projects having outlays of one crore rupees or more, and which have been completed not less than one year before undertaking the impact study. The impact assessment reports shall be placed before the Board and shall be annexed to the annual report on CSR. Impact assessment expenditure for a financial year shall not exceed five percent of the total CSR expenditure for that financial year or fifty lakh Rupees, whichever is less.
19.	<i>Website Disclosure(CSR Rule)</i>	New Disclosure on Website, if any – CSR Committee constitution, CSR Projects approved.
20.	<i>National Unspent</i>	<ul style="list-style-type: none"> Central Government shall establish a 'National Unspent CSR



Sl No.	Subject	Key Changes
	<i>CSR Fund</i>	<p>Fund' for purpose of transferring the unspent amount of companies, which shall be then used for activities outlined in Schedule VII.</p> <ul style="list-style-type: none"> Until such fund is created the unspent CSR amount in terms of provisions of sub--section (5) and (6) of section 135 of the Act shall be transferred by the company to any fund as specified in schedule VII of the Act. PMNRF, PM CARES, Swach Bharat Kosh, Clean Ganga Fund are the funds specified under Schedule VII.
21.	<i>Form CSR 1</i>	<ul style="list-style-type: none"> For registration of Implementing agencies with MCA Unique CSR Registration Number shall be generated for each entity. It is one time registration.

Annexure - 2: Environment Sustainability and CSR Related Issues- Guidelines

No.J-11013/25/2014-IA.1
Government of India
Ministry of Environment & Forests

Indira ParyavaranBhawan,
JorBagh Road, Ali Ganj,
New Delhi-110003

Dated the 11th August, 2014

OFFICE MEMORANDUM

Subject: Environment sustainability and CSR related issues-guidelines

The Environment Impact Assessment (EIA) Notification 2006, issued under the Environment (Protection) Act 1986, as amended from time to time, prescribes the process for granting prior environment clearance (EC) in respect of certain development projects / activities listed out in the Schedule to the notification.

2. Sustainable development has three components, viz., social, economic and environmental. All the three components are closely inter-related and mutually re-enforcing. Considering this, the general structure of EIA document, under Appendix-III to the notification, prescribes inter-alia public consultation, social impact assessment and R&R action plan besides environment management plan (EMP).

3. It is noticed that while there is clarity on the guidelines on EMP, as regards sustainability related issues, different formulations have been prescribed in the conditions in EC letters for the projects under different sectors listed out in Schedule to the EIA Notification, 2006. Thus, there is a need to issue guidelines on the subject.

4. Section 135 of the Companies Act, 2013 deals with corporate social responsibility and Schedule-VII of the Act lists out the activities which may be included by companies in their CSR Policies. The activities relating to "ensuring environmental sustainability", are listed in this schedule. Further, Ministry of Corporate Affairs has also notified the Companies (Corporate Social Responsibility Policy) Rules, 2014.

5. The concept of CSR as provided for in the Companies Act, 2013 and covered under the Companies (Corporate Social Responsibility Policy) Rules, 2014 comes into effect only in case of companies having operating projects and making net profit as also subject to other stipulations contained in the aforesaid Act and Rules. The environment clearance given to a project may involve a situation where the concerned company is yet to make any net profit and / or is not covered under the purview of the aforesaid Act and Rules. Obviously, in such cases, the provisions of aforesaid Act and Rules will not apply.

6. The matter has been further examined in the Ministry of Environment, Forests & Climate Change (MoEF&CC). It has been decided that in respect of valid concerns expressed during the public consultations, mitigation issues emerging from social impact assessment and R&R Plan, the project proponents, in EIA / EMP report will clearly state the activity-wise costs involved (both capital as well as recurring costs), the phasing of these activities along with costs and also as to how such expenditure would be met. The costs and the timelines for various activities as prepared by the project proponent may be looked into by the concerned Expert Appraisal Committee (EAC) for their reasonableness and appropriate recommendations in the matter reflected in the minutes of EAC meeting. In case these activities (or some of these activities) are proposed to be covered by the project proponent under CSR activities, the project proponent should commit providing for the same. In either case, the position regarding the agreed activities, their funding mechanism and the phasing should be clearly reflected in the EC letter.

7. The obligation on part of the project proponents, as mentioned in para 5 above, should be stated at the TOR stage itself as one of the TORs for the project.

8. All Sectoral EACs will follow the aforesaid procedure on environment sustainability and CSR related issues while appraising the projects and do away with the existing practices being followed on the subject, if any.

9. These guidelines will apply mutatis mutandis to SEACs/SEIAAs.

10. This issues with the approval of the Component Authority.


(Dr. Satish C. Garkoti)
Scientist 'F'

To

1. All the Officers of IA Division
2. Chairpersons / Member Secretaries of all the SEIAAs / SEACs
3. Chairman, CPCB
4. Chairpersons / Member Secretaries of all SPCBs / UTPCCs

Copy to:

1. PS to MEF
2. PPS to Secretary (EF&CC)
3. PPS to AS(SS)
4. PPS to JS(AT)
5. Website of MoEF&CC
6. Guard File

Sanjay S. Desai
7/9/19



Annexure - 3: CSR Budget Capital Expenditure

Sr. No.	Particular	Year	Unit	Rate Rs.	Villages											
					Maldi		Mopar		Devarani		Karmandhi		Sarkhipar		Mudhipar	
					No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.
1	Exposure visit on new technology in Agriculture to farmers and marginal farmers.	1 st	Per Unit	1,00,000	3	3,00,000	3	3,00,000	2	2,00,000	1	1,00,000	2	2,00,000	2	2,00,000
		2 nd		1,00,000	2	2,00,000	2	2,00,000	2	2,00,000	1	1,00,000	1	1,00,000	1	1,00,000
		3 rd		1,00,000	1	1,00,000	1	1,00,000	1	1,00,000	1	1,00,000	1	1,00,000	1	1,00,000
2	Tech/Material support to landless people for establishing micro-enterprises	1 st	Per enterprise	50,000	2	1,00,000	2	1,00,000	2	1,00,000	2	1,00,000	1	50,000	1	50,000
		2 nd		50,000	2	1,00,000	2	1,00,000	3	1,50,000	3	1,50,000	1	50,000	1	50,000
		3 rd		50,000	1	50,000	1	50,000	1	50,000	1	50,000	1	50,000	1	50,000
3	Construction of steps for the village pond with changing room facility (Nirmal Ghat)	1 st	Lumpsum	1,20,000	1	1,20,000	1	1,20,000								
		2 nd		1,000					1	1,20,000	1	1,20,000				
		3 rd		1,000									1	1,20,000	1	1,20,000
4	Medical check-up camp for the villages.	1 st	Per Unit	10,000	4	40,000	4	40,000	4	40,000	4	40,000	4	40,000	4	40,000
		2 nd		10,000	4	40,000	4	40,000	2	20,000	2	20,000	2	20,000	2	20,000
		3 rd		10,000	4	40,000	4	40,000	2	20,000	2	20,000	2	20,000	2	20,000
5	Skill development of local unemployed youths for gardener/landscape work. Twice in a year	1 st	Per Unit	50,000	6	3,00,000	6	3,00,000	6	3,00,000	3	1,50,000	3	1,50,000	3	1,50,000
		2 nd		50,000	3	1,50,000	3	1,50,000	3	1,50,000	6	3,00,000	6	3,00,000	6	3,00,000
		3 rd		50,000	3	1,50,000	3	1,50,000	3	1,50,000	3	1,50,000	3	1,50,000	3	1,50,000
6	Drinking water tank for schools and gram panchayat.	1 st	Per Unit	50,000	2	1,00,000	2	1,00,000	2	1,00,000	2	1,00,000	2	1,00,000	2	1,00,000
		2 nd		50,000	2	1,00,000	2	1,00,000	2	1,00,000	2	1,00,000	2	1,00,000	2	1,00,000
		3 rd		50,000	1	50,000	1	50,000	1	50,000	1	50,000	1	50,000	1	50,000



