

COMPLIANCE REPORT TO STAGE-I CONDITIONS

Proposal No: FP/KA/MIN/24548/2017

Name of the Proposal: Diversion of 32.56 hectare (revised from 33.80 hectare) of forest land for iron ore mining (erstwhile 'C' category ML No. 2621 of M/s. Rama Rao Paol) allocated through auction sale to M/s. JSW Steel Ltd., Toranagallu in Ramanamalai Block Reserve Forest, Sandur North Range, Ballari district.

Sl. No	Conditions	Compliances
1.	Legal status of the diverted forest land shall remain unchanged	The legal status of the forestland will be unchanged and continues as a forestland even after the diversion. An undertaking is attached as Annexure-I
2.	Since the user agency has not applied for the use of existing road used by M/s. Rama Rao Paol, which was actually diverted in favour of Zeenath Transport Company. State Government shall submit the relevant documents along with DGPS co-ordinates and alignment of the 'existing road'. The user agency may use the existing road by obtaining NOC from the Zeenath Transport Company for usage of road diverted in its favour and submitting the NOC prior to final approval.	We hereby undertake to obtain the NOC from M/s. Zeenath Transport Company before using the existing road and before the final approval. Undertaking attached in Annexure-II .
3.	From the analysis through DSS, it is observed that part of road, which is informed to be diverted in favour of Zeenath Transport Company, is passing through the proposed mining lease area of M/s. JSW Steel Ltd. It may be clarified that the portion of road which is passing through lease area of M/s. JSW Steel Ltd. is already diverted under Forest (Conservation) Act, 1980 in favour of Zeenath Transport company or not. If the portion of the road is already diverted than the same needs to be deducted from the proposed lease area or a NOC shall be provided by the Zeenath Transport Company to avoid twice diversion of same area in favour of two different project proponents.	We hereby undertake to obtain the NOC from M/s. Zeenath Transport Company to use the portion of road, which is passing through our lease area (if the portion of the road is diverted in favour of M/s. Zeenath Transport Company.) Undertaking attached in Annexure-III .
4.	Compensatory afforestation programme shall be taken-up in consultation with State Forest Department. For compensatory afforestation, preference will be given to native plant species.	Compensatory afforestation programme will be taken-up in consultation with State Forest Department wherein preference will be given to native plant species. As instructed, Compensatory Afforestation

	<p>Compensatory afforestation will be raised over 33.8 ha of non-forest land identified by the state government and at least 1000 plants per hectare (33800 plants of native tree species) will be planted. The CA cost may be revised accordingly, if required, and CA cost shall be deposited in the Compensatory afforestation Fund of Karnataka State managed by Adhoc CAPMPA.</p>	<p>charges for the entire 33.80 ha. amounting to Rs. 1,01,40,000/- has been deposited in CAMPA account. The details of the payment is enclosed as Annexure-IV.</p> <p>We have identified non-forest (Patta) land over an extent of 33.8 ha. The same has been registered in favour of Forest Dept. The details of the same are as follows:</p> <table border="1"> <thead> <tr> <th>Sl.</th> <th>Sy. No.</th> <th>Extent (Ha)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>39, 139, 142/1, 143 of Halbhavi Village, Raichur District</td> <td>32.62</td> </tr> <tr> <td>2</td> <td>1/3 (part) of Tumati Village, Ballari District</td> <td>1.18</td> </tr> <tr> <td colspan="2">Total</td> <td>33.80</td> </tr> </tbody> </table> <p>The maps of the same are enclosed as Annexure-V.</p>	Sl.	Sy. No.	Extent (Ha)	1	39, 139, 142/1, 143 of Halbhavi Village, Raichur District	32.62	2	1/3 (part) of Tumati Village, Ballari District	1.18	Total		33.80
Sl.	Sy. No.	Extent (Ha)												
1	39, 139, 142/1, 143 of Halbhavi Village, Raichur District	32.62												
2	1/3 (part) of Tumati Village, Ballari District	1.18												
Total		33.80												
5.	<p>25% of the Cost of CA will be deposited in addition to the CA cost for soil and moisture conservation works at CA site.</p>	<p>As instructed, 25 percent of total cost of the CA scheme as additional cost for Soil & Moisture Conservation activities at CA Site amounting to Rs. 25, 35,000 /- have been deposited in CAMPA account as per the following. The details of the payment are enclosed as Annexure-IV.</p>												
6.	<p>Since, the proposed area is prone to soil erosion because of high slope & poor vegetation. Hence, the user agency shall undertake adequate soil & moisture conservation works such as check dam, gully checks, retaining wall etc. whether inside or outside the lease area, in consultation with the forest department before starting mining works preferably within three years.</p>	<p>A comprehensive Reclamation and Rehabilitation (R & R) Plan prepared by the Indian Council for Forest Research & Education (ICFRE) that addresses soil & moisture conservation (SMC) works such as check dam, gully checks, retaining wall is already under implementation (summary attached as Annexure-VI). This will be subsequently inspected and approved by the Central Empowered Committee (CEC) before the commencement of mine. In addition to this, an approval (Attached as Annexure-VII) of SMC report by the Central Research Institute for Dryland Agriculture (CRIDA), duly approved by the PCCF(Wildlife) is attached in Annexure-VIII. The funds earmarked towards the same, will be deposited in Ad-hoc CAMPA Account of the Forest Department for undertaking the necessary SMC works. An undertaking to this effect is enclosed as Annexure-IX.</p>												
7.	<p>Presence of wild life has been reported in the area. State Government shall prepare a wild life management plan for the area and the same shall be implemented by the forest department. The cost of implementation and preparation of plan shall be borne by the user agency. The copy of approved wild life management plan by Chief wild life warden shall be submitted to MoEF&CC and the cost of the plan should be deposited in CAMPA fund prior to final approval.</p>	<p>Zoological Survey of India (ZSI, MoEFCC) was engaged in preparation of Conservation Plan for Wildlife. The Plan along with estimated Cost as approved by the PCCF-Wildlife & Chief Wildlife Warden is attached as Annexure-VII. The approval of the same is attached as Annexure-X. The approved cost will be remitted to Adhoc CAMPA through e-portal towards its implementation once the demand note is received. An undertaking to this effect is enclosed as Annexure-XI.</p>												
8.	<p>It is reported that proposal for diversion of 15.981 ha forestland for construction of pipe conveyer by the user agency is pending at state</p>	<p>The proposal for Approach Road, Downhill Pipe Conveyor and allied activities proposed for our lease is currently under consideration by MoEF&CC, GoI, New</p>												

	<p>level. State Government may be advised that, so far as technically possible, the alignment of pipe conveyer shall primarily follow the area of road which is already under non-forestry use so that there is minimum demand for change of land use of fresh forest area for construction of pipe conveyer.</p>	<p>Delhi. The alignment of the downhill pipe conveyer has been proposed in a manner that it primarily follows the area proposed for approach road. It is observed that if the alignment of Downhill Pipe Conveyer is kept to follow the road under non-forestry use, the forest area to be diverted for downhill pipe conveyer corridor exceeds the current requirement for forestland diversion for the same. The corridor of Downhill Pipe Conveyer was scientifically planned that it follows the proposed approach road alignment and the same does not require any additional service road for installation of structures and future maintenance further reducing the forestland diversion.</p>
9.	<p>The user agency will start production only after depositing all NPV and other compensatory levies imposed for FC clearance and obtaining final approval under FC Act even though the existing EC of 0.5 MTPA has been transferred in favor of M/s. JSW Steel Ltd.</p>	<p>We have deposited all NPV and other compensatory levies imposed for FC clearance and obtaining final approval under Forest (Conservation) Act, 1980.</p> <ol style="list-style-type: none"> 1. Total Amount inclusive of NPV & all other costs: Rs. 4,08,37,900 /- 2. Date of Challan generated: 07.09.2018 3. Application Number: 5824548459 4. Name of the Bank: Corporation Bank 5. Beneficiary Customer: Karnataka CAMPA 6. Account No.: 150735824548459 7. IFSC Code: CORP0000371 8. UTR No.: VIJBH18254059944 9. Transaction Date: 11.09.2018 <p>The details of the payment are enclosed as Annexure-IV.</p>
10.	<p>State Government will ensure complete compliance of Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 in accordance with Ministry's guidelines dated 03.08.2009 read with 05.07.2013;</p>	<p>The process of ensuring the compliance of Scheduled Tribe & other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 in accordance with Ministry's guidelines dated 03.08.2009 read with 05.07.2013 is under progress. The process of Gram Sabha, which was put on hold due to the stay Notice registered by Hon'ble High Court of Karnataka, Dharwad Bench under the W.P. (C) No. 106074/2018, has been vacated. We hereby undertake to submit the Form-II once; we receive it from Office of Deputy Commissioner. An Undertaking to submit the Form-II is enclosed as Annexure-XII.</p>
11.	<p>Fencing, protection and regeneration of the safety zone area (7.5 meters strip shall be kept within the mining lease boundary and flora of the safety zone shall be part of the total area of mining lease per the Ministry's guidelines dated 27.05.2015), shall be done at the project cost within three year and maintained thereafter as per approved working plan of the State Govt. Besides this, afforestation on degraded forest land to be selected elsewhere measuring one &</p>	<p>The safety zone strip of 7.5 meter has been kept within the mining lease boundary and it is the part of the total area of the mining lease as per the Ministry's guidelines. We hereby undertake that the fencing, protection and regeneration of the safety zone will be done at the project cost within three years and it will be maintained as per the approved working plan of the State Govt. An undertaking to this effect is enclosed as Annexure-XIII. We have transferred the cost for afforestation on degraded forestland measuring one</p>

	a half times the area under safety zone shall also be done at the project cost;	and half times the safety zone. The payment details are enclosed as Annexure-IV .
12.	User agency either himself or through the State Forest Department shall undertake gap planting and soil & moisture conservation activities to restock and rejuvenate the degraded open forests (having crown density less than 0.4), if any, located in the area within 100 meters from outer perimeter of the mining lease;	An undertaking expressing willingness to take up gap planting and soil & moisture conservation activities to restock and rejuvenate the degraded open forests (having crown density less than 0.4), if any, located in the area within 100 meters from outer perimeter of the mining lease, through the Forest Department, is enclosed as Annexure-XIV .
13.	The User Agency shall transfer the cost of raising and maintaining the Compensatory Afforestation at the current wage rate in consultation with State Forest Department in the account of Ad-hoc CAMPA of the concerned State through online portal. The scheme may include appropriate provision for anticipated cost increase for works scheduled for subsequent years;	We have transferred the cost of raising and maintaining the compensatory afforestation at the current wage rate consultation with State Forest Department in the account of Ad-hoc CAMPA of the concerned State through online portal. The details of the payment are enclosed as Annexure-IV .
14.	The User Agency shall transfer online, the Net Present Value (NPV) of the forest land being diverted under this proposal, as per the order of the Hon'ble Supreme Court of India dated 28.03.2008, 24.04.2008 and 09.05.2008 in Writ Petition (Civil) No. 202/1995 and the guidelines issued by this Ministry vide its letter No. 5-3/2007-FC dated 05.02.2009. The requisite funds shall be transferred through online portal into Ad-hoc CAMPA account of the State Concerned;	We have transferred the Net Present Value (NPV) of the forest land being diverted under this proposal, as per the order of the Hon'ble Supreme Court of India dated 28.03.2008, 24.04.2008 and 09.05.2008 in Writ Petition (Civil) No. 202/1995 and the guidelines issued by this Ministry vide its letter No. 5-3/2007-FC dated 05.02.2009. The requisite funds have been transferred through online portal into Ad-hoc CAMPA account of the State Concerned. The details of the payment are enclosed as Annexure-IV .
15.	The User Agency shall pay the additional amount of NPV, if so determined, as per the final decision of the Hon'ble Supreme Court of India;	We hereby undertake to pay the additional amount of NPV, if so determined, as per the final decision of the Hon'ble Supreme Court of India. An Undertaking to this effect enclosed as Annexure-XV .
16.	The user agency should ensure that the compensatory levies (CA cost, NPV, etc.) are deposited through challan generated online on web portal and deposited in appropriate bank online only. Amount deposited through other mode will not be accepted as compliance of the Stage- I clearance;	We have transferred the compensatory levies (CA Cost, NPV, etc.) through challan generated online on web portal by depositing in appropriate bank only. The details of the payment are enclosed as Annexure-IV .
17.	The forest clearance will be for a period co-terminus with the lease period specified in the lease agreement. The State Government will submit the lease agreement document specified in the lease agreement;	Forest clearance agreement will be signed for a period co-terminus with the lease period specified in the lease agreement. The lease agreement document can be submitted by the State Government in Annexure-XVI .
18.	The State Govt. may note that this Ministry will not be liable to pay any compensation or refund compensatory levies deposited in Adhoc CAMPA fund to the erstwhile lease holder in category "C" mine;	To be noted by the State Govt.

<p>19. The user agency shall implement the following activities under the supervision of the State Forest Department:</p> <ul style="list-style-type: none"> a. Mitigative measures to minimize soil erosion and choking of stream shall be initiated to be implemented within a period of three years with effect from the date of issue of Stage-II clearance in accordance with the approved Plan in consultation with the State Forest Department. b. Planting of adequate drought hardy plant species and sowing of seeds, in the appropriate area within the mining lease to arrest soil erosion in accordance with the approved scheme; c. Construction of check dams, retention /toe walls to arrest sliding down of the excavated material along the contour in accordance with the approved scheme; d. Stabilize the overburden dumps by appropriate grading/benching, in accordance with the approved scheme, so as to ensure that angles of repose at any given place is less than 28° ; and e. No damage shall be caused to the topsoil and the user agency will follow the top soil management plan. 	<p>We will implement following activities under the supervision of the State Forest Department:</p> <ul style="list-style-type: none"> a. Mitigative measures to minimize soil erosion and choking of stream will be initiated to be implemented within a period of three years with effect from the date of issue of Stage-II Clearance as specified. b. Planting of adequate drought hardy plant species and sowing of seeds, in the appropriate area within the mining lease to arrest soil erosion will be implemented as per the approved scheme. c. Construction of check dams, retention /toe walls to arrest sliding down of the excavated material along the contour will be undertaken in accordance with the approved scheme d. Stabilize the overburden dumps by appropriate grading/benching will be taken up in accordance with the approved scheme. e. Mine was operational earlier, prior to its allocation to M/s. JSW Steel Ltd. Hence, top soil conservation measures will be implemented in un-broken / virgin area. <p>An undertaking to this effect is enclosed as Annexure-XVII.</p>
<p>20. The User Agency shall undertake mining in a phased manner after taking due care for Reclamation of the mined over area. The concurrent reclamation plan as per the approved mining plan shall be executed by the User Agency from the very first year, and an annual report on implementation thereof shall be submitted to the Nodal Officer, Forest (Conservation) Act, 1980 in the concerned State Government and the concerned Regional Office of the Ministry. If it is found from the annual report that the activities indicated in the concurrent reclamation plan are not being executed by the User Agency, the Nodal Officer or the Addl. Pr. Chief Conservator of Forests (Central) may direct that the mining activities shall remain suspended till such time, such</p>	<p>We will undertake mining in phased manner as per the IBM approved Mining Plan. We also will submit the reports to the concerned offices at regular intervals. Comprehensive Reclamation & Rehabilitation (R & R) Plan prepared by the ICFRE and approved by the CEC is under implementation. The Monitoring Committee (MONCOM) constituted by the Hon'ble Supreme court is monitoring the same and its satisfactory completion is necessary prior to the commencement of mining operations. An undertaking to this effect is enclosed as Annexure-XVIII.</p>

	reclamation activities area satisfactorily executed;	
21.	The user agency shall implement the R&R Plan as per the R&R Policy of State Government in consonance with National R&R Policy, Government of India before the commencement of the project work. The said R&R Plan will be monitored by the State Government/concern Regional Office of MoEF &CC along with indicators for monitoring and expected observable milestones;	Comprehensive Reclamation & Rehabilitation (R & R) Plan prepared by the ICFRE and approved by the CEC is under implementation. The same is being monitored by the Monitoring Committee (MONCOM) constituted by the Hon'ble Supreme court and its satisfactory completion is necessary prior to the commencement of mining operations. We note that said R&R Plan will be monitored by the State Government/concerned Regional Office of MoEF &CC along with indicators for monitoring and expected observable milestones. An undertaking to this effect is enclosed as Annexure-XIX .
22.	The user agency in consultation with the State Government shall create and maintain alternate habitat/home for the avifauna, whose nesting trees are to be cleared in this project. Birds' nests artificially made out of eco-friendly material shall be used in the area, including forest area and human settlements, adjoining the forest area being diverted for the project.	We hereby agree to abide by this condition by providing nests made up of eco-friendly material, for birds whose nests are to be cleared, as per the estimation by the Forest Department. An undertaking in this effect has been submitted and enclosed as Annexure-XX .
23.	The boundary of the diverted forest land, mining lease and safety zone, as applicable, shall be demarcated on ground at the project cost, by erecting four feet high reinforced cement concrete pillars, each inscribed with its serial number, distance from pillar to pillar and GPS co-ordinates;	The process of demarcation of the boundary of the diverted forestland and safety zone on ground by erecting four feet high reinforced cement concrete pillars, each inscribed with its serial number, distance from pillar to pillar and GPS Co-ordinates is under progress. We hereby undertake to complete the same before final approval. The progress and an undertaking to this effect is enclosed as Annexure-XXI .
24.	The User Agency shall obtain the Environment Clearance as per the provisions of the Environmental (Protection) Act, 1986, if required;	Environmental Clearance has been transferred in favour of M/s. JSW Steel Ltd. as per the provisions of the Environmental (Protection) Act, 1986. The Copy is attached as Annexure-XXII .
25.	Any tree felling shall be done only when it is unavoidable and that too under strict supervision of the State Forest Department;	We hereby agree to abide by this condition. Undertaking enclosed as Annexure-XXIII .
26.	The layout plan of the proposal shall not be changed without the prior approval of the Central Government;	We hereby agree to abide by this condition. Undertaking enclosed as Annexure-XXIV .
27.	No labor camp shall be established on the forest land;	We hereby agree to abide by this condition. Undertaking enclosed as Annexure-XXV .
28.	The User Agency shall provide fuel ls preferably alternate fuels to the labors and the staff working at the site so as to avoid any damage and pressure on the nearby forest areas;	We hereby agree to abide by this and follow the directions, strictly. Undertaking enclosed as Annexure-XXVI .
29.	The User Agency shall prepare a list of existing village tanks and other water bodies with GPS co-ordinate located within five km. from the mine lease boundary. This list is to be duly verified by the concerned Divisional Forest Officer. The User Agency shall regularly undertake desilting of	We agree to identify existing village tanks within 5 km radius from the mine. We also agree to prepare detailed plan for desilting of identified ponds and water bodies in consultation with forest department and submit it before Stage-II approval. An undertaking to this effect is enclosed as Annexure-XXVII .



	these village tanks and other water bodies so as to mitigate the impact of siltation of such tanks/water bodies. A detailed plan for desilting of identified ponds and water bodies to be prepared in consultation with forest department and shall be submitted to MoEF&CC before Stage-II approval;	
30.	The forest land shall not be used for any purpose other than that specified in the proposal and the forest land proposed to be diverted shall under no circumstances be transferred to any other agency, department or person without prior approval of the Central Government;	We agree to use the forestland as specified in the proposal and under no circumstances, the land be transferred to any other user agency, department or person without prior approval of the Central Government. An undertaking to this effect is enclosed. Annexure-XXVIII.
31.	The User Agency shall submit the annual self - compliance report in respect of the above stated conditions to the State Government, concerned Regional Office and to this Ministry by the end of March every year;	We hereby agree to submit annual self - compliance report in respect of the above stated conditions to the State Government, concerned Regional Office and to this Ministry by the end of March every year. An undertaking to this effect is enclosed. Annexure-XXIX.
32.	Any other condition that the concerned Regional Office of this Ministry may stipulate, from time to time, in the interest of conservation, protection and development of forests & wildlife; and	We hereby agree to abide by any other condition that the concerned Regional Office of this Ministry may stipulate, from time to time, in the interest of conservation, protection and development of forests & wildlife. An undertaking to this effect is enclosed. Annexure-XXX.
33.	The user agency shall comply all the provisions of the all Acts, Rules, Regulations, Guidelines, Hon'ble Court Order (s) and National Green Tribunal Order(s) pertaining to this project, if any, for the time being in force, as applicable to the project;	We agree to comply all the provisions of the all Acts, Rules, Regulations, Guidelines, Hon'ble Court Order (s) and National Green Tribunal Order(s) pertaining with this project, if any, for the time being in force, as applicable to the project. An undertaking to this effect is enclosed. Annexure-XXXI.

Place: Bellary
Date: 15.11.2018

Authorized Signatory.

JSW STEEL LIMITED
For M/s. JSW Steel Ltd.



JSW Steel Limited

Vijayanagar Works :
P. O. Vidyanagar - 583 275,
Dist. Ballari, Karnataka, India.
CIN. : L27102MH1994PLC152925
Phone : +91 8395 250 120-30
Fax : +91 8395 250 132/142
Website : www.jsw.in

**Annexure- I
Condition No. 1**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F.No. 8- 14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby undertake that the legal status of the diverted forestland will not be changed. It will continue as a forestland even after the diversion.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.

JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai - 400 051

Phone : +91 22 4286 1000
Fax : +91 22 4286 3000





JSW Steel Limited

Vijayanagar Works :

P. O. Vidyanagar - 583 275,
Dist. Ballari, Karnataka, India.

CIN : L27102MH1994PLC152925

Phone : +91 8395 250 120-30

Fax : +91 8395 250 132/142

Website : www.jsw.in

**Annexure- II
Condition No. 2**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8- 14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby undertake to obtain the NOC from M/s. Zeenath Transport Company before using the existing road, which was actually diverted in favour of M/s. Zeenath Transport Company, before the issuance of Final Approval (Stage-II Clearance).

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.

JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai - 400 051

Phone : +91 22 4286 1000

Fax : +91 22 4286 3000



Part of O. P. Jindal Group



JSW Steel Limited

Vijayanagar Works :
P. O. Vidyanagar - 583 275,
Dist. Ballari, Karnataka, India.
CIN. : L27102MH1994PLC152925
Phone : +91 8395 250 120-30
Fax : +91 8395 250 132/142
Website : www.jsw.in

**Annexure- III
Condition No. 3**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8- 14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby undertake to obtain NOC from M/s. Zeenath Transport Company to use the portion of the road, which is passing through our lease area (if the portion of the road is diverted in favour of M/s. Zeenath Transport Company.)

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.
B
JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai - 400 051

Phone : +91 22 4286 1000
Fax : +91 22 4286 3000




JSW Steel Limited

Vijayanagar Works :

 P. O. Vidyannagar - 583 275,
 Dist. Ballari, Karnataka, India.

CIN. : L27102MH1994PLC152925

Phone : +91 8395 250 120-30

Fax : +91 8395 250 132/142

Website : www.jsw.in

Date: 12/09/2018

Letter No.: JSW/Forest/DCF/RAMA/2018-19

 To,
 The Deputy Conservator of Forests,
 Ballari Division,
 Ballari

Dear Sir,

Sub: Payment towards Demand Notice issued for diversion of 32.56 ha (revised from 33.80 ha) of Forest Land for Iron Ore lease (erstwhile 'C' category M.L. No. 2621 of Rama Rao Paol) allocated through auction sale to M/s. JSW steel Ltd., Torangallu in Ramanamalai Block reserve Forest, Sandur North Range, Ballari District in favor of M/s JSW Steel Ltd. Toranagallu, Ballari District - Reg.

Ref.: "Demand Notice" No. M1/MNG/JSW/Rama/M.L.No.2621/2018-19/787 dated 31.08.2018

With respect to the above referred letter, M/s. JSW Steel Ltd., Torangallau has paid an amount of Rs. 4,08,37,940/- (Rupees Four Crore Eight Lakh Thirty-Seven Thousand Nine Hundred and Forty Rupees Only) against application No. 5824548459 vide (RGTS) UTR No. VIJBH18254059944 towards Net Present Value (NPV), Compensatory Afforestation (CA), Afforestation in degraded Forest 1.5 times of Safety Zone and 25% of Raised CA Cost for SMC works for diversion of 32.56 ha (revised from 33.80 ha) of Forest Land for Iron Ore lease (erstwhile 'C' category M.L. No. 2621 of Rama Rao Paol) allocated through auction sale to M/s. JSW steel Ltd., Torangallu in Ramanamalai Block reserve Forest, Sandur North Range, Ballari District in favor of M/s JSW Steel Ltd. Toranagallu, Ballari District

Kindly find enclosed original letter from Vijya Bank confirming the above mention payment to CAMPA Account No. 150735824548459 against the online Challan generated.

Submitted for your kind information and further needful action please.

Thanking You.

For JSW Steel Limited

Authorised Signatory



Encl: Payment Details & online Challan copy



JINDAL Part of O. P. Jindal Group

 Regd. Office : JSW Centre,
 Bandra Kurla Complex,
 Bandra (East), Mumbai - 400 051

Phone : +91 22 4286 1000

Fax : +91 22 4286 3000

	विजया बैंक (भारत सरकार का उपक्रम) VIJAYA BANK (A Govt. of India Undertaking) प्रधान कार्यालय Head Office 41/2, एम जी रोड M G Road बेंगलूर Bangalore – 560 001	शाखा/कार्यालय : तोरणगल्लु Branch/Office : TORANAGALLU ई-मेल Email : vb1395@vijayabank.co.in वेब Web : www.vijayabank.com फोन Phone : 08395-250680 फैक्स Fax : 08395-250680

संदर्भ सं. :TNGI/5/2018

दिनांक Date:11-09-2018

TO

THE OFFICE OF THE

Deputy conservator of forest

Bellary division

Sir/madam,

Sub: Confirmation of RTGS

We hereby confirm you the remittance through RTGS from JSW STEEL LTD account no 139500301000052 with us .the following amounts as per the details given here,

BENIFICIARY A/C NO: 150735824548459

BENIFICIARY CUSTOMER NAME : KARNATAKA CAMPA

UTR NO: VIJBH18254059944

BANK NAME:CORPORATION BANK

TRANSACTION AMOUNT :RS 40837940/-

TRANSACTION DATE:11-09-2018

the request of JSW STEEL LTD, vijaya nagar



AGENCY COPY	
NEFT / RTGS CHALLAN for Ad-HOC CAMPA	
Date : 07-09-2018	
Agency Name.	JSW STEEL LIMITED
Application No.	5824548459
MoEF/SG File No.	8-14/2018-FC
Location.	KARNATAKA
Address.	Vijayanagar Works Bellary
Amount(in Rs)	40837940/-
Amount in Words :Four Crore Eight Lakh Thirty-Seven Thousand Nine Hundred and Forty Rupees Only	
NEFT/RTGS to be made as per following details;	
Beneficiary Name:	KARNATAKA CAMPA
IFSC Code:	CORP0000371
Pay to Account No.	150735824548459 Valid only for this challan amount.
Bank Name & Address:	Corporation Bank Lodhi Complex Branch, Block 11,CGO Complex, Phase I, Lodhi Road, New Delhi -110003
<ul style="list-style-type: none"> This Challan is strictly to be used for making payment to CAMPA by NEFT/RTGS only This challan is valid only for seven days. 	

BANK COPY	
NEFT / RTGS CHALLAN for Ad-HOC CAMPA	
Date : 07-09-2018	
Agency Name.	JSW STEEL LIMITED
Application No.	5824548459
MoEF/SG File No.	8-14/2018-FC
Location.	KARNATAKA
Address:	Vijayanagar Works Bellary
Amount(in Rs)	40837940/-
Amount in Words :Four Crore Eight Lakh Thirty-Seven Thousand Nine Hundred and Forty Rupees Only	
NEFT/RTGS to be made as per following details;	
Beneficiary Name:	KARNATAKA CAMPA
IFSC Code:	CORP0000371
Pay to Account No.	150735824548459 Valid only for this challan amount.
Bank Name & Address:	Corporation Bank Lodhi Complex Branch, Block 11,CGO Complex, Phase I, Lodhi Road, New Delhi -110003
<ul style="list-style-type: none"> This Challan is strictly to be used for making payment to CAMPA by NEFT/RTGS only This challan is valid only for seven days. 	

After making successful payment, User Agencies may send a line of confirmation through
Email: helpdeskampa@corpbank.co.in

No.M1/MNG/JSW/Rama/M.L.No.2621/2018-19

787

Office of the
Deputy Conservator of Forests,
Bellary Division, Bellary.
Dated: 31.08.2018.

Demand Notice

Sub: Diversion of 32.56 hectare [revised from 33.80 hectare] of forest land in for iron ore mining lease [erstwhile 'C' category M.L.No 2621 of M/s. Rama Rao Paol] allocated through auction sale to M/s. JSW Steel Ltd, Toranagallu in Ramanamalai Block Reserved Forest, Sandur North Range, Ballari District – reg.,

- Ref : 1) Letter No. F.No. 8-14/2018-FC dated:27.07.2018 of Government of India, Ministry of Environments, Forest and Climate Change, New Delhi.
2) Letter No. A5(1).MNG.CR.01/2017-18 dated: 16.08.2018 of the Principal Chief Conservator of Forests (Head of Forest Force), Bengaluru.
3) Letter No. A5(3).GFLCR-28/2009-10 dated: 24.05.2018 of the Principal Chief Conservator of Forests (Head of Forest Force), Bengaluru.

With reference to the above subject, the Ministry of Environment Forests and Climate Change, Bengaluru has accorded 'in principle' approval (Stage-I) under Section-2 of Forest (Conservation), Act-1980 for diversion of 32.56 hectare [revised from 33.80 hectare] of forest land in for iron ore mining lease [erstwhile 'C' category M.L.No 2621 of M/s. Rama Rao Paol] allocated through auction sale to M/s. JSW Steel Ltd, Toranagallu in Ramanamalai Block Reserved Forest, Sandur North Range, Ballari district in ref(1) cited above.

The Principal Chief Conservator of Forests (HOFF), Bangalore has directed you to make payments (Net Present Value, CA and other charges) through e-payment module as per the issued Demand notice from this office as per conditions stipulated in the Stage-I approval accorded by the Government of India vide letter dated:27.07.2017 (read as 27-07-2018) for the proposal for diversion of 32.56 hectare [revised from 33.80 hectare] of forest land in for iron ore mining lease [erstwhile 'C' category M.L.No 2621 of M/s. Rama Rao Paol] allocated through auction sale to M/s. JSW Steel Ltd, Toranagallu in Ramanamalai Block Reserved Forest, Sandur North Range, Ballari district vide reference (1) and (2) above.

As per the Principal Chief Conservator of Forests (HOFF), Bangalore order, regarding Compensatory Afforestation charges the revised rates will be Rs.3,00,000/- per hectare as per Common Sanctioned Schedule of Rates (CSSR) in the year 2018-19. As per the above directions, this office has been issued demand notice vide dated : 04.06.2018 in reference (4) cited above.

...2

Annexure-IV

Hence, you are hereby instructed to remit the following charges of amount through RTGS and E-Payment Module of Forest Clearance portal *forestclearance.nic* after duly generating the challen and submit the remittance details to this office.

Sl. No.	Specific activities	Condition number as per Stage-I clearance	Type of forest	Extent	Rate	Amount paid
1	Net Present Value	(xiv)	Eco-Class-III; Tropical dry deciduous Dense Forest;	33.80 hectares	803000.00	2,71,41,400.00
2	Compensatory Afforestation (Stipulation as per GoI)	(iv)	In lieu of area to be broken up afresh (virgin area) - Raising plantation in non-forest land	33.80 hectares	300000.00	1,01,40,000.00
3	25% of Raised CA Cost for SMC works	(v)	Raising of plantation in non-forest land	33.80 X 3,00,000 X 25%		25,35,000.00
4	Afforestation in degraded Forest 1½ time of safety zone	(xi)	Planting in Degraded Forest	2.27 x 1.5=3.405 hectares	300000.00	10,21,500.00
Total						4,08,37,900.00

Further, as per condition No. (vii), (xii), (xix) (a), (b),(c), (d) and (e), the user shall implement the soil and moisture conservation and planting works under the supervision of the State Forest Department. In this regard, this office will give you detailed plan.

And also instructed to submit compliance report to conditions stipulated by the Government of India letter cited at reference (1) above through Range Forest officer, Sandur North and Assistant Conservator of Forests, Ballari.


Deputy Conservator of Forests,
Bellary Division, Bellary.

To,
M/s. JSW Steel Limited,
JSW Mining Office,
Vidhyanagara, Toranagallu

Annexure-V

CA Land Transferred in favor of Forest Dept. for Rama Lease							
SL No.	Sy. No.	Extent		Village	Taluk	District	Remarks
		Acres	Ha.				
1	139	25.43	10.29	Halbhavi	Lingasuguru	Raichur	Registered
2	143	21.65	8.76				
3	142/1	9.58	3.88				
4	39	23.95	9.69				
Total (A)		80.61	32.62				
5	1/3p	2.91	1.18	Tumati	Sandur	Ballari	Registered
Total (B)		2.91	1.18				
Grand Total		83.52	33.80				

ಕರ್ನಾಟಕ ಸರ್ಕಾರ



ಕರ್ನಾಟಕ ಅರಣ್ಯ ಇಲಾಖೆ

ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿಗಳ ಕಚೇರಿ, ರಾಯಚೂರು ಅರಣ್ಯ ವಿಭಾಗ, ರಾಯಚೂರು

ವಿಳಾಸ: ಕೋರ್ಟ್ ರಸ್ತೆ, ರಾಯಚೂರು-584101, ದೂರವಾಣಿ ಸಂಖ್ಯೆ: 08532-230029, ಫ್ಯಾಕ್ಸ್: 08532-230029, ಈ-ಮೇಲ್: def.trcr@gmail.com

ಸಂ: ಎ6/ಸರ್ವೆ/JSW/ಸಿಆರ್-2016-17/2596

ದಿನಾಂಕ: 02-02-2017

✓

JSW Steel Limited,
Vidyanagar works:
P.O. Vidyanagar-583275
Dist: Ballaary.

ಮಾನ್ಯರೇ,

ವಿಷಯ: Request for suitability report for the following identified land to transfer to Forest Department on behalf of JSW Steel Ltd. for raising of Compensatory afforestation-reg,

- ಉಲ್ಲೇಖ: 1. JSW Steel Limited, Vidyanagar works: Dist: Ballaary. ಇವರ ಪತ್ರದ ದಿನಾಂಕ: 25-01-2017.
2. ಸಹಾಯಕ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿಗಳು, ರಾಯಚೂರು ಇವರ ಪತ್ರ ಸಂಖ್ಯೆ: ಸಅಸಂ/ರಾಉವಿ/ಲಿಂ.ವ/ಸಿಆರ್/2016-17ದಿನಾಂಕ:30-01-2017.
3. ವಲಯ ಅರಣ್ಯ ಅಧಿಕಾರಿಗಳು, ಮಾನವಿ ಇವರ ಪತ್ರ ಸಂಖ್ಯೆ: ವಅಅ/ಲಿಂ.ವ/ಸಿಆರ್-2016-17, ದಿನಾಂಕ: 25-01-2016

- - -

ಮೇಲಿನ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಉಲ್ಲೇಖದ (1) ರ ಪ್ರಕಾರ ನೀವು ಲಿಂಗಸುಗೂರು ವಲಯದ ಹಾಲಭಾವಿ ಗ್ರಾಮದಲ್ಲಿ 250.85 ಎಕರೆ (101.52 ಹೇ) ಗಳ ಪಟ್ಟಾ ಭೂಮಿಯನ್ನು ಮತ್ತು ತಿಮ್ಮಾಪೂರು ಗ್ರಾಮ ಹೊ|| ಮಸ್ತಿ ತಾ|| ಲಿಂಗಸುಗೂರು ಜಿ|| ರಾಯಚೂರು ರಲ್ಲಿ 128.57 ಎಕರೆ (52.03 ಹೇ) ನಲ್ಲಿ ಪಟ್ಟಾ ಜಮೀನುಗಳಲ್ಲಿ ಪರಿಹಾರಾತ್ಮಕ ನೆಡುತೋಪು ಬೆಳೆಸಲು ಹಾಗೂ ಸದರಿ ಪಟ್ಟಾ ಭೂಮಿಯನ್ನು ಅರಣ್ಯ ಇಲಾಖೆಗೆ ವರ್ಗಾಯಿಸಲು ಉದ್ದೇಶಿಸಿದ್ದು ಸದರಿ ಸರ್ವೆ ನಂಬರ್‌ಗಳಲ್ಲಿರುವ ಜಮೀನು ಅರಣ್ಯೀಕರಣಕ್ಕೆ ಯೋಗ್ಯವೇ ಎಂಬ ಬಗ್ಗೆ ವರದಿಯನ್ನು ನೀಡಲು ಕೋರಿರುತ್ತೀರಿ.

ಈ ಬಗ್ಗೆ ವಲಯ ಅರಣ್ಯ ಅಧಿಕಾರಿಗಳು ಲಿಂಗಸುಗೂರು ಹಾಗೂ ಸಹಾಯಕ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿಗಳು, ರಾಯಚೂರು ಇವರು ಸ್ಥಳ ಪರಿಶೀಲನೆ ಮಾಡಿ ಕ್ರಮವಾಗಿ ಉಲ್ಲೇಖ (2) ಮತ್ತು (3) ರ ಪತ್ರಗಳ ಪ್ರಕಾರ ತಮ್ಮ ಅಭಿಪ್ರಾಯ ವ್ಯಕ್ತಪಡಿಸಿರುತ್ತಾರೆ.