Sr. No.	Particular	Year	Unit	Rate Rs.	Villages											
					Maldi		Mopar		Devarani		Karmandhi		Sarkhipar		Mudhipar	
					No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.
7	Computer/Software Training to sustain in the Industry	1 st	Per Unit	25,000	1	25,000	1	25,000	1	25,000	0	-	1	25,000		-
		2 nd		25,000	1	25,000	1	25,000		-		-		-		-
8	Recharge bores in village pond for ground water recharge	1 st	Per Unit	75,000	2	1,50,000	2	1,50,000	1	75,000	1	75,000	1	75,000		-
		2 nd		75,000	1	75,000	1	75,000		-		-		-	1	75,000
		3 rd		75,000	2	1,50,000		-	1	75,000		-	2	1,50,000		-
9	Domestic solid waste management facility	1 st	Lumpsum	5,00,000	1	5,00,000		-	-	-	-	-	-	-	-	-
		2 nd		5,00,000		-	1	5,00,000		-		-		-		-
	Total				168	28,65,000	165	27,15,000	144	20,10,000	135	15,05,000	93	17,90,000	93	16,15,000
	Total Works		No.			612										
	Total Cost		Rs.			1,25,00,000										



Annexure - 4: Recurring Expenditure

Sr. No	Particular	Year	Unit	Rate Rs.	Villages											
					Maldi		Mopar		Devarani		Karmandhi		Sarkhipar		Mudhipar	
					No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.
1	Skill development of local unemployed youths for transport arrangement. Twice in a year	1 st	Per head per day	1000	20	20000	20	20000	15	15000	15	15000	15	15000	15	15000
		2 nd		1000	20	20000	30	30000	20	20000	20	20000	20	20000	20	20000
		3 rd		1000	20	20000	40	40000	25	25000	25	25000	25	25000	25	25000
2	Skill development of local unemployed youths for Civil and Mechanical work. Twice in a year	1 st	Per head per day	1000	30	30000	30	30000	20	20000	20	20000	20	20000	20	20000
		2 nd		1000	20	20000	20	20000	15	15000	15	15000	15	15000	15	15000
		3 rd		1000	20	20000	20	20000	15	15000	15	15000	15	15000	15	15000
3	Fruit tree plantation programme at School /Anganwadi/ Gram Panchayat	1 st	Number of trees with tree guard	1000	20	20000	10	10000	15	15000	15	15000	10	10000	10	10000
		2 nd		1000	10	10000	22	22000	10	10000	10	10000	10	10000	10	10000
		3 rd		1000	10	10000	10	10000	10	10000	30	30000		0		0
4	Skill development of local unemployed youths for gardener/landscape work. Twice in a year	1 st	Per head per day	1000	30	30000	20	20000	30	30000	0	0		0		0
		2 nd		1000	20	20000	30	30000	20	20000		0		0		0
		3 rd		1000	10	10000	10	10000	10	10000	10	10000		0		0
5	Exposure visit on new technology in Agriculture to farmers and marginal farmers.	1 st	Per Group	5000	10	50000	10	50000	10	50000	10	50000	10	50000	10	50000
		2 nd		5000	10	50000	10	50000	10	50000	10	50000	10	50000	10	50000
		3 rd		5000	5	25000	5	25000	5	25000	5	25000	5	25000	5	25000
6	Drinking water tank for schools and gram panchayat.	1 st	Per Group	5000	2	10000	2	10000	2	10000	2	10000	2	10000	2	10000
		2 nd		5000	2	10000	2	10000	2	10000	2	10000	2	10000	2	10000



Sr. No	Particular	Year	Unit	Rate Rs.	Villages											
					Maldi		Mopar		Devarani		Karmandhi		Sarkhipar		Mudhipar	
					No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No.	Cost Rs.	No	Cost Rs	No	Cost Rs
		3 rd		5000	2	10000	2	10000	2	10000	2	10000		0		0
8	Medical check-up camps for the villagers. Twice in a year	1 st	Per Camp	30000	2	60000	2	60000	2	60000	2	60000	2	60000	2	60000
		2 nd		30000	1	30000	1	30000	1	30000	1	30000	1	30000		
		3 rd		30000	0	0	0	0	0	0	1	30000	1	30000		
Recurring cost towards Operation & maintenance on an annual basis						0		0		0		0		0		0
9	Organization of industrial guest sessions.	1st	Per Ground	8000	1	8000					1	8000		0		0
		2nd		8000		0	2	16000		0		0		0		
		3rd		8000		0		0	2	16000		0		0		
10	Computer /Software Training to sustain in the industry	1st	Per Centre	5000	5	25000	5	40000	2	10000	5	25000	2	10000	2	10000
		2nd		5000	4	20000	4	20000	4	20000	4	20000	2	10000		
		3rd		5000	2	10000	2	10000	2	10000	2	10000	2	10000		
	Total Recurring Cost & Activities				276	538000	309	593000	249	506000	222	513000	169	425000	169	425000
	Total Works		No.			1056								-		-
	Total Cost		Rs.			30,00,000.								-		-



Annexure - 5: Priority Ranking of Villages Needs

Summary table of Socio economic Survey at mine lease area								
SL. No.	Name of Village	Total HH	Accessibility	Ranking	1st Year	2nd Year	3rd Year	Rimarks
1	Maldi	510	22	1	Job	Drinking Water	Education	
2	Mopar	496	15	2	Job	Education	Drinking Water	
3	Devarani	224	8	4	Job	Drinking Water	Education	
5	Karmadih	178	8	3	Education	Job	Drinking Water	
6	Sarkipar	146	8	6	Job	Roadway Connectivity	Drinking Water	
7	Mudhipar	99	5	5	Health Care	Job	Education	
Methodology of Ranking		1	Rank is specify to village zone					
		2	Rank of the village within the zone depends on population, accessibility and the intensity of the needs					



Sl No.	Village Name	Requirement							Zone Wise Ranking	Zone Wise Main Requirement	Remarks
		Irrigational Water	Drinking Water	Health Care	Roadway Connectivity	Education	Sanitation	Job			
1	Maldi	5	2	6	7	3	4	1	1		
2	Mopar	4	3	6	5	2	7	1	2		
3	Devarani	7	2	6	4	3	5	1	4		Requeste d for skill developm ent training
4	Karmadih	4	3	7	5	1	6	2	3		Hostel for children
5	Sarkipar	7	3	4	2	6	5	1	6		
6	Mudhipar	7	4	1	5	3	6	2	5		water facility in school
Total		34	17	30	28	18	33	8			
Methodology of Ranking											
		1	As per the need of the villages highest priority ranking setup.								
		2	The highest priority has been given 1 and lowest priority has been given as 7.								
		3	As 7 parameter has been consider.								



Annexure - 6: Brief of Need Based Assessment of Village Survey

Date:	26 th Feb 2022		
Name of Village:	Maldi		
Panchayat:	Maldi		
Tehsil:	Bhatapara		
District:	Balodabajar		
Total No of HHs (2011):	510		
Estimated No. of Sample HH:	124	Surveys Completed:	127
Water Supply System Source:	<ul style="list-style-type: none">• Drinking Water: Tap Water, Hand Pump• Irrigation & Other Domestic Usage: Nallah, Pond		

Total 4 hand pump are there out of 2 are not working now. They get drinking water from Tap water (Naljal Yojana) From Bhadrpali (Panchayat) Village.

Market Place: Nearest market place Arjuni and Balodabajar is 8 Km from the village, there is a weekly Haat on Thursday at Arjuni village.

Connectivity's: The village is near from main road. The connecting road is cement concrete. The present road condition is good. These roads should be maintained by Panchayat. Local railway station in Bhatapara and major railway station is Raipur.

Health Care: There is a primary health centre at village; if any kind of emergency and also for better treatment they are going to Balodabajar. One Mitanim is available at village and Sakhi (Ambuja Cement Foundation, Medical Worker) also available in a village.

Sanitation: Most of the houses have toilet facility and there is one community toilet but here is no Sewerage drainage system in village.

Education: Maldi have an Anganwari, one Secondary school at Maldi, for graduation they have to go Rawan and Balodabajar. Professional education colleges at Balodabajar.

General Observation: Most of the people in the villages live below poverty line. During off-season most of the male members of each family go to another state Particularly Maharashtra for Brisk Making Work for 5-6 months a year for work. Schedule Tribe (ST) constitutes 37 % while Schedule Caste (SC) was 6 % of total population in Maldi village. They are celebrating Dussera, Durga puja and Diwali and they also belief in Raksha Bandhan.

Requirement: (i) Bore well facility for pond using solar energy (ii) Steps for Village Pond (Also needed changing room) (iii) Income opportunity (iv) Water facility for Colony Para (v) One over headed tank near school. (vii) SHG training for women (Animal husbandry, cottage industry etc.)



Date: 26th Feb 2022

Name of Village: **Mudhipar**

Panchayat: Bhadrapali

Tehsil: Balodabajar

District: Balodabajar

Total No of HHs (2011): 99

Estimated No. of Sample HH: 20 **Surveys Completed:** 23

Water Supply System Source:

- **Drinking Water:** (Tap Nal Jal Yojana) Hand Pump,
- **Irrigation & Other Domestic Usage:** Nallah, Pond

Total 4 hand pump are there, out of 2 are not working now. They get drinking water from Tap Water (Naljal Yojana) From Bhadrapali (Panchayat) Village.

Market Place: Nearest market place Arjuni and Balodabajar is 8 Km from the village, there is a weekly Haat on Thursday at Arjuni village.

Connectivity's: The village is 1 km near from main road. The connecting road is cement concrete. The present road condition is good. These roads should be maintained by Panchayat. Local railway station in Bhatapara and major railway station is Raipur.

Health Care: There is a no primary health centre at village; if any kind of emergency and also for better treatment they are going to Arjuni and Balodabajar . One Mitanim is available at village and Sakhi (Ambuja Cement Foundation, Medical Worker) also available in a village.

Sanitation: All the houses have toilet facility but there is a no drainage system in village.

Education: Mudhipar have an Anganwari, one Secondary school at Mudhipar, for graduation they have to go Rawan and Balodabajar. Professional education colleges at Balodabajar.

General Observation: Most of the people in the villages live below poverty line. During off-season most of the male members of each family go to another state for 5-6 months a year for work.

Schedule Tribe (ST) constitutes 28 % while other cast was 72 % of total population in Mudhipar village. They are celebrating Dussera, Holi and Diwali and they also belief in Raksha Bandhan.

Requirement: (i) Employment ((ii) Fencing for agriculture land. (iii) Constructing one solar bore well near School boundary and Anganwadi. (iv)Roof of durga temple(v) Two no's of dustbin (one near school and another is near pond (vi) Steps for Village Pond (Also needed changing room)



Date: 26th Feb 2022

Name of Village: **Karmandhih**

Panchayat: Karmandhih

Tehsil: Balodabajar

District: Balodabajar

Total No of HHs (2011): 178

Estimated No. of Sample HH: 45 **Surveys Completed:** 45

Water Supply System Source:

- **Drinking Water:** Hand Pump,
- **Irrigation & Other Domestic Usage:** Nallah, Pond

Total 4 hand pump are there out of 2 are not working now. They get drinking water from Tap Water (Naljal Yojana) From Bhdrapali (Panchayat) Village.

Market Place: Nearest market place Arjuni and Balodabajar is 8 Km from the village, there is a weekly Haat on Thursday at Arjuni village.

Connectivity's: The village is 1 km near from main road. The connecting road is cement concrete. The present road condition is good. These roads should be maintained by Panchayat. Local railway station in Bhatapara and major railway station is Raipur.

Health Care: There is a no primary health centre at village; if any kind of emergency and also for better treatment they are going to Arjuni and Balodabajar . One Mitanim is available at village and Sakhi (Ambuja Cement Foundation, Medical Worker) also available in a village.

Sanitation: All the houses have toilet facility but there is a no drainage system in village.

Education: Karmandhih have an Anganwari, one Secondary school in Village, for graduation they have to go Rawan and Balodabajar. Professional education colleges at Balodabajar.

General Observation: Most of the people in the villages live below poverty line. During off-season most of the male members of each family go to another state Particularly Maharashtra For Brisk Making Work for 5-6 months a year for work.

Most of the villagers are SC category, total number of Schedule Caste (SC) was 96 % in Karmandhih village. They are celebrating Dussera, Holi and Diwali and they also belief in Raksha Bandhan.

Requirement: (i) Drinking Water facility for village (ii) Pond Desalting (iii) Solar pump near school Compound (iv) Community Hall (v) Steps for Village Pond (Also needed changing room) (vi) Income opportunity (vii) School compound wall (viii) concrete road (also needed Karmandi to Sarkipar village road).



Date: 26th Feb 2022

Name of Village: **Mopar**

Panchayat: Mopar

Tehsil: Bhatapara

District: Balodabajar

Total No of HHs (2011): 496

Estimated No. of Sample HH: 118 **Surveys Completed:** 124

Water Supply System Source:

- **Drinking Water:** Hand Pump,
- **Irrigation & Other Domestic Usage:** Nallah, Pond

Total 4 hand pump are there out of 2 are not working now. They get drinking water from Tap Water (Naljal Yojana) From Bhdrapali (Pnchayat) Village.

Market Place: Nearest market place Arjuni and Balodabajar is 8 Km from the village, there is a weekly Haat on Thursday at Arjuni village.

Connectivity's: The village is 1 km near from main road. The connecting road is cement concrete. The present road condition is good. These roads should be maintained by Panchayat. Local railway station in Bhatapara and major railway station is Raipur.

Health Care: There is primary health centre at village; if any kind of emergency and also for better treatment they are going to Arjuni and Balodabajar . One Mitanim is available at village and Sakhi (Ambuja Cement Foundation, Medical Worker) also available in a village.

Sanitation: All the houses have toilet facility but there is a no drainage system in village.

Education: Mopar have an Anganwari, one Secondary and Higher Secondary school at Mopar, for graduation they have to go Balodabajar. Professional education colleges at Balodabajar.

General Observation: Most of the people in the villages live below poverty line. During off-season most of the male members of each family go to another state Particularly Maharashtra For Brisk Making Work for 5-6 months a year for work.

Schedule Tribe (ST) constitutes 9 % while Schedule Caste (SC) was 5 % of total population in Mopar village. They are celebrating Dussera, Holi and Diwali and they also belief in Raksha Bandhan.