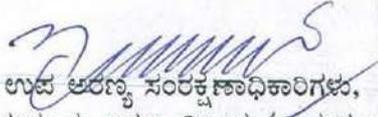
ಹಾಲಭಾವಿ ಗ್ರಾಮಕ್ಕೆ ಸೇರಿದ ಸರ್ವೆ ನಂಬರ್ 39, 107, 121 & 137 ರಿಂದ 143 ಸರ್ವೆನಂಬರ್‌ಗಳ ಒಟ್ಟು ವಿಸ್ತೀರ್ಣ ಪಹಣಿ ಪತ್ರಿಕೆಯ ಪ್ರಕಾರ 250.850 ಎಕರೆ ಇದ್ದು (101.52 ಹೇ) ಸದರಿ ಪ್ರದೇಶವು ಅರಣ್ಯ ಪ್ರದೇಶಕ್ಕೆ ಹೊಂದಿಕೊಂಡಿದ್ದು ಸದರಿ ಪ್ರದೇಶ ಶೇ 15 ರಿಂದ ಶೇ 20 ರಷ್ಟು ಭಾಗಶಃ ಕಲ್ಲು ಬಂಡೆಗಳಿಂದ ಕೂಡಿದ್ದು ಹಾಗೂ ಇನ್ನುಳಿದ

Annexure-V

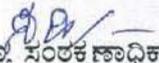
ಪ್ರದೇಶವು ಕುರಚಲು ಸಸ್ಯವರ್ಗದಿಂದ ಆವೃತಗೊಂಡಿದೆ. ಸದರಿ ಪ್ರದೇಶದಲ್ಲಿ ಅಂದಾಜು ಶೇಕಡಾ ಶೇ 15 ರಿಂದ ಶೇ 20 ರಷ್ಟು ಭೂಮಿಯಲ್ಲಿ ANR Model ನಲ್ಲಿಯೂ ಇನ್ನುಳಿದ ಪ್ರದೇಶದಲ್ಲಿ ವಿವಿಧ ಮಾದರಿಯಡಿ ಅರಣ್ಯೀಕರಣ ಕಾಮಗಾರಿ ಕೈಗೊಳ್ಳಲು ಯೋಗ್ಯವಿರುತ್ತದೆ.

ಅದರಂತೆ ತಿಮ್ಮಾಪೂರು ಗ್ರಾಮಕ್ಕೆ ಸೇರಿದ ಸರ್ವೆ ನಂಬರ್ 74/1, 74/2, 74/4, & 74/5 ಸರ್ವೆನಂಬರ್‌ಗಳ ಒಟ್ಟು ವಿಸ್ತೀರ್ಣ ಪಹಣಿ ಪತ್ರಿಕೆಯ ಪ್ರಕಾರ 128.57 ಎಕರೆ (52.03 ಹೆ) ಇದ್ದು ಸದರಿ ಪ್ರದೇಶವು ಕೂಡ ಅರಣ್ಯ ಪ್ರದೇಶಕ್ಕೆ ಸಮೀಪದಲ್ಲಿದ್ದು, ಅಲ್ಲಲ್ಲಿ ಕುರಚಲು ಸಸ್ಯಗಳು ಬೆಳೆದಿರುವುದು ಕಂಡುಬರುತ್ತದೆ. ಸದರಿ ಪ್ರದೇಶವು ಅರಣ್ಯೀಕರಣ ಕಾಮಗಾರಿ ಕೈಗೊಳ್ಳಲು ಸೂಕ್ತವಿರುತ್ತದೆ. ಎಂದು ಅಭಿಪ್ರಾಯ ನೀಡಲಾಗಿದೆ.

ತಮ್ಮ ವಿಶ್ವಾಸಿ


ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿಗಳು,
ರಾಯಚೂರು ಅರಣ್ಯ ವಿಭಾಗ, ರಾಯಚೂರು.

ಪ್ರತಿಯನ್ನು ಮುಖ್ಯ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿಗಳು, ಕಲಬುರಗಿ ವೃತ್ತ, ಕಲಬುರಗಿ ಇವರಿಗೆ ಮಾಹಿತಿಗಾಗಿ ಸಲ್ಲಿಸಲಾಗಿದೆ.


ಉಪ ಅರಣ್ಯ ಸಂರಕ್ಷಣಾಧಿಕಾರಿಗಳು,
ರಾಯಚೂರು ಅರಣ್ಯ ವಿಭಾಗ, ರಾಯಚೂರು.

No: M1/MNG/Bly/ JSW/SC/2017-18

office of the
Deputy Conservator of Forests
Bellary Division, Bellary
Date: 12.09.2018

SUITABILITY CERTIFICATE

This is to certify that the patta land is identified in the following area for raising of compensatory afforestation in lieu of diversion of forest land infavour of M/s JSW Steel Ltd, Toranagallu, Sandur Taluk The land is free from encroachment and is suitable for afforestation.

SL No.	Taluk	Village	Sy No.	Extent in Acres	Extent in Hectares.
1	Sandur	Tumati	1 (part)		
			1/2	35.46	29.83
			1/3	36.00	
Total				71.46	29.83


Deputy Conservator of Forests
Bellary Division, Bellary

No: M1/MNG/Bly/ JSW/SC/2017-18

office of the
Deputy Conservator of Forests
Bellary Division, Bellary
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SL No.	Taluk	Village	Sy No.	Extent in Acres	Extent in Hectares.
1	Sandur	Tumati	1 (part) 1/4	36.00	15.00
Total				36.00	15.00


Deputy Conservator of Forests
Bellary Division, Bellary



ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಅರ್ಜಿ ಸಂಖ್ಯೆ : 3,855

Print Date/Time: Saturday, 29 September, 2018 - 2:21:00PM

ನಮೂನೆ 15

ಪ್ರಮಾಣಪತ್ರದ ಸಂಖ್ಯೆ : 2,936

ಪ್ರಪತ್ರ ಸಂಖ್ಯೆ 15 (148ನೇ ನಿಯಮ)

ಕೆಳಗೆ ತಿಳಿಸಿದ ಅಸ್ತಿಯ ಸಂಬಂಧದಲ್ಲಿ ಋಣಭಾರಗಳು ಏನಾದರೂ ಇದ್ದರೆ, ಮತ್ತು ನೋಂದಣಿಯಾದ ಕ್ರಮಗಳ ವಿವರಣೆಗಳ ಬಗ್ಗೆ ಒಂದು ಪ್ರಮಾಣಪತ್ರಕ್ಕಾಗಿ ಅರ್ಜಿಯನ್ನು ಸಲ್ಲಿಸಲಾಗಿದೆ. (ಅರ್ಜಿಯಲ್ಲಿ ಹೇಳಿದಂತೆ ತಿಳಿಸಬೇಕು ಮತ್ತು ವಿವರಿಸಬೇಕು)

Details of Property: Properties situated in: Thumati having , Survey No - 0 ;

ಮೇಲೆ ತಿಳಿಸಿದ ಅಸ್ತಿಯ ವಿವರಗಳನ್ನು 29/09/2018 ರಿಂದ 29/09/2018 ರವರೆಗೆ 1 ರಲ್ಲಿ ಸೂಚಿಯಲ್ಲಿರುವುದನ್ನು ಶೋಧನೆ ನಡೆಸಲಾಯಿತು ಮತ್ತು ಈ ಶೋಧನೆಯಿಂದ ಕೆಳಗೆ ತೋರಿಸಿದ ಕ್ರಮಗಳು ಹಾಗೂ ಋಣಭಾರಗಳು ಕಂಡುಬಂದುವೆಂಬುದನ್ನು ಈ ಮೂಲಕ ಪ್ರಮಾಣೀಕರಿಸುತ್ತೇನೆ.

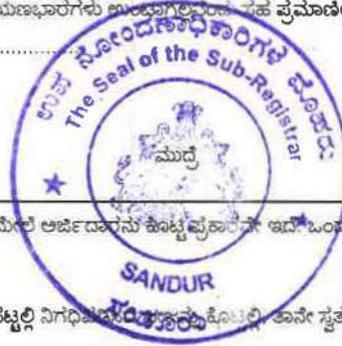
ಕ್ರಮಾಂಕ	(ಎ) ಅಸ್ತಿಯ ವಿವರ	ನಿರ್ವಹಣಾ ಜಾರಿಯ ದಿನಾಂಕ	(ಬಿ) ದಸ್ತಾವೇಜಿನ ಸ್ವರೂಪ ಮತ್ತು ಮೌಲ್ಯ (in Rs.)	ಕಟ್ಟುಗಾರರ ಹೆಸರು		ಸಂಪುಟ ಸಿ. ಡಿ. ಸಂಖ್ಯೆ	ಪುಟ	ದಸ್ತಾವೇಜಿನ ಉಲ್ಲೇಖ ಸಂಖ್ಯೆ ಮತ್ತು ವರ್ಷ
				ಬರದು ಕೊಟ್ಟವರು	ಬರೆಯಿಸಿಕೊಂಡವರು			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Village Name: ತುಮಟಿ Property Schedule Description: (LAND MARK)ತುಮಟಿ ಗ್ರಾಮದ ಸ.ನಂ.1/3 ವಿಸ್ತೀರ್ಣ 36 ಎಕರೆ 00 ಸೆಂಟ್ಸ್ ಉಳ್ಳ ಪೂರಾ ನಂ. ಜಮೀನು (Schedule A:) ತುಮಟಿ ಗ್ರಾಮದ ಸ.ನಂ.1/3 ವಿಸ್ತೀರ್ಣ 36 ಎಕರೆ 00 ಸೆಂಟ್ಸ್ ಉಳ್ಳ ಪೂರಾ ನಂ. ಜಮೀನು (EAST)ಸ. ನಂ. 2 (WEST) ಸ. ನಂ. 01 ವೈಕಿ ಉಳಿದ ಭೂಮಿ (SOUTH)ಇದೇ ಸ.ನಂ.ಉಳ್ಳ ಎ.ಪಾರ್ವತ ಮತ್ತು ಅವರ ಮಕ್ಕಳ ಜಮೀನು (NORTH)ಇದೇ ಸ.ನಂ.ಉಳ್ಳ ಟಿ.ಸುಕನ್ಯ ಅಲಿಯಾಸ್ ಎ.ಸುಧಾರಾವಾ ನವರ ಜಮೀನು (Note:)	29/09/2018	ಕ್ರಿಯೆ Market Value 8,640,000.00 Consideration 8,640,000.00	(1)ಎ.ಶಶಿಕಲೆ Additional Details: Category:PRV, RelationShip:-, Relative:ಗಂಡ.ಲೇಟ. ಎ. ಬದ್ರಿ ನಾರಾಯಣ. Transacted Acre:36 Gunta:0 FGunta:0.00	(1) FOREST DEPARTMENT ,ON BEHALF OF HON'BLE GOVERNOR OF KARNATAKA REPRESENTED BY DEPUTY CONSERVATOR OF FORESTS ,BALLARI . , Additional Details: Category:-, RelationShip:-, Relative:-,	SNRD71	12	SNR-1-01165-2018-19

Liability Note - NA

ಸದರಿ ಆಸ್ತಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಫೂರ್ವೋಕ್ತ ಕ್ರಮಗಳ ಮತ್ತು ಋಣಭಾರಗಳ ಹೊರತು ಇತರ ಯಾವುದೇ ಕ್ರಮಗಳು, ಋಣಭಾರಗಳು ಉಂಟಾಗಲಿವೆಯೆ ಎಂಬ ಸಹ ಪ್ರಮಾಣೀಕರಿಸುತ್ತೇನೆ. ಶೋಧನೆ ನಡೆಸಿದವರು ಮತ್ತು ಪ್ರಮಾಣಪತ್ರ ಸಿದ್ಧಪಡಿಸಿದವರು ಶ್ರೀ.....
ಶೋಧನೆ ಪರಿವೀಕ್ಷಿಸಿದವರು ಮತ್ತು ಪ್ರಮಾಣಪತ್ರವನ್ನು ಪರಿವೀಕ್ಷಿಸಿದವರು ಶ್ರೀ.....

ರುಜು (ಪದನಾಮ).....

ಸ್ಥಳ : ರುಜು :



(Signature)
ಉಪನೋಂದಣಾಧಿಕಾರಿ
ಸಾಂದೂರು

ಸೂಚನೆ- (1) ಈ ಋಣಭಾರ ಪತ್ರಿಕೆಯಲ್ಲಿ ಕಂಡುಬರುವ ಕ್ರಮಗಳು ಮತ್ತು ಋಣಭಾರಗಳು ಆಸ್ತಿಗಳ ವಿವರಣೆಯ ಮೇಲೆ ಅರ್ಜಿದಾರನು ಕೊಟ್ಟ ಪ್ರಕಾರವೇ ಇದೆ. ಒಂದು ವೇಳೆ ನೋಂದಣಿಯಾದ ಪತ್ರಗಳಲ್ಲಿ ಅರ್ಜಿದಾರನು ಕೊಟ್ಟಿರುವ ಆಸ್ತಿಯ ವಿವರಣೆ ವ್ಯತ್ಯಾಸವಾಗಿದ್ದಲ್ಲಿ ಅಂತಹ ವಿವರಣೆಯು ಈ ಋಣಭಾರ ಪತ್ರಿಕೆಯಲ್ಲಿ ಸೇರಿಸಲು ಸಾಧ್ಯವಿಲ್ಲ.

(2) ನೋಂದಣಿ ಅಧಿನಿಯಮದ 57 ಪ್ರಕರಣ ಮತ್ತು ನಿಯಮ 138 (1)ರ ಪ್ರಕಾರ ಅರ್ಜಿದಾರನು ಇಚ್ಛಿಪಟ್ಟಲ್ಲಿ ನಿಗದಿತವಾಗಿ ಕೊಟ್ಟಿರುವ ತಾನೇ ಸ್ವತಃ ನೋಂದಣಿ ಪುಸ್ತಕ ಮತ್ತು ಸೂಚಿಕೆಯನ್ನು ಋಣಭಾರ ಪತ್ರಿಕೆ ಮತ್ತು ಯಥಾ ನಕಲನ್ನು ತಯಾರುಮಾಡಲು ಅವರ ವಶಕ್ಕೆ ಕೊಡಲಾಗುವುದು.

ಆದರೆ ಈ ಪ್ರಸ್ತುತ ಅರ್ಜಿಯ ಪ್ರಕಾರ ಅರ್ಜಿದಾರನು ಸ್ವತಃ ಪರಿಶೀಲನೆ ಇಚ್ಛಿಪಡದಿದ್ದ ಹಾರಣ ಆಫೀಸಿನ ಸಿಬ್ಬಂದಿಯು ಶೋಧನೆಯನ್ನು ಆದಷ್ಟು ಜಾಗರೂಕತೆಯಿಂದ ಮಾಡಲಾಗಿದೆ. ಆದ್ದರಿಂದ ಈ ತತ್ಸಂಬಂಧವಾಗಿ ಯಾವುದೇ ತಪ್ಪುಗಳು ಶೋಧನೆಯಲ್ಲಿ

(ಎ) ಕಂಡುಬಂದಲ್ಲಿ ಇಲಾಖೆಯು ಯಾವುದೇ ರೀತಿ ಜವಾಬ್ದಾರಿಯಾಗಿರುವುದಿಲ್ಲ.

ಮತ್ತು ಈ ಪ್ರಸ್ತುತ ಅರ್ಜಿಯ ಪ್ರಕಾರ ಅರ್ಜಿದಾರನೇ ಸ್ವತಃ ತಾವು ಋಣಭಾರಗಳಿಗೆ ಶೋಧನೆಯನ್ನು ಮಾಡಿರುವುದರಿಂದ ಈ ಋಣಭಾರ ಪತ್ರಿಕೆಯಲ್ಲಿ ಸದರಿ ಆಸ್ತಿಯ ವಿವರದಲ್ಲಿ ಯಾವುದೇ ಲೋಪದೋಷಗಳು ಕಂಡುಬಂದಲ್ಲಿಯೂ ಸಹ ಇಲಾಖೆಯು

(ಬಿ) ಯಾವರೀತಿಯಲ್ಲಿಯೂ ಜವಾಬ್ದಾರರಾಗುವುದಿಲ್ಲ.

ಅರ್ಜಿ ಸಂಖ್ಯೆ : 24,864

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ನಮೂನೆ 15

ಪ್ರಪತ್ರ ಸಂಖ್ಯೆ 15 (148ನೇ ನಿಯಮ)

Print Date/Time: Thursday, 25 October, 2018 - 3:03:16PM

ಪ್ರಮಾಣಪತ್ರದ ಸಂಖ್ಯೆ : 22,320

ಕೆಳಗೆ ತಿಳಿಸಿದ ಆಸ್ತಿಯ ಸಂಬಂಧದಲ್ಲಿ ಋಣಭಾರಗಳು ಏನಾದರೂ ಇದ್ದರೆ, ಮತ್ತು ನೋಂದಣಿಯಾದ ಕ್ರಮಗಳ ವಿವರಣೆಗಳ ಬಗ್ಗೆ ಒಂದು ಪ್ರಮಾಣಪತ್ರಕ್ಕಾಗಿ ಅರ್ಜಿಯನ್ನು ಸಲ್ಲಿಸಲಾಗಿದೆ. (ಅರ್ಜಿಯಲ್ಲಿ ಹೇಳಿದಂತೆ ತಿಳಿಸಬೇಕು ಮತ್ತು ವಿವರಿಸಬೇಕು)

Details of Property: Properties situated in: Haalbhavi having , Survey No - 0 ;

ಮೇಲೆ ತಿಳಿಸಿದ ಆಸ್ತಿಯ ವಿವರಗಳನ್ನು 25/10/2018 ರಿಂದ 25/10/2018 ರವರೆಗೆ 1 ರಲ್ಲಿ ಸೂಚಿಯಲ್ಲಿರುವುದನ್ನು ಶೋಧನೆ ನಡೆಸಲಾಯಿತು ಮತ್ತು ಈ ಶೋಧನೆಯಿಂದ ಕೆಳಗೆ ತೋರಿಸಿದ ಕ್ರಮಗಳು ಹಾಗೂ ಋಣಭಾರಗಳು ಕಂಡುಬಂದುವೆಂಬುದನ್ನು ಈ ಮೂಲಕ ಪ್ರಮಾಣೀಕರಿಸುತ್ತೇನೆ.

ಕ್ರಮಾಂಕ	(ಎ) ಆಸ್ತಿಯ ವಿವರ	ನಿರ್ವಹಣಾ ಜಾರಿಯ ದಿನಾಂಕ	(ಬಿ) ದಸ್ತಾವೇಜಿನ ಸ್ವರೂಪ ಮತ್ತು ಮೌಲ್ಯ (in Rs.)	ಕಟ್ಟಿಗಾರರ ಹೆಸರು		ಸಂಪುಟ ಸಿ. ಡಿ. ಸಂಖ್ಯೆ	ಪುಟ	ದಸ್ತಾವೇಜಿನ ಉಲ್ಲೇಖ ಸಂಖ್ಯೆ ಮತ್ತು ವರ್ಷ
				ಬರೆದು ಕೊಟ್ಟವರು	ಬರೆಯಿಸಿಕೊಂಡವರು			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Village Name: ಹಾಲಭಾವಿ Property Schedule Description: (LAND MARK)ಗ್ರಾಮ ಹಾಲಭಾವಿ ಸರ್ವೆ ನಂ 39* ಹಿಸ್ಸಾ* ಸ್ವೀಕೃತ 23-18 ಪೋಟ ಖರಾಬ 3-18 ಉಳಿದದ್ದು 20-20 ಖುಷ್ಕಿ ಕಪ್ಪು (Schedule A:) ಗ್ರಾಮ ಹಾಲಭಾವಿ ಸರ್ವೆ ನಂ 39* ಹಿಸ್ಸಾ* ಸ್ವೀಕೃತ 23-18 ಪೋಟ ಖರಾಬ 3-18 ಉಳಿದದ್ದು 20-20 ಖುಷ್ಕಿ ಕಪ್ಪು (EAST) (WEST) (SOUTH) (NORTH)(Note:)	25/10/2018	ಕ್ರಯ Market Value 3,280,000.00 Consideration 3,280,000.00	(1)ದುರಗಮ್ಮ ಗಂಡ ಬಸವಗೌಡ Additional Details: Category:PRV, RelationShip:-, Relative:., Transacted Acre:20 Gunta:20 FGunta:0.00	(1)Forest Department Hon'ble Governor of Karnataka represented by Range Forest Officer Lingasugur on Behalf of .Deputy Conservator of Forests Raichur Divison Raichur. M/S. JSW Steel Limited has Gi	INGD247	15	LNG-1-10788-2018-19

Liability Note - NA

ಸದರಿ ಅಸ್ತಿಗೆ ಸಂಬಂಧಿಸಿದಂತೆ ಪೂರ್ವೋಕ್ತ ಕ್ರಮಗಳ ಮತ್ತು ಋಣಭಾರಗಳ ಹೊರತು ಇತರೆ ಯಾವುದೇ ಕ್ರಮಗಳು, ಋಣಭಾರಗಳು ಉಂಟಾಗಿಲ್ಲವೆಂದು ಸಹ ಪ್ರಮಾಣೀಕರಿಸುತ್ತೇನೆ. ಶೋಧನೆ ನಡೆಸಿದವರು ಮತ್ತು ಪ್ರಮಾಣಪತ್ರ ಸಿದ್ಧಪಡಿಸಿದವರು ಶ್ರೀ.....
ಶೋಧನೆ ಪರಿವೀಕ್ಷಿಸಿದವರು ಮತ್ತು ಪ್ರಮಾಣಪತ್ರವನ್ನು ಪರಿವೀಕ್ಷಿಸಿದವರು ಶ್ರೀ.....

ರುಜು (ಪದನಾಮ).....

ಸ್ಥಳ : ರುಜು : ಮುದ್ರೆ

ಸೂಚನೆ- (1) ಈ ಋಣಭಾರ ಪತ್ರಿಕೆಯಲ್ಲಿ ಕಂಡುಬರುವ ಕ್ರಮಗಳು ಮತ್ತು ಋಣಭಾರಗಳು ಅಸ್ತಿಗಳ ವಿವರಣೆಯ ಮೇಲೆ ಅರ್ಜಿದಾರನು ಕೊಟ್ಟ ಪ್ರಕಾರವೇ ಇದೆ. ಒಂದು ವೇಳೆ ನೋಂದಣಿಯಾದ ಪತ್ರಗಳಲ್ಲಿ ಅರ್ಜಿದಾರನು ಕೊಟ್ಟಿರುವ ಅಸ್ತಿಯ ವಿವರಣೆ ವ್ಯತ್ಯಾಸವಾಗಿದ್ದಲ್ಲಿ ಅಂತಹ ವಿವರಣೆಯು ಈ ಋಣಭಾರ ಪತ್ರಿಕೆಯಲ್ಲಿ ಸೇರಿಸಲು ಸಾಧ್ಯವಿಲ್ಲ.

(2) ನೋಂದಣಿ ಅಧಿನಿಯಮದ 57 ಪ್ರಕರಣ ಮತ್ತು ನಿಯಮ 138 (1)ರ ಪ್ರಕಾರ ಅರ್ಜಿದಾರನು ಇಚ್ಛಿಪಟ್ಟಲ್ಲಿ ನಿಗದಿಪಡಿಸಿದ ಫೀಜನ್ನು ಕೊಟ್ಟಲ್ಲಿ, ತಾನೇ ಸ್ವತಃ ನೋಂದಣಿ ಪುಸ್ತಕ ಮತ್ತು ಸೂಚಿಕೆಯನ್ನು ಋಣಭಾರ ಪತ್ರಿಕೆ ಮತ್ತು ಯಥಾ ನಕಲನ್ನು ತಯಾರುಮಾಡಲು ಅವರ ವಶಕ್ಕೆ ಕೊಡಲಾಗುವುದು.

ಆದರೆ ಈ ಪ್ರಸ್ತುತ ಅರ್ಜಿಯ ಪ್ರಕಾರ ಅರ್ಜಿದಾರನು ಸ್ವತಃ ಪರಿವೀಕ್ಷಿಸಲು ಇಚ್ಛಿಪಡೆದಿದ್ದ ಕಾರಣ ಅರ್ಜಿದಾರನು ಸಿಬ್ಬಂದಿಯ ಶೋಧನೆಯನ್ನು ಆದಷ್ಟು ಜಾಗರೂಕತೆಯಿಂದ ಮಾಡಲಾಗಿದೆ, ಆದ್ದರಿಂದ ಈ ತತ್ಸಂಬಂಧವಾಗಿ ಯಾವುದೇ ತಪ್ಪುಗಳು ಶೋಧನೆಯಲ್ಲಿ

(ಎ) ಕಂಡುಬಂದಲ್ಲಿ ಇಲಾಖೆಯು ಯಾವುದೇ ರೀತಿ ಜವಾಬ್ದಾರಿಯಾಗಿರುವುದಿಲ್ಲ.

ಮತ್ತು ಈ ಪ್ರಸ್ತುತ ಅರ್ಜಿಯ ಪ್ರಕಾರ ಅರ್ಜಿದಾರನೇ ಸ್ವತಃ ತಾವು ಋಣಭಾರಗಳಾಗಿ ಶೋಧನೆಯನ್ನು ಮಾಡಿರುವುದರಿಂದ ಈ ಋಣಭಾರ ಪತ್ರಿಕೆಯಲ್ಲಿ ಸದರಿ ಅಸ್ತಿಯ ವಿಚಾರದಲ್ಲಿ ಯಾವುದೇ ಲೋಪದೋಷಗಳು ಕಂಡುಬಂದಲ್ಲಿಯೂ ಸಹ ಇಲಾಖೆಯು

(ಬಿ) ಯಾವರೀತಿಯಲ್ಲಿಯೂ ಜವಾಬ್ದಾರಾಗುವುದಿಲ್ಲ.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ನಮೂನೆ 15

Annexure-V

ಪ್ರಪತ್ರ ಸಂಖ್ಯೆ 15 (148ನೇ ನಿಯಮ)

Print Date/Time: Wednesday, 14 November, 2018 - 4:20:09PM

ಪ್ರಮಾಣಪತ್ರದ ಸಂಖ್ಯೆ : 23,691

ಕೆಳಗೆ ತಿಳಿಸಿದ ಆಸ್ತಿಯ ಸಂಬಂಧದಲ್ಲಿ ಋಣಭಾರಗಳು ಏನಾದರೂ ಇದ್ದರೆ, ಮತ್ತು ನೋಂದಣಿಯಾದ ಕ್ರಮಗಳ ವಿವರಣೆಗಳ ಬಗ್ಗೆ ಒಂದು ಪ್ರಮಾಣಪತ್ರಕ್ಕಾಗಿ ಅರ್ಜಿಯನ್ನು ಸಲ್ಲಿಸಲಾಗಿದೆ. (ಆರ್ಜಿಯಲ್ಲಿ ಹೇಳಿದಂತೆ ತಿಳಿಸಬೇಕು ಮತ್ತು ವಿವರಿಸಬೇಕು)

Details of Property: Properties situated in: Haalbhavi having , Survey No - 0 ;

ಮೇಲೆ ತಿಳಿಸಿದ ಆಸ್ತಿಯ ವಿವರಗಳನ್ನು 14/11/2018 ರಿಂದ 14/11/2018 ರವರೆಗೆ 1 ರಲ್ಲಿ ಸೂಚಿಯಲ್ಲಿರುವುದನ್ನು ಶೋಧನೆ ನಡೆಸಲಾಯಿತು ಮತ್ತು ಈ ಶೋಧನೆಯಿಂದ ಕೆಳಗೆ ತೋರಿಸಿದ ಕ್ರಮಗಳು ಹಾಗೂ ಋಣಭಾರಗಳು ಕಂಡುಬಂದುವೆಂಬುದನ್ನು ಈ ಮೂಲಕ ಪ್ರಮಾಣೀಕರಿಸುತ್ತೇನೆ.

ಕ್ರಮಾಂಕ	(ಎ) ಆಸ್ತಿಯ ವಿವರ	ನಿರ್ವಹಣಾ ಜಾರಿಯ ದಿನಾಂಕ	(ಬಿ) ದಸ್ತಾವೇಜಿನ ಸ್ವರೂಪ ಮತ್ತು ಮೌಲ್ಯ (In Rs.)	ಕಟ್ಟೆಗಾರರ ಹೆಸರು		ಸಂಪುಟ ಸಿ, ಡಿ, ಸಂಖ್ಯೆ	ಪುಟ	ದಸ್ತಾವೇಜಿನ ಉಲ್ಲೇಖ ಸಂಖ್ಯೆ ಮತ್ತು ವರ್ಷ
				ಬರೆದು ಕೊಟ್ಟವರು	ಬರೆಯಿಸಿಕೊಂಡವರು			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Village Name: ಹಾಲಭಾವಿ Property Schedule Description: (LAND MARK)ಗ್ರಾಮ ಹಾಲಭಾವಿ ಸರ್ವೆ ನಂ 139, ಕ್ಷೇತ್ರ 25-17 ಪೋಟ ಖರಾಬ 3-27 ಉಳಿದದ್ದು 21-30 ಪೂರ್ತಿ ಜಮೀನು ಋಷಿ ಮಸಬು (Schedule A.) ಗ್ರಾಮ ಹಾಲಭಾವಿ ಸರ್ವೆ ನಂ 139, ಕ್ಷೇತ್ರ 25-17 ಪೋಟ ಖರಾಬ 3-27 ಉಳಿದದ್ದು 21-30 ಪೂರ್ತಿ ಜಮೀನು ಋಷಿ ಮಸಬು (EAST) (WEST) (SOUTH) (NORTH)(Note:)	14/11/2018	ಕ್ರಯ Market Value 3,480,000.00 Consideration 3,480,000.00	(1)ಯಲ್ಲಪ್ಪ ತಂ.ಕೆರೆಪ್ಪ ಮುಂಡರಿ Additional Details: Category:PRV, RelationShip:-, Relative:., Transacted Acre 21 Gunta.30 FGunta:0.00	(1)Forest Department on behalf of Hon'ble Governor of Karnataka represented by Range Forest Officer Lingasugur Delegated by the Deputy Conservator of Forests Raichur Division Raichur. M/S. JSW Stree	LNGD248	21	INC-I-11558-2018-19

Liability Note - NA

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ನಮೂನೆ 15

ಪ್ರಪತ್ರ ಸಂಖ್ಯೆ 15 (148ನೇ ನಿಯಮ)

Print Date/Time: Wednesday, 14 November, 2018 - 4:19:48PM

ಪ್ರಮಾಣಪತ್ರದ ಸಂಖ್ಯೆ : 23,689

ಕೆಳಗೆ ತಿಳಿಸಿದ ಆಸ್ತಿಯ ಸಂಬಂಧದಲ್ಲಿ ಮುಣ್ಣಾರಗಳು ಏನಾದರೂ ಇದ್ದರೆ, ಮತ್ತು ನೋಂದಣಿಯಾದ ಕ್ರಮಗಳ ವಿವರಣೆಗಳ ಬಗ್ಗೆ ಒಂದು ಪ್ರಮಾಣಪತ್ರಕ್ಕಾಗಿ ಅರ್ಜಿಯನ್ನು ಸಲ್ಲಿಸಲಾಗಿದೆ. (ಅರ್ಜಿಯಲ್ಲಿ ಹೇಳಿದಂತೆ ತಿಳಿಸಬೇಕು ಮತ್ತು ವಿವರಿಸಬೇಕು)

Details of Property: Properties situated in: Haabhavi having , Survey No - () ;

ಮೇಲೆ ತಿಳಿಸಿದ ಆಸ್ತಿಯ ವಿವರಗಳನ್ನು 14/11/2018 ರಿಂದ 14/11/2018 ರವರೆಗೆ 1 ರಲ್ಲಿ ಸೂಚಿಯಲ್ಲಿರುವುದನ್ನು ಶೋಧನೆ ನಡೆಸಲಾಯಿತು ಮತ್ತು ಈ ಶೋಧನೆಯಿಂದ ಕೆಳಗೆ ತೋರಿಸಿದ ಕ್ರಮಗಳು ಹಾಗೂ ಮುಣ್ಣಾರಗಳು ಕಂಡುಬಂದುವೆಂಬುದನ್ನು ಈ ಮೂಲಕ ಪ್ರಮಾಣೀಕರಿಸುತ್ತೇನೆ.

ಕ್ರಮಾಂಕ	(ಎ) ಆಸ್ತಿಯ ವಿವರ	ನಿರ್ವಹಣಾ ಜಾರಿಯ ದಿನಾಂಕ	(ಬಿ) ದಸ್ತಾವೇಜಿನ ಸ್ವರೂಪ ಮತ್ತು ಮೌಲ್ಯ (in Rs.)	ಕಟ್ಟಿಗಾರರ ಹೆಸರು		ಸಂಪುಟ ಸಿ. ಡಿ. ಸಂಖ್ಯೆ	ಪುಟ	ದಸ್ತಾವೇಜಿನ ಉಲ್ಲೇಖ ಸಂಖ್ಯೆ ಮತ್ತು ವರ್ಷ
				ಬರೆದು ಕೊಟ್ಟವರು	ಬರೆಯಿಸಿಕೊಂಡವರು			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Village Name: ಹಾಲಭಾವಿ Property Schedule Description: (LAND MARK) ಗ್ರಾಮ ಹಾಲಭಾವಿ ಸರ್ವೆ ನಂ 142 ಹಿಸ್ಸಾ-1 ,ಕ್ಷೇತ್ರ 9-23 ಪೋಟ ಖರಾಬ 1-23 ಉಳಿದದ್ದು 8-00 ಪೂರ್ವ ಜಮೀನು ಋಷಿ ಮಸಜು (Schedule A:) ಗ್ರಾಮ ಹಾಲಭಾವಿ ಸರ್ವೆ ನಂ 142 ಹಿಸ್ಸಾ-1 ,ಕ್ಷೇತ್ರ 9-23 ಪೋಟ ಖರಾಬ 1-23 ಉಳಿದದ್ದು 8-00 ಪೂರ್ವ ಜಮೀನು ಋಷಿ ಮಸಜು (EAST) (WEST) (SOUTH) (NORTH)(Note:)	14/11/2018	ಕ್ರಿಯೆ Market Value 1,280,000.00 Consideration 1,280,000.00	(1)ಹಸುಮಂತ್ರಾಯ Additional Details: Category:PRV, RelationShip:-, Relative:ಗುಂಡಪ್ಪ ಸಾ ಹಾಲಭಾವಿ, Transacted Acre:8 Gunta:0 FGunta:0.00 . (2)ದ್ಯಾಮವ್ವ Additional Details: Category:PRV, RelationShip:-, Relative:ಬಸವ್ವ, Transacted Acre:0 Gunta:0 FGunta:0.00 . (3)ಸಂಗಮ್ಮ Additional Details: Category:PRV, RelationShip:-, Relative:ಯಲ್ಲಪ್ಪ, Transacted Acre:0 Gunta:0 FGunta:0.00 . (4)ಬಸಮ್ಮ Additional Details: Category:PRV, RelationShip:-, Relative:ಗಡ್ಡಪ್ಪ, Transacted Acre:0 Gunta:0 FGunta:0.00	(1)Forest Department on behalf of Hon'ble Governor of Karnataka represented by Range Forest Officer Lingasugur Delegated by the Conservator of Forests Raichur Division Raichur. M/S JSW Steel Limite	LINGD248	21	LING-1-11555-2018-19

Liability Note - NA

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ನಮೂನೆ 15

ಪ್ರಪತ್ರ ಸಂಖ್ಯೆ 15 (148ನೇ ನಿಯಮ)

Print Date/Time: Wednesday, 14 November, 2018 - 4:20:00PM

ಪ್ರಮಾಣಪತ್ರದ ಸಂಖ್ಯೆ : 23,690

ಕೆಳಗೆ ತಿಳಿಸಿದ ಆಸ್ತಿಯ ಸಂಬಂಧದಲ್ಲಿ ಋಣಭಾರಗಳು ಏನಾದರೂ ಇದ್ದರೆ, ಮತ್ತು ನೋಂದಣಿಯಾದ ಕ್ರಮಗಳ ವಿವರಣೆಗಳ ಬಗ್ಗೆ ಒಂದು ಪ್ರಮಾಣಪತ್ರಕ್ಕಾಗಿ ಅರ್ಜಿಯನ್ನು ಸಲ್ಲಿಸಲಾಗಿದೆ. (ಅರ್ಜಿಯಲ್ಲಿ ಹೇಳಿದಂತೆ ತಿಳಿಸಬೇಕು ಮತ್ತು ವಿವರಿಸಬೇಕು)

Details of Property: Properties situated in: Hoalbhavi having , Survey No - 0 ;

ಮೇಲೆ ತಿಳಿಸಿದ ಆಸ್ತಿಯ ವಿವರಗಳನ್ನು 14/11/2018 ರಿಂದ 14/11/2018 ರವರೆಗೆ 1 ರಲ್ಲಿ ಸೂಚಿಯಲ್ಲಿರುವುದನ್ನು ಶೋಧನೆ ನಡೆಸಲಾಯಿತು ಮತ್ತು ಈ ಶೋಧನೆಯಿಂದ ಕೆಳಗೆ ತೋರಿಸಿದ ಕ್ರಮಗಳು ಹಾಗೂ ಋಣಭಾರಗಳು ಕಂಡುಬಂದುವೆಂಬುದನ್ನು ಈ ಮೂಲಕ ಪ್ರಮಾಣೀಕರಿಸುತ್ತೇನೆ.

ಕ್ರಮಾಂಕ	(ಎ) ಆಸ್ತಿಯ ವಿವರ	ನಿರ್ವಹಣಾ ಜಾರಿಯ ದಿನಾಂಕ	(ಬಿ) ದಸ್ತಾವೇಜಿನ ಸ್ವರೂಪ ಮತ್ತು ಮೌಲ್ಯ (in Rs.)	ಕಟ್ಟಿಗಾರರ ಹೆಸರು		ಸಂಪುಟ ಸಿ. ಡಿ. ಸಂಖ್ಯೆ	ಪುಟ	ದಸ್ತಾವೇಜಿನ ಉಲ್ಲೇಖ ಸಂಖ್ಯೆ ಮತ್ತು ವರ್ಷ
				ಬರೆದು ಕೊಟ್ಟವರು	ಬರೆಯಿಸಿಕೊಂಡವರು			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Village Name: ಹಾಲಭಾವಿ Property Schedule Description: (LAND MARK)ಗ್ರಾಮ ಹಾಲಭಾವಿ ಸರ್ವೆ ನಂ 143 ಸ್ಥಳೀಯ 21-26 ಫೋಟ ಖರಾಬ 2-26 ಉಳಿದದ್ದು 19-00 ಪೂರ್ತಿ ಜಮೀನು ಋಷಿ ಮಸಬು (Schedule A:) ಗ್ರಾಮ ಹಾಲಭಾವಿ ಸರ್ವೆ ನಂ 143 ಸ್ಥಳೀಯ 21-26 ಫೋಟ ಖರಾಬ 2-26 ಉಳಿದದ್ದು 19-00 ಪೂರ್ತಿ ಜಮೀನು ಋಷಿ ಮಸಬು (EAST) (WEST) (SOUTH) (NORTH)(Note:)	14/11/2018	ಕ್ರಯ Market Value 3,040,000.00 Consideration 3,040,000.00	(1)ಹನುಮಂತಾಯ Additional Details: Category:PRV, RelationShip:-, Relative:ಸುಂದಪ್ಪ ಸಾ ಹಾಲಭಾವಿ, Transacted Acre 19 Gunta.0 FGunta:0.00 , (2)ದ್ವಾಮವ್ವ Additional Details: Category:PRV, RelationShip:-, Relative:ಬಸವ್ವ, Transacted Acre:0 Gunta 0 FGunta:0.00 , (3)ಸಂಗಮ್ಮ Additional Details: Category:PRV, RelationShip:-, Relative:ಯಲ್ಲಪ್ಪ, Transacted Acre:0 Gunta 0 FGunta:0.00 , (4)ಬಸಮ್ಮ Additional Details: Category:PRV, RelationShip:-, Relative:ಗಣ್ಣ, Transacted Acre:0 Gunta 0 FGunta 0.00	(1)Forest Department on behalf of Hon'ble Governor of Karnataka represented by Range Forest Officer Lingosugur Delegated by the Deputy Conservator of Forests Raichur Divison Raichur, M/S. JSW Ste	LINGD248	21	LING-1-11556-2018-19

BK I 1165/18-19

Annexure-V

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ. ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

ದಸ್ತಾವೇಜು ಹಾಳೆ Document Sheet



The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
This sheet can be used for any document

ಈ ದಸ್ತಾವೇಜಿನಲ್ಲಿ 2 ಪುಟಗಳು ಇವೆ
ಇದು 1 ಸಂಖ್ಯೆ 1165/18-19 (GST EXTRA)
ದಸ್ತಾವೇಜಿನ 1 ನೇ ಪುಟ

DEED OF CONVEYANCE

ಲಂಚನೋಂದಣಾಧಿಕಾರಿ
ಬೆಂಗಳೂರು

This DEED OF CONVEYANCE is made on this 26th day of September 2018

BY AND BETWEEN

Smt A Shashikala W/o Late A Badrinarayana, aged about 84 years, residing at Flat No 201, H M Prudence Court, 18 th Cross Malleswaram, Bengaluru Power of Attorney Holder of Shri M K Sriram S/o M K Virupakshappa aged about 50 years Aadhar no- 2064 5770 3477 , PAN No- AXLPS1185J residing at House No 39/2, Ward No-5, Ganesh Temple Street, Brucepet Ballari, (hereinafter referred to as the "Seller", which expression shall unless repugnant to the context and meaning thereof be deemed to mean and include his heirs, executors, successors and permitted assigns); of the ONE PART

AND

Forest Department, on behalf of Hon'ble Governor of Karnataka represented by Deputy Conservator of Forests, Ballari, (hereinafter referred to as the "Buyer", which expression shall unless it is repugnant to the context or meaning thereof be deemed to include its successors) of the SECOND PART.

The Seller and Buyer may hereinafter be collectively referred to as the "Parties" and individually as a "Party".

WHEREAS:

- The Seller is the Power of Attorney holder **Smt A Shashikala W/o Late A Badrinarayana** who is absolutely seized and possessed of or otherwise well and sufficiently entitled to the plot of agricultural land bearing Survey No. 1/3 admeasuring approx 36 acres situated at Tumuti Village, Sandur Taluk, Ballari District, Karnataka together with if any structures and trees standing thereon and more particularly described in the Schedule hereunder (hereafter referred to as the "Property").

M. K. Sri Ram


Deputy Conservator of Forests,
Bellary Division, Bellary.



Print Date & Time : 29-09-2018 01:49:59 PM

ಇದು 116ವೇ 1819
 ದಸ್ತಾವೇಜು ನಂ. 2 ನ ಪುಟ

ದಸ್ತಾವೇಜು ಸಂಖ್ಯೆ : 1165

ಸಬ್ ರಜಿಸ್ಟ್ರಾರ್ ಸಂಠೋರು ರವರ ಕಚೇರಿಯಲ್ಲಿ ದಿನಾಂಕ 29-09-2018 ರಂದು 01:07:37 PM ಗಂಟೆಗೆ ಈ ಕೆಳಗೆ ವಿವರಿಸಿದ ಶುಲ್ಕದೊಂದಿಗೆ

ಕ್ರಮ ಸಂಖ್ಯೆ	ವಿವರ	ರೂ. ವೆ
1	ಸ್ಯಾನಿಂಗ್ ಫೀ	420.00
2	ಪರಿವರ್ತನಾ ಶುಲ್ಕ	70.00
3	ಪರಿಶೋಧನೆ ಮತ್ತು ಪರಿವೀಕ್ಷಣೆ	30.00
	ಒಟ್ಟು :	520.00

ಶ್ರೀ ಎ. ಶಶಿಕಲಾ ಗಂಡ ದಿ . ಎ. ಬದ್ರಿನಾರಾಯಣ ಇವರ ಪರವಾಗಿ ಜಿ.ಪಿ.ಎ .ಹೋಲ್ಡರ್ ಎಂ.ಕೆ.ತ್ರೀರಾಮ್ ತಂದೆ ಎಂ .ಕೆ.ವಿರುಪಾಕ್ಷಪ್ಪ ಇವರಿಂದ ಹಾಜರ ಮಾಡಲ್ಪಟ್ಟಿದೆ

ಹೆಸರು	ಫೋಟೊ	ಹೆಚ್ಚಿಟ್ಟನ ಗುರುತು	ಸಹಿ
ಶ್ರೀ ಎ. ಶಶಿಕಲಾ ಗಂಡ ದಿ . ಎ. ಬದ್ರಿನಾರಾಯಣ ಇವರ ಪರವಾಗಿ ಜಿ.ಪಿ.ಎ .ಹೋಲ್ಡರ್ ಎಂ.ಕೆ.ತ್ರೀರಾಮ್ ತಂದೆ ಎಂ .ಕೆ.ವಿರುಪಾಕ್ಷಪ್ಪ			M.U. Sri Ram

ಇದು ಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯ ಸಬ್ ರಜಿಸ್ಟ್ರಾರ್ ಕಛೇರಿ

ರಜಿಸ್ಟ್ರೇಷನ್ ಕಾಯ್ದೆ ಕೆಲಂ 88(i) ಪ್ರಕಾರ ಹಾಜರಾಗಲು ವಿನಾಯ್ತಿಯಿರುವ FOREST DEPARTMENT .ON BEHALF OF HON'BLE GOVERNOR OF KARNATAKA REPRESENTED BY DEPUTY CONSERVATOR OF FORESTS . BALLARI . . ಇವರು ದಸ್ತಾವೇಜನ್ನು ಬರೆದುಕೊಟ್ಟಿರುವುದನ್ನು ನಾನು ಒಪ್ಪಿರುತ್ತೇನೆ.

ಇದು ಸಂಪನ್ಮೂಲ ಇಲಾಖೆಯ ಸಬ್ ರಜಿಸ್ಟ್ರಾರ್ ಕಛೇರಿ

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ. ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

ದಸ್ತಾವೇಜು ಹಾಳೆ
Document Sheet

**The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.**

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು.
This sheet can be used for any document.

ದಸ್ತಾವೇಜು ಸಂಖ್ಯೆ: 65/1819
ದಸ್ತಾವೇಜು 3 ನ ಪುಟ
ಬೆಲೆ: ರೂ. 2/-
(GST EXTRA)

ಉಪನಿಯಮದಂತೆ
ಸೂಚಿಸಿ

- b) The Seller is acting on behalf of Smt A Shashikala W/o Late A Badrinarayana who is personally unable to attend all the acts, deed and things that may be necessary in respect of the property and has executed an Irrevocable Power of Attorney (PoA) in favor of Shri M K Sriram S/o M K Virupakshappa, which is registered with the office of the Sub-Registrar of Gandhinagar, Bangalore, vide document number GAN 4-00178/2018-19 CD No GAND 314 dated 07-09-2018.
- c) Seller has agreed with JSW Steel Limited that the Seller will sell the Property to JSW Steel Limited or State Forest Department. for the total purchase consideration as agreed. JSW Steel Limited has paid the full Purchase Consideration to the Seller and has asked the Seller to transfer the Property to the Buyer i.e. Government of Karnataka. Forest Department on behalf of JSW Steel Limited for mandatory provision for mining lease as per the Forest Act 1980 and Government of Karnataka represented by Deputy Conservator of Forests, Ballari has accepted the Property for raising Compensatory Afforestation;
- d) JSW Steel Limited has paid to the Seller purchase consideration of **INR 86,40,000/- (Rupees Eighty Six Lakhs Forty Thousand Only) vide cheque number 480437, 480438 dated 28/9/2018 of SBI Bank** _____ **JVSL Branch** Toranagallu.
- e) As per the proviso to Section 3 of the Karnataka Stamp Act, 1957, no duty shall be chargeable in respect of any instrument executed by, or on behalf of, or in favour of, the State Government in cases where the State Government would be liable to pay the duty chargeable in respect of such instrument. Further, as per article XXXIII of Table of Registration Fees, Karnataka Registration, Rules 1965, a department either of the State Government or Central Government liable to pay registration charges is exempt from the

M. U. Sri Ram

Deputy Conservator of Forests,
Bellary Division, Bellary.

ಗುರುತಿಸುವವರು

ಇದು 2 ಪುಸ್ತಕದ 1165/1819
ದಾಖಲೆ ಸಂಖ್ಯೆ 4 ನ ಪುಟ

ಉಪನೋದಕಾರಿ

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು ಮತ್ತು ವಿಳಾಸ	ಸಹಿ
1	ಎಂ.ನಾಗರಾಜ ತಂದೆ ದಿ.ಎಂ.ದೊಡ್ಡ ತಿಮ್ಮಣ್ಣ ಬಳ್ಳಾರಿ	
2	ಸಂಜಯ್ ಹಿರೇಮಠ್ ತಂದೆ ದಿ.ಶಂಕರ್ ಹಿರೇಮಠ್ ವಿದ್ಯಾನಗರ	

ಉಪ ನೋಂದಣಾಧಿಕಾರಿ
ಸಂಪನ್ಮೂಲ

IG0143000017898 ಸರ್ಕಾರ ಆದೇಶ ಸಂ, RD/33/GST/62 ದಿನಾಂಕ 16/2/69 ರಂತೆ ಮುದ್ರಾಂಕ ಶುಲ್ಕ ಮತ್ತು ನೋಂದಣಿ ಶುಲ್ಕ ವಿನಾಯಿತಿ
ನಿಡಲಾಗಿದೆ.

ಉಪ ನೋಂದಣಾಧಿಕಾರಿ
ಸಂಪನ್ಮೂಲ



 1 ನೇ ಪುಸ್ತಕದ ದಸ್ತಾವೇಜು ನಂಬರ SNR-1-01165-2018-19 ಆಗಿ ಸಿ.ಡಿ. ನಂಬರ SNRD71 ನೇ ಧರಲ್ಲಿ ದಿನಾಂಕ 29-09-2018 ರಂದು ನೋಂದಾಯಿಸಲಾಗಿದೆ ಉಪ ನೋಂದಣಾಧಿಕಾರಿ ಸಬ್ ರೆಜಿಸ್ಟ್ರಾರ್ (ಸಂಪನ್ಮೂಲ)	
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ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ. ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

ದಸ್ತಾವೇಜು ಹಾಳೆ
Document Sheet

**The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.**

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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ಇದು _____ ಸಂಖ್ಯೆ 1165/18-19
ದಸ್ತಾವೇಜಿನ _____ ನ ಪುಟ: ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

ಉಪನೋಂದಣಿ ಸಹಕಾರ ಸಂಘದ ಅಧಿಕಾರಿ

payment of all fees under the Table of Registration Fees. However, in case any stamp duty or registration fee in respect to this instrument is assessed by any competent authority to be borne by the State Government, the same would be borne by JSW Steel Limited.

- f) On relying on the representation of the Seller that the Property is free from all encumbrances and have not at any time hereinbefore, in any manner whatsoever, been mortgaged, charged, conveyed or agreed to be sold and transferred to any third person(s), the Seller has agreed to transfer the Property and the Buyer has agreed to acquire the Property from the Seller.
- g) The Seller has further represented that, to the best of his knowledge, there are no proceeding, order, decree, suit or judgment pending/passed in/by any court or judicial/government authority, local body or statutory authority in respect of the Property, which would, in any manner, prejudice, restrain, limit or inhibit the transfer of all titles, rights, interests and benefits connected with the Property to and in favour of the Buyer.
- h) The Parties, being desirous of recording the terms and conditions on which the Seller shall sell and the Buyer shall acquire the Property, have decided to execute this deed.

NOW THIS DEED WITNESSES:

1. In consideration of **INR 86,40,000/- (Rupees Eighty Six Lakhs Forty Thousand Only)**, (the "**Purchase Consideration**"), the receipt of which is hereby acknowledged by the Seller, the Seller hereby irrevocably conveys and transfers by way of sale to the Buyer all that piece and parcel of land bearing **Survey No.1/3 admeasuring approx 36 acres** situated at **Tumuti Village, Sandur Taluk, Ballari District, Karnataka** which is more particularly described in Schedule, free from any encumbrances and reasonable doubts, together with all and singular the structures, houses, outhouses, fencing,

H. U. Sri Ram

Deputy Conservator of Forests,
Bellary Division, Bellary.

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ
ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ
ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

ದಸ್ತಾವೇಜು ಹಾಳೆ
Document Sheet

**The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.**

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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1165/819

ದಸ್ತಾವೇಜಿನ _____ ನ ಪುಟ

ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

ಸೂಂಟಾಟಿ

compound walls, edifices, buildings, court yards, areas, compounds, sewers, drains, ditches, fences, trees, plants, shrubs, ways, paths, passages, commons, gullies, wells, waters, water-courses, lights, liberties, privileges, easements, profits, advantages, rights, members and appurtenances whatsoever to the said land or ground hereditaments and premises or any part thereof belonging or in any wise appurtenant to or with the same or any part thereof now or at or any time hereto before usually held used occupied or enjoyed or reputed or known as part or member thereof and to belong or be appurtenant thereto.

2. The Parties shall undertake all necessary steps as may be required to endorse the name of the Buyer in place of Seller in the concerned revenue records of the Property. The Parties shall depute their respective authorized representatives, as and when required, to the office of Sub-Registrar for signing the requisite documents as may be desired by the said offices.
3. That the Seller hereby covenants to the Buyer that:
 - (i) the Seller has, good right, full power and absolute authority to convey and transfer by way of sale the Property hereby conveyed unto and to the use of the Buyer by way of this Deed of Conveyance and notwithstanding any act, deed, matter or thing whatsoever by the Seller or any person/s lawfully claiming by from, through, under or in trust for the Seller, she has not committed, omitted or knowingly or willingly suffered or been a party or privy to any act, deed or thing whereby the Seller is prevented from granting and conveying the Property in the manner aforesaid or whereby the Property or any part thereof are, is, can or may be charged, encumbered or prejudicially affected in estate, title or otherwise;
 - (ii) the Buyer may, from time to time and at all times hereafter, peacefully and quietly enter upon, occupy, or possess and enjoy the Property hereby conveyed with their

M. K. Sri Ram .

Deputy Conservator of Forests,
Bellary Division, Bellary.

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ. ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

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Document Sheet

**The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.**

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಲು ಈ ಹಾಳೆಯನ್ನು ಬಳಸಬಹುದು.
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1165/18-19

ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

ಉಪನಿಯಮದ ಅಧಿಕಾರಿ
Sub-Registrar

appurtenances, and receive the rents, issues and profits thereof and every part thereof for its own use and benefit without any suit, lawful eviction or interruption, claim and demand whatsoever from or by the Seller or his successors or any of them or by any person or persons claiming or to claim, from under or in trust for them or any of them; and

- (iii) the Seller and all persons having or claiming any estate, right, title, or interest, in the Property, hereby conveyed or any part thereof by from, under or in trust for the Seller or his heirs, executors, administrators or any of them shall and will from time to time and at all times hereafter at the request and costs of the Buyer do and execute and cause to be done and executed all such further and other lawful acts, deeds, things, conveyances and assurances, whatsoever, for better and more perfectly and absolutely granting the Property and every part thereof hereby conveyed unto and to the use of the Buyer in pursuance hereof and in the manner as the Buyer, its executors or administrators and assigns shall reasonably require.
4. The Seller confirms that she shall fully co-operate with the Buyer and the statutory authorities and do all such acts, matters, deeds and things as may be necessary and expedient for having Buyer name endorsed in the required revenue records and shall not do any act, matters, deed or thing which may delay or otherwise adversely affect the endorsement.
5. The Seller has simultaneous with the execution of this deed delivered vacant and peaceful possession of the Property to the Buyer, and the Buyer hereby acknowledges the delivery of vacant and peaceful possession of the Property from the Seller.
6. The Seller hereby agrees and undertakes to indemnify the Buyer and JSW Steel Limited harmless in the event of any defect in the title of the Property or any claims put forth either by the Seller, or his legal heirs, representatives, successors or anybody, claiming

M. L. Sri Ram.

Deputy Conservator of Forests,
Bellary Division, Bellary.

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ
ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ
ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

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The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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ದಸ್ತಾವೇಜಿನ ಸಂಖ್ಯೆ 16511819

ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

ಉಪನಿಯಮದ ಪ್ರಕಾರ

ಸೂಂಟಾಡು

any right, title, or interest under or in trust for the Seller and also to reimburse all such cost and expenses of litigation or in the event the Property or any portion thereof is lost to the Buyer as a result of defective title or breach of covenants by the Seller.

Schedule to the Deed of Conveyance

Details of the Property

Land situated within the limits of **Tumuti** Village, **Sandur** Taluk, **Ballari** District, Karnataka, bearing **Survey No. 1/3** extent of **36 acres** with the following descriptions:

- East : Land Bearing Sy No 2.
West : Remaining Land in the same Sy No 1.
North : Smt T Sukanya @ A Sudha Rao- Land in the same Sy No.
South : Smt A Parvathi and her childrens' land in the same Sy No.

IN WITNESS WHEREOF this deed has been duly executed as of the day and year first above written.

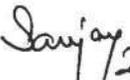
SIGNED AND DELIVERED by the
Within named Seller, Power of
Attorney Holder of Shri M K Sriram

) M.K.S. Ram
) (SRI RAM. M.K.)
) GPA HOLDER.

SIGNED AND DELIVERED by the
Within named Buyer

)
) Deputy Conservator of Forests,
Bellary Division, Bellary.

Witnesses:-

1.  (M. Megaraj S/o Late M. Dadda Thimanna, Ballari)
2. /29 Sep (SS Hirsemath S/o Late Shankar Hirsemath)
Vidyanagar


SADASHIVA S. SHINDE
D.W.L. No. 10/06-06
SANDUR-583 119

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ. ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

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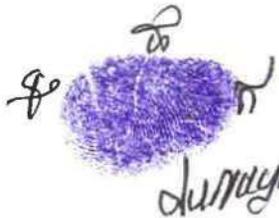
**The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.**

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ನಿರ್ದೇಶಿಸಿದ ನಂಬರ್ ಮುಖ್ಯ
ಉಪ ನೋಂದಣಾಧಿಕಾರಿಗಳ ಲಿಂಗಸುಗೂರು

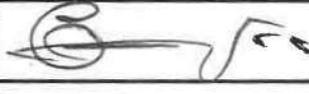
ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

- c) By an Agreement to Sell dated 9th Feb 2017 (the "Agreement to Sell") entered into between the Seller and JSW Steel Limited, the Seller had agreed to sell the Property to JSW Steel Limited or State Forest Department or any other Government authority as instructed by JSW Steel Limited, for a total purchase consideration of **INR 32, 80, 000/- (Rupees Thirty Two Lakhs Eighty Thousand Only)**, (the "Purchase Consideration").
- d) JSW Steel Limited has paid the full Purchase Consideration to the Seller and has asked the Seller to transfer the Property to the Buyer i.e. Government of Karnataka, Forest Department on behalf of JSW Steel Limited for mandatory provision for mining lease as per the Forest Act 1980 and Government of Karnataka represented by Deputy Conservator of Forests, Raichur has accepted the Property for raising Compensatory Afforestation;
- e) As per the provision to Section 3 of the Karnataka Stamp Act, 1957, no duty shall be chargeable in respect of any instrument executed by, or on behalf of, or in favour of, the State Government in cases where the State Government would be liable to pay the duty chargeable in respect of such instrument. Further, as per article XXXIII of Table of Registration Fees, Karnataka Registration, Rules 1965, a department either of the State Government or Central Government liable to pay registration charges is exempt from the payment of all fees under the Table of Registration Fees. However, in case any stamp duty or registration fee in respect to this instrument is assessed by any competent authority to be borne by the State Government, the same would be borne by JSW Steel Limited.
- f) In consideration of the Seller agreeing to sell, convey and transfer the Property to the Buyer in accordance with this Agreement, the Buyer will pay consideration amount **INR 32, 80, 000/- (Rupees Thirty Two Lakhs Eighty Thousand Only)**, through Cheque bearing number 42.0.119 dated 23.10.2018 of State Bank of India, JVSL branch, Toranagallu at the time of Registration of Deed of Conveyance.
- g) Therefore, on fulfillment of the conditions set out in the Agreement to Sell and relying on the representation of the Seller that the Property is free from all encumbrances and have not at any time hereinbefore, in any manner

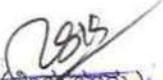

Dunyamma


ವಲಯ ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು

ಗುರುತಿಸುವವರು

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು ಮತ್ತು ವಿಳಾಸ	ಸಹಿ
1	A.k.Udadappa S/o Mastanappa Ingaligi R/o Hospet.	
2	Devappa S/o Hanumappa R/o Gonwar	


 ಸಬ್ ರೆಜಿಸ್ಟ್ರಾರ್
 ಗುಡ್ನೋಂದಣಾಧಿಕಾರಿ
 ಲಿಂಗಸುಗೂರು.

 1 ನೇ ಪುಸ್ತಕದ ದಸ್ತಾವೇಜು ನಂಬರ LNG-1-10788-2018-19 ಆಗಿ ಸಿ.ಡಿ. ನಂಬರ LNGD247 ನೇ ಧರಲ್ಲಿ ದಿನಾಂಕ 25-10-2018 ರಂದು ನೋಂದಾಯಿಸಲಾಗಿದೆ  ಸಬ್ ರೆಜಿಸ್ಟ್ರಾರ್ (ಲಿಂಗಸುಗೂರು) ಗುಡ್ನೋಂದಣಾಧಿಕಾರಿ ಲಿಂಗಸುಗೂರು.
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Designed and Developed by C-DAC, ACTS, Pune



D.O.C No. 128/2018-19,

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ. ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

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Document Sheet

**The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.**

ಈ ದಸ್ತಾವೇಜು ಸೀಟುಗಳನ್ನೇ ಉಪಯೋಗಿಸಬಹುದು
ಇದು ಈ ದಸ್ತಾವೇಜು ಸಹಕಾರ ಸಂಘದ ಉಪನಿಯಮದ ಪ್ರಕಾರ
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ಉಪ ನೋಂದಣಿ ಅಧಿಕಾರಿಗಳು
ಲಿಂಗಸುಗೂರು

ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

DEED OF CONVEYANCE

This DEED OF CONVEYANCE made on this 25th day of October, 2018

BY AND BETWEEN

Smt. Durugamma W/o Shri Basavanagouda, aged about 50 years, residing at Halabhavi Village, **Lingasaguru** Taluk, **Raichur** District, (hereinafter referred to as the "**Sellers**", which expression shall unless repugnant to the context and meaning thereof be deemed to mean and include his/her heirs, executors, successors and permitted assigns); of the **FIRST PART**

AND

Forest Department, Hon'ble Governor of Karnataka represented by **Deputy Conservator of Forest Office** at Court road, **Raichur**, (hereinafter referred to as the "**Buyer**", which expression shall unless it is repugnant to the context or meaning thereof be deemed to include its successors) of the **SECOND PART**.

The Sellers and Buyer may hereinafter be collectively referred to as the "**Parties**" and individually as a "**Party**".

WHEREAS:

- a) The Sellers are absolutely seized and possessed of or otherwise well and sufficiently entitled to the plot of agricultural land bearing **Survey No:- 39**, admeasuring approx **23 acres 38 guntas** (P.K 3 acres 18 guntas) or thereabouts situated at **Halabhavi** Village, **Lingasuguru** Taluk, **Raichur** District, Karnataka together with if any structures standing thereon and more particularly described in the Schedule hereunder (hereafter referred to as the "**Property**").
- b) The Seller has inherited the Property from ancestor and same stands in the name of the Seller in revenue records as owner and Seller has full rights absolute authority to sell, dispose off and transfer the Property in the manner Seller wishes.

ಶಿ
ಗು
Durugamma

ಮುಖ್ಯ ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು.



Print Date & Time : 25-10-2018 01:57:35 PM

ದಸ್ತಾವೇಜು ಸಂಖ್ಯೆ : 10788

ಸಬ್ ರಜಿಸ್ಟ್ರಾರ್ ಲಿಂಗಸುಗೂರು ರವರ ಕಚೇರಿಯಲ್ಲಿ ದಿನಾಂಕ 25-10-2018 ರಂದು 11:57:24 AM ಗಂಟೆಗೆ ಈ ಕೆಳಗೆ ವಿವರಿಸಿದ ಶುಲ್ಕದೊಂದಿಗೆ

ಕ್ರಮ ಸಂಖ್ಯೆ	ವಿವರ	ರೂ. ವೆ
1	ಸ್ಯಾನಿಂಗ್ ಫೀ	525.00
2	ನಕ್ಷೆ ಫೈಲಿಂಗ್ ಶುಲ್ಕ	100.00
3	ಪರಿವರ್ತನಾ ಶುಲ್ಕ	35.00
4	ಪರಿಶೋಧನಾ ಶುಲ್ಕ	35.00
	ಒಟ್ಟು :	695.00

ಶ್ರೀ Forest Department Hon'ble Governor of Karnataka represented by Range Forest Officer Lingasugur on Behalf of .Deputy Conservator of Forests Raichur Divison Raichur. M/S. JSW Steel Limited has Given for Compensatory Afforestation ಇವರಿಂದ ಹಾಜರ ಮಾಡಲ್ಪಟ್ಟಿದೆ

ಬರೆದುಕೊಟ್ಟಿದ್ದಾಗಿ ಒಪ್ಪಿರುತ್ತಾರೆ

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು	ಪೋಟೊ	ಹೆಚ್ಚಿಟ್ಟಿನ ಗುರುತು	ಸಹಿ
1	Forest Department Hon'ble Governor of Karnataka represented by Range Forest Officer Lingasugur on Behalf of .Deputy Conservator of Forests Raichur Divison Raichur. M/S. JSW Steel Limited has Given for Compensatory Afforestation (ಬರೆದುಕೊಂಡವರು)			 ಲಿಂಗಸುಗೂರು,
2	ದುರಗಮ್ಮ ಗಂಡ ಬಸನಗೌಡ (ಬರೆದುಕೊಡುವವರು)			

ಉಪನೋಂದಣಾಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು.

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ. ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

ದಸ್ತಾವೇಜು ಹಾಳೆ
Document Sheet

**The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.**

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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10/08/2023
ನೋಂದಣಿ ಸಂಖ್ಯೆ
ಲಿಂಗಸುಗೂರು

ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

whatsoever, been mortgaged, charged, conveyed or agreed to be sold and transferred to any third person(s), the Seller has agreed to transfer the Property and the Buyer has agreed to acquire the Property from the Seller.

- h) The Seller has further represented that, to the best of her knowledge, there are no proceeding, order, decree, suit or judgment pending/passed in/by any court or judicial/government authority, local body or statutory authority in respect of the Property, which would, in any manner, prejudice, restrain, limit or inhibit the transfer of all titles, rights, interests and benefits connected with the Property to and in favour of the Buyer.
- i) The Parties, being desirous of recording the terms and conditions on which the Seller shall sell and the Buyer shall acquire the Property, have decided to execute this deed.

NOW THIS DEED WITNESSES:

1. In consideration of INR 32, 80, 000/- (Rupees Thirty Two Lakhs Eighty Thousand Only) (the "Purchase Consideration"), the receipt of which is hereby acknowledged by the Sellers, the Sellers hereby irrevocably conveys and transfers by way of sale to the Buyer all that piece and parcel of land bearing **Survey No 39**, admeasuring approx **23 acres 38 guntas** (P.K 3 acres 18 guntas) or thereabouts situated at **Halabhavi Village, Lingasuguru Taluk, Raichur District, Karnataka**, which is more particularly described in Schedule, free from any encumbrances and reasonable doubts, together with all and singular the structures, houses, outhouses, fencing, compound walls, edifices, buildings, court yards, areas, compounds, sewers, drains, ditches, fences, trees, plants, shrubs, ways, paths, passages, commons, gullies, wells, waters, water-courses, lights, liberties, privileges, easements, profits, advantages, rights, members and appurtenances whatsoever to the said land or ground hereditaments and premises or any part thereof belonging or in any wise appurtenant to or with the same or any part thereof now or at or any time hereto before usually held used occupied or enjoyed or reputed or known as part or member thereof and to belong or be appurtenant thereto.

ಶಿ. [Signature]

[Signature]

ಮಲಯ ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು.

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ
ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ
ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

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The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.

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ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

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ಈ ದಸ್ತಾವೇಜು.....ಸೀಟುಗಳನ್ನೊಳಗೊಂಡಿದ್ದು
ಇದು.....ದಸ್ತಾವೇಜು ನಂಬರಿನ ಮೊದಲನೆಯ ಪುಟ

ಹರಿಯ ಉಪ ನೋಂದಣಾಧಿಕಾರಿಗಳು
ಲಿಂಗಸುಗೂರು

DEED OF CONVEYANCE

This DEED OF CONVEYANCE made on this 14th day of NOVEMBER 2018

BY AND BETWEEN

Shri Yallappa S/o Shri Kareppa Mundaragi, aged about years, residing at Halabhavi Village, Lingasaguru Taluk, Raichur District, (hereinafter referred to as the "Sellers", which expression shall unless repugnant to the context and meaning thereof be deemed to mean and include his/her heirs, executors, successors and permitted assigns); of the **FIRST PART**

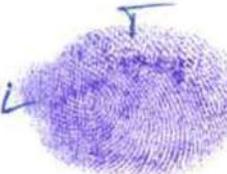
AND

Forest Department, on behalf of Hon'ble Governor of Karnataka represented by Range Forest Officer delegated by the Deputy Conservator of Forest Office at Court Road, Raichur, (hereinafter referred to as the "Buyer", which expression shall unless it is repugnant to the context or meaning thereof be deemed to include its successors) of the **SECOND PART**.

The Sellers and Buyer may hereinafter be collectively referred to as the "Parties" and individually as a "Party".

WHEREAS:

- The Sellers are absolutely seized and possessed of or otherwise well and sufficiently entitled to the plot of agricultural land bearing **Survey No: - 139**, admeasuring approx **25 acres 17 guntas (P.K 3 acres 27 guntas)** or thereabouts situated at **Halabhavi Village, Lingasuguru Taluk, Raichur District, Karnataka** together with if any structures standing thereon and more particularly described in the Schedule hereunder (hereafter referred to as the "**Property**").
- The Seller has inherited the Property from ancestor and same stands in the name of the Seller in revenue records as owner and Seller has full rights absolute authority to sell, dispose off and transfer the Property in the manner Seller wishes.

 M of Yallappa.

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ಲಿಂಗಸುಗೂರು

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 ಸಹಾಯಕ ರೇಂಜ್ ಆಫೀಸರ್ ನಯರಾ
 ಹಿರಿಯ ಉಪನಿರೀಕ್ಷಕಾಧಿಕಾರಿಗಳು ಲಿಂಗಸುಗೂರು

ಸಬ್ ರಜಿಸ್ಟ್ರಾರ್ ಲಿಂಗಸುಗೂರು ರವರ ಕಚೇರಿಯಲ್ಲಿ ದಿನಾಂಕ 14 11-2018 ರಂದು 12:16:30 PM ಗಂಟೆಗೆ ಈ ಕೆಳಗೆ ವಿವರಿಸಿದ ಶುಲ್ಕದೊಂದಿಗೆ

ಕ್ರಮ ಸಂಖ್ಯೆ	ವಿವರ	ರೂ. ಪೈ.
1	ವ್ಯಾನ್‌ನಿಂಗ್ ಫೀ	35.00
2	ಸ್ಟೆಪ್ಲಿಂಗ್ ಶುಲ್ಕ	100.00
3	ಪರಿವರ್ತನಾ ಶುಲ್ಕ	35.00
4	ಪರಿಶೋಧನಾ ಶುಲ್ಕ	35.00
	ಒಟ್ಟು :	905.00

ಶ್ರೀ Forest Department on behalf of Hon'ble Governor of Karnataka represented by Range Forest Officer Lingasugur Delegated by the Deputy Conservator of Forests Raichur Division Raichur, M/S. JSW Steel Limited has Given for Compensatory Afforestation ಇವರಿಂದ ಹಾಜರ ಮಾಡಲ್ಪಟ್ಟಿದೆ

ಬರೆದುಹಿಡಿದುದಾಗಿ ಒಪ್ಪಿರುತ್ತಾರೆ

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು	ಫೋಟೋ	ಹೆಚ್ಚುವರಿ ವಿವರ	ಇತರೆ
1	Forest Department on behalf of Hon'ble Governor of Karnataka represented by Range Forest Officer Lingasugur Delegated by the Deputy Conservator of Forests Raichur Division Raichur, M/S. JSW Steel Limited has Given for Compensatory Afforestation (ಬರೆಸಿಹಿಡಿದವರು)			 ನಯರಾ ಅರಣ್ಯ ಅಧಿಕಾರಿ ಲಿಂಗಸುಗೂರು.
2	ಯುಲ್ಲವೈ ಅಂಕಣವು ಮುಂಡಲಗಿ (ಬರೆದುಹಿಡಿದವರು)			

ಸಹಾಯಕ ರೇಂಜ್ ಆಫೀಸರ್ ನಯರಾ
 ಹಿರಿಯ ಉಪನಿರೀಕ್ಷಕಾಧಿಕಾರಿಗಳು
 ಲಿಂಗಸುಗೂರು.

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ. ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

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The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.

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ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

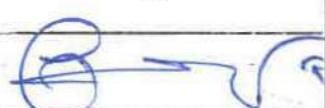
- c) Seller has agreed to sell the Property to JSW Steel Limited or State Forest Department or any other Government authority as instructed by JSW Steel Limited, for a total purchase consideration of **INR 34,80,000/- (Rupees Thirty Four Lakhs Eighty Thousand Only)**, (the "Purchase Consideration").
- d) JSW Steel Limited has paid the full Purchase Consideration to the Seller and has asked the Seller to transfer the Property to the Buyer i.e. Government of Karnataka, Forest Department on behalf of JSW Steel Limited for mandatory provision for mining lease as per the Forest Act 1980 and Government of Karnataka represented by Deputy Conservator of Forests, Raichur has accepted the Property for raising Compensatory Afforestation;
- e) As per the provision to Section 3 of the Karnataka Stamp Act, 1957, no duty shall be chargeable in respect of any instrument executed by, or on behalf of, or in favour of, the State Government in cases where the State Government would be liable to pay the duty chargeable in respect of such instrument. Further, as per article XXXIII of Table of Registration Fees, Karnataka Registration, Rules 1965, a department either of the State Government or Central Government liable to pay registration charges is exempt from the payment of all fees under the Table of Registration Fees. However, in case any stamp duty or registration fee in respect to this instrument is assessed by any competent authority to be borne by the State Government, the same would be borne by JSW Steel Limited.
- f) In consideration of the Seller agreeing to sell, convey and transfer the Property to the Buyer as agreed by both the parties, the Buyer will pay consideration amount **INR 34,80,000/- (Rupees Thirty Four Lakhs Eighty Thousand Only)**, through Cheque bearing number 480382 dated 21/11/2018 of **State Bank Of India** JVSL branch, Toranagallu at the time of Registration of Deed of Conveyance.
- g) Therefore, the Seller has assured that the Property is free from all encumbrances and have not at any time hereinbefore, in any manner whatsoever, been mortgaged, charged, conveyed or agreed to be sold and transferred to any third

 M. S. Yallappa


ವಲಯ ಅಧ್ಯಕ್ಷರು
ಲಿಂಗಸುಗೂಡು

ಗುರುತಿಸುವವರು

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 ಸೋದರಾಪ್ಪ ಹೊಸಪ್ಪೆ ನಂಬರ್ ಪುಟ
 ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿಗಳು ಶಿಂಗಸಗೂಡು

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು ಮತ್ತು ವಿಳಾಸ	ಸಹಿ
1	ಹುಡೇದಪ್ಪ ತಂದೆ ಮಸ್ತಾನಪ್ಪ ಇಂಗಳಿಗಿ ಸಾ-ಹೊಸಪೇಟೆ	
2	ಗುಲಾಮಸಮದಾನಿ ತಂದೆ ಮಹ್ಮದಹುಸೇನ ಸಾ-ಲಿಂಗಸಗೂಡು	

ಸುಬಾಷ್ ಹೊಸಪ್ಪೆ
 ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ
 ಶಿಂಗಸಗೂಡು

As per G.O.No RD 403 ESR 85 Dated 27-5-1986 Registration Fee Is Exempted. As per G.O.No RD 33 GST 62 Dated 15/16 th February 1969 Stamp Duty Is Exempted.