Requirement: (i) Plantation (ii) Pond Desalting (iii) Repair or construct over headed tank (iv) Concrete road (Nayapara) (v) Computer training in school(15 PC are available) and women group are also interested for training (vi) Gym kit for health club (vii) employment for youth (viii) Fencing for agriculture land (ix) Bridge for chandi road



Date: 26th Feb 2022

Name of Village: Sarkipar

Panchayat: Sarkipar

Tehsil: Balodabajar

District: Balodabajar

Total No of HHs (2011): 146

Estimated No. of Sample HH: 35 **Surveys Completed:** 37

Water Supply System Source:

- **Drinking Water:** Hand Pump,
- **Irrigation & Other Domestic Usage:** Nallah, Pond

Total 4 hand pump are there out of 2 are not working now. They get drinking water from Tap Water (Naljal Yojana) From Bhdrapali (Pnchayat) Village.

Market Place: Nearest market place Arjuni and Balodabajar is 8 Km from the village, there is a weekly Haat on Thursday at Arjuni village.

Connectivity's: The village is 1 km near from main road. The connecting road is cement concrete. The present road condition is good. These roads should be maintained by Panchayat. Local railway station in Bhatapara and major railway station is Raipur.

Health Care: There is a no primary health centre at village; if any kind of emergency and also for better treatment they are going to Arjuni and Balodabajar . One Mitanim is available at village and Sakhi (Ambuja Cement Foundation, Medical Worker) also available in a village.

Sanitation: All the houses have toilet facility but there is a no drainage system in village.

Education: Sarkipar have an Anganwari, one Secondary school at Sarkipar, for graduation they have to go Rawan and Balodabajar. Professional education colleges at Balodabajar. After covid there is a big problem of dropout, percentage is very high near about 50% to 60%

General Observation: Most of the people in the villages live below poverty line. During off-season most of the male members of each family go to another state Particularly Maharashtra For Brisk Making Work for 5-6 months a year for work.

Schedule Tribe (ST) constitutes 54 % while Schedule Caste (SC) was 16 % of total population in Sarkipar village. They are celebrating Dussera, Holi and Diwali and they also belief in Raksha Bandhan.

Requirement: (i) Anganwadi and school building (ii) Pond Desilting (iii) Roads(Bridge to Boradi talab) (iv) Burning Ghat (v) Nirmala Ghat (vi) Fencing of Gothan (vii) Job for Youth, (viii) Mobile tower for batter network facility.



Date: 26th Feb 2022

Name of Village: **Devrani**

Panchayat: Devrani

Tehsil: Bhatapara

District: Balodabajar

Total No of HHs (2011): 224

Estimated No. of Sample HH: 50 **Surveys Completed:** 49

Water Supply System Source:

- **Drinking Water:** Hand Pump,
- **Irrigation & Other Domestic Usage:** Nallah, Pond

Total 4 hand pump are there out of 2 are not working now. They get drinking water from Tap Water (Naljal Yojana) From Bhdrapali (Pnchayat) Village.

Market Place: Nearest market place Arjuni and Balodabajar is 8 Km from the village, there is a weekly Haat on Thursday at Arjuni village.

Connectivity's: The village is 1 km near from main road. The connecting road is cement concrete. The present road condition is good. These roads should be maintained by Panchayat. Local railway station in Bhatapara and major railway station is Raipur.

Health Care: There is a no primary health centre at village; if any kind of emergency and also for better treatment they are going to Arjuni and Balodabajar . One Mitanim is available at village and Sakhi (Ambuja Cement Foundation, Medical Worker) also available in a village.

Sanitation: All the houses have toilet facility but there is a no drainage system in village.

Education: Devrani have an Anganwari, one Secondary school at Devrani, for graduation they have to go Mopar and Balodabajar. Professional education colleges at Balodabajar.

General Observation: Most of the people in the villages live below poverty line. During off-season most of the male members of each family go to another state Particularly Maharashtra For Brisk Making Work for 5-6 months a year for work.

Schedule Tribe (ST) constitutes 23% while Schedule Caste (SC) was 22% of total population in Devrani village. They are celebrating Dussera, Holi and Diwali and they also belief in Raksha Bandhan.

Requirement: (i) Dustbin near market place (ii) Constructing a permanent drainage system in the village. (iii) Align agriculture training for women (iv) One changing room for women in village Community Hall (v) Water for every house (vi) Income opportunity



Annexure - 7: Demographic Data of the Study Area (As per 2011 Census)

Sr. No.	Village Name	Tehsil	No of Households	Population			SC		ST		Literates	
				Total	M	F	M	F	M	F	M	F
1	Jethani	Bhatapara	102	516	267	249	94	87	23	20	140	81
2	Deorani	Bhatapara	224	1190	609	581	126	137	141	137	356	231
3	Maldi	Bhatapara	510	2365	1178	1187	73	66	415	466	778	589
4	Mopar	Bhatapara	496	2527	1272	1255	108	108	51	53	905	593
5	Boirdih	Baloda Bazar	36	180	89	91	0	0	10	14	68	53
6	Sarkipar	Baloda Bazar	146	717	372	345	199	186	58	63	241	145
7	Karmadih	Baloda Bazar	178	1022	506	516	485	501	0	0	275	179
8	Piprahi	Baloda Bazar	128	614	296	318	40	43	41	53	225	186
9	Bhadrapali	Baloda Bazar	282	1549	809	740	6	5	67	77	673	518
10	Mudhipar	Baloda Bazar	99	505	252	253	0	0	71	69	182	127
11	Arjuni	Baloda Bazar	1027	5035	2508	2527	70	77	321	326	1772	1384
12	Mirgi	Bhatapara	283	1308	635	673	5	7	97	100	414	289
13	Chamari	Bhatapara	120	572	302	270	300	267	0	0	205	134
14	Magarway	Baloda Bazar	51	292	161	131	0	0	27	13	132	68
15	Kukurdihi	Baloda Bazar	355	2026	1012	1014	152	137	438	475	718	469
16	Khairwardih	Baloda Bazar	25	121	60	61	0	0	3	2	53	45
17	Semhradhi (Semradhi)	Bhatapara	287	1366	675	691	28	32	271	280	493	339
18	Dhandhani	Baloda Bazar	134	700	331	369	325	362	0	0	221	162
19	Khairtal	Baloda Bazar	339	1842	944	898	342	343	163	162	631	438

Need Based Assessment for Maldi-Mopar Limestone Mining Project
Project Proponent : M/s. Ambuja Cement Ltd.



Sr. No.	Village Name	Tehsil	No of Households	Population			SC		ST		Literates	
				Total	M	F	M	F	M	F	M	F
20	Dhurrabandha	Bhatapara	381	1908	965	943	109	121	193	216	594	353
21	Kukda	Bhatapara	215	1188	606	582	242	205	126	134	359	235
22	Koliyari	Baloda Bazar	169	1006	495	511	0	0	369	375	341	208
23	Baloda Bazar	Baloda Bazar	8241	40716	20513	20203	3938	3958	1025	1061	15696	12720
24	Pahanda	Baloda Bazar	201	1091	539	552	245	247	114	110	378	255
25	Limahi	Baloda Bazar	129	788	381	407	115	126	144	156	248	172
26	Chicholi	Baloda Bazar	77	485	242	243	0	0	96	102	194	118
27	Khapri	Bhatapara	298	1374	657	717	5	4	226	235	483	362
28	Rajadhar	Bhatapara	290	1389	674	715	453	508	40	35	462	333
29	Gurra	Bhatapara	435	2022	1025	997	273	282	271	264	689	453
30	Amlidih	Bhatapara	214	1037	507	530	85	106	176	187	337	233
31	Champa	Baloda Bazar	236	1066	500	566	71	78	65	76	367	275
32	Thelki	Baloda Bazar	232	1182	590	592	84	76	73	79	446	326
33	Sonpuri	Baloda Bazar	108	653	336	317	246	232	0	0	233	155
34	Dhabadih	Bhatapara	215	976	486	490	68	71	75	91	342	221
35	Mudhipar	Bhatapara	110	533	272	261	7	7	118	122	195	143
36	Khapradih	Bhatapara	182	849	429	420	8	11	281	265	369	290
37	Borsi	Bhatapara	148	897	451	446	262	260	41	46	269	208
38	Khairi	Bhatapara	264	1389	695	694	19	30	280	272	399	236
39	Alesur	Bhatapara	184	834	425	409	191	180	99	115	236	142