ಸುಬಾಷ್ ಹೊಸಪ್ಪೆ
 ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ
 ಶಿಂಗಸಗೂಡು



1 ನೇ ಪುಸ್ತಕದ ದಸ್ತಾವೇಜು
 ನಂಬರ್ LNG-1-11558-2018-19 ಆಗಿ
 ಸಿ.ಡಿ. ನಂಬರ್ LNGD248 ನೇ ಧರಲ್ಲಿ
 ದಿನಾಂಕ 14-11-2018 ರಂದು ನೋಂದಾಯಿಸಲಾಗಿದೆ



ಸುಬಾಷ್ ಹೊಸಪ್ಪೆ (ಉಪನೋಂದಣಾಧಿಕಾರಿ)
 ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ
 ಶಿಂಗಸಗೂಡು




ಈ ದಸ್ತಾವೇಜು ಹಾಕೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ. ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

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Official's Multipurpose Co-Operative Society Ltd.

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ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

11/5/2020

ನಂ. 11/5/2020

2. The Parties shall undertake all necessary steps as may be required to endorse the name of the Buyer in place of Sellers in the concerned revenue records of the Property. The Parties shall depute their respective authorized representatives, as and when required, to the office of Sub-Registrar for signing the requisite documents as may be desired by the said offices.
3. That the Sellers hereby covenants to the Buyer that:
 - (i) the Sellers have, in themselves, good right, full power and absolute authority to convey and transfer by way of sale the Property hereby conveyed unto and to the use of the Buyer by way of this Deed of Conveyance and notwithstanding any act, deed, matter or thing whatsoever by the Sellers or any person/s lawfully claiming by from, through, under or in trust for the Sellers, it has not committed, omitted or knowingly or willingly suffered or been a party or privy to any act, deed or thing whereby the Sellers is prevented from granting and conveying the Property in the manner aforesaid or whereby the Property or any part thereof are, is, can or may be charged, encumbered or prejudicially affected in estate, title or otherwise;
 - (ii) the Buyer may, from time to time and at all times hereafter, peacefully and quietly enter upon, occupy, or possess and enjoy the Property hereby conveyed with their appurtenances, and receive the rents, issues and profits thereof and every part thereof for its own use and benefit without any suit, lawful eviction or interruption, claim and demand whatsoever from or by the Sellers or their successors or any of them or by any person or persons claiming or to claim, from under or in trust for them or any of them; and
 - (iii) the Sellers and all persons having or claiming any estate, right, title, or interest, in the Property, hereby conveyed or any part thereof by from, under or in trust for the Sellers or their heirs, executors, administrators or any of them shall and will from time to time and at all times hereafter at the request and costs of the Buyer do and execute and cause to be done and executed all such further and other lawful acts, deeds, things,

 M. J. Yallappa


ವಿಲಯ ಅಧ್ಯಕ್ಷ, ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು.

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ. ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

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ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

ಹಿರಿಯ ಅಧಿಕಾರಿಯ ಸಹಿ ಮತ್ತು ಮುದ್ರಣ

person(s), the Seller has agreed to transfer the Property and the Buyer has agreed to acquire the Property from the Seller.

- h) The Seller has further represented that, to the best of her knowledge, there are no proceeding, order, decree, suit or judgment pending/passed in/by any court or judicial/government authority, local body or statutory authority in respect of the Property, which would, in any manner, prejudice, restrain, limit or inhibit the transfer of all titles, rights, interests and benefits connected with the Property to and in favour of the Buyer.
- i) The Parties, being desirous of recording the terms and conditions on which the Seller shall sell and the Buyer shall acquire the Property, have decided to execute this deed.

NOW THIS DEED WITNESSES:

1. In consideration of **INR 34,80,000/- (Rupees Thirty Four Lakhs Eighty Thousand Only)** (the "**Purchase Consideration**"), the receipt of which is hereby acknowledged by the Sellers, the Sellers hereby irrevocably conveys and transfers by way of sale to the Buyer all that piece and parcel of land bearing **Survey No 139**, admeasuring approx **25 acres 17 guntas** (P.K 3 acres 27 guntas) or thereabouts situated at **Halabhavi** Village, **Lingasuguru** Taluk, **Raichur** District, Karnataka, which is more particularly described in Schedule, free from any encumbrances and reasonable doubts, together with all and singular the structures, houses, outhouses, fencing, compound walls, edifices, buildings, court yards, areas, compounds, sewers, drains, ditches, fences, trees, plants, shrubs, ways, paths, passages, commons, gullies, wells, waters, water-courses, lights, liberties, privileges, easements, profits, advantages, rights, members and appurtenances whatsoever to the said land or ground hereditaments and premises or any part thereof belonging or in any wise appurtenant to or with the same or any part thereof now or at or any time hereto before usually held used occupied or enjoyed or reputed or known as part or member thereof and to belong or be appurtenant thereto.

 M. J. Yallappa


ವಲಯ ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗುರು.

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ
ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

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ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ
ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ



The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

conveyances and assurances, whatsoever, for better and more perfectly and absolutely granting the Property and every part thereof hereby conveyed unto and to the use of the Buyer in pursuance hereof and in the manner as the Buyer, its executors or administrators and assigns shall reasonably require.

4. The Sellers confirms that they shall fully co-operate with the Buyer and the statutory authorities and do all such acts, matters, deeds and things as may be necessary and expedient for having Buyer name endorsed in the required revenue records and shall not do any act, matters, deed or thing which may delay or otherwise adversely affect the endorsement.
5. The Sellers have simultaneous with the execution of this deed delivered vacant and peaceful possession of the Property to the Buyer, and the Buyer hereby acknowledges the delivery of vacant and peaceful possession of the Property from the Sellers.
6. The Sellers hereby agrees and undertakes to indemnify the Buyer and JSW Steel Limited harmless in the event of any defect in the title of the Property or any claims put forth either by the Sellers, or their legal heirs, representatives, successors or anybody, claiming any right, title, or interest under or in trust for the Sellers and also to reimburse all such cost and expenses of litigation or in the event the Property or any portion thereof is lost to the Buyer as a result of defective title or breach of covenants by the Sellers.

 M. G. Yallopaga.


ವಲಯ ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗನಾಥ್.

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಸಂಘದ ಉಪನಿಯಮ ಸಂಖ್ಯೆ 5(9) ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ದಸ್ತಾವೇಜು ಹಾಳೆ
Document Sheet

ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ



The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

11558
ದಸ್ತಾವೇಜು ನಂಬರ್

ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿಗಳು Schedule to the Deed of Conveyance

Details of the Property

Land situated within the limits Halabhavi Village, Lingasuguru Taluk, Raichur District, Karnataka, bearing Survey No 139, measuring 25 acres 17 guntas (P.K 3 acres 27 guntas) acres with the following descriptions:

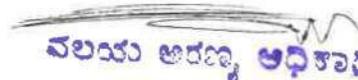
- East : Land of Survey No 138
- West : Land of Survey No 142
- North : Nalla
- South : Land of Survey No 140

IN WITNESS WHEREOF this deed has been duly executed as of the day and year first above written.

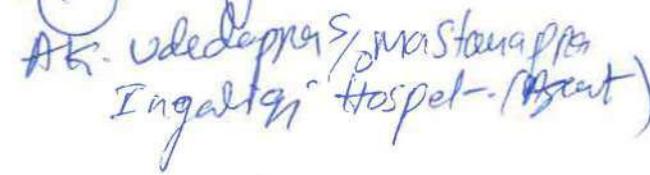
SIGNED AND DELIVERED by the
Within named Seller

)  M of. Yallappa.

SIGNED AND DELIVERED by the
Within named Buyer

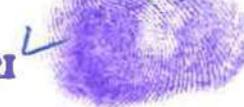
) 
ನಲಯು ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗುರು.

Witnesses:

1. 
Ak. Udedappa / M. Stanaappa
2. 
Ingaltgi Hospet - (Rent)

)  M of. Hanuachappa
L  M of. Dhanappa

3 
M of. Sanganappa
ಅಮೇಶ್ ಗಾಚಾರಿ
ಅಧಿಕಾರಿ

)  M of. Gudeappa
L 

AMARESH. V. GANACHARI
District Deed Writer
Lice. No. RGNDWL/16/2009-10
LINGASUGUR-584122



Print Date & Time : 14-11-2018 12:07:43 PM

ದಸ್ತಾವೇಜು ಸಂಖ್ಯೆ : 11555

ಸಬ್ ರೆಜಿಸ್ಟ್ರಾರ್ ಲಿಂಗಸಗೂರು ರವರ ಕಚೇರಿಯಲ್ಲಿ ದಿನಾಂಕ 14-11-2018 ರಂದು 11:22:35 AM ಗಂಟೆಗೆ ಈ ಕೆಳಗೆ ವಿವರಿಸಿದ ಶುಲ್ಕದೊಂದಿಗೆ

ಕ್ರಮ ಸಂಖ್ಯೆ	ವಿವರ	ರೂ.	ಪೈ
1	ಸ್ಯಾನಿಂಗ್ ಫೀ	735.00	/
2	ನೆಕ್ಸ್ಟ್ ಫೈಲಿಂಗ್ ಶುಲ್ಕ	100.00	/
3	ಪರಿವರ್ತನಾ ಶುಲ್ಕ	35.00	/
4	ಪರಿಶೋಧನಾ ಶುಲ್ಕ	35.00	/
	ಒಟ್ಟು :	905.00	/

ಶ್ರೀ Forest Department on behalf of Hon'ble Governor of Karnataka represented by Range Forest Officer Lingasugur Delegated by the Deputy Conservator of Forests Raichur Divison Raichur. M/S. JSW Steel Limited has Given for Compensatory Afforestation ಇವರಿಂದ ಹಾಜರ ಮಾಡಲ್ಪಟ್ಟಿದೆ

ಬರೆದುಕೊಟ್ಟಿದ್ದಾಗಿ ಒಪ್ಪಿರುತ್ತಾರೆ

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು	ಫೋಟೊ	ಹೆಚ್ಚಿಟ್ಟನ ಗುರುತು	ಸಹಿ
1	Forest Department on behalf of Hon'ble Governor of Karnataka represented by Range Forest Officer Lingasugur Delegated by the Conservator of Forests Raichur Divison Raichur. M/S. JSW Steel Limited has Given for Compensatory Afforestation (ಬರೆದುಕೊಂಡವರು)			 ನಲಯು ಉಪನಿರ್ದೇಶಕರು ಲಿಂಗಸಗೂರು.
2	ಹನುಮಂತ್ರಾಯ D/0-ಕುಂದಪ್ಪ ಸಾ ಹಾಲಭಾವಿ (ಬರೆದುಕೊಂಡವರು)			

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು	ಫೋಟೊ	ಹೆಚ್ಚಿಟ್ಟನ ಗುರುತು	ಸಹಿ
3	ದ್ಯಾಮವ್ವ H/0 ಬಸವ್ವ (ಬರೆದುಕೊಂಡವರು)			

ಉಪನಿರ್ದೇಶಕರು
ಲಿಂಗಸಗೂರು.

				d	~
4	ಸಂಗಮ್ H/o ಯಲ್ಲವ್ವ (ಬರೆದುಕೊಡುವವರು)			l	~
5	ಬಸಮ್ಮ H/o ಗಡ್ಡೆವ್ವ (ಬರೆದುಕೊಡುವವರು)			h	~

11555
 ಸಿ.ಎಸ್.ಎಸ್.ಎಸ್. ನಂಬರ್.....ಮುಖ
 ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿಗಳು ಲಿಂಗಸುಗೂಡು.

ಸುಭಾಷ್ ಹೆಚ್.ಎಲ್.
 ಸಬ್ ರಿಜಿಸ್ಟ್ರಾರ್
 ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ
 ಲಿಂಗಸುಗೂಡು.



ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಕರ್ನಾಟಕ ಸರ್ಕಾರದ
ಆದೇಶ ಸಂಖ್ಯೆ ಕಂಇ 152 ಮುನೋಮು 2003
ದಿನಾಂಕ 09-05-2003ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ
Government of Karnataka

ದಸ್ತಾವೇಜು ಹಾಳೆ
Document Sheet

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ನೋಂದಣಿ ಹಾಗೂ ಮುದ್ರಾಂಕ ಇಲಾಖೆ
Registration and Stamps Department

ಬೆಲೆ : ರೂ. 2/-

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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ದಸ್ತಾವೇಜನ್ನು ಬರೆದುಕೊಟ್ಟ ದಿನಾಂಕ

ಪಾವತಿಸಿದ ಒಟ್ಟು ಮುದ್ರಾಂಕ ಶುಲ್ಕ ರೂ.

ಓಟಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿಗಳು ರಂಗಸುಗುರು

Total stamp duty paid Rs.

- 3 -

transferred to any third person(s), the Sellers have agreed to transfer the Property and the Buyer has agreed to acquire the Property from the Sellers.

- g) The Sellers, have further represented that, to the best of her knowledge, there are no proceeding, order, decree, suit or judgment pending/passed in/by any court or judicial/government authority, local body or statutory authority in respect of the Property, which would, in any manner, prejudice, restrain, limit or inhibit the transfer of all titles, rights, interests and benefits connected with the Property to and in favour of the Buyer.
- h) The Parties, being desirous of recording the terms and conditions on which the Sellers shall sell and the Buyer shall acquire the Property, have decided to execute this deed.

NOW THIS DEED WITNESSES:

- 1) In consideration of **INR 12,80,000/- (Rupees Twelve Lakhs Eighty Thousand Only)**, (the "**Purchase Consideration**"), the receipt of which is hereby acknowledged by the Sellers hereby irrevocably conveys and transfers by way of sale to the Buyer all that piece and parcel of land bearing **Survey No: - 142/1**, admeasuring approx **9 acres 23 guntas** (P.K 1 acres 23 guntas) or thereabouts situated at **Halabhavi Village, Lingasuguru Taluk, Raichur District, Karnataka**, which is more particularly described in Schedule, free from any encumbrances and reasonable doubts, together with all and singular the structures, houses, outhouses, fencing, compound walls, edifices, buildings, court yards, areas, compounds, sewers, drains, ditches, fences, trees, plants, shrubs, ways, paths, passages, commons, gullies, wells, waters, water-courses, lights, liberties, privileges, easements, profits, advantages, rights, members and appurtenances whatsoever to the said land or ground hereditaments and premises or any part thereof belonging or in any wise appurtenant to or with the same or any part thereof now or at or any time hereto before usually held used occupied or enjoyed or reputed or known as part or member thereof and to belong or be appurtenant thereto.

 ಮೆ. ಆನವಾ, ಆಧಾರ್  ಮೆ. Basamma
 ಮೆ. Basamma
 ಮೆ. Basamma

 ಎಲಯ ಆರಣ್ಯ ಅಧಿಕಾರಿ
 ರಂಗಸುಗುರು.

ಗುರುತಿಸುವವರು

11555-6
 ದಸ್ತಾವೇಜು ನಂಬರ್.....
 ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿಗಳ ಲಿಂಗಸೂಚಕ

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು ಮತ್ತು ವಿಳಾಸ	ಸಹಿ
1	ಹುಡೇದವ್ವ ತಂದೆ ಮೆಸ್ತಾನವ್ವ ಇಂಗಳಗಿ ಸಾ-ಹೊಸಪೇಟೆ	
2	ಗುಂಡವ್ವ ತಂದೆ ಗಡ್ಡವ್ವ ಸಾ-ಹಾಲಭಾವಿ	ಗುಂಡವ್ವ

ಸುಭಾಷ್ ಹೊಸಳೆ
 ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ
 ಲಿಂಗಸೂಚಕ

As per G.O.No RD 403 ESR 85 Dated 27-5-1986 Registration Fee Is Exempted. As per G.O.No RD 33 GST/62 Dated 15/16 th February 1969 Stamp Duty Is Exempted.

ಸುಭಾಷ್ ಹೊಸಳೆ
 ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ
 ಲಿಂಗಸೂಚಕ

 1 ನೇ ಪುಸ್ತಕದ ದಸ್ತಾವೇಜು ನಂಬರ್ LNG-1-11555-2018-19 ಅಗಿ ಸಿ.ಡಿ. ನಂಬರ್ LNGD248 ನೇ ಧರಲ್ಲಿ ದಿನಾಂಕ 14-11-2018 ರಂದು ನೋಂದಾಯಿಸಲಾಗಿದೆ ಸುಭಾಷ್ ಹೊಸಳೆ (ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ) ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ ಲಿಂಗಸೂಚಕ	 ಸುಭಾಷ್ ಹೊಸಳೆ ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ ಲಿಂಗಸೂಚಕ
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ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಕರ್ನಾಟಕ ಸರ್ಕಾರದ
ಆದೇಶ ಸಂಖ್ಯೆ ಕಂಇ 152 ಮುನೋಮು 2003
ದಿನಾಂಕ 09-05-2003ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ
Government of Karnataka

ದಸ್ತಾವೇಜು ಹಾಳೆ
Document Sheet

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ನೋಂದಣಿ ಹಾಗೂ ಮುದ್ರಾಂಕ ಇಲಾಖೆ
Registration and Stamps Department

ಬೆಲೆ : ರೂ. 2/-

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ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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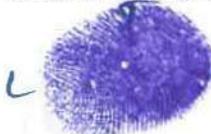
ದಸ್ತಾವೇಜನ್ನು ಬರದುಕೊಟ್ಟ ದಿನಾಂಕ
Date of execution

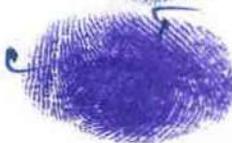
ಪಾವತಿಸಿದ ಒಟ್ಟು ಮುದ್ರಾಂಕ ಶುಲ್ಕ ರೂ.
Total stamp duty paid Rs.

- 5 -

and absolutely granting the Property and every part thereof hereby conveyed unto and to the use of the Buyer in pursuance hereof and in the manner as the Buyer, its executors or administrators and assigns shall reasonably require.

4. The Sellers confirms that they shall fully co-operate with the Buyer and the statutory authorities and do all such acts, matters, deeds and things as may be necessary and expedient for having Buyer name endorsed in the required revenue records and shall not do any act, matters, deed or thing which may delay or otherwise adversely affect the endorsement.
5. The Sellers have simultaneous with the execution of this deed delivered vacant and peaceful possession of the Property to the Buyer, and the Buyer hereby acknowledges the delivery of vacant and peaceful possession of the Property from the Sellers.
6. The Sellers hereby agrees and undertakes to indemnify the Buyer and JSW Steel Limited harmless in the event of any defect in the title of the Property or any claims put forth either by the Sellers, or their legal heirs, representatives, successors or anybody, claiming any right, title, or interest under or in trust for the Sellers and also to reimburse all such cost and expenses of litigation or in the event the Property or any portion thereof is lost to the Buyer as a result of defective title or breach of covenants by the Sellers.

 m of Anandanna

 m of Sarganna

 m of Sarganna

 m of Basanna

ವಲಯ ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು.

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಕರ್ನಾಟಕ ಸರ್ಕಾರದ
ಆದೇಶ ಸಂಖ್ಯೆ ಕಂಇ 152 ಮುನೋಮು 2003
ದಿನಾಂಕ 09-05-2003ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ
Government of Karnataka

ದಸ್ತಾವೇಜು ಹಾಳೆ
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ನೋಂದಣಿ ಹಾಗೂ ಮುದ್ರಾಂಕ ಇಲಾಖೆ
Registration and Stamps Department

ಬೆಲೆ : ರೂ. 2/-

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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Date of execution

ಪಾವತಿಸಿದ ಒಟ್ಟು ಮುದ್ರಾಂಕ ಶುಲ್ಕ ರೂ.

- 6 - Total stamp duty paid Rs.

Schedule to the Deed of Conveyance

Details of the Property

Land situated within the limits Halabhavi Village, Lingasuguru Taluk, Raichur District, Karnataka, bearing Survey No 142/1, measuring 9 acres 23 guntas (P.K 1 acres 23 guntas) acres with the following descriptions:

- East : Land of Survey No: 139
- West : Land of Survey No: 143
- North : Forest Land
- South : Land of Survey No: 142/2

IN WITNESS WHEREOF this deed has been duly executed as of the day and year first above written.

SIGNED AND DELIVERED by the
Within named Sellers

- 1. M of Anandappa
- 2. M of Srinivas
- 3. M of Sargamma
- 4. M of Basamma

SIGNED AND DELIVERED by the
Within named Buyer

Witnesses:-

- 1. H.K. Udedeppa Ma Stamma Ingali
Hospet
 - 2. ಸುಬ್ಬಯ್ಯ
 - 3. ಗುಂಡಪ್ಪ ತಂದೆ ಗಿಡ್ಡೆ. ಕಾಲಬಲಿ.
 - 4. ಗೋಪಾಲ್ ತಂದೆ ಯಲ್ಲಪ್ಪ ಬಾಲಬಲಿ
- ಶ್ರೀ ದಯಾಚಾರ್ಯ ಅಂ/ದಾಖಲೆ
ಗುಂಡಪ್ಪ

ನಲಯ ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು.

AMARESH. V. GANACHARI
District Deed Writer
Lic. No. RGNDWL/16/2009-10
LINGASUGUR-584122

ಕರ್ನಾಟಕ ರಾಜ್ಯ ನೋಂದಣಿ ಮತ್ತು ಮುದ್ರಾಂಕ ಇಲಾಖಾ
ನೌಕರರ ವಿವಿಧೋದ್ದೇಶ ಸಹಕಾರ ಸಂಘ ನಿಯಮಿತ

The Karnataka State Registration and Stamps Department
Official's Multipurpose Co-Operative Society Ltd.



ಈ ದಸ್ತಾವೇಜು ಸೀಟುಗಳನ್ನೆಲ್ಲೆಗೂ ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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ಇದು ದಸ್ತಾವೇಜು ನಂಬರಿಗೆ ಮೊದಲನೆಯ ಪುಟ

ಬೆಲೆ : ರೂ. 2/-
(GST EXTRA)

- 1 -

ಇದು ಉಪ ನೋಂದಣಿಕಾರಿಗಳು

ಲಿಂಗಸುಗೂರು

DEED OF CONVEYANCE

This DEED OF CONVEYANCE made on this 5th day of NOVEMBER 2018

BY AND BETWEEN

1. Shri. Hanumantharaya S/o Gundappa, aged about 65 years, residing at Halabhavi village, Lingasagur Taluk, Raichur District.
2. Smt. Dyamavva W/o Basappa, aged about 64 years, residing at Halabhavi village, Lingasagur Taluk, Raichur District.
3. Smt. Sangamma W/o Yallappa, aged about 63 years, residing at Halabhavi village, Lingasagur Taluk, Raichur District.
4. Smt. Basamma W/o Gaddeppa, aged about 62 years, residing at Halabhavi village, Lingasagur Taluk, Raichur District (hereinafter referred to as the "Sellers", which expression shall unless repugnant to the context and meaning thereof be deemed to mean and include his/her heirs, executors, successors and permitted assigns); of the **FIRST PART**

AND

Forest Department, on behalf of Hon'ble Governor of Karnataka represented by **Range Forest Officer** delegated by the **Deputy Conservator of Forest Office** at Court road, **Raichur**, (hereinafter referred to as the "**Buyer**", which expression shall unless it is repugnant to the context or meaning thereof be deemed to include its successors) of the **SECOND PART**. The Sellers and Buyer may hereinafter be collectively referred to as the "**Parties**" and individually as a "**Party**".

WHEREAS:

- a) The Sellers are absolutely seized and possessed of or otherwise well and sufficiently entitled to the plot of agricultural land bearing **Survey No: - 143**, admeasuring approx **21 acres 26 guntas** (P.K 2 acres 26 guntas) or thereabouts situated at **Halabhavi Village, Lingasuguru Taluk, Raichur District, Karnataka** together with if any structures standing thereon and more particularly described in the Schedule hereunder (hereafter referred to as the "**Property**").

L T M }
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Hanumantharaya

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L T M }
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Dyamavva

ವರಿಯ ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು

L T M }
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Sangamma



Print Date & Time : 14-11-2018 12:11:16 PM

ದಸ್ತಾವೇಜು ಸಂಖ್ಯೆ : 11556

11556 ದಸ್ತಾವೇಜು ಸಂಖ್ಯೆ 2
ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿಗಳು ಲಿಂಗಸುಗೂರು

ಸಬ್ ರಜಿಸ್ಟ್ರಾರ್ ಲಿಂಗಸುಗೂರು ರವರ ಕಚೇರಿಯಲ್ಲಿ ದಿನಾಂಕ 14-11-2018 ರಂದು 11:27:44 AM ಗಂಟೆಗೆ ಈ ಕೆಳಗೆ ವಿವರಿಸಿದ ಶುಲ್ಕದೊಂದಿಗೆ

ಕ್ರಮ ಸಂಖ್ಯೆ	ವಿವರ	ರೂ. ಪೈ
1	ಸ್ಯಾನಿಂಗ್ ಫೀ	735.00
2	ನಕ್ಷೆ ಫೈಲಿಂಗ್ ಶುಲ್ಕ	100.00
3	ಪರಿವರ್ತನಾ ಶುಲ್ಕ	35.00
4	ಪರಿಶೋಧನಾ ಶುಲ್ಕ	35.00
	ಒಟ್ಟು :	905.00

ಶ್ರೀ Forest Department on behalf of Hon'ble Governor of Karnataka represented by Range Forest Officer Lingasugur Delegated by the Deputy Conservator of Forests Raichur Divison Raichur. M/S.JSW Steel Limited has Given for Compensatory Afforestation ಇವರಿಂದ ಹಾಜರ ಮಾಡಲ್ಪಟ್ಟಿದೆ

ಬರೆದುಕೊಟ್ಟಿದ್ದಾಗಿ ಒಪ್ಪಿರುತ್ತಾರೆ

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು	ಫೋಟೋ	ಹೆಚ್ಚಿಟ್ಟ ಗುರುತು	ಸಹಿ
1	Forest Department on behalf of Hon'ble Governor of Karnataka represented by Range Forest Officer Lingasugur Delegated by the Deputy Conservator of Forests Raichur Divison Raichur. M/S. JSW Steel Limited has Given for Compensatory Afforestation (ಬರೆಸಿಕೊಂಡವರು)			
2	ಹನುಮಂತಾಯ D/O ಗುಂಡಪ್ಪ ಸಾ ಹಾಲಭಾವಿ (ಬರೆದುಕೊಡುವವರು)			

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು	ಫೋಟೋ	ಹೆಚ್ಚಿಟ್ಟ ಗುರುತು	ಸಹಿ
3	ದ್ಯಾಮವ್ವ H/o ಬಸವ್ವ			

ಶುಭಾಶ ಯೋಸಳ್ಳಿ
ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಕರ್ನಾಟಕ ಸರ್ಕಾರದ
ಆದೇಶ ಸಂಖ್ಯೆ ಕಂಇ 152 ಮುನೋಮು 2003
ದಿನಾಂಕ 09-05-2003ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ
Government of Karnataka

ದಸ್ತಾವೇಜು ಹಾಳೆ
Document Sheet

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ನೋಂದಣಿ ಹಾಗೂ ಮುದ್ರಾಂಕ ಇಲಾಖೆ
Registration and Stamps Department

ಬೆಲೆ: ರೂ. 2/-

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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ದಸ್ತಾವೇಜನ್ನು ಬರೆದುಕೊಟ್ಟ ದಿನಾಂಕ
Date of execution

- 2 - ಪಾವತಿಸಿದ ಒಟ್ಟು ಮುದ್ರಾಂಕ ಶುಲ್ಕ ರೂ.
Total stamp duty paid Rs.

together with if any structures standing thereon and more particularly described in the Schedule hereunder (hereafter referred to as the "Property").

- b) The Sellers have inherited the Property from ancestor and same stands in the name of the Sellers in revenue records as owner and Sellers have full rights absolute authority to sell, dispose off and transfer the Property in the manner Sellers wishes.
- c) JSW Steel Limited have paid the full Purchase Consideration to the Sellers and has asked the Sellers to transfer the Property to the Buyer i.e. Government of Karnataka, Forest Department on behalf of JSW Steel Limited for mandatory provision for mining lease as per the Forest Act 1980 and Government of Karnataka represented by Deputy Conservator of Forests, Raichur has accepted the Property for raising Compensatory Afforestation;
- d) As per the provision to Section 3 of the Karnataka Stamp Act, 1957, no duty shall be chargeable in respect of any instrument executed by, or on behalf of, or in favour of, the State Government in cases where the State Government would be liable to pay the duty chargeable in respect of such instrument. Further, as per article XXXIII of Table of Registration Fees, Karnataka Registration, Rules 1965, a department either of the State Government or Central Government liable to pay registration charges is exempt from the payment of all fees under the Table of Registration Fees. However, in case any stamp duty or registration fee in respect to this instrument is assessed by any competent authority to be borne by the State Government, the same would be borne by JSW Steel Limited.
- e) In consideration of the Sellers agreeing to sell, convey and transfer the Property to the Buyer in accordance with this Agreement, the Buyer will pay consideration amount **INR 30,40,000/- (Rupees Thirty Lakhs Forty Thousand Only)**, through Cheque bearing number 480369, 480370, 480371 & 480372 dated 03.09.2018, State Bank of India JVSL branch, Toranagallu at the time of Registration of Deed of Conveyance. Each Seller will received sale consideration amount equally in total consideration amount.

M of. ಹನುಮಂತರಾವ್ M of Babanna
M of ಸುಬ್ರಹ್ಮಣ್ಯ
M of Sauganna
ವಲಯ ಅಧ್ಯಕ್ಷ, ಅಧಿಕಾರಿ
ಲಿಂಗದುರ್ಗುರು.

	(ಬರೆದುಕೊಡುವವರು)			
4	ಸಂಗಮ್ H/o ಯಲ್ಲಪ್ಪ (ಬರೆದುಕೊಡುವವರು)			
5	ಬಸಮ್ಮ H/o ಗಡ್ಡಪ್ಪ (ಬರೆದುಕೊಡುವವರು)			

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 ಸಂಖ್ಯೆ 4
 ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿಗಳು ಲಿಂಗಸುಗೂರು

ಸುಬ್ಬರಾಜ್
 ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ
 ಲಿಂಗಸುಗೂರು



ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಕರ್ನಾಟಕ ಸರ್ಕಾರದ
ಆದೇಶ ಸಂಖ್ಯೆ ಕಂಇ 152 ಮುನೋಮು 2003
ದಿನಾಂಕ 09-05-2003ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ
Government of Karnataka

ದಸ್ತಾವೇಜು ಹಾಳೆ
Document Sheet

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ನೋಂದಣಿ ಹಾಗೂ ಮುದ್ರಾಂಕ ಇಲಾಖೆ
Registration and Stamps Department

ಬೆಲೆ : ರೂ. 2/-

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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.....ಮುಖ್ಯ
ದಸ್ತಾವೇಜನ್ನು ಬಿಡುಗಡೆ ಮಾಡಿದ ದಿನಾಂಕ
Date of execution

- 3 - ಪಾವತಿಸಿದ ಒಟ್ಟು ಮುದ್ರಾಂಕ ಶುಲ್ಕ ರೂ.
Total stamp duty paid Rs.

- f) Therefore, on fulfillment of the conditions set out in the Agreement to Sell and relying on the representation of the Sellers that the Property is free from all encumbrances and have not at any time hereinbefore, in any manner whatsoever, been mortgaged, charged, conveyed or agreed to be sold and transferred to any third person(s), the Sellers have agreed to transfer the Property and the Buyer has agreed to acquire the Property from the Sellers.
- g) The Sellers have further represented that, to the best of her knowledge, there are no proceeding, order, decree, suit or judgment pending/passed in/by any court or judicial/government authority, local body or statutory authority in respect of the Property, which would, in any manner, prejudice, restrain, limit or inhibit the transfer of all titles, rights, interests and benefits connected with the Property to and in favour of the Buyer.
- h) The Parties, being desirous of recording the terms and conditions on which the Sellers shall sell and the Buyer shall acquire the Property, have decided to execute this deed.

NOW THIS DEED WITNESSES:

1. In consideration of **INR 30,40,000/- (Rupees Thirty Lakhs Forty Thousand Only)**, (the "**Purchase Consideration**"), the receipt of which is hereby acknowledged by the Sellers hereby irrevocably conveys and transfers by way of sale to the Buyer all that piece and parcel of land bearing **Survey No: - 143**, admeasuring approx **21 acres 26 guntas** (P.K 2 acres 26 guntas) or thereabouts situated at **Halabhavi Village, Lingasuguru Taluk, Raichur District, Karnataka**, which is more particularly described in Schedule, free from any encumbrances and reasonable doubts, together with all and singular the structures, houses, outhouses, fencing, compound walls, edifices, buildings, court yards, areas, compounds, sewers, drains, ditches, fences, trees, plants, shrubs, ways, paths, passages, commons, gullies, wells, waters, water-courses, lights, liberties, privileges, easements, profits, advantages, rights, members and appurtenances whatsoever to the said land or ground hereditaments and premises or any part

L M of. ಶವನೂರು

L M of Babunna

L M of ಸುಬ್ಬಯ್ಯ

L M of Saugamanna

ವಲಯ ಅಧ್ಯಕ್ಷರು
ರಂಗಸುಗುರು

ಗುರುತಿಸುವವರು

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6
ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿಗಳು ಲಿಂಗಸುಗೂರು

ಕ್ರಮ ಸಂಖ್ಯೆ	ಹೆಸರು ಮತ್ತು ವಿಳಾಸ	ಸಹಿ
1	ಹುಡೇದಪ್ಪ ತಂದೆ ಮಸ್ತಾನಪ್ಪ ಇಂಗಳಗಿ ಸಾ-ಹೊಸಪೇಟೆ	
2	ಗುಂಡಪ್ಪ ತಂದೆ ಗಡ್ಡಪ್ಪ ಸಾ-ಹಾಲಭಾವಿ	ಗುಂಡಪ್ಪ

ಸಹಾಯಕ ಯೋಜನಾ
ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು

As per G.O.No RD 403 ESR 85 Dated 27-5-1986 Registration Fee Is Exempted. As per G.O.No RD 33 GST 62 Dated 15/16 th February 1969 Stamp Duty Is Exempted.

ಸಹಾಯಕ ಯೋಜನಾ
ಹಿರಿಯ ಉಪನೋಂದಣಾಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು

1 ನೇ ಪುಸ್ತಕದ ದಸ್ತಾವೇಜು
ನಂಬರ LNG-1-11556-2018-19 ಆಗಿ
ಸಿ.ಡಿ. ನಂಬರ LNGD248 ನೇ ಧರಲ್ಲಿ
ದಿನಾಂಕ 14-11-2018 ರಂದು ನೋಂದಾಯಿಸಲಾಗಿದೆ

ಸಬ್ ರೆಜಿಸ್ಟ್ರಾರ್ (ಲಿಂಗಸುಗೂರು)

ಲಿಂಗಸುಗೂರು

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಕರ್ನಾಟಕ ಸರ್ಕಾರದ
ಆದೇಶ ಸಂಖ್ಯೆ ಕಂಎ 152 ಮುನೋಮು 2003
ದಿನಾಂಕ 09-05-2003ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ
Government of Karnataka

ದಸ್ತಾವೇಜು ಹಾಳೆ
Document Sheet

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ನೋಂದಣಿ ಹಾಗೂ ಮುದ್ರಾಂಕ ಇಲಾಖೆ
Registration and Stamps Department

ಬೆಲೆ : ರೂ. 2/-

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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ದಸ್ತಾವೇಜು ಬರೆದುಕೊಟ್ಟ ದಿನಾಂಕ
Date of execution

- 4 - ಪಾವತಿಸಿದ ಒಟ್ಟು ಮುದ್ರಾಂಕ ಶುಲ್ಕ ರೂ.
Total stamp duty paid Rs.

thereof belonging or in any wise appurtenant to or with the same or any part thereof now or at or any time hereto before usually held used occupied or enjoyed or reputed or known as part or member thereof and to belong or be appurtenant thereto.

2. The Parties shall undertake all necessary steps as may be required to endorse the name of the Buyer in place of Sellers in the concerned revenue records of the Property. The Parties shall depute their respective authorized representatives, as and when required, to the office of Sub-Registrar for signing the requisite documents as may be desired by the said offices.

3. That the Sellers hereby covenants to the Buyer that:

- (i) the Sellers have, in themselves, good right, full power and absolute authority to convey and transfer by way of sale the Property hereby conveyed unto and to the use of the Buyer by way of this Deed of Conveyance and notwithstanding any act, deed, matter or thing whatsoever by the Sellers or any person/s lawfully claiming by from, through, under or in trust for the Sellers, it has not committed, omitted or knowingly or willingly suffered or been a party or privy to any act, deed or thing whereby the Sellers is prevented from granting and conveying the Property in the manner aforesaid or whereby the Property or any part thereof are, is, can or may be charged, encumbered or prejudicially affected in estate, title or otherwise;
- (ii) the Buyer may, from time to time and at all times hereafter, peacefully and quietly enter upon, occupy, or possess and enjoy the Property hereby conveyed with their appurtenances, and receive the rents, issues and profits thereof and every part thereof for its own use and benefit without any suit, lawful eviction or interruption, claim and demand whatsoever from or by the Sellers or their successors or any of them or by any person or persons claiming or to claim, from under or in trust for them or any of them; and

 M of Sanyamara

 M of Sanyamara

 M of Sanyamara

 M of Sanyamara


ವಲಯ ಅಧಿನಿ, ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು.

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಕರ್ನಾಟಕ ಸರ್ಕಾರದ
ಆದೇಶ ಸಂಖ್ಯೆ ಕಂಇ 152 ಮುನೋಮು 2003
ದಿನಾಂಕ 09-05-2003ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ
Government of Karnataka

ದಸ್ತಾವೇಜು ಹಾಳೆ
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ನೋಂದಣಿ ಹಾಗೂ ಮುದ್ರಾಂಕ ಇಲಾಖೆ
Registration and Stamps Department

ಬೆಲೆ : ರೂ. 2/-

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ದಸ್ತಾವೇಜನ್ನು ಬರೆದುದು
Date of execution

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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- 5 - ಪಾವತಿಸಿದ ಒಟ್ಟು ಮುದ್ರಾಂಕ ಶುಲ್ಕ ರೂ.
Total stamp duty paid Rs.

(iii) the Sellers and all persons having or claiming any estate, right, title, or interest, in the Property, hereby conveyed or any part thereof by from, under or in trust for the Sellers or their heirs, executors, administrators or any of them shall and will from time to time and at all times hereafter at the request and costs of the Buyer do and execute and cause to be done and executed all such further and other lawful acts, deeds, things, conveyances and assurances, whatsoever, for better and more perfectly and absolutely granting the Property and every part thereof hereby conveyed unto and to the use of the Buyer in pursuance hereof and in the manner as the Buyer, its executors or administrators and assigns shall reasonably require.

4. The Sellers confirms that they shall fully co-operate with the Buyer and the statutory authorities and do all such acts, matters, deeds and things as may be necessary and expedient for having Buyer name endorsed in the required revenue records and shall not do any act, matters, deed or thing which may delay or otherwise adversely affect the endorsement.
5. The Sellers have simultaneous with the execution of this deed delivered vacant and peaceful possession of the Property to the Buyer, and the Buyer hereby acknowledges the delivery of vacant and peaceful possession of the Property from the Sellers.
6. The Sellers hereby agrees and undertakes to indemnify the Buyer and JSW Steel Limited harmless in the event of any defect in the title of the Property or any claims put forth either by the Sellers, or their legal heirs, representatives, successors or anybody, claiming any right, title, or interest under or in trust for the Sellers and also to reimburse all such cost and expenses of litigation or in the event the Property or any portion thereof is lost to the Buyer as a result of defective title or breach of covenants by the Sellers.

ಮಂತ್ರಿ ಜನಾರಾಜ್
ಮಂತ್ರಿ ಜ್ವಾಲಾಬ್
ಮಂತ್ರಿ Saegamma
ಮಂತ್ರಿ Balamanna
ಮಂತ್ರಿ ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗೂರು

ಈ ದಸ್ತಾವೇಜು ಹಾಳೆಯನ್ನು ಕರ್ನಾಟಕ ಸರ್ಕಾರದ
ಆದೇಶ ಸಂಖ್ಯೆ ಕಂಇ 152 ಮುನೋಮು 2003
ದಿನಾಂಕ 09-05-2003ರ ಪ್ರಕಾರ ಮುದ್ರಿಸಲಾಗಿದೆ.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ
Government of Karnataka

ದಸ್ತಾವೇಜು ಹಾಳೆ
Document Sheet

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ನೋಂದಣಿ ಹಾಗೂ ಮುದ್ರಾಂಕ ಇಲಾಖೆ
Registration and Stamps Department

ಬೆಲೆ : ರೂ. 2/-

ಈ ಹಾಳೆಯನ್ನು ಯಾವುದೇ ದಸ್ತಾವೇಜಿಗೆ ಉಪಯೋಗಿಸಬಹುದು
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11556
Date of execution

- 6 - ಪಾವತಿಸಿದ ಒಟ್ಟು ಮುದ್ರಾಂಕ ಶುಲ್ಕ ರೂ.
Total stamp duty paid Rs.

Schedule to the Deed of Conveyance

Details of the Property

Land situated within the limits Halabhavi Village, Lingasuguru Taluk, Raichur District, Karnataka, bearing Survey No 143, measuring 21 acres 26 guntas (P.K 2 acres 26 guntas) acres with the following descriptions:

- East : Land of Survey No: 142
- West : Forest Land
- North : Forest Land
- South : Land of Survey No: 39

IN WITNESS WHEREOF this deed has been duly executed as of the day and year first above written.

SIGNED AND DELIVERED by the
Within named Sellers

- 1. M of ...
- 2. M of ...
- 3.
- 4. M of Sangamara
- 5. M of Balamma

SIGNED AND DELIVERED by the
Within named Buyer

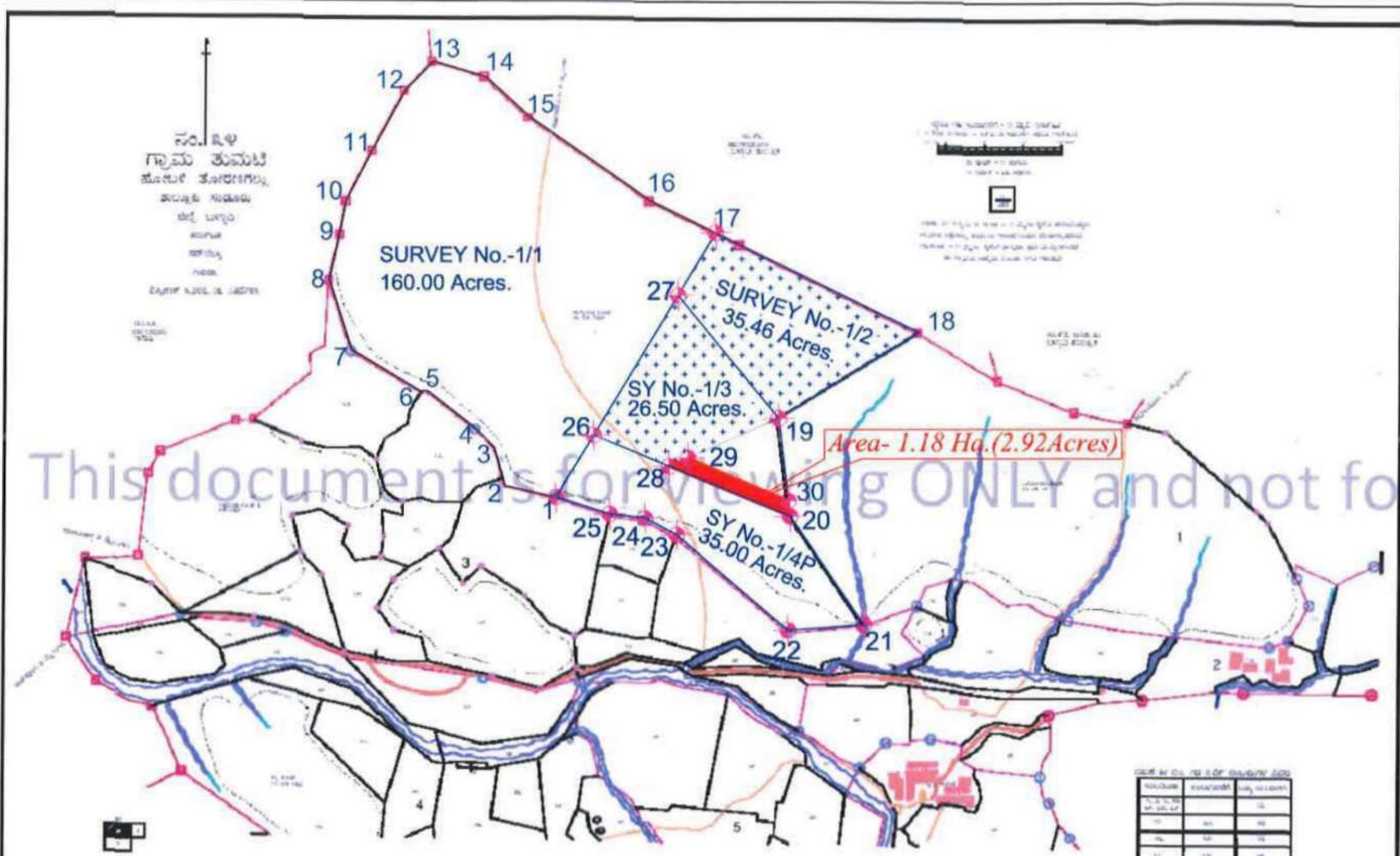
Witnesses:-

- 1.
- 2. ...
- 3. ...
- 4. ... (ನುಭವಿ ಶಾಶಿವನು)
- 5. ...
- 6. ...

ಕಲಿಯ ಅರಣ್ಯ ಅಧಿಕಾರಿ
ಲಿಂಗಸುಗುರು.

AMARESH. V. GANACHARI
District Deed Writer
Lic. No. RGN/DWL/16/2009-10
LINGASUGUR-584122

VILLAGE MAP SHOWING THE AREA IDENTIFIED FOR COMPENSATORY AFFORESTATION IN LIEU OF RAMA IRON ORE MINES ML NO 2621 OVER AN EXTENT OF 1.18HA.(2.92 ACRES.) AT TUMATI VILLAGE, SANDUR TALUK, BALLARI DISTRICT.



SCALE:-1"=1320'
OR
1Cm=158.40 m.

LEGEND

-  Area-106.46 Acres identified by JSWSL as a CA land.
-  Corner points with Sy.No.
-  Area-61.96 Acres (25.075 Ha.) earmarked as a CA land for Bhadra Iron Ore Mine ML No.2365.
-  Area- 1.18 Ha.(2.92Acres) earmarked as a CA land for Rama Iron Ore Mine ML No.2621.

Sy.No.1/3 (PART) , Area -26.50 Acres (10.724ha.)

GPS CO ORDINATES OF SY NO. 1/3 (PART 1.18 HA.)

POINT NO.	UTM (M) ZONE : 43N		DATUM : WGS-84	
	NORTHING	EASTING	LATITUDE	LONGITUDE
20	1671064.7037	690455.9857	15.10823	76.77221
28	1671195.2835	690139.7263	15.10943	76.76928
29	1671217.2522	690190.1950	15.10963	76.76975
30	1671105.2355	690451.3477	15.10860	76.77217

ಗಣಕೀಕೃತ ನಕ್ಷೆ ತಯಾರಿಸಿದವರು:



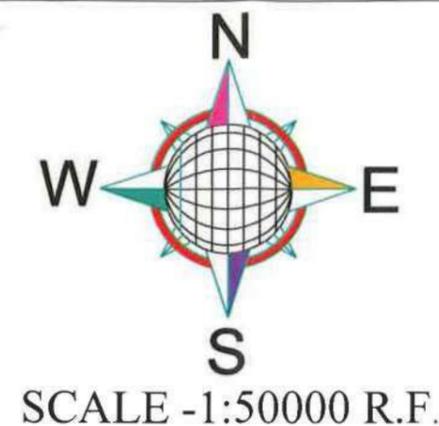
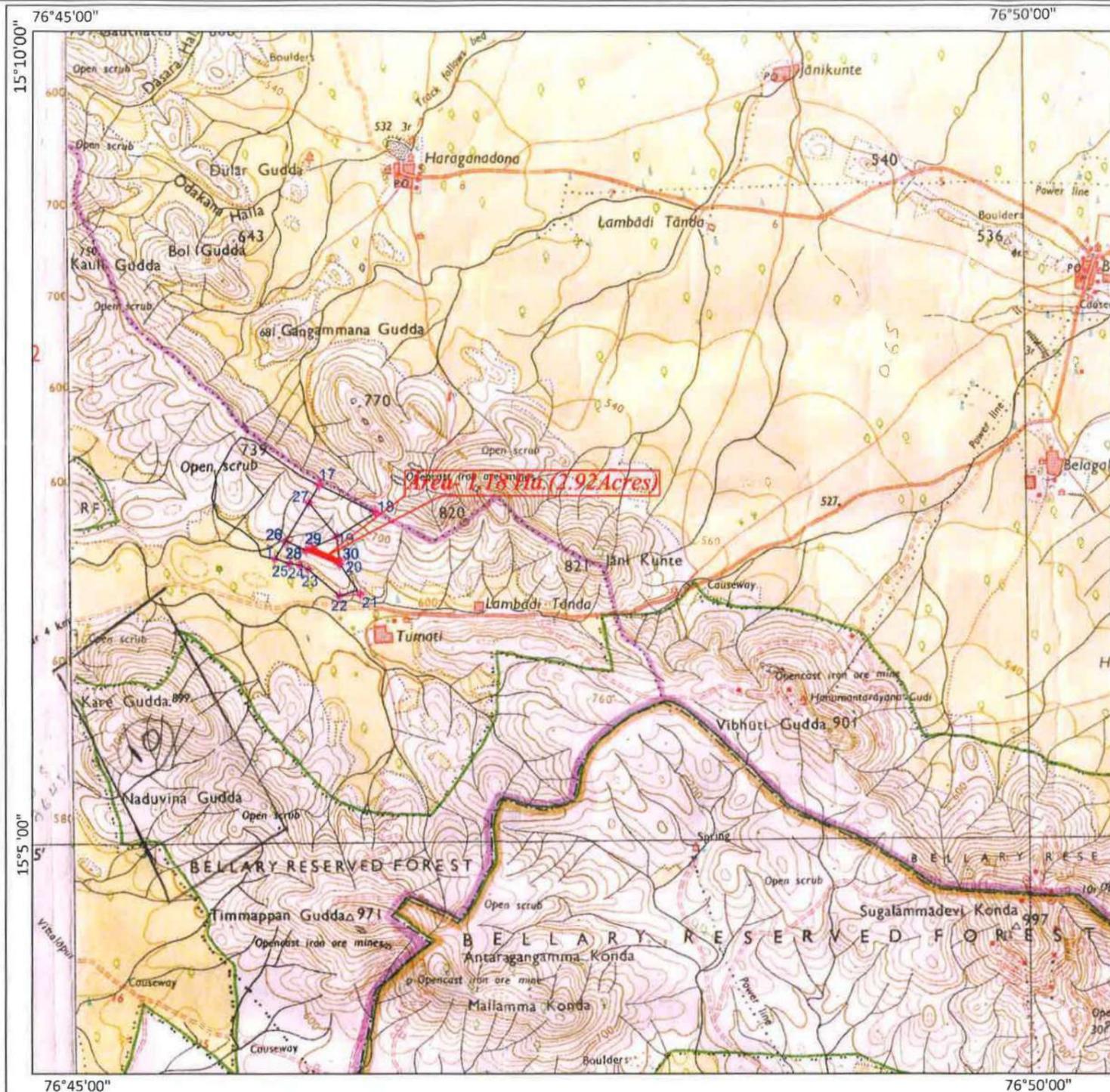
ಕರ್ನಾಟಕ ರಾಜ್ಯ ದೂರ ಸಂವಹನ ಅಧಿನಿಯಮ ಕೆಎಂವಿ

ಮೂಲನಕ್ಷೆ ತಯಾರಿಸಿದವರು ಮತ್ತು ಓದಿದವರು:



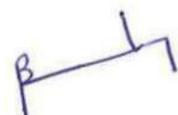
ಭೂಮಾಪನ ಕಂದಾಯ ಇಲಾಖೆ ಮತ್ತು ಭೂಮಾಪನ ಇಲಾಖೆ

TOPO MAP SHOWING THE AREA IDENTIFIED FOR COMPENSATORY AFFORESTATION IN LIEU OF RAMA IRON ORE MINES ML NO 2621 OVER AN EXTENT OF 1.18HA.(2.92 ACRES.) AT TUMATI VILLAGE, SANDUR TALUK, BALLARI DISTRICT.



LEGEND

Sy.No.1/3 (PART) , Area -26.50 Acres (10.724ha.)				
GPS CO ORDINATES OF SY NO. 1/3 (PART 1.18 HA.)				
POINT NO.	UTM (M) ZONE : 43N		DATUM : WGS-84	
	NORTHING	EASTING	LATITUDE	LONGITUDE
20	1671064.7037	690455.9857	15.10823	76.77221
28	1671195.2835	690139.7263	15.10943	76.76928
29	1671217.2522	690190.1950	15.10963	76.76975
30	1671105.2355	690451.3477	15.10860	76.77217



Project Proponent
For JSW Steel Ltd.

GOOGLE MAP SHOWING THE AREA IDENTIFIED FOR COMPENSATORY AFFORESTATION IN LIEU OF RAMA IRON ORE MINES ML NO 2621 OVER AN EXTENT OF 1.18HA.(2.92 ACRES.) AT TUMATI VILLAGE, SANDUR TALUK, BALLARI DISTRICT.

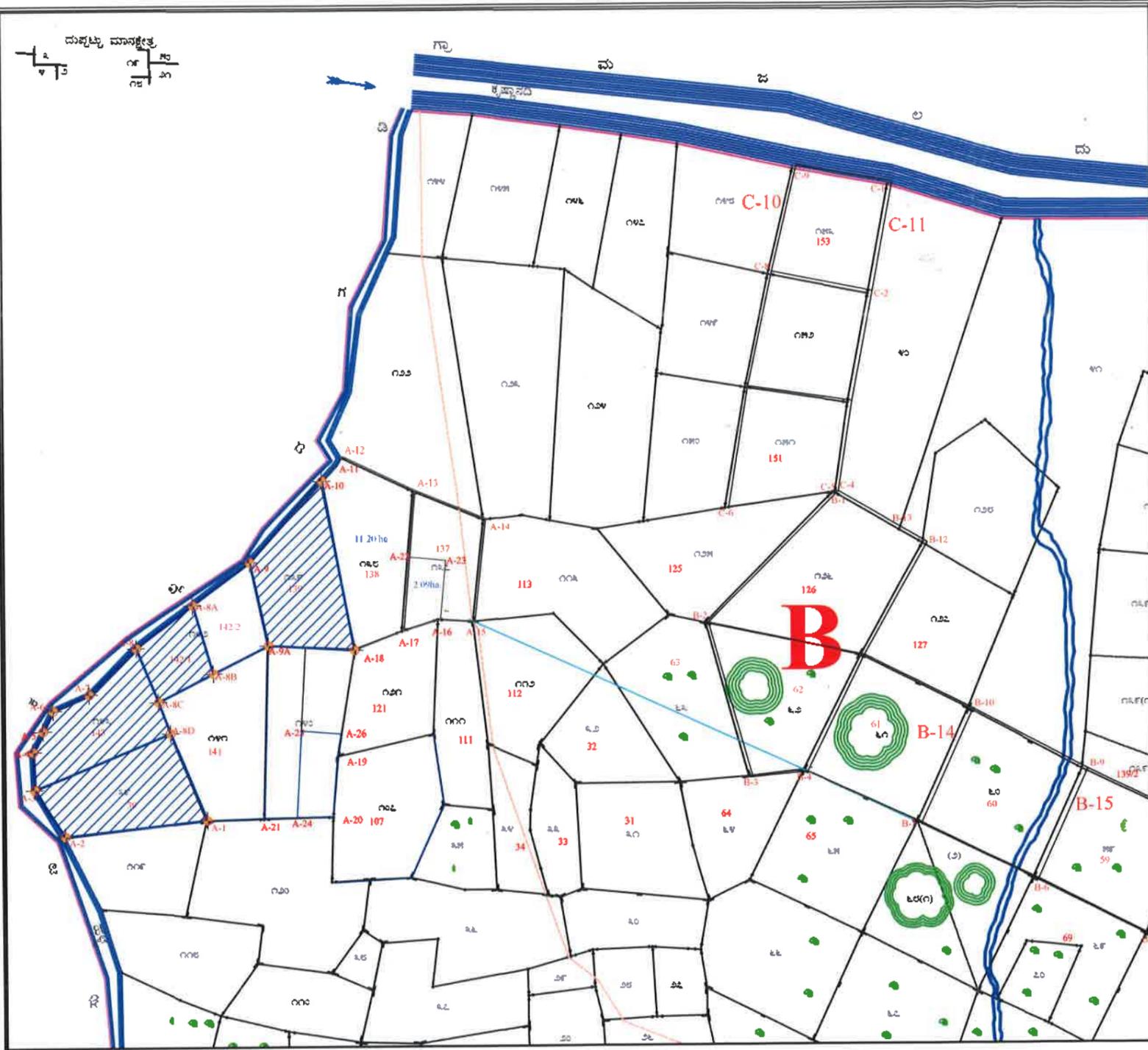


Legend

 Sy.No. $\frac{1}{3}$ (Part) measuring 1.18 Ha.(2.92Acres) earmarked as a CA land for Rama Iron Ore Mine ML No.2621.


Project Proponent
For JSW Steel Ltd.

VILLAGE MAP SHOWING THE AREA IDENTIFIED FOR "COMPENSATORY AFFORESTATION " IN LIEU OF RAMA IRON ORE MINES ML NO 2621 OVER AN EXTENT OF 32.62 Ha.(80.60 ACRE) IN HALBHAVI VILLAGE, LINGASUGUR TALUK, RAICHUR DISTRICT



LEGEND

- Area earmarked as CA land by M/s. JSW Steel Ltd. over an extent of 32.62 Ha. (80.60 Acres) in lieu of Rama Iron Ore Mine ML No.2621 ha. in Halbhavi village, Lingasugur Taluk, Raichur district
- Corner points with Sy.No.



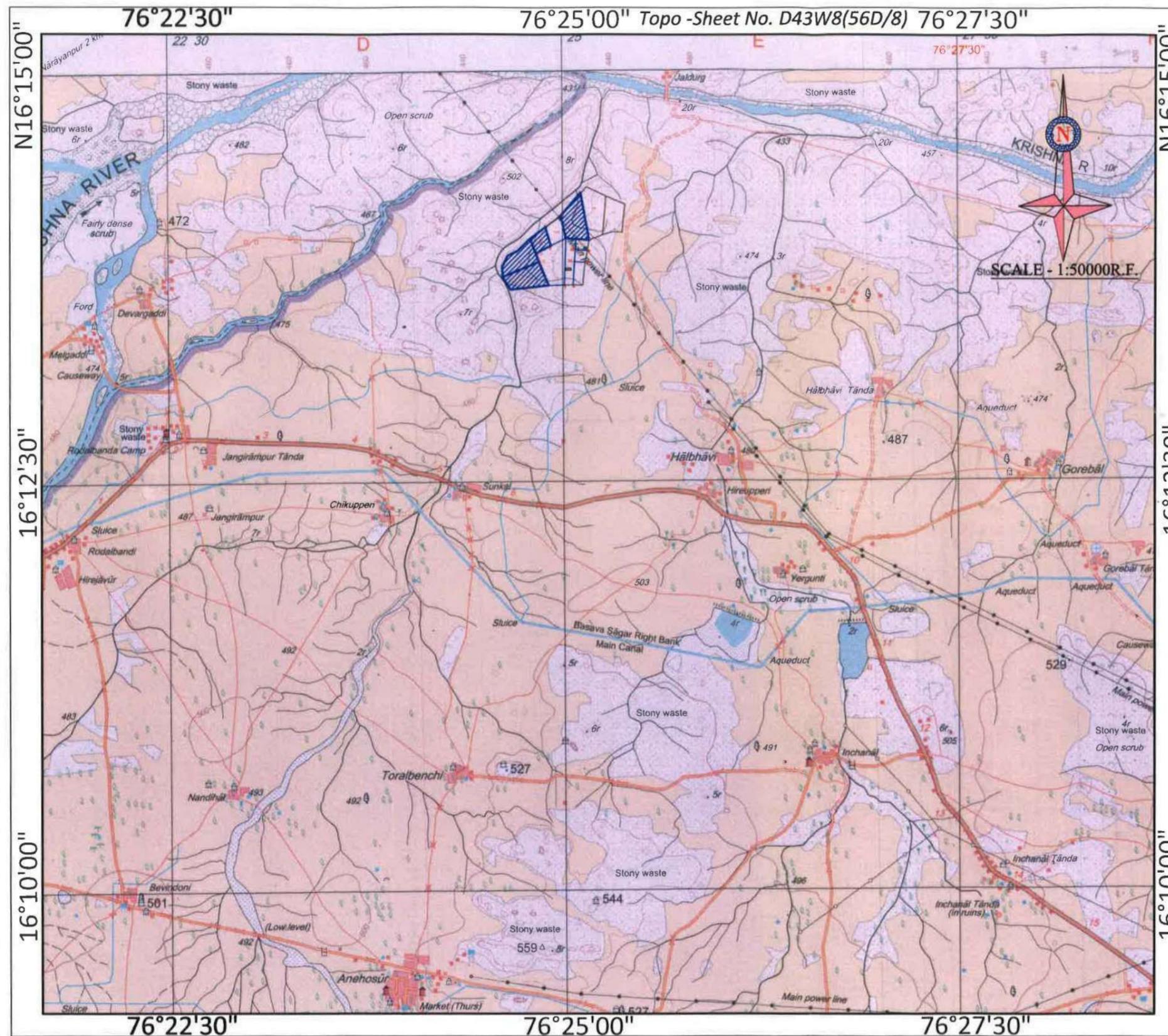
**SCALE:-1"=1320'
OR
1Cm=158.40 m.**

Sy. No. 139, 142/1, 143 & 39, Total Area 80.60 Acres (32.62 Ha.)				
GPS CO ORDINATES OF Sy. No. 139, 142/1, 143 & 39 (32. Ha.)				
SY.No. 139		Area	10.29 Ha.	25.43 Acres
		Perimeter	1393.57 m.	
POINT No.	UTM (m.), ZONE - 43 N		DATUM : WGS-84	
	EASTING	NORTHING	LATITUDE	LONGITUDE
A-9	651380.8649	1795499.6579	16.23542	76.41643
A-10	651600.3315	1795756.9710	16.23773	76.41850
A-18	651698.2376	1795231.3951	16.23298	76.41939
A-9A	651436.9397	1795246.7969	16.23313	76.41694
SY.No. 142/1		Area	3.88 Ha.	9.59 Acres
		Perimeter	800.26 m.	
POINT No.	UTM (m.), ZONE - 43 N		DATUM : WGS-84	
	EASTING	NORTHING	LATITUDE	LONGITUDE
A-8	651034.2190	1795241.1584	16.23310	76.41317
A-8A	651208.1995	1795370.9093	16.23427	76.41481
A-8B	651269.4123	1795162.0133	16.23237	76.41537
A-8C	651101.5099	1795077.0524	16.23162	76.41379
SY.No. 143		Area	8.76 Ha.	21.65 Acres
		Perimeter	1303.85 m.	
POINT No.	UTM (m.), ZONE - 43 N		DATUM : WGS-84	
	EASTING	NORTHING	LATITUDE	LONGITUDE
A-3	650722.1567	1794813.0401	16.22926	76.41023
A-4	650717.5195	1794927.7779	16.23029	76.41019
A-5	650748.7558	1794988.7582	16.23084	76.41049
A-6	650778.7472	1795052.7475	16.23142	76.41077
A-7	650889.0613	1795100.8977	16.23185	76.41181
A-8	651034.2190	1795241.1584	16.23310	76.41317
A-8C	651101.5099	1795077.0524	16.23162	76.41379
A-8D	651137.5825	1794981.7950	16.23075	76.41412
SY.No. 39		Area	9.69 Ha.	23.94 Acres
		Perimeter	1339.60 m.	
POINT No.	UTM (m.), ZONE - 43 N		DATUM : WGS-84	
	EASTING	NORTHING	LATITUDE	LONGITUDE
A-1	651248.1770	1794718.2495	16.22837	76.41514
A-2	650813.7984	1794671.6107	16.22797	76.41108
A-3	650722.1567	1794813.0401	16.22926	76.41023
A-8D	651137.5825	1794981.7950	16.23075	76.41412

ವಿವರಣೆ	ಚಿಹ್ನೆ
ಗ್ರಾಮದ ಗಡಿ ರೇಖೆ	
ಸರ್ಕಾರಿ ಸಂಚಾರಿ ಗಡಿ	
ಪೈಲಟ್ ಸಂಬರಗಲು	
ಸರ್ಕಾರಿ ಸಂಬರಗಲು	
ಕಾಲುವೆ	
ಬಂದಿ ದಾರಿ	
ನದಿ	
ಹಳ್ಳಿ (ಶೋಕಲು ಹಳ್ಳಿ)	
ಗುಡ್ಡ	
ಬಾವುಗಳು	
ಕಲ್ಲುಗಳು	
ನೀರು ಹರಿಯುವ ದಿಕ್ಕು	
ಬಾವಿ	
ಒಂದು ಕಡಲ ಬಾವಿ	
ದೊಡ್ಡ ಮರಗಳು	
ಇತರೆ (ಕುರುಚಲು) ಗಿಡಗಳು	
ಕೊಚಲು ಮರಗಳು	

*Project Proponent
For JSW Steel Ltd.*

TOPO MAP SHOWING THE AREA IDENTIFIED FOR "COMPENSATORY AFFORESTATION " IN LIEU OF RAMA IRON ORE MINES ML NO 2621 OVER AN EXTENT OF 32.62 Ha.(80.60 ACRE) IN HALBHAVI VILLAGE, LINGASUGUR TALUKa, RAICHUR DISTRICT



LEGEND

- Area earmarked as CA land by M/s. JSW Steel Ltd. over an extent of 32.62 Ha. (80.60 Acres) in lieu of Rama Iron Ore Mine ML No.2621 ha. in Halbhavi village, Lingasugur Taluk, Raichur district.
- Contour
- Corner points of Sy.No.
- Villages
- Road
- Nalla (seasonal)

Sy. No. 139, 142/1, 143 & 39, Total Area 80.60 Acres (32.62 Ha.)				
GPS CO ORDINATES OF Sy. No. 139, 142/1, 143 & 39 (32. Ha.)				
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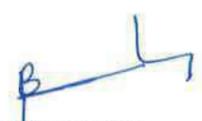
Project Proponent
For JSW Steel Ltd.

GOOGLE MAP SHOWING THE AREA IDENTIFIED FOR "COMPENSATORY AFFORESTATION " IN LIEU OF RAMA IRON ORE MINES ML NO 2621 OVER AN EXTENT OF 32.62 Ha.(80.60 ACRE) IN HALBHAVI VILLAGE, LINGASUGUR TALUK, RAICHUR DISTRICT



Legend

 Area earmarked as CA land by M/s. JSW Steel Ltd. over an extent of 32.62 Ha. (80.60 Acres) in lieu of Rama Iron Ore Mine ML No.2621 ha. in Halbhavi village, Lingasugur Taluk, Raichur district .


Project Proponent
For JSW Steel Ltd

EXECUTIVE SUMMARY

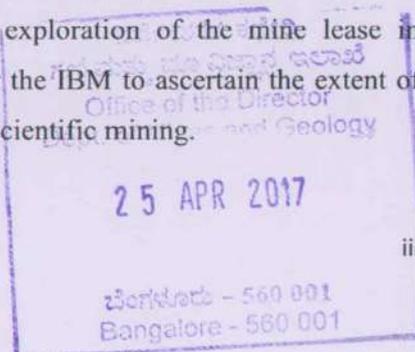
1. The Hon'ble Supreme Court of India, while considering the deleterious changes to the environment caused by the unscientific and unregulated mining in Bellary, Chitradurga and Tumkur districts in Karnataka and based on the Macro level Environmental Impact Assessment (EIA) report submitted by the Indian Council of Forestry Research and Education (ICFRE), has directed the Government of Karnataka to submit a Reclamation and Rehabilitation (R & R) Plan for the mines located in these districts. The Government of Karnataka, keeping in view the National Environmental Standards and the commitment for holistic approach for sustainable management of the area affected by mining, has awarded the formulation of R&R Plan to the ICFRE, Dehra Dun, vide letter No.DMG/MLS/R&R/2011-12 dated 27.12.2011 and letter No. DMG/MLS/R&R/2011-12/15179 dated 31.03.2012. Accordingly, the R&R Plan of category A & B mines have been prepared in the first phase and that of the category-C mines initiated in second phase.
2. As per the guidelines for preparation of the R&R Plans of Category "A" and "B" mine approved by the Hon'ble Supreme Court *inter-alia* provide that the concerned lessees will provide the baseline data to the FIMI for preparation of the draft R & R Plans. The R & R Plans will thereafter be finalized by the ICFRE on behalf of the State Government and which will be considered for approval by the CEC. The lease wise Maximum Permissible Annual Production (MPAP) prescribed in the R & R plans is decided on the basis of (a) the assessed mineral resources (b) the extent of area available for overburden dumps and (c) the infrastructure facilities available in and around the mining leases.
3. However, as per letter No. 61/CEC/SC/2012-PtII dated 20.08.2015, CEC is in view that with regard to the category- C mining leases it may be appropriate that while the R & R Plans for the areas found to be under illegal mining pit / overburden dump etc., are prepared and finalized before auction, the SEMP and MPAP may be prepared and finalized only after the auction of category-C mining leases is held and the successful bidders / lessees provide the baseline data to the FIMI / ICFRE particularly with regard to the extent and location of the areas identified for overburden dumps and the infrastructure facilities such as conveyer system, railway siding and slurry pipeline that are planned to be developed. The lease wise SEMP and MPAP which are

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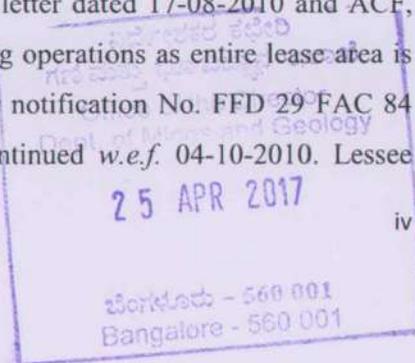
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finalized without considering the inputs provided by the successful bidders / lessees may subsequently require substantial changes particularly with regard to the MPAP. The same has been conveyed by the Government of Karnataka and accordingly the provisional R&R Plan of Precambrian Iron Ore Mine (ML 2621) of Sri. Ram Rao M. Poal of 33.80 Ha area was prepared *vide* letter No. DMG/MLS/CCA/12/2621/2016-17 dated 26.10.2016 and approved by CEC *vide* letter No. 2-76/CEC/SC/2015 dt. 02.11.2015. The Govt. of Karnataka has issued Letter of Intent (LOI) with reference to e-auction dated 01.10.2016 for grant of iron ore mining lease for “M/s. Rama Rao M. Poal, ML No. 2621”, block in Ramgad village, Sandur taluk, Bellary district over an extent of 33.80 Ha of forest land of Ramandurga Range to M/s. JSW Steel Ltd., for a period of 50 years with certain conditions (copy of LOI enclosed) and accordingly requested ICFRE to prepare the final R&R Plan.

4. The scope of the study includes collection and assessment of the existing scenario and environment status data such as topography, production technology, overburden dump, top soil, soil conservation measures, environmental quality, to assess pollution levels and its impacts; CEC observations and formulation of site specific R & R Plan.
5. The information pertaining to all attributes of mining was mainly obtained from the records of the Directorate of Mines and Geology, Govt. of Karnataka up to the extent possible and exploration data from M/s MECL. Information from secondary sources such as EIA/EMP reports, Mining Scheme, IBM Annual returns etc., was largely utilized for assessing the existing environmental status of the mine. Further, the data provided by allottee i.e. M/s. JSW Steel Ltd was also used for finalization of R&R Plan.
6. The team had a detailed discussion with the officials representing Precambrian Iron Ore Mine to understand the activities carried out in the mining lease area. A detailed field survey was conducted with the help of surveyors and all the plans required for the preparation of the R&R Plan were updated accordingly to the extent possible.
7. The R&R Plan has been prepared based on the field survey, updated plans and MECL data. The allottee may be required to get the exploration of the mine lease in accordance with the UNFC guidelines adopted by the IBM to ascertain the extent of the mineral reserves available for sustainable and scientific mining.