Sr. No.	Village Name	Tehsil	No of Households	Population			SC		ST		Literates	
				Total	M	F	M	F	M	F	M	F
40	Hasda	Bhatapara	159	734	364	370	130	146	60	48	256	175
41	Chichpol	Bhatapara	273	1530	755	775	20	11	335	349	461	310
42	Pausari	Bhatapara	172	941	486	455	182	155	130	124	343	222
43	Topa	Bhatapara	151	816	396	420	0	0	151	168	301	204
44	Tonatar	Bhatapara	528	2562	1266	1296	203	210	396	395	815	589
45	Parsadih	Bhatapara	115	557	269	288	0	0	242	267	183	123
46	Turma	Bhatapara	266	1292	656	636	162	158	80	74	375	237
47	Dhawai	Baloda Bazar	166	939	453	486	135	156	153	163	329	282
48	Purena	Baloda Bazar	90	524	267	257	0	0	209	206	170	121
49	Saloni	Baloda Bazar	387	1736	868	868	317	308	295	294	581	368
50	Deori	Baloda Bazar	339	1704	855	849	100	96	501	486	570	327
51	Mohtara	Baloda Bazar	450	2287	1154	1133	93	74	79	96	776	569
52	Chhuiha	Baloda Bazar	93	447	219	228	201	216	7	5	147	102
53	Parsabhadar	Baloda Bazar	174	921	450	471	1	1	172	193	303	242
54	Khairghata	Baloda Bazar	126	643	321	322	37	30	95	84	237	177
55	Suklabhata	Baloda Bazar	189	857	422	435	35	32	95	119	323	217
56	Latuwa	Baloda Bazar	1079	5363	2669	2694	371	391	401	427	1808	1243
57	Pausari	Baloda Bazar	323	1626	804	822	145	150	127	139	612	483
58	Bharseli Malgajari	Baloda Bazar	171	933	462	471	92	95	200	209	323	246
59	Karmada	Baloda Bazar	674	3548	1743	1805	162	143	364	353	1173	896



Sr. No.	Village Name	Tehsil	No of Households	Population			SC		ST		Literates	
				Total	M	F	M	F	M	F	M	F
60	Bhathagaon	Baloda Bazar	173	863	432	431	37	34	48	49	294	197
61	Gaitara	Baloda Bazar	323	1681	832	849	95	94	183	169	597	447
62	Khamhariya	Baloda Bazar	222	1067	542	525	376	355	105	106	391	260
63	Risda	Baloda Bazar	844	4293	2174	2119	851	783	167	165	1505	1056
64	Puran	Baloda Bazar	94	480	227	253	4	5	74	90	158	140
65	Bharuwadih	Baloda Bazar	176	915	476	439	163	158	49	54	302	212
66	Nawapara	Baloda Bazar	418	2634	1287	1347	135	151	30	45	735	498
67	Rawan (CT)	Baloda Bazar	1074	5100	2614	2486	180	186	186	183	2020	1543
68	Nawagaon	Bhatapara	190	899	425	474	71	71	0	0	290	241
69	Godkhapri	Baloda Bazar	108	574	288	286	10	9	248	256	237	179
70	Dasharma	Baloda Bazar	389	1896	949	947	305	285	304	319	643	426
71	Magarchaba	Baloda Bazar	158	721	364	357	12	19	181	170	245	165
72	Jhonka	Baloda Bazar	186	767	381	386	147	134	103	110	242	189
73	Budgahan	Baloda Bazar	153	786	388	398	91	91	114	115	285	212
74	Khamhriya (Khamriya)	Bhatapara	295	1417	702	715	360	379	47	45	482	353
75	Kesla	Bhatapara	279	1293	649	644	18	19	222	246	368	225
76	Ameri	Simga	162	866	434	432	146	113	6	2	310	224
77	Raweli	Simga	203	971	500	471	189	168	11	11	388	253
78	Diggi	Simga	251	1045	511	534	508	529	0	1	341	232
79	Khapri	Simga	80	338	170	168	164	162	0	0	121	98

Need Based Assessment for Maldi-Mopar Limestone Mining Project
Project Proponent : M/s. Ambuja Cement Ltd.



Sr. No.	Village Name	Tehsil	No of Households	Population			SC		ST		Literates	
				Total	M	F	M	F	M	F	M	F
80	Chandi	Simga	281	1480	737	743	11	11	243	258	570	438
81	Jhipan	Simga	402	1772	923	849	179	149	69	62	661	498
82	Suhela	Simga	574	2935	1430	1505	163	188	26	32	1104	936
83	Tekari	Simga	223	1063	541	522	0	0	135	130	392	298
84	Amakoni	Simga	221	1322	655	667	126	127	76	91	450	329
85	Sinodha	Simga	527	2272	1150	1122	498	486	98	99	766	550
86	Sarseni	Palari	302	1431	717	714	96	83	92	110	543	386
87	Chuchrungpur	Palari	301	1440	718	722	374	368	49	61	501	378
88	Guma	Palari	342	1693	842	851	16	11	186	193	624	442
89	Saiha	Palari	300	1425	687	738	42	50	27	37	490	390
90	Belha	Palari	179	849	441	408	234	238	0	0	316	209
91	Parsadih	Palari	64	378	194	184	88	80	0	0	116	91
92	Achholi	Palari	438	2012	1025	987	542	530	91	103	696	498
93	Lohari	Simga	246	1101	538	563	108	112	4	3	410	342
94	Bhanwargarh(Bhawargarh)	Simga	115	609	305	304	44	38	34	50	230	177
	Total		33369	166178	83193	82985	17543	17448	13309	13815	59028	43713



Annexure - 8: Focus Group Discussion/ Community consultation Survey Format

Areas	Observations
Health	
Public Health	
Veterinary Clinic	
Education	
Schools/Anganwadis	
Anganwadi Kitchen Shed	
Livelihood	
Handloom/Weaving, etc.	
Agriculture & Allied	
Forest/NTFP/Local Species	
SHGs	
Animal Husb.	
Dairy	
Sericulture	
Social/Agro Forestry	
Horticulture	
Water Resources, Irrigation source (River/Well/Tubewell)	
Enterprise Development	
Local Skills	
Soil and water conservation	
Others	
Infrastructure	
Road/Connectivity	
Electricity/Solar Power	
Drinking Water/Dug-well/tap water	
Sanitation/Water SLWM (Solid/liquid waste management)	
Playground/Public Park, etc.	
General Utility, Community Infrastructure/Gotul/Waiting Room, etc.	
Markets/Haats/Bazaars/Pashu Bazaars, etc.	
Water Bodies (lake, pond etc)	
Entrance Gate	
Computers/Internet, etc.	
Haudis (Drinking water arrangement for animal, cattle)	

**AMBUJA CEMENT FOUNDATION
CSR ACTIVITIES DURING THE YEAR
April 2023 to March 2024**



Highlights of Works

Programme/Activities	Achievement	Details of Activity
Agro Based Livelihood & Allied Activities		
Farmers covered under Kharif season through improved package of practices	350 farmers (350 acres)	Core Villages
Farmers trained on Kharif crop in Improved package of practice.	459 farmers	Core Villages
Farmers covered under Rabi season through improved package of practices	320 Farmers	Core Villages
Farmers trained on Rabi crop in Improved package of practice.	382 Farmers	Core Villages
Virtual workshop/trainings with Krishi Mitras on season wise crop planning and improved package of practices, Seed Bank, Natural Farming	6 Krishi Mitra	Core Villages
Training of farmers on Biofloc fish farming	21 farmers	Core villages
Demo plots promoted under Kharif and Rabi crop	148	Core village
Farmer's field day cum training in Kharif and Rabi	3515 farmers	Core villages
Support in no. of goats/sheep covered through treatment and ET vaccine	3769 goats	215 Households (139 HH in core villages and 76 in peripheral villages)
No. of farmers benefitted from custom hiring center with farm machinery	660 farmers	Core village
Support farmer producer company in it's functioning	1263 farmers	Core villages
No. of farmers supported for farm protection – fencing	60 farmers	Core villages
No of soil testing done	655 farmers	Core villages
Promoted Azola Culture & Mineral mixture under Animal Husbandry	50 farmers	Core villages
Promoted Goat manure making machine	1 group	Core village
MoU with district animal husbandry department for Artificial insemination promotion	13 village	Core village
Promoted Bio resource center	13 village	Core village

Women Empowerment		
No. of awareness sessions conducted on the concept of SHGs	19	Core Villages
No. of women participated in the awareness sessions	206	Core Villages
New SHG Formed	15	Core Villages
New Members added in SHGs	157	Core Villages
No. of SHGs Linked with Bank	102	Core Villages
Amount Received form Bank	210 Lakh	Core Villages
No. of Six Module Training	36	Core Villages
Turmeric Cultivation with SHG members	261	Core Villages
Area Covered in Turmeric Cultivation	8 Acer	Core Villages
Education		
Education Programme	5032 Students	Core Villages
Physical Education Programme	2106 Students (1002 Boys, 1104 Girls)	12 Schools in Core Villages
Reading Promotion	95 Students	3 school in core village
Students participated for district/stated level sports competition	24	All core village
Khel Utsav, Sports Event (10 Schools)	250 Participants (133 Girls and 117 Boys)	Core Villages
Under WASH Activity 1 Toilet Renovation and 1 Toilet Construction at Primary School	1 Toilet Renovation at Government P.S Pousri and 1 Toilet Construction at Government P.S Devrani	Core Villages
Sessions on Personal Hygiene	30 (547 students participated)	All core village
Session on Water Use Efficiency	4 (387 students participated)	All core village
Health		
MCH Program	100%	100% ANC/PNC mother have taken Iron Folic tablet and have registered within 1st trimester of their pregnancy. Institutional deliveries is up to 99%. Family planning counselling has been done among the eligible couple, where 16076 eligible couple used temporary family planning method and 127 have done Tubectomy and 6 have done vasectomy. Total 2069 Health Awareness program has been conducted on exclusive

		breast feeding and benefit of breast feeding where 100% of early and exclusive breast feeding has been done in our area.
NCD Program	525 health awareness program	Organized health marker days (World No tobacco day, world cancer day, world Heart day, World diabetes day, world Hypertension day) to sensitize the community as well as school children. 312 screening camp has been organized to identify the high risk individuals and 382 screening and awareness camp has been organized among the community on Cancer (cervical, breast and oral) with the support of BALCO cancer care hospital, Raipur.
Atmiyata Program	402 awareness program	Awareness programs has been conducted in the community to sensitize about the different social issues (domestic violence, unemployment etc) through Audio visual aids, in which 4880 community members took part.
APEKSHA and MHM Program	532 health awareness sessions	6236 adolescent girls have been provided absorbent and 1783 women have been provided absorbent. 10 Sanitary vending machines and 10 incinerators have been provided to schools as well as PHC.
NSF survey	382 awareness session have been conducted by sakhi in community level	358 first trimester pregnant ladies have been screened through baseline survey. The tobacco users have been followed up every month by

		sakhis
Malnutrition	1626 events have been conducted	Events have been conducted on early breastfeeding, immunization, complementary feeding, growth and development of child and importance of nutrition at 41 AWCs where 2317 participants took part. Developed Nutritional Garden under Ma Ganga model for the AWC children.
Community Clinic and Telemedicine	232 patients treated	Patient health cards has been developed for verification of case history of patients and initiating referrals. Health promotion and awareness activities are conducted to enhance behavior change communication and knowledge regarding risk factors. Telemedicine program started with health expert, Apollo hospital, Chennai.
Health and Safety	14 safety awareness programs has been conducted	Safety awareness programs has been conducted on domestic safety (fire, gas, electricity, medicine road, personal safety) by our safety ambassador (health sakhis). Specifically they have promoted for wearing helmet and taking safety measures while using gas or electricity.
Water Resource Management, Drinking Water& Rural Infrastructure Development		
Awareness session on drinking water	13	Core Villages
Total Participants in awareness session	243	Core Villages
RRWHS Constructed	100	Core Villages
RRWHS in the name of women	62	Core Villages
Potential capacity of HH level RRWHS	172.79 m3	Core Villages
Doha/ponds revived	7	Core Villages

No. of check dams constructed/revived	3	Core Villages
Potential capacity of water structures created through construction	214229 m3	Core Villages
Skill Development		
Training Batch Completed	22 Batches	
Total No. of Trainee Enrolled	578	
Trainee Trained	414	
Trainee Placed	291	
Total number of safety session	22	
Total candidate attended safety session	414	
Total Awareness session (Tobacco, use sanitary napkins, Menstrual Cycle,jal yatra,Health awareness,)	22	
Financial Literacy session	22 Session (1 sesion in a Batch)	Financial literacy session conducted by SBI at SEDI,Bhatapara.
Career Guidance program	414	
Different programmed & activities conducted like (Kargil Vijay Diwas, Republic Day, Women's Day, International Earth Day, World Safety Day For Safety And Health, World Environment Day, International Yoga Day, World Youth Day)	All enrolled candidates participated during the activity & celebration	Day wise programmed conducted
Organized Raipur Chapter Alumni Meet by SEDI Bhatapara.	Approx. 150 candidates participated	
Organized guest lecture in virtual class from different SEDI locations for domains, Electrical, Retail, Mason, Beautician and soft skill, welder & EDP	Each batch	Through online internal and External Guest
Innovated Virtual E- Pamphlet, and online Registration form Google Form for mobilization, Physical mobilization ,Door to door, Road show	Got 755 Inquiry from mobilization activity	
Online assessment	1504	4 Assessment per batch
Parents meeting Participation	494	Each batch

Financial Statement

AMBUJA CEMENT FOUNDATION – Bhatapara		
EXPENSES DETAIL FROM 01-04-2023 to 31.03.2024		
S.NO	ACTIVITIES	ADANI SPEND
1	EDUCATION DEVELOPMENT	2401045
2	WATER RESOURCE MANAGEMENT	9656847
3	HEALTH DEVELOPMENT	5012090
4	WOMEN ENPOWERMENT	2093481
5	INFRASTRUCTURE	21612916
6	AGRO BASED ACTIVITIES	5078547
7	SKILL TRAINING	7470463
8	Community Development & Welfare Expenses	1493996
9	ESTABLISHMENT	2218902
	TOTAL=	57038287