8. Precambrian Iron Ore Mine (ML 2621) of Sri. Ram Rao M Poal has an extent of area of 33.80 ha area. The mine is situated in Survey of India Toposheet No. 57 A/8 near Ramgad village, Sandur Taluk, Bellary District, Karnataka. Lessee had applied for grant of ML for an area of 70 acre (28.34 ha) on 09-01-1997. This area was part of the surrendered private property of Raja of Sandur. Area surrendered to State Govt. in 1980 was 2395.40 acre. Govt. of Karnataka granted ML to the lessee over an area of 70 acre for mining of iron ore on 18-07-2009, with the prior approval of Ministry of Mines, Govt. of India, dated 14-08-2008. After obtaining environment clearance, ML was executed in favour of lessee on 04-02-2010 for a period of 20 years over an area of 70 acres (28.34 ha). Entire area as per the lease deed was revenue land. Mine come into operation on 18-03-2010. Extent of the original lease granted was for 28.34 ha but actual enjoyment area is 28.12 ha as per CEC survey. However, area as per lease deed sketch after digitalizing is 33.80 ha. The mining lease was originally granted to Sri. Ram Rao M. Poal under ML No. 2621 on 04.02.2010 for a period of 20 years valid upto 03.02.2030.
9. The Mining Plan was prepared for grant of mining lease over an area of 28.33 ha, approved *vide* IBM letter No. 279/733/2002/BNG dated 08.01.2007.
10. Environmental clearance was obtained from State level Environment Impact Assessment Authority, Karnataka for the production capacity of 0.50 MTPA *vide* letter No. SEIAA: 127:MIN:2008 dated 30.12.2009. Further modifications in the approved mining Plan is approved *vide* letter no. MS/BLR/Fe-46-SZ/40 dated 07.02.2011 for a production capacity of 3.0 MTPA (saleable products). As per the order of Hon'ble Supreme Court dated 30.07.2015, the existing statutory approvals/clearances in favour of the lessee of the erstwhile category 'C' mining leases are to be transferred in favour of the new lessees. Therefore necessary action has to be initiated by M/s JSW Steel Ltd. for obtaining necessary statutory clearances either by transfer or obtaining fresh.
11. FC is not applied as the entire lease area was stated to be revenue land. However, notice was issued to lessee by RFO, Sandur *vide* letter dated 17-08-2010 and ACE, Bellary *vide* letter dated 26-08-2010 to stop mining operations as entire lease area is forest land as notified by Govt. of Karnataka *vide* notification No. FFD 29 FAC 84 dated 28-02-1985. Mining operations were discontinued *w.e.f.* 04-10-2010. Lessee



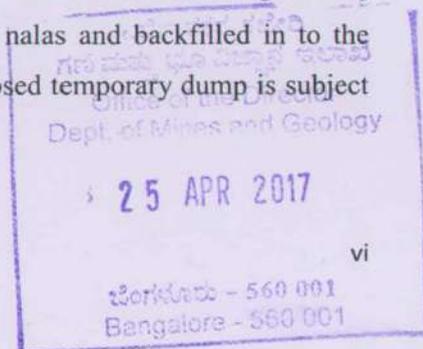
challenged the stoppage notice in the Hon'ble High Court of Karnataka. The Hon'ble High Court stayed the stoppage notice and mining operations resumed w. e. f. 23-12-2010, and continued up to 06-04-2011. Thereafter, mining operations were stopped by the order of Hon'ble High Court (Order No. 41376 dated 06-04-2011), followed by blanket ban on mining in Bellary – Hospet sector by the Hon'ble Supreme Court since July, 2011. Hon'ble High Court of Karnataka also directed the lessee to obtain forest clearance under FCA-1980. Accordingly lessee applied for forest clearance for which there was no follow up/ progress. In view of the above order of Hon'ble High Court, it is implied that entire lease area is forest land. Since lessee has operated the mine without forest clearance, the entire lease area is deemed to be encroachment under "Others" category as brought out in CEC sketch.

12. CFE was granted by KSPCB *vide* letter dated 25-01-2010 for new iron ore mine of 0.50 MTPA production capacity for a period of 5 years from the date of issue, i.e., valid up to 24-01-2015. CFO was granted by KSPCB *vide* letter dated 16-02-2010 for a production capacity of 0.50 MTPA valid from 08-02-2010 to 30-06-2011.
13. Mining lease area is located on a hillock. There is only one mine pit spreading along the length of the lease area from NW-SE direction. Altogether, 10 benches have been developed. Benches were formed on both the flanks of hill slopes. Main pit starts adjacent to new boundary pillar No. 4 and it is developed in the NW – SE directions along the strike almost for a length of 1 km. Initially for about 100 m, the pit has only two benches. Mining is haphazard benches have been developed unscientifically resulting in collapse of most of the mine benches. For the last 500 – 550 m (approx.) towards extreme S.E. direction, the pit is very well developed having total 10 benches. Bench height is varying from 5-8 m with width 5-7 m. Laminated and powdery ore are very well exposed from 5th to 10th benches. 8th and 9th bench have merged due to narrow width and wash out of powdery ore at some places.
14. There are three OB dumps i.e. ROM-1, ROM-2 and ID mixed with waste OB material ROM boulders, located within the ML area. ROM-1 is on eastern side and ROM-2 is on western side of the ML area. The dump height varies from 5 to 10 m and slope angle is 45 to 50 degrees. The dumps are partially covered with natural vegetation of *Chromolaena odorata*, *Lantana camara*, *Tecoma stans*, *Calotropis gigantea* and other

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grasses. ID is a very small dump lying within the pit and need to be re-handled during mining operation.

15. As per letter No.1-26/CEC/SC/2013-Pt XXXXXIV dated 24-10-2014; the CEC is of the view that before finalizing the R & R plans of any of the Category 'C' mining leases, it may be appropriate that the details of mineral reserves to be available based on the exploration data undertaken by the State Govt. Accordingly the Govt. of Karnataka has provided the exploration work to M/s. Mineral Exploration Corporation Limited (MECL), a Government of India Enterprise, Nagpur, to assess the mineral reserves in all "C" category mines in Bellary, Chitradurga and Tumkur Districts of Karnataka State.
16. Geological mapping was carried out over an area of 0.2834 sq km by M/s. MECL. Exploration was done by M/s MECL by drilling 2 bore holes by core drilling and 21 bore holes by RC drilling for a total of 1438.50 m of exploratory drilling by M/s. MECL with a core and chip sample recovery of 85-90%. Bore holes were drilled at a grid pattern of 100 m x 100 m.
17. The estimated total mineable reserves based on MECL report is 25.676 million tonnes. Since no bore hole drilled by M/s MECL has bottomed the ore body, there is a possibility of ore body existing at depth.
18. The stripping ratio of 1: 0.23 indicated in the five year production programme at page 13 of approved modified mining plan of 07.02.2011 may be considered for calculation of dump capacity, in absence of any other reliable data. Further as per the detailed exploration conducted by MECL, the entire area of the lease is found to be mineralised and there is no non-mineralised area for **waste dumping, in view it is proposed that mining should be conducted block wise**. Initially the ore present in the southern side should be excavated while temporary dump should be placed on the northern side. After exhausting an individual mineral block, the area should be backfilled by waste material available in the proposed temporary dump. The temporary dump proposed should be rehabilitated with suitable bio-engineering methods to avoid erosion into the nearby forest and nalas and backfilled in to the excavated mine pit during next plan period. The proposed temporary dump is subject to the approval of IBM.



19. An overall significant change has been noticed in the physical and biological environment in and around the lease area, while, that in the social environment may perhaps be due to the inadequacy of implementation of suitable social management plans. The major impact of mining would be on the water resources and the soil environment. This is mainly due to unscientific management of waste dumps which in most cases eroded to the seasonal water courses during raining and eventually spread over the area downstream.
20. Engineering measures for management of waste dumps and surface water runoff of the ML area has been given.
21. Biological measures for management of overburden dumps, mine pit area, surface water, haul roads etc., have been suggested by providing an exhaustive list of indigenous species which may be selected to support the vegetation growth. Suitable tree species having timber, fodder, fuel wood and medicinal uses have been recommended for restoration of the mined out areas and overall ecosystem development.
22. Feasible production capacity based on reserves, waste dumps, road capacity and EC capacity has been worked out as 1.28, 1.31, 0.94 and 0.50 MTPA respectively. Out of the above criteria, feasible production capacity based on EC i.e., **0.50 MTPA** is the lowest and the same may be considered as the permissible production capacity of the mine for the next 20 years. Further, the **dump capacity proposed is provisional and subject to the approval of IBM. The allottee has to get transfer/obtained EC, FC and other statutory clearances, if required; the capacity proposed may be revised accordingly based on the criteria fixed by CEC.**
23. The indicative cost estimated for the engineering and biological measure for the Reclamation and Rehabilitation of the ML area is **Rs. 116.72 lakhs (Rupees One Crore Sixteen Lakhs and Seventy Two Thousands only)**, excluding the cost for Biodiversity Management Plan, Monitoring and Evaluation, Capacity Building, development of common infrastructure, etc. The cost proposed for R&R is indicative and may vary based on actual dimensions of the proposed engineering structures, common schedule rate of Govt. of Karnataka and local field conditions (at the time of implementation).

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25 APR 2017

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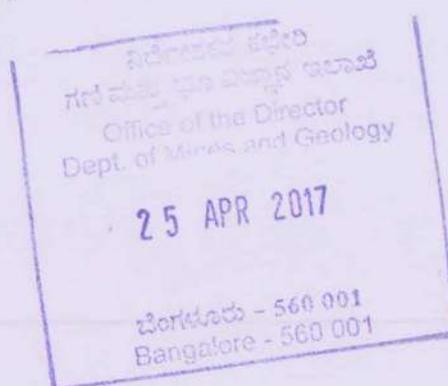
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Bangalore - 560 001

24. The R&R plan is aimed to protect the environment from further degradation by implementing suitable site specific bio-engineering measures for the encroached areas, inactive overburden/ waste dumps, seasonal water courses/ *nalas*, etc., taking into consideration, the hydrological condition on the micro watershed basins and compatibility of the surrounding area, stability and drainage density. The plan includes enlisting of the existing as well as proposed engineering structures within and outside the ML area and their detailed cost estimation. Accordingly, a variety of engineering structures encompassing toe walls, garland drains, check dams, rain water harvesting pits, silt settling tanks, etc., have been proposed for the protection of inactive and encroached waste dumps and the *nalas* in the lease area. Biological measures for management of overburden dumps, mine pit area, mine drainage, haul roads, etc., are suggested by providing an exhaustive list of indigenous species having multiple uses suitable for afforestation in these areas.
25. The R&R plan will be useful in providing a framework and process to various target for undertaking scientific rehabilitation and reclamation of mined out areas. This will also provide the essential insight into environmentally safe planning of mining activities in future.
26. The ultimate aim of the proposed plan is to develop an ecosystem with all its biological and physical characteristics relatively similar to that of the pre-mining stage. The success of the R&R plan depends on proper implementation and monitoring, which can be ensured only through a specialized institution that has the requisite competence, composite scientific expertise and professional skills. Regular monitoring of the implementation of the measures proposed has twin objectives. First, to obtain valuable reference data for authorities to ensure and demonstrate compliance with regulatory requirements and second, to assist in decision-making on operational parameters essential for site specific land use for sustainable management. The capacity building of the personnel involved in implementation of this plan by an expert scientific organization is also an essential for the successful implementation of this plan. Further, as proposed in Chapter-4 of the report, the quality of the material used for implementation of R&R including planting material, geo-mat and others should be ensured. The material used should be a certified material by the National reputed organization having experience in the field of R&R.

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27. The existing statutory approvals/ clearances of the erstwhile category 'C' mining leases to be transferred in favour of the new leasees, as per the order of Hon'ble Supreme Court dated 30.07.2015. Therefore necessary action should be initiated for the same and wherever required fresh clearances should be obtained before commencement of mining operations. All the conditions stipulated by various statutory agencies, viz., MoEF, SPCB, IBM, DGMS, DMG, etc. in their various approvals should be complied accordingly before commencement of mining.

XXX



Principal Chief Conservator of Forests
(Wildlife) & Chief Wildlife Warden.
Karnataka.



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Aranya Bhavan, 2nd Floor,
18th Cross, Malleswaram,
Bangalore-560 003
Date: 19-09-2018

No. PCCF/ WL/D/CR-41/2018-19

To,

M/s. JSW Steel Ltd.
U 6th Floor, East Wing,
Raheja Towers, M.G.Road,
Bangalore-560001

Sir,

Sub: Request to accord approval to the Conservation Plan for Wildlife & the Soil & Moisture Conservation Plan of Stage I Forest Clearance (FC) conditions of Devadari, Rama & Bhadra Mines of M/s. JSW Steel Ltd

Ref: Your Letter No. JSW/ Devadari, Rama & Bhadra/WMP/CWL/1, 2 & 3 and JSW/ Devadari, Rama & Bhadra /SMC/CWL/4, 5 & 6 Dated 06.09.2018

* * *

With reference to the subject and letter cited above, the Wildlife Conservation Plan - 2018 prepared by the Zoological Survey of India (ZSI) & the Soil & Moisture Conservation Plan -2018 prepared by Central Research Institute for Dry land Agriculture (CRIDA) for the projects mentioned in the below table has been approved. A copy of the Wildlife Conservation Plan and the Soil & Moisture Conservation Plan is enclosed herewith.

(Amount in Lakhs)

Sl No.	Type of Plan	Devadari Mines	Rama Mines	Bhadra Mines
1	Wildlife Conservation	62.80	63.00	64.00
2	The Soil & Moisture Conservation Plan	08.28	06.31	03.36

Your's faithfully,

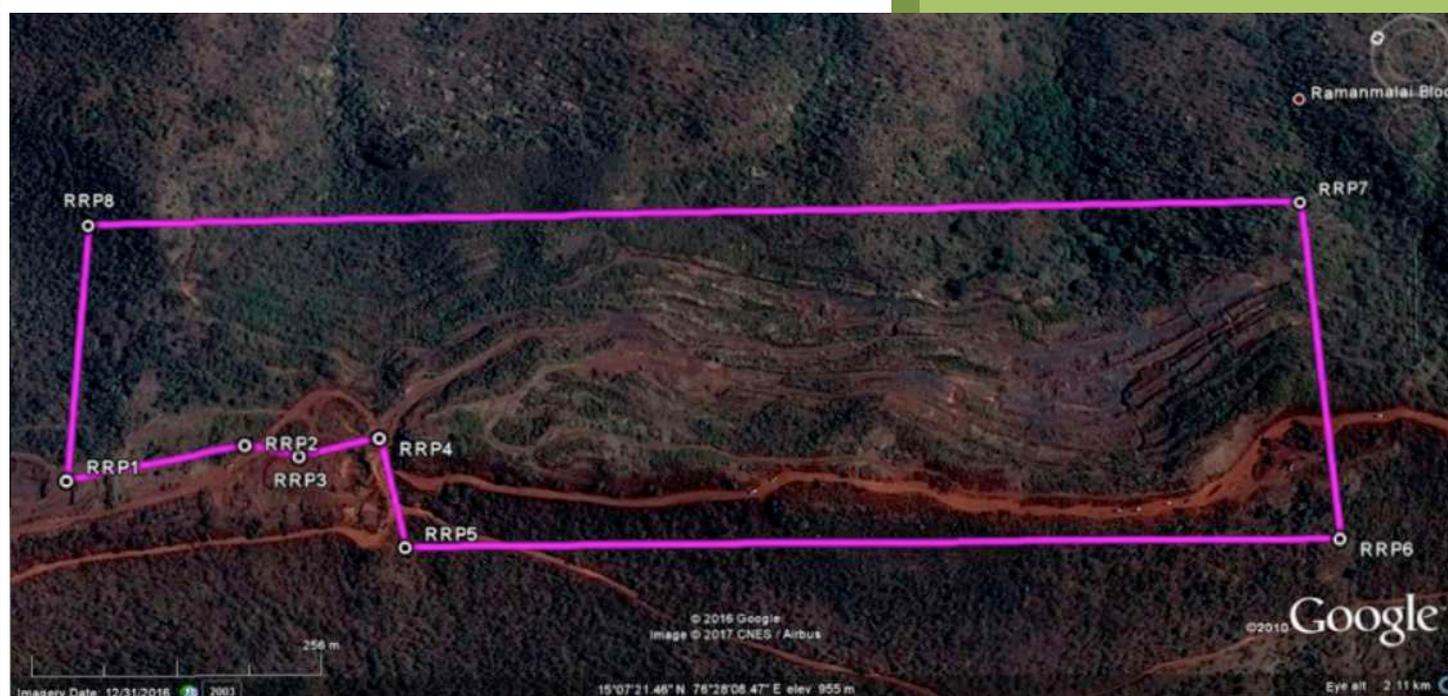
CA 19/9/18
Principal Chief Conservator of Forests,
(Wildlife) & Chief Wildlife Warden
Karnataka.

Copy to:

1. Chief Conservator of Forests, Ballary Circle, Ballary for information & necessary action.
2. Deputy Conservator of Forests, Ballary Circle, Ballary for information & necessary action.



Soil Moisture Conservation Scheme: Rama Mine (ML 2621)



Prepared by

**ICAR-Central Research Institute
for Dryland Agriculture
Santoshnagar
Hyderabad 500 059**

2018

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Executive Summary

M/s JSW Steel Ltd., Vijayanagar Works, Ballari dt., Karnataka had requested ICAR-Central Research Institute for Dryland Agriculture (ICAR-CRIDA), Hyderabad, Telangana to prepare a Soil Moisture Conservation (SMC) Scheme with Cost Estimates for the Rama Iron Ore Mine (ML 2621) as per the directive of the Ministry of Environment and Forests & Climate Change, Government of India, New Delhi.

Rama Iron Ore Mine, ML No. 2621, located in Ramgad village, Sandur Taluka, Ballari District, over an extent of 33.80 ha (later revised to 32.56 ha) area of Forest Land of Ramamalai range is an iron ore mining lease granted to M/s JSW Steel Limited as per the Letter of Intent by Govt. of Karnataka No. DMG/MLS/CCA/12/2621/2016-17 dated 26.10.2016 after e- auction.

ICAR-CRIDA, a premier institute of Indian Council of Agricultural Research, Department of Agricultural Research & Education, Ministry of Agriculture & Farmers' Welfare, Government of India, New Delhi, specializes on natural resource management aspects. Soil and water are the two major natural resources and ICAR-CRIDA has several Soil & Water Conservation Engineers to address various issues related to conservation and sustainable use of these two resources.

This Soil Moisture Conservation Scheme (SMC) report has been formulated by site visits undertaken on 12.07.2018 and 13.07.2018 by the Consultant team of ICAR-CRIDA comprising Dr. Manoranjan Kumar (Principal Scientist, Soil & Water Conservation), Dr. M. Osman (Principal Scientist, Agronomy) and Dr. S. Desai (Principal Scientist, Plant Pathology). The team carefully evaluated ground situations, held detailed discussions with staff belonging to mining, environment management, geology and RS & GIS departments of JSW Steel Ltd., and consulted Reclamation and Rehabilitation (R&R) report formulated by the Indian Council for Forestry Research & Education (ICFRE), Dehradun and other reports available in the public domain. The team also has taken into account the ongoing execution of R & R measures as per the ICFRE approved R & R Plan. Based on the detailed analysis, the team has suggested, following SMC plan.

After a thorough study of the site and soil-climate-rainfall characteristics, the team recommended a three-pronged approach towards the SMC plan to achieve optimal soil moisture conservation in Rama Iron Ore mine. This include introduction of Staggered

Contour Trenches (SCTs) at 10 m contour interval and bio-engineering measures including grass seeding and plantations.

Construction of 163 staggered contour trenches (SCT) per ha has been worked out, totaling to 808 SCTs. The estimated cost of each trench is around Rs 263 and the total trenching cost is Rs 2.12 lakhs. These trenches are recommended to be substantiated with bioengineering measures that include plantation of *Pongamia* trees on the lower side of each SCT and seeding of the berms with *Stylosanthes*. On the mild to gently sloping lands, other tall growing tree species are recommended for plantation to increase the green cover. This plantation will also help to provide shelter to the wildlife as well as enhance soil nutrition. The rooted grass slips recommended to be planted on these mild and gentle slopes will provide fodder to the herbivores including wild animals. It will also control run-off as well as soil erosion from ridge to valley. The estimated cost towards the proposed SMC Scheme is **INR 336314** (Three Lakhs Thirty-Six Thousand Three Hundred and Fourteen rupees only). The suggested bioengineering measures are in conjunction with the afforestation and greenbelt recommendations of the R&R plan of Rama mine. The estimated cost of INR 3.36 lakhs includes an outlay of Rs. 2.12 lakhs towards SCTs and Rs1.24 lakhs towards greening near SCTs. Since, the mine area is very steep, receives high rainfall and is also covered by dense plantation, no additional plantation systems have been suggested in the leased area and beyond the leased area (within 500 m). The expected benefits of the SMC scheme are i) The SCTs will help to harvest surface run-off in this relatively low rainfall region and also increase sub-surface moisture regimes; ii) tree plantation near the SCTs can grow with minimum extraneous water supply as they can depend on water harvested in the trenches; iii) stylo seeding on the berms stabilizes loose soil in the berms and also provide nutritious fodder to wildlife which in turn help in wildlife rehabilitation; and iv) over time, implementation of SMC scheme in conjunction with R&R plan will help to promote ecotourism, once the mining is ceased. Plantation near SCTs, seeding of stylo on berms and afforestation in the area (within and outside leased area) is over and above the expenditure of Rs 60.634 lakhs towards afforestation (31.60 ha) and greenbelt development (2.2 ha) in the approved Reclamation and Rehabilitation (R & R) Plan of ICFRE.

Thus, The proposed cost estimate towards the SMC Scheme is INR 3,36,314 (Three Lakhs Thirty-Six Thousand Three Hundred and Fourteen rupees only). The user agency - M/s. JSW Steel Ltd., has to make provision to meet this SMC Scheme requirement.

Chapter 1

1. Introduction

Rama Iron Ore Mine, ML No. 2621, located in Ramgad village, Sandur Taluka, Ballari District, over an extent of 33.80 ha (later revised to 32.56 ha) area of forest land of Ramamalai range. It is one of the 5 'C Category' mines that have been allocated to M/s. JSW Steel Ltd., through an e-auction process conducted by the Govt. of Karnataka. Lease area of this mine is 32.56 (forest land) and the lease is located at Ramamalai Block of Sandur Range of Bellary Division of Karnataka. M/s. JSW Steel Limited has secured this mining block through e-auction of 'C' category mines by Government of Karnataka vide Letter of Intent (LOI) no. DMG/MLS/CCA/12/2290/2016-17 dated 26.10.2016.

As per the directives of the Hon'ble Supreme Court (Judgement dt. 30.07.2015) to transfer the existing statutory clearances of erstwhile lessees in favour of new lessees, who have received the blocks in the auction, the Environmental clearances of the Rama mines has been transferred by the State Level Environmental Impact Assessment Authority (SEIAA) constituted by MOEF&CC for 0.5 MTPA vide EC letter SEIAA.127.MIN.2008 dated 04.02.2017. The firm has also applied freshly, for the Forest Diversion and secured Stage I of Forest Clearance (FC) vide letter no. F.No.8-14/2018 _FC dated 27th July 2018, by MOEFCC, New Delhi.

For Rama Mines, one of the Stage I Clearance Condition states that 'Since the proposed area is prone to soil erosion because of high slope & poor vegetation. Hence, the user agency shall undertake adequate Soil & Moisture conservation works such as check dam, gully checks, retaining wall etc. whether inside or outside the lease area, in consultation with the forest department before starting mining works preferably within three years'.

Accordingly, M/s JSW Steels has requested ICAR-Central Research Institute in Dryland Agriculture (ICAR-CRIDA) as a competent agency to formulate Soil Moisture Conservation (SMC) Scheme with estimates.

1.1 About ICAR-CRIDA

ICAR-Central Research Institute for Dryland Agriculture (ICAR-CRIDA) is a premier constituent institute of the Indian Council of Agricultural Research (ICAR), an apex body for research and education in agriculture in India. ICAR is an autonomous body under the Department of Agricultural Research and Education, Ministry of Agriculture & Farmers' Welfare, Government of India. It is the apex body for agricultural research and education in

the Country. ICAR-CRIDA was established in 1985 to cater to the needs of the rainfed farmers of India. Rainfed agriculture spans across about 80 million ha which is about 56% of the total cultivated area. The mandate of the institute is to carry out:

- a. Basic and applied for sustainable and climate resilient agriculture in rainfed areas
- b. Co-ordinate network research for generating location-specific technologies in rainfed areas and
- c. Centre for capacity enhancement in natural resource management in drylands.

ICAR-CRIDA has developed and demonstrated several technologies for the sustainable livelihoods of rainfed farming community especially small and marginal resource-poor farmers. The institute has pioneered in developing the guidelines for watershed programs, which have later become guidelines for implementing the watershed projects in the Country. The institute has developed *ex-situ* (customized rainwater harvesting ponds, percolation tanks for various agro-ecologies) and *in-situ* (contour bunding, contour trenches, conservation furrows, raised bed and furrow systems) for rainwater harvesting and management technologies, which have been widely accepted among farming community. It has executed several national and international collaborative projects. At present the institute is coordinating the mega project 'National Innovations in Climate Resilient Agriculture' partnering with 40 national research institutes to assess impact of climate change and climatic variability on Indian Agriculture and develop adaptation and mitigation strategies to reduce the impacts. It has prepared vulnerability atlas of Indian Agriculture to climate change.

The Institute has undertaken several Consultancy Projects especially for assessment of impacts of various government programs. Some of the important ones are impact assessment of NABARD-implemented and Indo-German watersheds, MGNREGS programs, SERP program of Government of Andhra Pradesh, Prioritizing rainfed districts of India. The All India Coordinated Research Projects Dryland Agriculture and Agrometeorology with 25 partners each are also hosted at ICAR-CRIDA to undertake location-specific research. Apart from the strategic research program under NICRA, the Technology Demonstration component is undertaken in 100 KVK villages to make them 'Climate Resilient Villages'.

CRIDA has inter-disciplinary team of scientists cutting across several disciplines and has active collaborations with several universities including Telangana, Andhra Pradesh, and Karnataka State Agricultural Universities (PJ TSAU, ANGRAU and UAS-B, UAS-D), ICRISAT, and NGOs like WASSAN, BIRD-K, CSA, MARI etc. The institute has qualified soil and water conservation engineers, agronomists, agroforestry scientists, plant protection scientists and other disciplines. In this backdrop, ICAR-CRIDA is the most competent

agency for undertaking preparation of ‘Soil Moisture Conservation Scheme (SMC) Scheme and estimates’.

1.2 Location

Rama iron ore mine spreads over an area of 33.80 ha (later revised to 32.56 ha) ha and is located at Ramgad reserved forest, Ramgad Village, Sandur Mandal, Ballari District of Karnataka State (Fig 1).

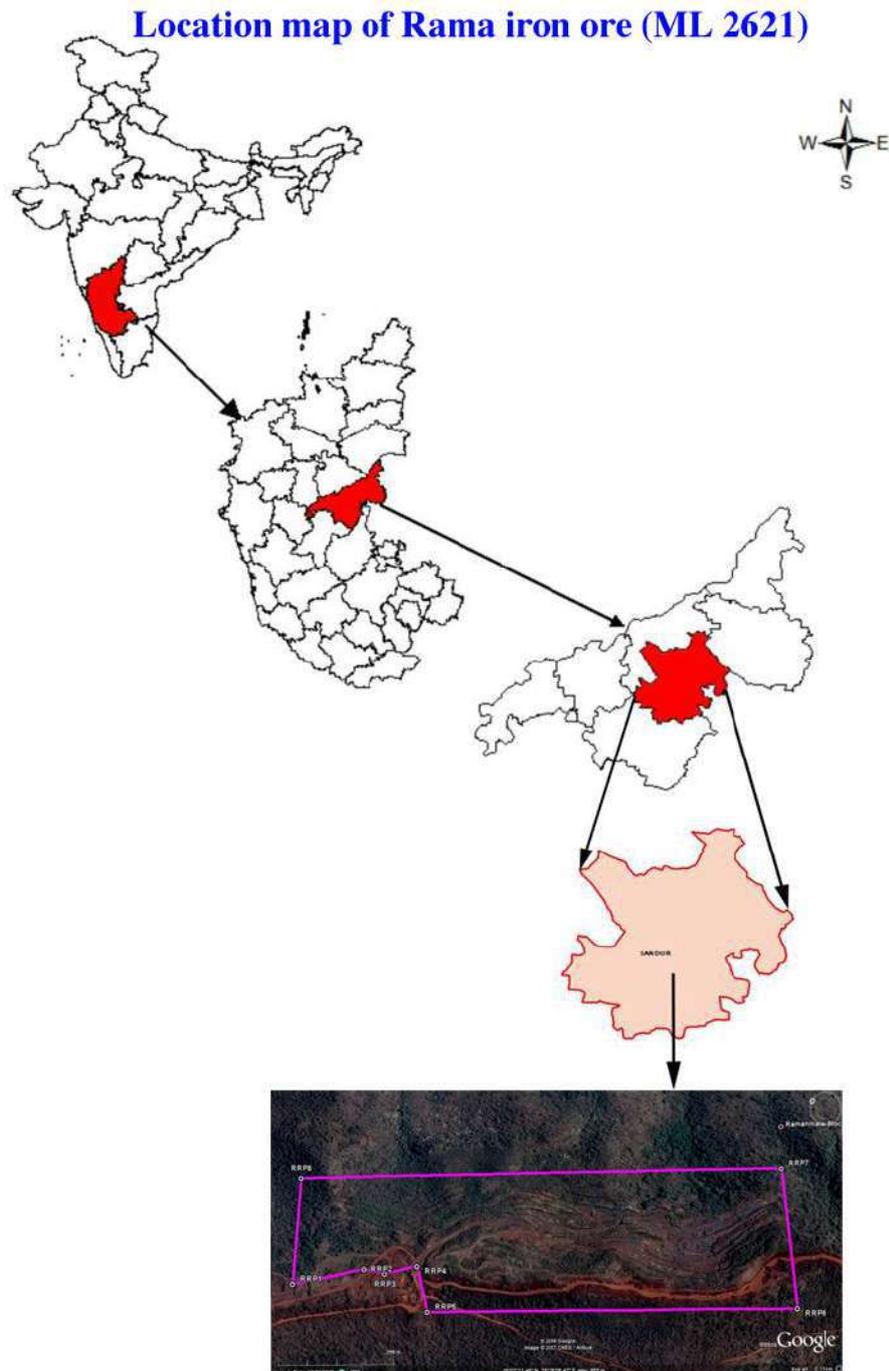
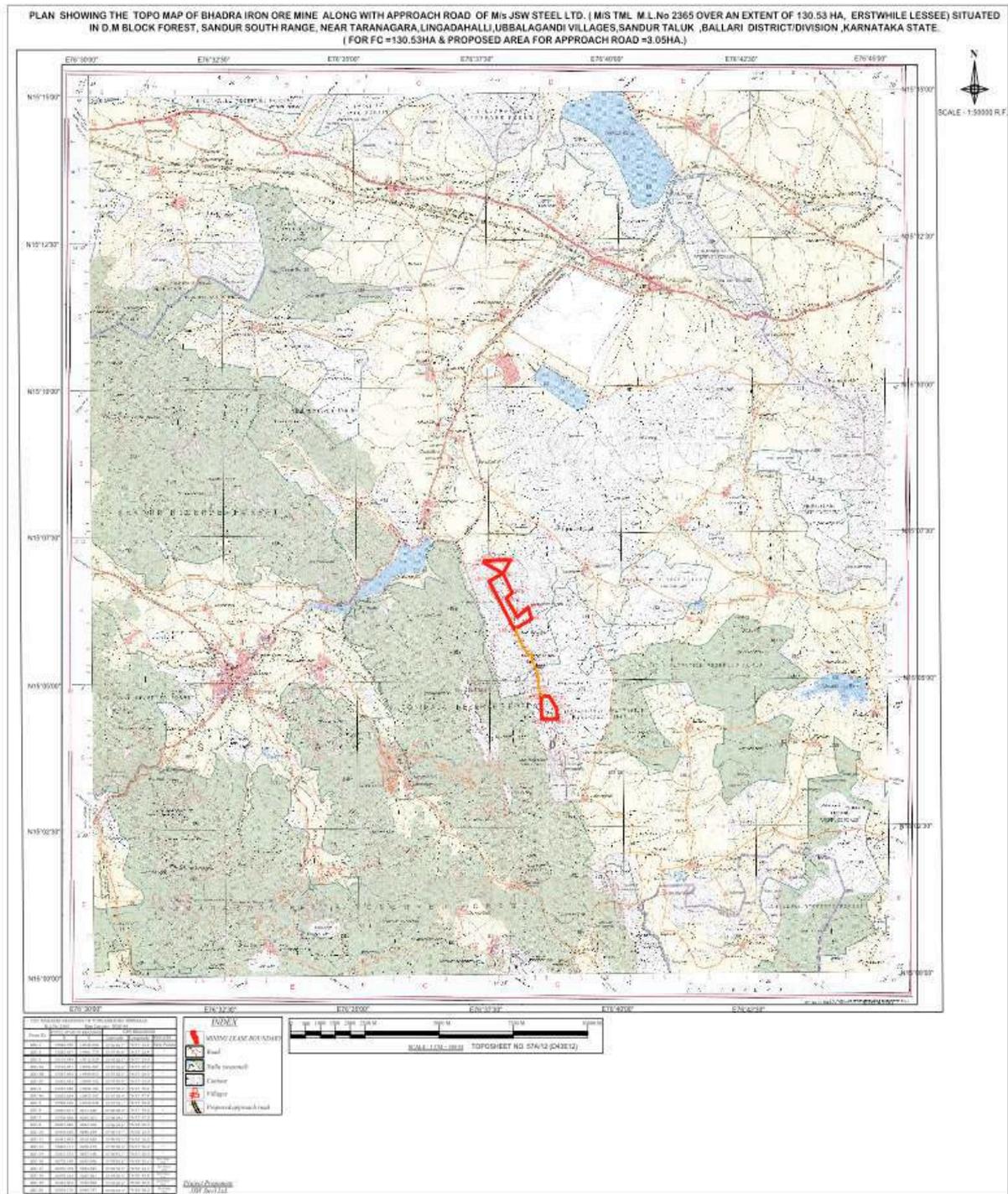


Fig. 1.1. Location map of Rama iron ore mine (ML 2621)

The Mining lease area is a part of the Survey of India Toposheet No.57/A/8. The geographical coordinates of the site are 15° 7'3.11" - 15° 7'37.12"N and 76°27'55.94" - 76°28'21.40"E with an average altitude of 962 m above MSL. The Key Plan is provided as Fig 1.2.



Nearest railway line connecting Hospet – Swamihalli of South Western Railway line is at a distance of 1.8 km in WSW direction to the Mining lease area. Nearest railway line connecting Hospet – Ballari of South Western Railway line is at a distance of 11.7 km in Northern direction to the Mining lease area. The mining area is well connected by road. The National Highway NH-50 connecting Hospet–Kudligi is at a distance of 11.7 km in West-southern westerly direction to the Mining lease area. Another National Highway NH-67 connecting Hospet–Ballari is at a distance of 12.1 km in N direction to the Mining lease area. The nearest railway station is Ramgad, which is 2.0 km in western direction. The nearest city from the Mining lease area is Bengaluru which is about 275.0 km in South-Southeasterly direction. Nearest settlements from the mining lease area are Ramgad – 0.3 km towards West and Bhavihalli – 2.3 km towards East. The degree sheet gives the details of the JSW mines and nearest protected areas in 10 km radius around the mines (Fig. 1.3).

DEGREE SHEET SHOWING 10 KM RADIUS AROUND THE JSW STEEL MINES AND LOCATION OF NEAREST PROTECTED AREAS

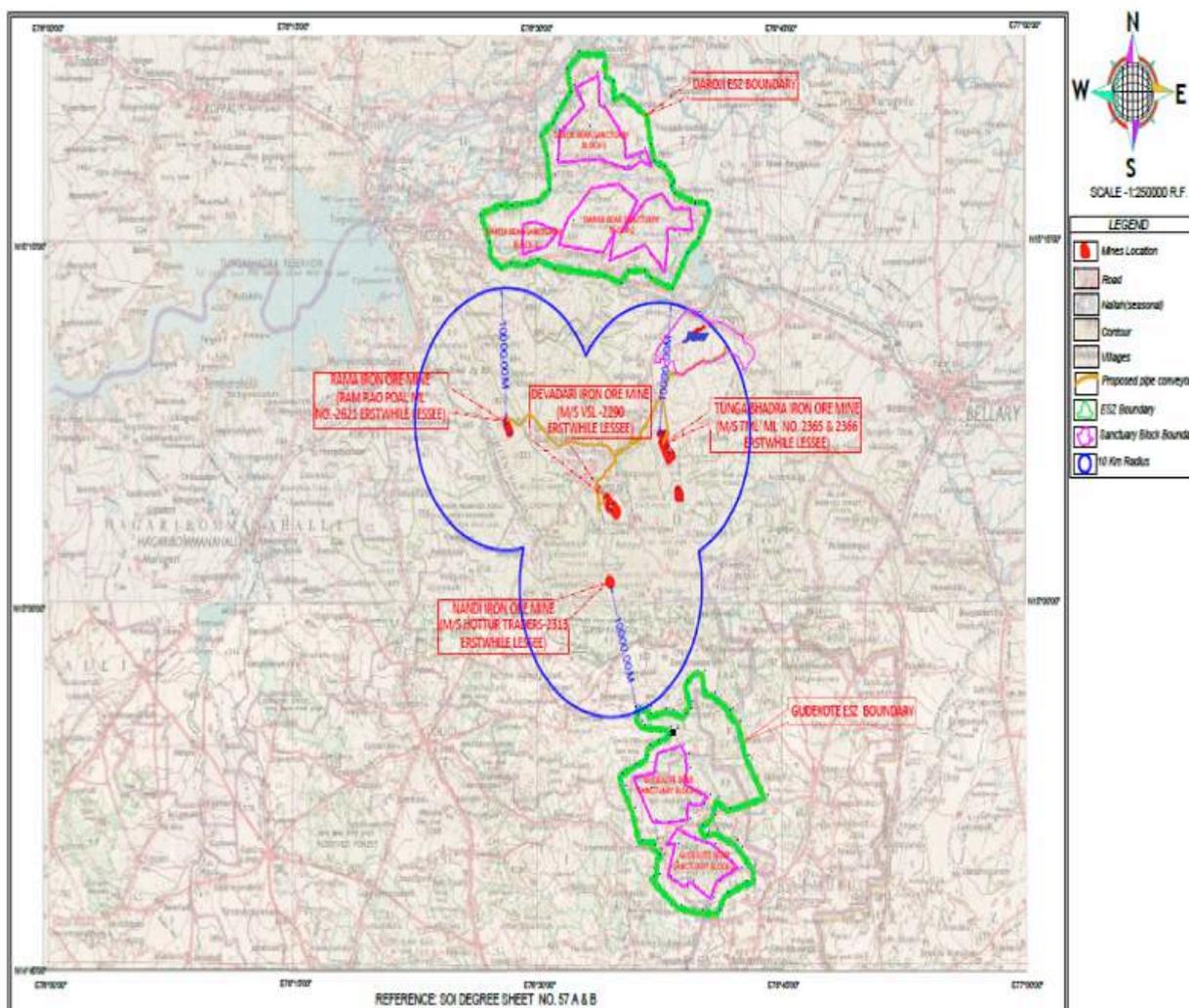


Fig. 1.3 Degree sheet of JSW mines and nearest protected areas around 10 km radius

The Google map of the area and the DGPS map of the area are provided as Fig 1.4 Fig 1.5.