Activity Photographs

Agriculture



SRI Plot of Paddy



Soil Testing Kit



Goat Shed



Goat Manure Production



Farmers Training Kharif



FPO Farmers Training



Farmer Producer Company Promoted



Annual General Meeting of FPO

Women Empowerment Programme



SHG Credit Linkages



IGA Bamboo Making



Group IGA



Turmeric IGA



SHG Training

Education



Hand Wash Session



Reading Session



Sports Events conducted at Village Government M.S School Mopar (8th& 9th Feb 2024)

Health and Sanitation



Specialty Camp



No Tobacco Campaign



Nutrition Sessions



Yoga Sessions with Adolescent Girls



MHM Session



Awareness Session

Water&Rural Infrastructure Development



Magarway Pond



Pachri Construction



RRWHS Constructed



Water Awareness Session

Skill Development Programme



Practical Training



Guest Visits at SEDI

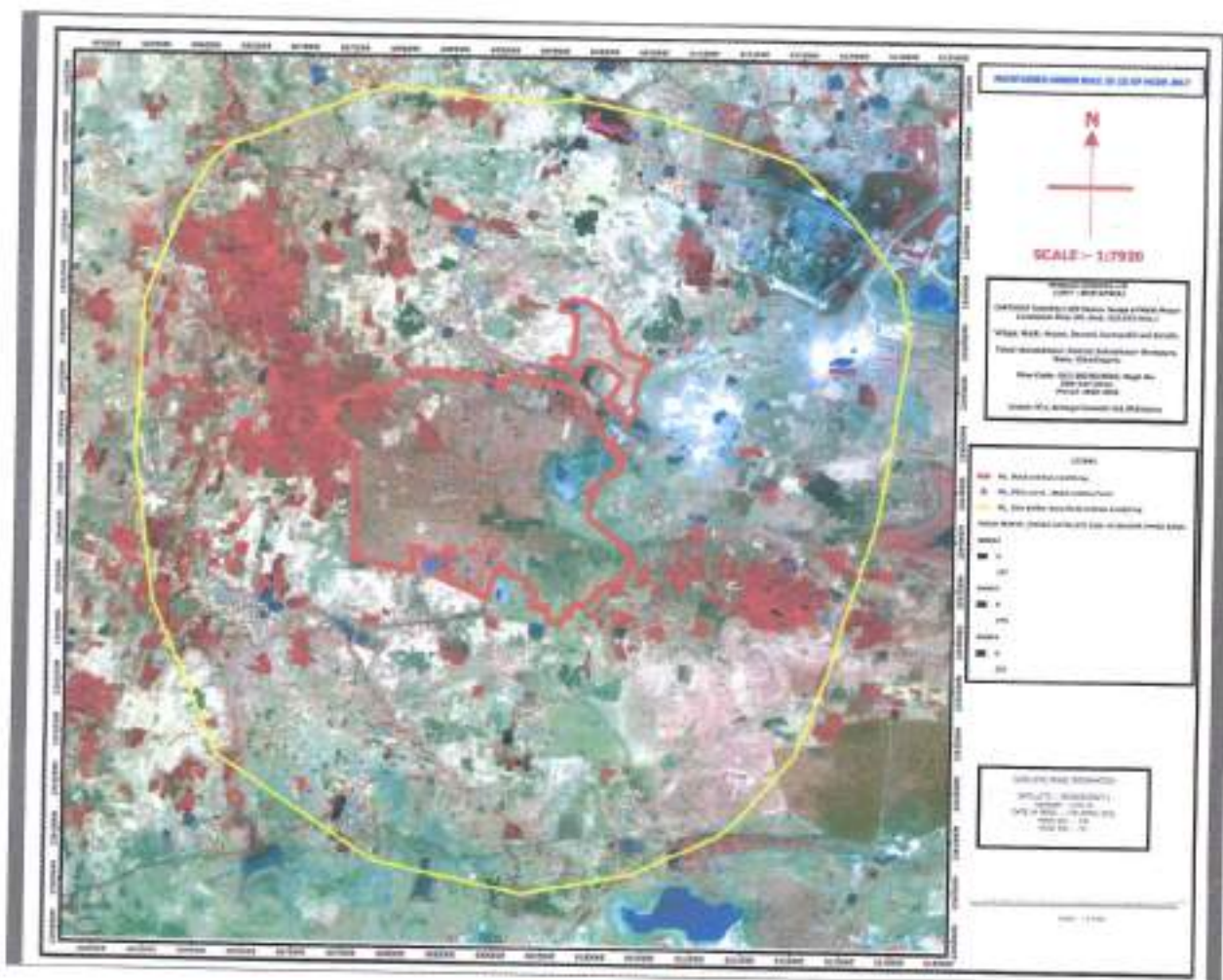


Alumni Chapter Inauguration at Raipur Chhattishgarh



Alumni Meet

Annexure 14





Ultimate
ENVIROLYTICAL SOLUTIONS

HDD-272, PHASE III- NEAR JP CHOWK,

RING ROAD NO - 2, KAPUR NAGAR, RAIPUR, C.G. - 492099

PH - 0771 - 4027777 /email - ultimatenviro@gmail.com

Name & Address of The Customer		MONTH OF SAMPLING	OCTOBER-2023 TO MARCH-2024
TO, AMBUJA CEMENT LIMITED (UNIT: BHATAPARA) P.O. Rawan, Tehsil: Baloda Bazar, Dist.: Baloda Bazar-Bhatapara-493331		TYPES OF REPORT	HALF YEARLY MONTHLY AVERAGE REPORT
SAMPLE DETAILS			
MONITORING FOR	NOISE LEVEL MONITORING		
CUSTOMER REF. NO. & DATE	2800956665/NE08, Date 10/06/2023		
SAMPLING LOCATION	BUFFER ZONE (OUTSIDE VILLAGE)		
SAMPLE COLLECTED BY	LABORATORY CHEMIST		
SAMPLING PROCEDURE	IS 9889:1981:RA 2001		

TEST REPORT					
LOCATION	UNIT	RESULT		LIMIT (RESIDENTIAL ZONE)	
		DAY TIME	NIGHT TIME	DAY TIME	NIGHT TIME
Residential Area				55	45
DEVIRANT VILLAGE	dB(A)	52.1	41.2		
KARMANDI VILLAGE	dB(A)	50.2	43.0		
MOPAR VILLAGE	dB(A)	52.0	42.3		
MALDI VILLAGE	dB(A)	50.5	40.9		
PARSADI VILLAGE	dB(A)	49.8	39.4		
MUDHIPAR VILLAGE	dB(A)	53.1	40.3		
KHAIRATAL VILLAGE	dB(A)	51.0	42.1		
BHADRAPALI VILLAGE	dB(A)	49.6	42.2		
ARJUNI VILLAGE	dB(A)	52.9	43.5		
RAWAN VILLAGE	dB(A)	51.4	40.2		
PAUSARI VILLAGE	dB(A)	53.0	43.1		
BHARSELI VILLAGE	dB(A)	50.6	42.4		

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- > The report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- > This is for information as the party has asked for above test(s) only.

 REVIEWED BY	 For ULTIMATE ENVIROLYTICAL SOLUTIONS	 AUTHORIZED SIGNATORY
------------------------	---	---------------------------------

-----End of the test report-----



Ultimate
ENVIROLYTICAL SOLUTIONS

HDD-272, PHASE III- NEAR JP CHOWK,
RING ROAD NO - 2, KABIR NAGAR, RAIPUR, C.G. - 492099
PH - 0771 - 4027777 : email - ultimatenviro@gmail.com

Name & Address of The Customer

TO,
AMBUJA CEMENT LIMITED
(UNIT: BHATAPARA)
P.O. Rawan, Tehsil: Baloda Bazar,
Dist: Baloda Bazar-Bhatapara-
493331

MONTH OF SAMPLING

OCTOBER-2023 to MARCH-2024

TYPES OF REPORT

HALF YEARLY MONTHLY AVERAGE REPORT

SAMPLE DETAILS

MONITORING FOR	NOISE LEVEL MONITORING
CUSTOMER REF. NO. & DATE	2800956665/NE08, Date 10/06/2023
SAMPLING LOCATION	MINES (CORE ZONE)
SAMPLE COLLECTED BY	LABORATORY CHEMIST
SAMPLING PROCEDURE	IS 9989:1981:RA 2001

TEST REPORT

LOCATION	UNIT	RESULT		LIMIT (INDUSTRIAL ZONE)	
		DAY TIME	NIGHT TIME	DAY TIME	NIGHT TIME
Industrial Area				75	70
MALDI MINES OFFICE	dB(A)	67.2	59.8		
RAWAN MINES NORTH BLOCK FIELD OFFICE	dB(A)	69.0	59.3		
RAWAN MINES SOUTH BLOCK FIELD OFFICE	dB(A)	70.8	52.9		
MALDI MINES CRUSHER AREA	dB(A)	71.0	62.7		

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- > The report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- > This is for information as the party has asked for above test(s) only.

REVIEWED BY



For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-----End of the test report-----

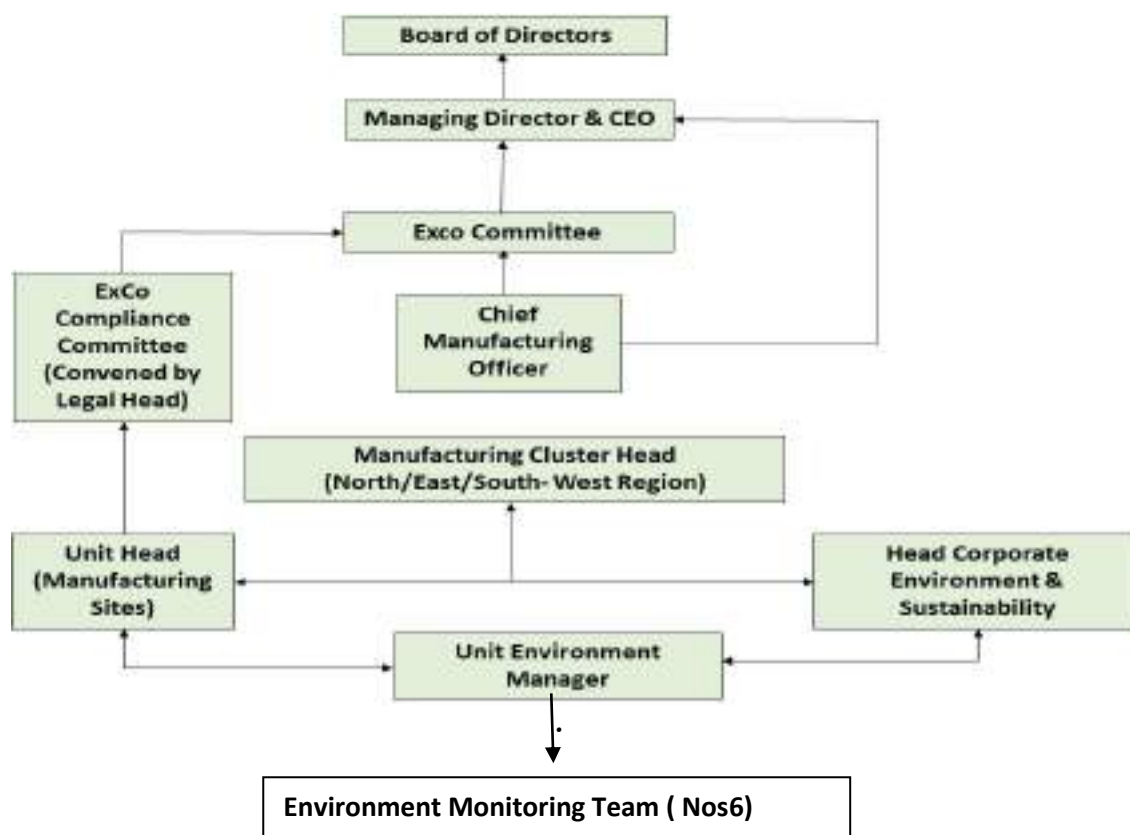
Annexure - 16

ENVIRONMENTAL MANAGEMENT CELL (EMC)

In order to maintain the environmental quality within the standards, regular monitoring of various environmental components is necessary. M/s.Ambuja Cements Ltd. Is maintaining/ will maintain a full-fledged Environmental Management Cell (EMC) for environmental monitoring and management. The EMC team is responsible for pollution monitoring aspects and implementation of control measures in the plant .A group of qualified and efficient engineers with technicians has been deputed for maintenance, up keeping and monitoring of the pollution control equipment, to keep them in working at the best of their efficiencies.

Structure of EMC

Structure of Environment Management Cell at M/s. Ambuja Cements Ltd.



Structure of EMC at M/s. Ambuja Cements Ltd.

Responsibilities of EMC

The EMC looks after and implement the various functions to ensure that environmental status of the area remains within the statutory standard of MOEFCC and SPCB. The responsibilities of the EMC include the following:

- ⌘ Procurement and commissioning of Pollution Control/Monitoring Equipment.
- ⌘ Environmental monitoring of the core and buffer zone and evaluation of results. Keeping of records to track the surrounding environment quality status.
- ⌘ Timely Calibration of Pollution Control Equipment and facilities.
- ⌘ Specification and regulation of maintenance schedules for Pollution Control Equipment.
- ⌘ Ensuring that prescribed standards are maintained.
- ⌘ Implementation of the mitigation measures as suggested in EIA/EMP Report.
- ⌘ Ensuring greenbelt development/plantation & its maintenance.
- ⌘ Compliance with guidelines and statutory requirements.
- ⌘ Coordination with statutory bodies, functional groups of the unit, Corporate Project / Environment & Engineering department etc.
- ⌘ Organizing meetings of the Environmental Management Committee.
- ⌘ Interaction with engineering & operation team for implementation of any modification programmes intended to improve the availability / efficiency of pollution control devices / systems.
- ⌘ Carry out proactive environmental studies and observe all precautions necessary to avert disasters and emergencies in the mining observations as well as nearby areas.
- ⌘ Regular environmental review and performance appraisal (Internal) and organizing Environmental / Energy and Water Audits by independent agencies/ 3rd party agencies.
- ⌘ Coordination with the vendors dealing in waste supplies and disposal.
- ⌘ Ensuring that the waste handling and disposal is carried out as per prescribed conditions.
- ⌘ Conducting regular training programmes on various environmental requirements especially sustainable development, climate change, environmental monitoring etc.
- ⌘ Reporting of compliances and non-compliances (if any) to management and other stakeholders.

Annexure 17

Environmental Expenditure incurred for the Environmental Protection for Maldi Mopar Mine for the period (October 2023 - March 2024)

Sr. No	Particulars	Cost (In Lacs.)
1	Water Sprinkling on Haul road- 28 KL Water Tanker	22.05
2	Bag filter Installation	1.00
3	Dust Suppression and Sprinkler System on Limestone hopper and Conveyor	25.00
4	Sewerage Treatment Plant (STP) Cost	1.11
5	Effluent Treatment Plant (ETP) Cost	1.11
6	Rain water Harvesting Structures with Garland Drains -	6.25
7	Green Belt Development	12.50
8	Environmental Monitoring	12.20
Total		81.20