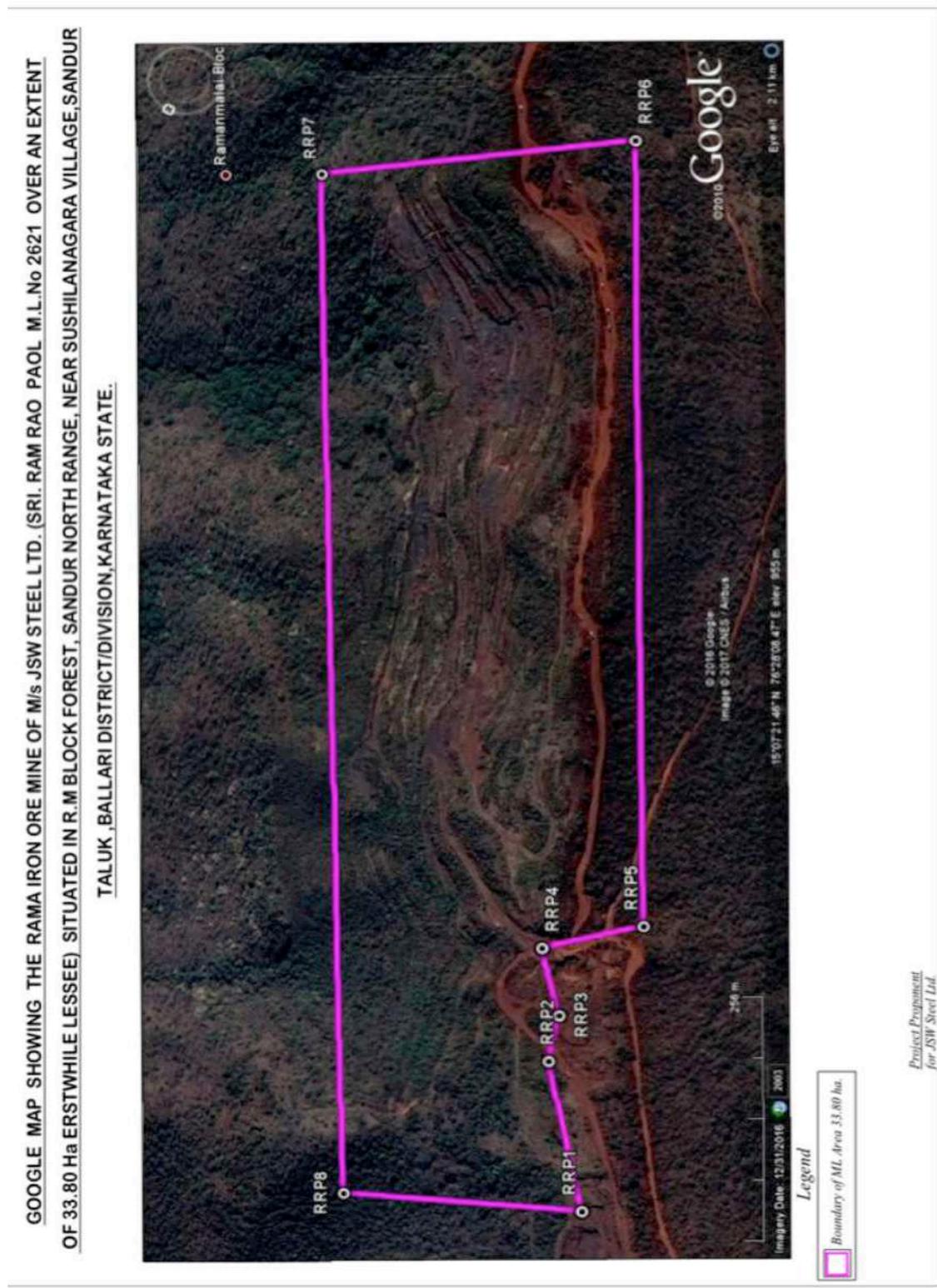


Fig 1.4 Google map of the Rama iron ore mine (ML 2621)

1.3 Physiography, Land Use Pattern and Access

The Sandur hills, Dharwar schists, run Northwest of the Ballari district dividing the district into two distinct parts i.e. eastern and western parts. These hills display typical ridge-valley systems with lush green forest growth. They extend from Mallapuram on the bank of river TungaRama and runs for 48 kms in the southeasterly direction up to Ballari. The highest elevation in the ridge is the Kumaraswamy hill, which is 1084 m above mean sea level. Ramanmalai (993.1m) and Jambunatha hill (908 m) are the other major ridges. Rama mine is spread over an area of 33.80 ha (later revised to 32.56 ha) of Ramgad reserved forest.

The core mining area forms part of fairly high range of hill trending NNW to SSE, occurs between village Deogiri and Hospet town. The lease area occupies the crest and slopes of this range for about 1170 m. the crest of lease hold comprises a narrow plateau of about 40 to 60 m wide, with steep slopes towards East. The slopes are traversed by a few seasonal nallas draining into the valley. These nallahs are small and narrow and act only as flood channels during rainy season and none of them are perennial. The lease area, termed as core zone, is steeply sloping revenue land having thick iron ore float and iron ore reef.

Buffer zone- the buffer zone area characteristically comprises of valleys and altitude varying between 600 to 1023 m above MSL, surrounded by rugged hills, marked by discrete, NW-SE trending ridges, separated by flat or gently sloping land. The area has got sub-dendritic pattern of drainage. The terrain is hilly with alternate valleys. The hill contain erosion resistant rocks like banded hematite quartzite (BHQ), banded hematite jasper (BHJ), granite, argillites etc. some steep escarpments are encountered in these hill ranges. The latitudes and longitudes of the corner pillars of the leased area ML 2621 are given in table 1.1.

Table 1.1. Latitude and longitudes of the corner pillars of the lease area (Datum WGS-1984)

Sl No	Boundary Pillar No.	Co-ordinates	
		Northing	Easting
1	LBS-1	15°07'37.1"	76°27'56.0"
2	LBS-2	15°07'33.0"	76°27'59.4"
3	LBS-3	15°07'31.4"	76°27'59.9"
4	LBS-4	15°07'29.6"	76°28'01.3"
5	LBS-5	15°06'02.5"	76°37'29.3"
6	LBS-6	15°07'03.0"	76°28'11.8"
7	LBS-7	15°07'08.1"	76°28'21.0"
8	LBS-8	15°07'41.2"	76°28'02.7"

(Source: R & R Plan for Rama Iron ore mine ML 2621 of JSW Steels Limited)

1.4 Soil types

In Ballari district, the soils are derived from granites, gneisses and schistose rocks. The sandy loam soil mixed with black and grey soil occurs along the streambeds. These are originated from gneisses and granites. They are permeable and mildly alkaline in nature. The thickness of the soil varies from 0.2 to 1.00m. The alfisols are the major soil type in the district, found mainly at elevated places due to decomposition of rocks and surrounding granitic and gneissic hills. These soils have high permeability and neutral pH. Vertisols with high initial infiltration rate when dry and cracked are also seen in the district and the cracks close when get wet due to which infiltration rate gets reduced. These are derived from schistose rocks. The vertisols are found in the prolonged submerged areas and canal command areas. These are calcareous and mildly alkaline in nature. About 57.3% area of the mine is under mining and about 6.75% area is under green belt. The unbroken area constitutes about 56.75%/. The detailed breakup of the existing land use pattern of the project site is provided in table 1.2.

1.5 Water resources and drainage

No perennial rivers flow through the mine lease area. However, numerous seasonal watercourses traverse through the area, which are usually active during monsoon season and draining into the nearby water bodies such as Hulikunte tank. The rainwater flows from hill slopes and it doesn't accumulate till it reaches the lower valleys and hence usually rainwater accumulation in the mine area doesn't occur. Number of minor streams in the district rise locally and ultimately drains into Tungabhadra. Narihalla is one among them, with a medium irrigation project constructed over it, at Taranagar in Sandur taluk and is useful for irrigation in the taluk. The drainage pattern is sub-dendritic in nature and is typical of the hilly area. A total of 6 nalas are originating from the lease area. Out of the total, one is from western side and emptying into a tank near Byalakundi and another one originates from northern side is flowing towards NW direction and emptying into Raya channel. The remaining 4 nalas are originating from eastern side of ML area and flowing towards eastern direction and emptying into Narihalla Reservoir (Fig. 1.6).

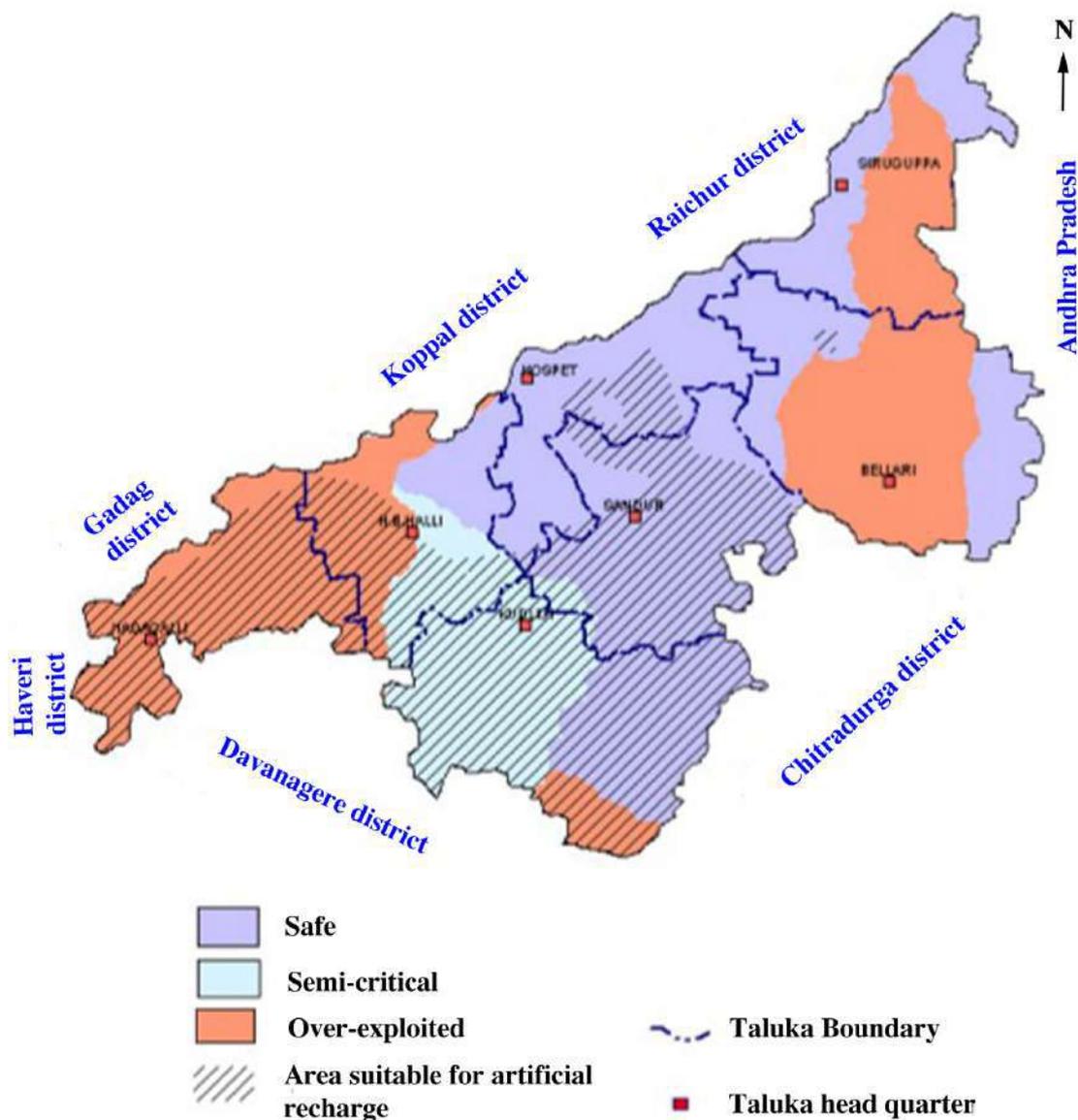
Table 1.2. Existing land use pattern of the Rama mine (ML2621)

Sl. No.	Particulars	% Land use pattern
1.	Area for mining	32.10
2.	Area for waste dump	--

3.	Roads	3.91
4.	Green Belt/ 7.5m safety zone	6.51
5.	Infrastructure	2.81
6.	Virgin/ Unbroken area	54.67
Total		100

1.6 Climate and Rainfall pattern

Ballari district benefits from both Southwest monsoon (June to September) and Northeast monsoon (October to December). The mean number of rainy days are highest in Sandur taluk (56.4) as compared to Ballari which has the lowest number of rainy days (32.4). The mean number of rainy days for Ballari district are 43. As per the 1951 to 1970 rainfall data analysis, the precipitation during southwest monsoon accounts for 60% of the total amount of rainfall and during northeast monsoon it is 24% the remaining 11.62% is sporadic in summer. September is the wettest month in the year. The analysis of the last ten years rainfall data (1996-2005) shows that the highest rainfall occurred in Sandur taluk with 752.1mm and the lowest at Bellary with 452mm and over all annual normal rainfall in the district is 611mm. Again it is proved that south west monsoon contributes 63% of the total rainfall in the district and north east monsoon with 25.36%. Deficiency in rainfall is observed in the four taluks for the last ten years in the range of 2.40% (Kudluga taluk) to 26.02% (Bellary taluk). The excess rainfall in the range of 15.41% (Siruguppa taluk) to 23% (Sandur taluk) was observed.

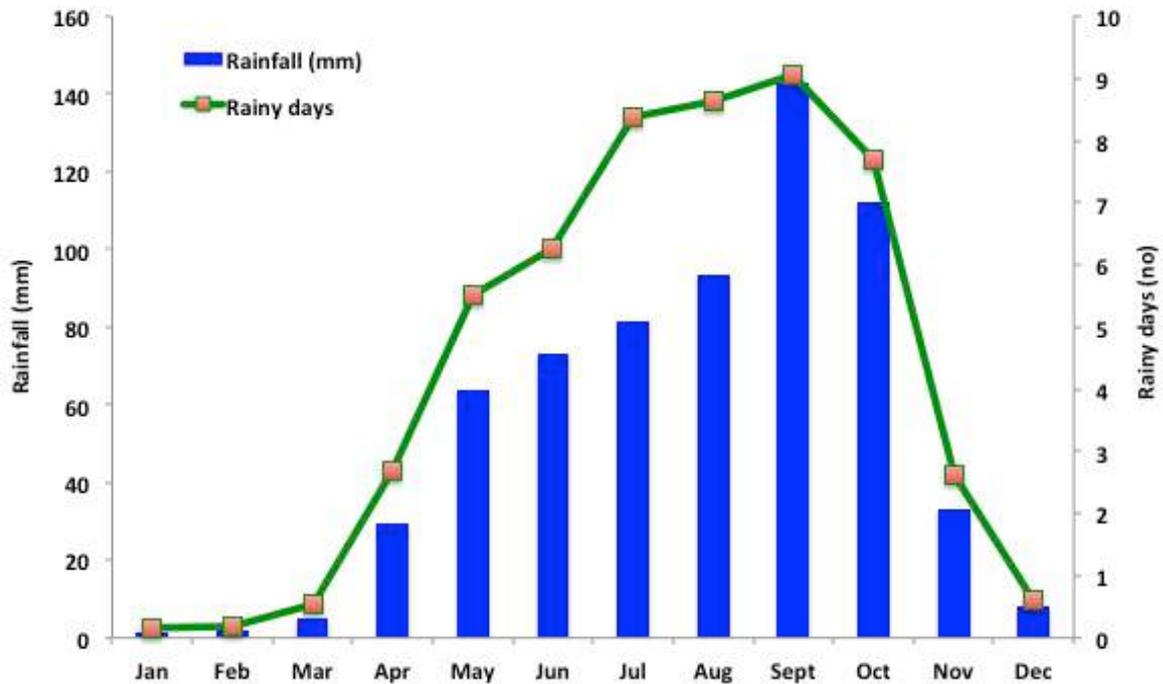


(Source: Groundwater information booklet, Southwestern region, March 2011)

Fig 1. 6 Status of groundwater utilization in Ballari district

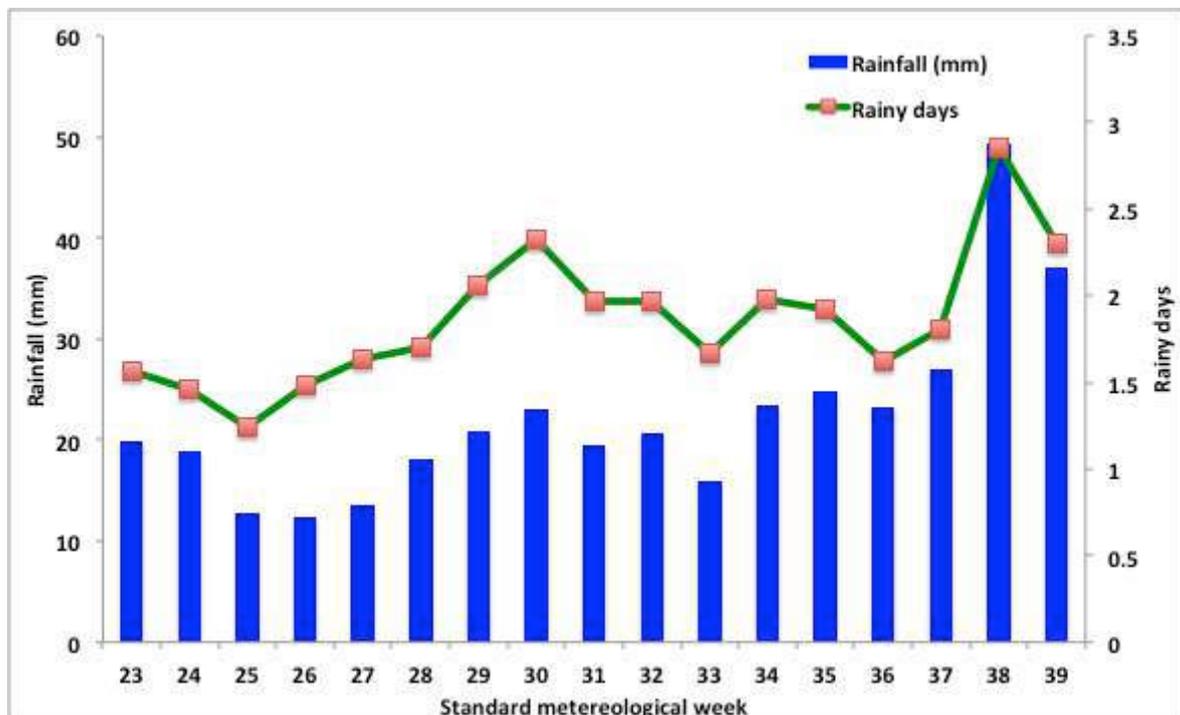
Sandur has a tropical savannah climate, which lies on the border of semi-arid type of Ballari and Hospet. The climate in Sandur is cooler than its surroundings due to its elevation and has recorded a maximum temperature of 42°C and a minimum of 6°C. On an average, the taluk receives 750 mm of precipitation but in certain years has received more than 1000 mm of rainfall. An analysis of the mean monthly rainfall of the Sandur taluk shows that September month receives highest mean monthly rainfall of 142 mm followed by October (112 mm) and August (93 mm). The months of May, June and July also receive considerable rainfall (64 mm, 73mm and 81mm, respectively). Similarly, September and August months experience maximum number of rainy days (9) followed by July (8). The weekly rainfall analysis of 23 to 39 standard meteorological weeks shows that 38th week (3rd week September) receives

highest amount of rainfall with maximum number of rainy days (48 mm and 3 days, respectively) followed by 39th standard meteorological week (4th week of September) (37 mm and 2 days, respectively). The analysis is presented in Fig 1.7 and Fig 1.8.



(Source: IMD grid data for 1951-2013)

Fig 1.7 Mean monthly rainfall distribution in Sandur taluk



(Source: IMD grid data for 1951-2013)

Fig 1.8 Weekly mean rainfall distribution in Sandur taluk during SW monsoon period

1.7 Flora and Fauna

The reserve forest and its adjoining areas are rich in biodiversity. Several floral and faunal elements have been recorded from this region. Several grasses, shrubs and tree species are native to this area. Though, the forest cover is not substantial in Sandur Taluk and there is variation in tree densities across the sites visited by the team, these forests are known to harbour various floral and faunal elements.

The dry mixed deciduous forests of Sandur consist of several trees and shrubs native to India. In all, 234 plant species belonging to 59 families have been recorded in Sandur forest area. Among them, 56 tree species, 30 shrub species, 118 herb species and 30 climber species have been documented in the Working Plan of Ballari district. Among these, 47 tree species, 19 shrub species, 54 herb species and 23 climber species have been known to possess medicinal value. Some of the common species are *Hardwickia binata* (Anjan), *Acacia nilotica* (gum Arabic), *Azadirachta indica* (neem), *Wrightia tinctoria* (Dyer's Oleander), *Butea monosperma* (palash tree), *Syzygium cumini* (jamun), *Dendrocalamus strictus* (bamboo), *Cassia auriculata* (Cassia), *Mangifera indica* (mango), *Ailanthus excelsa* (mahaneem), *Dodonaea viscosa* (hopseed), *Anona squamosa* (custard apple), *Pongamia pinnata* (karanj), *Zizyphus xylopyrus* (ber), *Sapindus emarginatus* (notched leaf soapnut), etc. Many of these trees and shrubs provide shelter to the wild life and also provide nutrition. Further, some of these plants are used for medicinal purpose also.

The forests where timber trees of appreciable girth grow are situated in the Sandur taluk. The species found in Swamimalai, Donimalai and Ramanamalai blocks of Sandur forests are teak, rosewood, *Pterocarpus marsupium*, satin or *Chloroxylon sweitenia*, dindiga or *Anogiessus latifolia*, Siris or *Albizzia lebbek*, *A. amara*, *Cassia fistula*, *Lagerstroemia parviflora*, *Lannea grandis*, *Boswellia serrata*, *Terminalia arjuna*, *T. chebula*, *T. belerica*, ebony or *Diospyros ebony*, mohwa or *Bassia latifolia*, *Grewia tiliaefolia*, *Semicarpus anacardium*, *Acacia sundra*, *Aegle mermelos*, *Gmelina arborea*, *Santalum album*, chironji or *Buchnanian lanzan* and *Soymida febrifuga*. Perennial grasses such as *Cymbopogon*, *Stylosanthes* have also been seen during our survey. The predominant tree species of the region are given in table 1.3.

Table 1.3. Predominant tree species of the Rama mine region

S.No.	Local Name	Botanical Name
1	Khair	<i>Acacia catechu</i>
2	Pachali	<i>Dalbergia paniculata</i>

3	Rose wood	<i>Dalbergia latifolia</i>
4	Hudi	<i>Stereospermum chelonoides</i>
5	Maradi	<i>Buchnanania lanzana</i>
6	Channaagi	<i>Lageratroeemia parviflora</i>
7	Dindal	<i>Anogeissus latifolia</i>
8	Honne	<i>Pterocarpus marsupium</i>
9	Beete	<i>Pterocarpus santalinus</i>
10	Somi	<i>Soymida febrifuga</i>
11	Dupa	<i>Bosewellia serrata</i>
12	Mashiwala	<i>Chloroxylon swietenia</i>
13	Maddi	<i>Morinda tinctoria</i>
14	Naibela	<i>Limonia acidissima</i>
15	Bela	<i>Feronia elephantum</i>
16	Bikke	<i>Gardenia gummifera</i>
17	Kakke	<i>Cassia fistula</i>
18	Goravi	<i>Ixora arborea</i>
19	Tega	<i>Tectona grandis</i>
20	Jagalaganti	<i>Diospyros montana</i>

(Source: REIA/EMP of Rama iron ore Mine)

Besides the members of vertebrata numerous species of insects, butterflies and micro fauna inhabit this region. The Daroji Sloth Bear Sanctuary has been created in an area of 82.72 km² to protect these bears. Panthers are reported to be seen in the hills of Sandur taluk. The other mammalian wildlife includes wild boars and jackals. Blackbucks and wolves occur in certain plantations and grasslands in the plains but not reported from the project area and its vicinity. The other mammals reported include Bonnet Macaque, Hanuman Langur, wildboar, Indian Hare, porcupines, squirrels, rats and mice. Hares are plentiful on the hill slopes. Among reptiles, kraits, cobras, vipers, pythons, monitor lizard, garden lizard, and skinks are commonly sighted. The commonly seen arthropods & insects include millipedes, centipedes, cockroaches, different types of ants, honeybees, houseflies, red ants, earthworms, crickets, grasshoppers, and silver fish. The common amphibians observed are frogs and tods. Among the bird species, nilkanths, crows, pigeons, common quails, grey francolins, partridges, owls,

kites, peacocks, , bulbuls, whistling teals, vultures, mynas, egrets, brahmny kites, shikras, buzzards, blue jays and shrikes are common.

1.8 Summary of existing R & R Plan and Soil Moisture Conservation activities

There are no rivers or perennial water courses in the leased mine area. However, the area is traversed by numerous seasonal water courses which are usually active during monsoon season and draining into the nearby water bodies (Narihalla tank). Naturally, no rain water accumulates in the lease area. The rainwater flows from hill slopes and it doesn't accumulate till it reaches the lower valleys. Hence, the drainage pattern is sub-dendritic in nature and is typical of the hilly area.

A total of 6 nalas are originating from the lease area. Out of the total, one is from western side and emptying into a tank near Byalakundi and another one originates from northern side is flowing towards NW direction and emptying into Raya channel. The remaining 4 nalas are originating from eastern side of ML area and flowing towards eastern direction and emptying into Narihalla Reservoir.

Control of erosion is important for both during mining and post mining period as the waste materials emanating from the fragmented areas such as mine pit and waste dumps can cause damage to the local environment including soil, water, air, agriculture, etc. The main objective of the surface water management plan is to suggest suitable site specific bio-engineering measures for the protection of nalas, waste dumps, mine pits, sub-grade dumps, etc., from erosion/run-off due to rain. Erosion of waste materials through natural water channels should be arrested/ controlled by constructing silt retaining and grade stabilizing structures like gabion check dams, stone masonry check dams, earthen check dams, silt settling tanks, etc. All these structures retain silt behind it and allow only relatively clear water to flow towards downstream. Due to retention of silt, channel gradient, flow velocity and consequently carrying capacity of the water course will be reduced. Engineering measures are the first line of defense in controlling erosion and they also facilitate quick re-establishment of vegetation over the disturbed areas. The proposed engineering measures for the surface water management of the ML area are given in following pages.

Chapter 2

2. Proposed Soil Moisture Conservation Interventions

The natural resource base in semi-arid areas has undergone degradation because of neglect and over-exploitation. The most important natural resources (NRs), ie, soil and water, hold the key for improving the livelihoods of the rural poor located in semi-arid areas. Nearly 67% of the cultivated area in India comes under rainfed agriculture and supports 40% of the population and 60% of the livestock (CRIDA 1997). The project area i.e. Rama Mines is located in the forested areas of Sandur Taluk of Ballari District of Karnataka and the site represents semi-arid areas and deciduous vegetation and scrub forests. The project area receives scanty rainfall and affected by droughts due to failure of monsoons. The rainfall distribution, which is primarily uni-modal results in heavy rains in a short period causing high run-off and soil loss. Prolonged dry spells between two rains during the monsoon can occur, resulting in drying of the sown crops. The soils are also poor and degraded. Farmers report that the groundwater is over-exploited resulting in lowering of the water table and drying of open wells.

Steep slope and non-arable topography characterizes the Rama mine. It is prone to excessive soil erosion and transportation of soil from the mining area. The area receives mean annual rainfall of around 750 mm with few intense storms. The geographic characteristic of the area influences quick drainage of run-off so generated and thus provides little retention time to allow run-off to infiltrate into the soil. This would result into further depletion of vegetative cover and this in turn, accelerates soil erosion leading to vicious circle of soil erosion and vegetative cover depletion. This requires to be tackled by intensive soil and moisture conservation practices in the area. To address these issues, a two-pronged approach has been suggested i.e. introduction of staggered contour trenching, SCTs at 10 m contour interval and Bioengineering measures including grass seeding and plantations.

2.1 Site characteristics of Rama mine area

The characteristic of catchment area that produces surface run-off is very important for design of trenches. The general consideration is to design trenches such that, it get filled at least once in the season to ensure soil moisture conservation. The Rama mine has little or no soil depth, steep slope, even more that 1:1 (vertical:horizontal), less infiltration capacity and moderate vegetative cover. This is prone to cause higher run-off and severe soil erosion.

Based on the prevailing site conditions and rainfall characteristics, run-off coefficient may be taken as 0.5 for higher run-off generation potential of the area.

2.2 Data and analysis

The simulated rainfall data in $0.25^\circ \times 0.25^\circ$ grid were considered for hydrological data analysis as actual observed data were not available. The grid nearest to latitude and longitude of Sandur block of Ballari district is available at ICAR-CRIDA is used for rainfall analysis. The data was available for 63 years (1951-2013) and this can be considered as sufficient length of record for comprehensive conclusion. The design rainfall was computed from this data record (Fig 2.1).

The design rainfall defined as the amount of rainfall needed to produce sufficient run-off. The design rainfall is computed after the probability analysis. The daily maximum rainfall data for respective year was used in probability analysis. A simple graphical method was used for probability analysis and occurrence of daily rainfall. The probability distribution of rainfall event is presented in figure 2.1. The design rainfall is taken as the rainfall with 50% probability level. Thus the design rainfall value obtained as 48.5 mm. It can be implied that atleast 48.5 mm/day rainfall event would be occurred in two years.

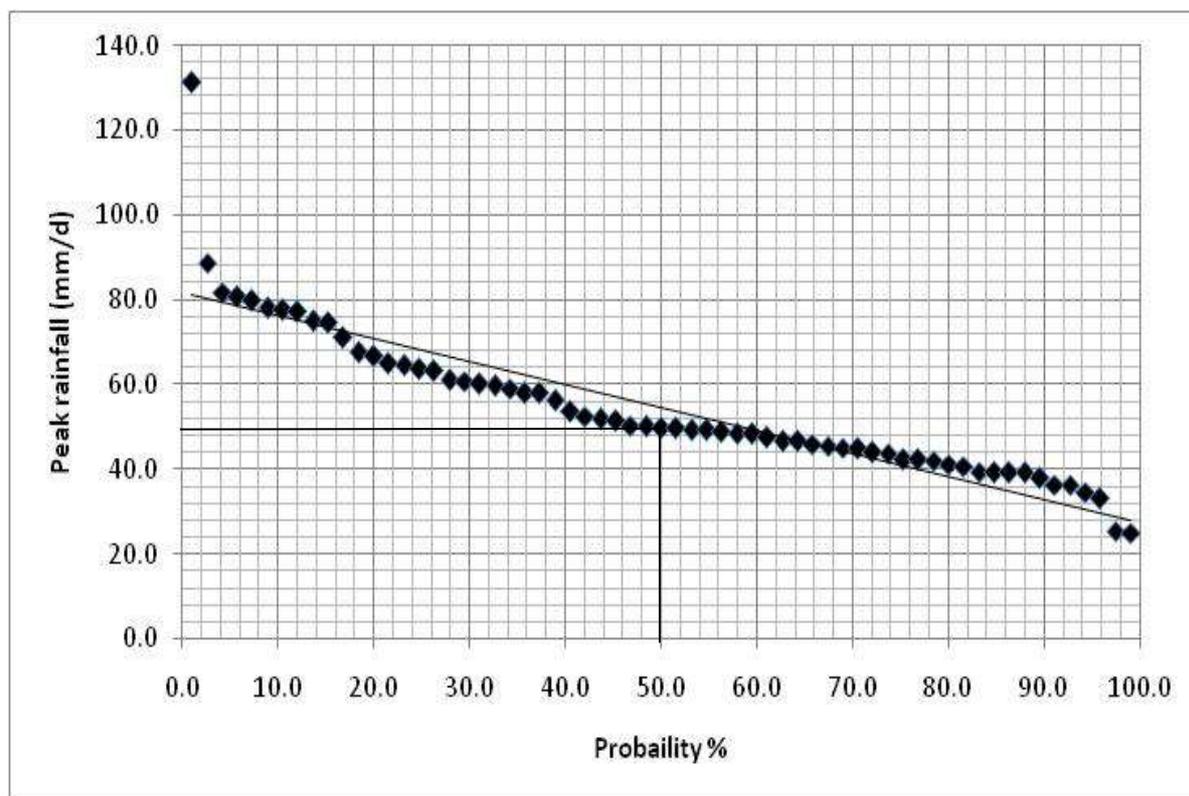


Fig 2.1 Probability analysis of daily peak rainfall of Sandur taluk

2.3 Staggered contour trenches

The velocity of overland flow in sloppy terrain is often surpassing the safe limit and cause soil erosion from surface. The trenches constructed in these regions to arrest the soil erosion by acting as a flow barrier such that the flow restricted within the safe limit. The staggered contour trenches involve the excavation of trenches of shorter length in a row along the contour with interspace between them (Figure 2.2 & 2.3). These trenches are arranged in line (staggered form). Vertical intervals of 10 m between the rows are suggested so that maximum run-off could be stored in these trenches. In the alternate row, the trenches are located directly below one another. The trenches in successive rows are thus staggered, with the trenches in the upper row and the interspace in the lower row being directly below each other. The length of the trench and the interspace between the trenches in the same row kept at 3 meters considering the rainfall characteristics. The berm with planting of grasses, shrubs and trees on downstream side of SCT is also suggested to enhance the water and moisture storage capacity of such trench in order to make these trenches effective on such high slopes, where it will be constructed at very close intervals.

3.4 Designing staggered contour trenches

The trenches were designed considering the location characteristics and design rainfall with following steps considering unit area (1 ha). Maximum run-off generating potential from design rainfall off 48.5 mm from unit catchment area (1 ha) in one day,

$$Q = 10000(\text{area in m}^2) \times 48.5 (\text{design rainfall in mm/d}) \times 0.5 (\text{Run-off coefficient}) = 242.5 \text{ m}^3$$

Assuming half of the potential run-off could be harnessed for soil moisture conservation, i.e. 122 m³ considering the site characteristics, standard dimension for staggered contour trenches has been adopted, which is typically 3 m long and 0.25 m² in cross section (i.e. width and depth is limited to 0.5m).

Thus 163 such trenches per hectare is optimally required. Therefore the SCTs can be aligned with 6 m (centre to centre) horizontal interval and 10 m (centre to centre) vertical interval.

The layout and design of proposed SCTs are provided in figure 2.2 and 2.3. The lengths of the trenches are kept at 3 m long and 0.5 meter wide. The depth is suggested as maximum 0.5 m. The unit cost of such contour trench including berm is provided in table 2.1. For cost estimation in earthwork, unit rate prevailing at JSW Steel Ltd., has been considered.

Table 2.1. Unit cost of trenches and berm proposed for Ramajunction area

Items	Dimension in m				Height/ depth	Total Excavation/ Material to be filled	Unit Rate*/ (Rs)
	Width		Length				
	Top	Bottom	Top	Bottom			
Trench	0.5	0.5	3	3	0.50	0.75 m³	350
Berm	0.2	0.5	3	3	0.15	0.31 m ³	

* As per prevailing JSW rates

Thus total cost for one SCT = $0.75 \times 350 = \text{Rs } 263$.

The contour level at top of the Rama mine reads as 860 m. After site visit and study of contour map of the location, it was observed that the regular gully are formed at contour level of 740 m. Thus it was suggested to construct the trenching between the contour levels of 820 to 740 m at 10 m interval. Thus 9 rows of SCTs are suggested (table 2.2).

Table 2.2 Total cost of SCTs proposed for Rama mines

Contour number	Contour RL (m)	Total length (m)	Effective length for construction of trenches*	No of SCTs	Cost /SCT @ INR 263*
1	860	1469	1113	186	48918
2	870	1447	1090	182	47866
3	880	1415	1057	176	46288
4	890	1244	880	147	38661
5	900	1082	649	117	30771
Total		6657	4789	808	2,12,504

* As per JSW prevailing rates

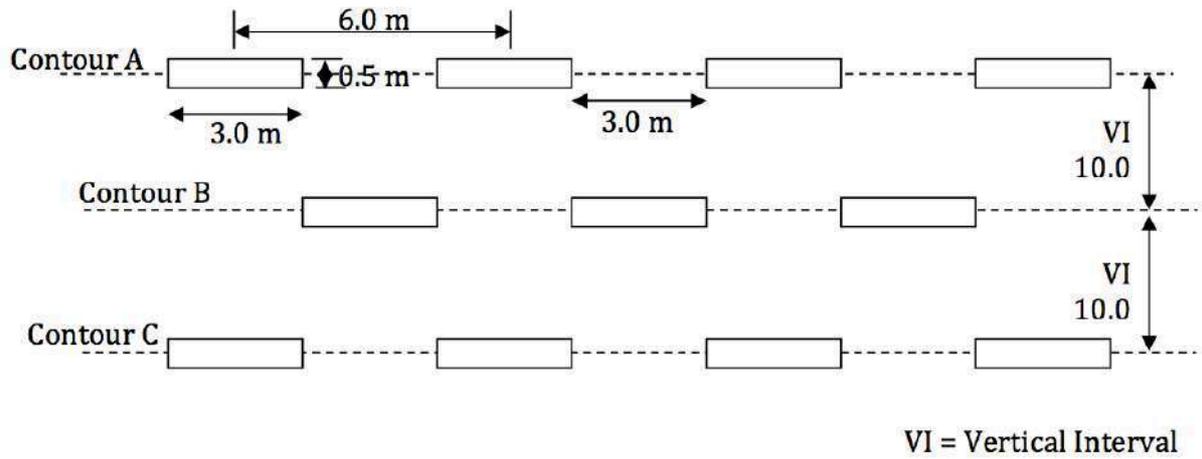
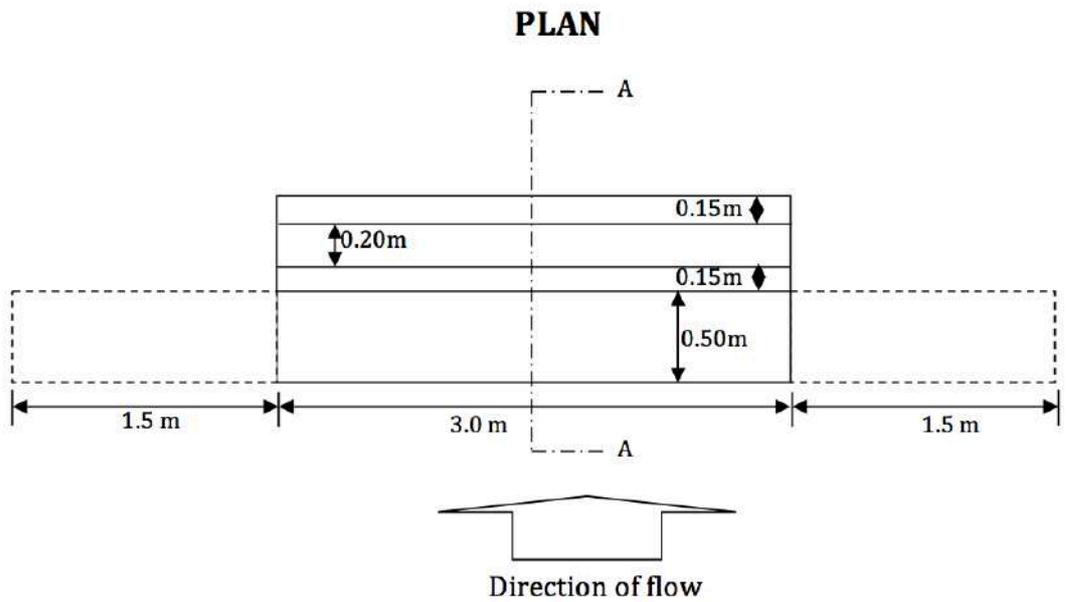


Fig 2.2 Layout of proposed SCT



ELEVATION AT SECTION A-A

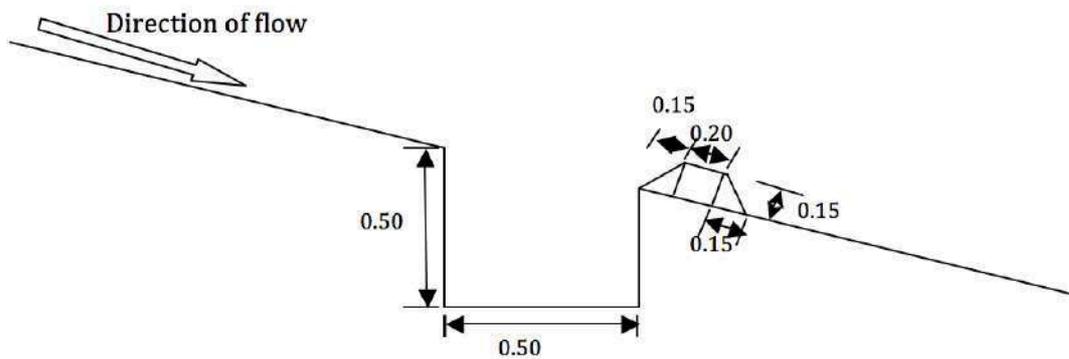


Fig 2.3 Proposed SCT plan and elevation diagram

Chapter 3

3. Afforestation and greenbelt interventions

In case of Rama mines, the flat area is very less and hence staggered contour trenches are suggested. These trenches need to be supported with one tree per trench on the downward side where water availability will be more due to trench acting as small catch pit by arresting run-off. Following species are suggested so that a mixed plantation with diverse outputs will meet the need of wildlife and others.

Fruit species for Dryland Horticulture: Custard apple (*Annona squamosa*), Ber (*Zizyphus mauritiana*, local wild type), Ficus (*Ficus glomerata*), Jamun (*Syzygium cuminii*), etc.

Biofuel Species: Karanj (*Pongamia pinnata*), Jatropha (*Jatropha curcas*), Paradise tree (*Simarouba glauca*), and Neem (*Azadirachta indica*).

Ground cover: Stylo legume (*Stylosanthes hamata/ S. scabra*) on the mounds / berms of trenches while Sabi grass (*Urochloa mosamibensis*) for water ways.

Pit amendment: 1/3 top soil, 1/3 FYM or compost

1/3 tank silt/black soil plus DAP @ 100 g per pit

Biofertilizer: Rhizobium (only for leguminous trees), PSB and Zinc solubilizers for all the species to be mixed with the pit filling material. For each pit, 10 g Rhizobium, 20 g each of PSB and Zn solubilizer to be added.

Provision for weeding & watering:

During the first year, the basins to be kept weed free and arrangement for supplemental watering during off-season are to be made. For species like *Pongamia pinnata*, *Simarouba glauca* or *Azadirachta indica*, *Ficus glomerata*, *Syzygium cuminii*, etc., a spacing of 6.0 m x 6.0 m and pit size of 0.5 m x 0.5 m x 0.5 m is suggested. Regular weeding and watering to be followed for attaining higher survival percent of planted seedlings.

Table 3. Cost estimation of bio engineering measures

S No	Items	Qty.	Length (m)	Width (m)	Depth (m)	Unit quantity	Unit cost per m ³ (Rs)	Total cost (Rs)	
		(a)				(b)	(c)	(a)*(b)*(c)	
1	Pit for <i>Pongamia</i>	808 nos	0.5	0.5	0.5	0.125	350	35350	
2	<i>Stylo</i> seeding on SCT berm	Lumpsum 20 mandays						350	14000
3	<i>Stylo</i> for slope	5 kg	-	-	-	-	500	2500	
4	Grass seed, <i>Sabi</i> for waterways	10 kg	-	-	-	-	450	4500	
5	Grass seed, <i>Cenchrus</i> for multipurpose	10 kg	-	-	-	-	450	4500	
6	<i>Pongamia</i> saplings	808 nos					25	20200	
7	Soil amendment*								
	a. 2 tractor trollies black soil or tank silt						1000	2000	
	b. 2 tractor trollies of FYM						2000	4000	
	c. 8 kg Rhizobium						50	4000	
	16 kg Phosphate solubilizer biofertilizers						80	1280	
	14 kg Zinc solubilizer biofertilizers						80	1280	
10	2 bags DAP fertilizer						1100	2200	
11	50 mandays for weeding (2 times)						350	17500	
12	30 mandays for watering the plants						350	10500	
Total								123810	

*Soil amendment by mixing (1/3rd in-situ soil +1/3rd black soil or tank silt +1/3rd FYM + + 100 g DAP + 1400010 g Rhizobium + 20 each of PSB and ZSB).

The bioengineering measures suggested are recommended to be implemented along with the afforestation and greenbelt proposed in the Reclamation & Rehabilitation (R & R) plan of the Rama mine. The budget proposed above SMC Scheme measures / interventions requires to be arranged by M/s. JSW Steel Ltd., which works out to be **Rs 3.36 lakhs**. This is in addition to the provision of Rs. 60.63 lakhs that has been already made in the approved R & R Plan of ICFRE for Rama Mines towards greenbelt development and afforestation. The approved R & R Plan is already under implementation at Rama Mines.

As suggested in the R&R plan, work of afforestation will be carried out in close coordination with the State Forest Department, Karnataka, utilizing local people and the periodical monitoring will also be carried out, in co-ordination with state agencies. The seeds of *Stylosanthes* could be obtained from reliable sources and planted. Rooted slips of grasses such as *Cymbopogon*, *Cenchrus* etc could be used for planting in accessible areas. This exercise also could be taken up on the slopes of dumps covered with geo-jute. From the rainfall analysis, it is observed that July, August and September months receive high rainfall of 2-3 rainfall events in every month. Hence, the recommended bioengineering plan may be implemented in line with the R&R plan especially during these months to ensure proper establishment of the plants and this will also reduce watering of the plants frequently. Planting of tall growing trees such as *Pterocarpus marsupium*, *Albizia lebbek*, *A. amara*, *Cassia fistula*, *Ficus* spp., *Azadirachta indica*, *Syzygium cumini*, *Terminalia arjuna*, *T. chebula*, *T. belerica*, *Diospyros ebony*, *Bassia latifolia*, *Semicarpus anacardium*, *Acacia sundra*, and *Aegle marmelos* etc.

Chapter 4

4. Expected benefits from the SMC plan

The expected benefits from the SMC Scheme interventions plan are:

1. The staggered contour trenching is the most suited soil moisture conservation plan for Rama mine. The trenching should be done at 6 m as horizontal interval (along the contour line) and 10 m vertical interval (across the contour line). A total of 808 contour trenches in Rama mine are recommended to be excavated. The expected soil water storage potential could be up to 7200 m³ per year (expecting that every year receives daily rainfall events of 24 mm more than 12 in a year). The corresponding run-off analysis based on the IMD data is shown in Fig 4.1.

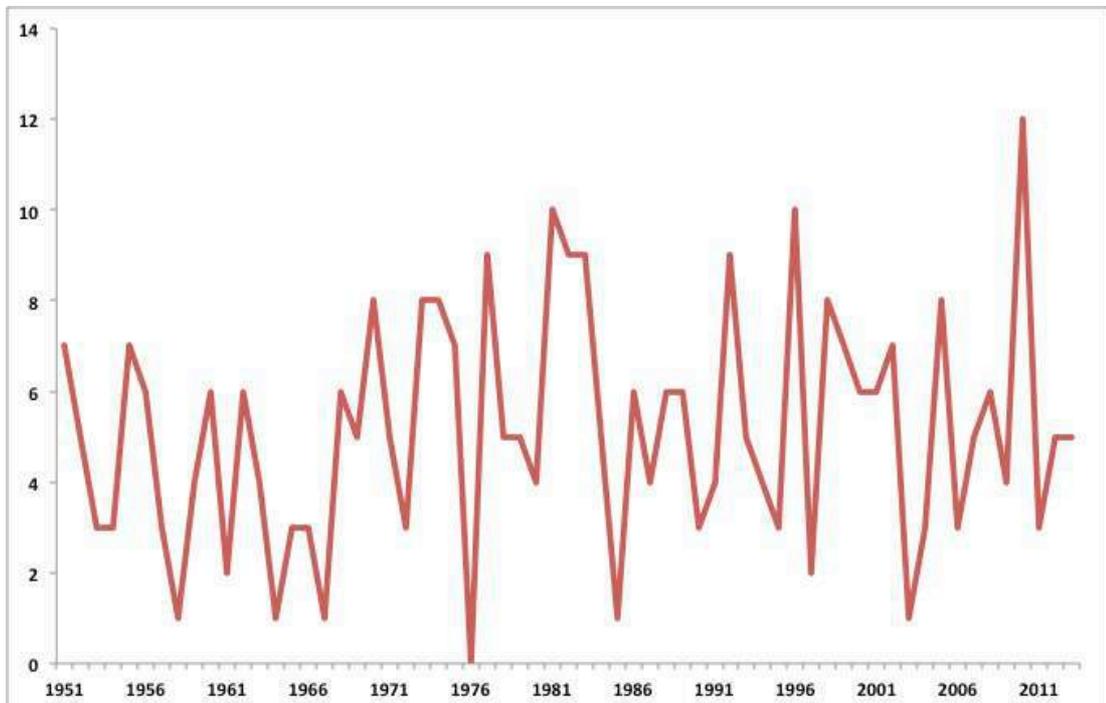


Fig 4.1 Expected run-off generating rainfall events (≥ 24 mm) in the region based on the rainfall analysis of Sandur Taluk (1951-2013)

2. Berm must be provided at the downstream of the trenches as shown in the layout and design. The Berm may be raised from the excavated material (top soil) obtained from trenching work.
3. *Pongamia* plantation adjacent to each of the CCTs will help to stabilize the SCTs and also make use of the water harvested in the trenches.

4. *Stylo* plantation on the berms of the CCT will help to stabilize the berms and also increase nutritious fodder availability for the herbivorous animals in the forest area and thus could help in their rehabilitation.
5. Since both *Pongamia* and *Stylo* are leguminous, they will help enrich soil with Nitrogen and thus help grow other plants also.
6. Since *Pongamia* is evergreen tree, it will help to maintain the ecosystem from high temperature stresses.
7. *Pongamia* trees will help to sequester carbon and thus carbon stocks could be increased over period of time. If the trees are maintained for 30 years, the expected carbon stocks per tree could be 35-40 kg per tree and thus from 2001 trees, 28000 to 32000 Kg carbon stocks could be accumulated.
8. The *Pongamia* pods are good source of biofuel and hence can add value to the plantations.

5. Complementarity of the SMC plan to other schemes

The suggested SMC plan can complement to the Reclamation & Rehabilitation plan being implemented already at the mining site and also wildlife. The CCTs planned in the SMC scheme will help to reduce surface run-off and the harvested water in the trenches will help to increase recharge of the subsurface water systems. The plan also includes plantation of trees such as *Ficus*, Custard apple and *Pongamia* trees near each CCT. These trees will help as shelter and also provide food to the wild life. The *Stylosanthes* being planted on the CCT bunds will not only help to reduce soil erosion but also provide nutritious leguminous fodder to the herbivorous wild life such as rabbits and other grazing animals. The animals consuming this fodder get supplemented with good nutrition as *Stylo* is rich in crude protein content.

Since, the CCTs are planned at regular intervals at each 10 meters contour lines in a staggered way, systematic harvesting of run-off from the ridge to the valley occurs. This will also compliment the R&R plan wherein several checkdams, garland drains, rain water harvesting ponds, and gabions are being planned. In fact, we opine that after observing for one or two years, the implementation fo the R&R plan also could be revisited to reduce avoidable physical structures on a more realistic basis.

Chapter 6

6. Recommendations

The team recommends the following as SMC Scheme/Plan.

1. The SMC plan includes construction of **Staggered CTs** from 900 m altitude to 860 m at 10 m interval contours covering a total length of 6657 m. After careful scrutiny of the site, excluding 1868 m which is inaccessible either due to steep slope or rocky area, 808 SCTs have been recommended. The total estimated cost towards this exercise is **Rs. 2,12,504**.
2. All together 808 *Pongamia* saplings are to be planted adjacent to each of the SCTs about one meter away from the SCT at the distal end and maintained till they get established. It is also proposed to seed grasses and *Stylosanthes* through seeding and rooted slips as part of afforestation. The requisite financial and manpower requirements are provided in the detailed plan and the estimated cost towards these biological measures is **Rs 123810**.
3. Overall the total estimated cost towards the proposed SMC Scheme is INR 336314 (Three Lakh Thirty-Six Thousand Three Hundred and Fourteen Rupees only).
4. The map of Rama Mines showing proposed Soil & Moisture Conservation Scheme is shown in fig 6.1.
5. Upon perusal of the R&R plan, the team observed that already a provision has been made for greenbelt development in 2.2 ha and afforestation in 31.60 ha by seeding grasses, rooted slips and planting tall growing tree species. The laid out cost towards this exercise is Rs. 60.634 lakhs (please refer to the page 64 of the approved R&R plan of Rama mine by ICFRE). Cost of plantation of *Pongamia* trees near SCTs and seeding *Stylosanthes* on the berms also could also be met out of this fund as it compliments to the afforestation and greenbelt plan suggested by R&R plan. Else, this is considered as additional to the existing R & R Plan.

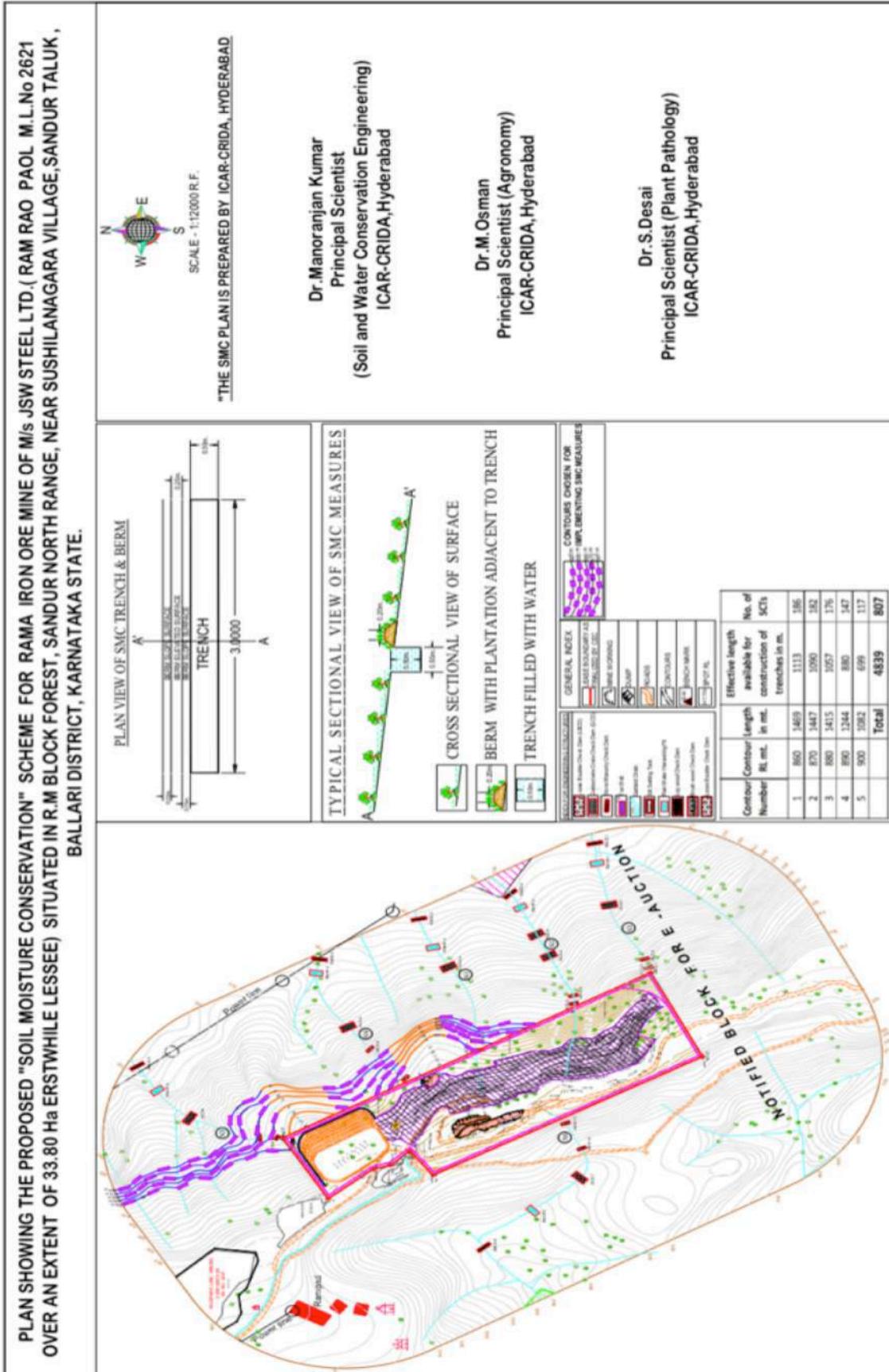


Fig 6.1 Rama Mine map showing proposed Soil & Moisture Conservation Scheme

Chapter 7

7. About Consultants

Dr Manoranjan Kumar

Dr Manoranjan Kumar obtained PhD from Indian Institute of Technology, Kharagpur in 2003. He received bachelor degree in agricultural engineering in 1996 from College of Agricultural Engineering, Jabalpur followed by master degree in agricultural engineering with specialization in soil and water conservation engineering from Indian Institute of Technology, Kharagpur in 1998.

Dr. Manoranjan Kumar is presently working as principal scientist (Soil and Water Conservation Engineering) at ICAR-CRIDA, Hyderabad. He joined ICAR in 2001 as scientist and worked at ICAR-VPKAS, Almora representing hill and mountain agro-ecosystem. In 2009, he moved to CRIDA, Hyderabad on direct selection as senior scientist to further serve in drylands. Thus he has diversified research and development experience of varied climate, topography and conditions. During his initial years of service, he led projects on application of plastics in agriculture in which greenhouse structures and LDPE lined tanks extensively popularized in the Hills of Uttarakhand that brought many success stories. He has been involved in many external funded projects along with institute project as PI and Co-PI. Those include projects funded by central water commission, NAIP, National horticulture mission, NICRA, water platform, NABARD, Bharthi Cement, and USAID etc. Dr. Kumar also pioneered in application of neural networks in hydrological modelling particularly potential evapotranspiration. His major contribution include artificial neural network techniques in modelling of hydrological processes, development of gravity fed microirrigation system and solar powered micro-irrigation system, LDPE lined tanks for hill region, climate change modelling. He published more than 30 research paper in journals of international and national repute. His other publication includes edited books, book chapters, atlases, technical bulletin, training manual and resources, leaflets etc. He has guided 1 PhD and imparted training to many MTech and BTech students.

Dr. Suseelendra Desai

Dr. Suseelendra Desai is a Principal Scientist (Plant Pathology) at the ICAR-Central Research Institute for Dryland Agriculture, Hyderabad. He obtained his Bachelors in Agriculture from Andhra Pradesh Agricultural University, Rajendranagar, Hyderabad in

1980, Masters in Agriculture with specialization in Plant Pathology from University of Agricultural Sciences, Bengaluru in 1982 and Doctoral degree in 1987 from Acharya NG Ranga Agricultural University, Rajendranagar, Hyderabad. He conducted doctoral research at International Crops Research Institute for Semi-Arid Tropics (ICRISAT).

He joined ICAR as Scientist at the National Research Centre for Groundnut, at Junagadh, Gujarat in 1987 and worked there until 2004. During this period, he has made significant contributions by developing integrated foliar disease management and integrated aflatoxin contamination management packages in groundnut. In 2004, he moved to ICAR-Central Research Institute for Dryland Agriculture, Hyderabad and since then, he has worked extensively on harnessing microbial resources for plant health management.

During 1991-1994, he was a DAAD post-doctoral fellow in Germany and worked at Justus-Maxmillans University, Wuerzburg and Justus-Liebig University, Giessen. He was awarded DAAD Re-invitation fellowship during 2007, 2011 and 2015 for research stays at the Wilhelms Westfallische University, Muenster, Germany.

His significant research contributions include development of biocontrol agents for management of soil-borne plant pathogens (which is popular among farming community), characterization of microbial diversity from different agroecological regions of India for their beneficial traits and identification of multi-nutrient tasking strains of *Azospirillum* and *Azotobacter*, which can mobilize N, P, and Zn which are essentially required for the crop plants. He was instrumental in establishing “Integrated Bioresources Centre” at ICAR-CRIDA that not only supplies quality bioinputs to farmers at an affordable price so that the input costs are reduced and thereby farm profitability is enhanced.

He has executed many national and international projects successfully. He has published more than 180 research papers, technical bulletins, book chapters, popular articles, and edited books. He has delivered several radio talks and appeared in TV programs on crop health management and invited speaker at more than 30 national and international seminars. He has guided so far 4 doctoral students and 3 Masters students.

He is a Member of Scientific Panel of Food Safety Standards Authority of India (FSSAI), Government of India on “Microbial Hazards in Foods during 2008-2016 and since 2016, member of the panel “Contaminants in Food Chain”. He is a recipient of University Gold Medal during Masters, many academic merit awards and fellowships from ICAR and ASPEE. He is a Fellow of many professional societies. He served as Zonal President of Indian Phytopathological Society. He has organized national and international seminars,

training programs and chaired/co-chaired sessions in national and international seminars. He has wide international exposure in North American and Asian countries.

Dr. Mohammed Osman

Dr. Mohammed Osman, graduated in the field of agriculture and possesses Masters in the discipline of Agronomy. He did his doctorate in the discipline of agroforestry from Department of Forest Science, Oregon State University, Corvallis, OR, USA. He has more than 33 years of experience in the field of natural resource management and serving at CRIDA since 1984. During this tenure, he worked as visiting scientist at ICRISAT for a period of one year. He was involved in popularizing the concepts of alternate land use systems and dryland horticulture for resource conservation and sustainable dryland agriculture. He is associated with implementation of watershed programmes and also in monitoring and evaluation of these programmes executed by different agencies. Presently he is working as Principal Scientist (Agronomy) & Head, Prioritization, Monitoring and Evaluation cell. He is involved in coordination of research programmes and building of linkages with different institutions. His area of interest is natural resource management through agroforestry and soil conservation in watersheds.

Dr. K. Sammi Reddy

Dr. K. Sammi Reddy was born in Sriramulapally, Karimnagar, India on 12 October 1965. He studied at Zilla Parishad High School, Gopalpur, during 1980-81 and then at Government Junior College, Hanamkonda, during 1981-83. He graduated from A.P. Agricultural University during 1983-87 and obtained his Masters in 1987-89. He obtained his doctoral degree from IARI, New Delhi during 1995-98.

He started his career as Scientific Assistant at the National Remote Sensing Agency, Hyderabad during 1990-91. He joined ICAR and joined at NAARM, Hyderabad as Scientist trainee during 1991-92. He served in ICAR as Scientist (1992-98) Scientist (Senior Scale), during 1998-2000; Senior Scientist (2000-2008), and as Principal Scientist (2008-2012) at the Indian Institute of Soil Science, Bhopal. He moved to ICAR-CRIDA as Principal Scientist, in 2012. He is heading the Division of Resource Management at ICAR-Central Research Institute for Dryland Agriculture, Hyderabad since 2014. His research areas are Soil chemistry & fertility, soil testing, integrated nutrient management, soil health & climate change, and dryland agriculture.

He has obtained several honours and awards. The awards he received are Dhiru Morarji Memorial Award of FAI, 1995 and 2005; PPIC-FAI Award, 1997; Golden Jubilee Commemoration Young Scientist Award of ISSS, 2002; IMPHOS-FAI Award, 2003; TSI-FAI Award, 2006; FAI Golden Jubilee Award for Excellence, 2008; Hari Om Ashram Trust Award of ICAR, 2008-09; Best Paper Presentation Award of ISSS, 2011; 12th International Congress of Soil Science Commemoration Award of ISSS, 2013.

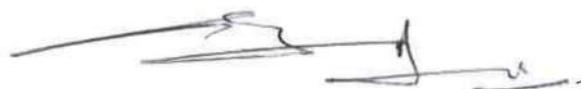
Dated: 10.08.2018

Signatures of the Consultants with Designations



(Manoranjan Kumar)

Principal Scientist (SWC)



(Mohammed Osman)

Principal Scientist (Agronomy)



(Suscelendra Desai)

(Principal Scientist (Plant Pathology))



(K. Sammi Reddy)

Head, Division of Resource Management

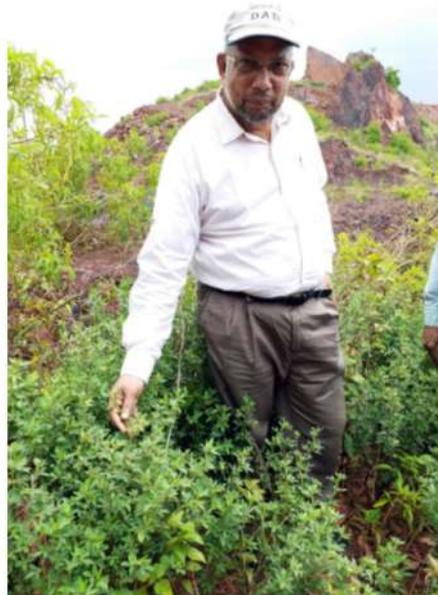
Approved by



(Director)

DIRECTOR
Central Research Institute
for Dryland Agriculture
P.O. Saidabad, Hyderabad 501160

Field visit of the Consultant team







Vijayanagar Works :
 P. O. Vidyannagar - 583 275,
 Dist. Ballari, Karnataka, India.
 CIN : L27102MH1994PLC152925
 Phone : +91 8395 250 120-30
 Fax : +91 8395 250 132/142
 Website : www.jsw.in

**Annexure-
 Condition No. 6**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby undertake to deposit the funds in Ad-hoc CAMPA Account earmarked towards the implementation of SMC works, once the demand note for the same is received from the Forest Department.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.

JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
 Bandra Kurla Complex,
 Bandra (East), Mumbai - 400 051
 Phone : +91 22 4286 1000
 Fax : +91 22 4286 3000





विजया बैंक x

(भारत सरकार का उपक्रम)

VIJAYA BANK

(A Govt. of India Undertaking)

प्रधान कार्यालय Head Office

41/2, एम जी रोड M G Road

बेंगलूर Bangalore – 560 001

शाखा/कार्यालय : तोरणगल्लु

Branch/Office : TORANAGALLU

ई-मेल

Email : vb1395@vijayabank.co.in

वेब Web

www.vijayabank.com

फोन Phone

: 08395-250680

फैक्स Fax

: 08395-250680

संदर्भ सं. : TNGL/6/2018

दिनांक Date: 03-12-2018

TO

THE OFFICE OF THE

Deputy conservator of forest

Bellary division

Sir/madam,

Sub: Confirmation of RTGS

We hereby confirm you the remittance through RTGS from JSW STEEL LTD account no 139500301000052 with us. Following are details of the Remittance:

BENEFICIARY A/C NO: 150735824548023

BENEFICIARY CUSTOMER NAME : KARNATAKA CAMPA

UTR NO: VIJBH18337007854

BANK NAME: CORPORATION BANK

TRANSACTION AMOUNT : RS 6931000/-

TRANSACTION DATE: 03-12-2018.

This certificate is given at the request of JSW STEEL LTD, vijaya nagar.

कृते विजया बैंक
For VIJAYA BANK,
P. V. Zahery
असिस्टेंट मैनेजर/Asst. Manager
ए. एस. एल. शाखा, तोरणगल्लु
I.V.S.L. Branch, Toranagallu.

AGENCY COPY	
NEFT / RTGS CHALLAN for Ad-HOC CAMPA	
Date : 30-11-2018	
Agency Name.	JSW STEEL LIMITED
Application No.	5824548023
MoEF/SG File No.	8-14/2018-FC
Location.	KARNATAKA
Address.	Vijayanagar WorksBellary
Amount(in Rs)	6931000/-
Amount in Words :Sixty-Nine Lakh Thirty-One Thousand Rupees Only	
NEFT/RTGS to be made as per following details;	
Beneficiary Name:	KARNATAKA CAMPA
IFSC Code:	CORP0000371
Pay to Account No.	150735824548023 Valid only for this challan amount.
Bank Name & Address:	Corporation Bank Lodhi Complex Branch, Block 11,CGO Complex, Phase I, Lodhi Road, New Delhi -110003
<ul style="list-style-type: none"> This Challan is strictly to be used for making payment to CAMPA by NEFT/RTGS only This challan is valid only for seven days. 	

BANK COPY	
NEFT / RTGS CHALLAN for Ad-HOC CAMPA	
Date : 30-11-2018	
Agency Name.	JSW STEEL LIMITED
Application No.	5824548023
MoEF/SG File No.	8-14/2018-FC
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<ul style="list-style-type: none"> This Challan is strictly to be used for making payment to CAMPA by NEFT/RTGS only This challan is valid only for seven days. 	

After making successful payment, User Agencies may send a line of confirmation through
Email: helpdeskcampa@corpbank.co.in

1322

Demand Notice

Sub: Diversion of 32.56 hectares (revised from 33.80 hectare) of forest land for iron ore mining (erstwhile 'C' category ML No.2621 of M/s. Rama Rao Poal) allocated through auction sale to M/s. JSW Steel Ltd, Torangallu in Ramanalai Block Reserve Forest, Sandur North Range, Ballari District.,

- Ref: 1) Letter No. F.No. 8-14/2018-FC dated:27.07.2018 of Government of India, Ministry of Environmental, Forest and Climate Change, New Delhi.
- 2) Letter No. PCCF/WL/D/CR-41/2018-19 dated: 19.09.2018 of the Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Bengaluru.
- 3) This office letter No.M1/MNG/WL/SMC/Plan/2018-19 (M.L.No.2621) dated:16.11.2018.

* * * * *

With reference to the above subject, the Ministry of Environment Forests and Climate Change, Bengaluru has accorded 'in principle' approval (Stage-I) under Section-2 of Forest (Conservation), Act-1980 for Diversion of 32.56 hectares (revised from 33.80 hectare) of forest land for iron ore mining (erstwhile 'C' category ML No.2621 of M/s. Rama Rao Poal) allocated through auction sale to M/s. JSW Steel Ltd, Torangallu in Ramanalai Block Reserve Forest, Sandur North Range, Ballari District in ref(1) cited above. Condition as follows:

Condition No.vii "Presence of wild life has been reported in the area. State Governmetn shall prepare a wild life management plan for the area and the same shall b implemented by the Forest Department. The cost of impelentation and preparation of planshall be borne by the user agency. The copy of the approved wildlife management plan by Chief Wildlife Warden shall be submitted to MoEF &CC and the cost of the plan should be deposited in CAMPA fund prior to fina approval."

As per the condition No.(vii) & (xix)(a)(c), meeting was held on 08.08.2018 under the chairmanship of Chief Conservator of Forests, Ballari at circle office in the presence of DCF, Ballari and user agency. In this meeting, the CCF, Ballari instructed the DCF, Ballari to give the field inputs on the basis of field verification to the user agency for including the same in the Wildlife Conservation Plan and Soil & Mositure Conservation Plan. Meanwhile, the Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Bengaluru has approved the Wildlife Conservation Plan and Soil & Moisture Conservation Plan submitted by the user agency directly to the the Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Bengaluru vide letter at reference(2) above. Subsequently, as per the instruction of Chief Conservator of Forests, Ballari, this office submitted report to the Chief Conservator of Forests,

Ballari Circle, Ballari for inclusion of field inputs on the basis of field verification in the Wildlife Conservation Plan and Soil & Moisture Conservation plan vide reference (3) above.

On 19.11.2018, DCF, Ballari discussed with the Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Bengaluru through telephone, about the inclusion of field inputs (on the basis of field verification) in the approved plan. But, the Principal Chief Conservator of Forests (Wildlife) & Chief Wildlife Warden, Bengaluru has instructed to issue a demand notice as per the plan already approved. Further, the issue was discussion with APCCF (FC), Bangalroe (on 27.11.2018) and CCF, Ballari about issuing the demand notice to the user agency based on the already approved plan.

Hence, you are hereby instructed to remit the following amount through RTGS and E-Payment Module of Forest Clearance portal *forestclearance.nic* after duly generating the challan and submit the remittance details to this office.

Sl. No.	Specific activities	Amount (In lakhs)
1	Wildlife Conservation plan	63.00
2	Soil & Moisture Conservation Plan	06.31
Total		69.31

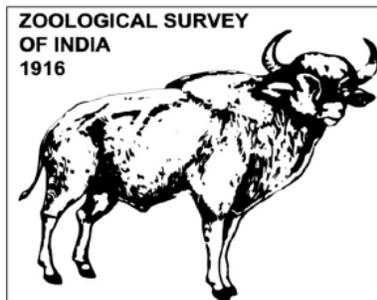
Further, at any circumstances, if the above plans are revised or additional item are included in future, the difference amount have to be remitted in future without fail. In this regard undertaking can be submitted by the user agency.


Deputy Conservator of Forests,
Bellary Division, Bellary.

To,

M/s. JSW Steel Limited,
M.L.No.2621, JSW Mining Office,
Vidhyanagara, Toranagallu

**WILDLIFE MANAGEMENT PLAN FOR
RAMA IRON ORE MINES
OF
M/S. JSW STEEL LTD.**

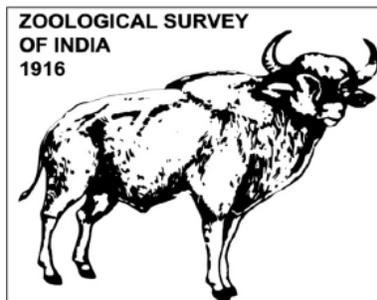
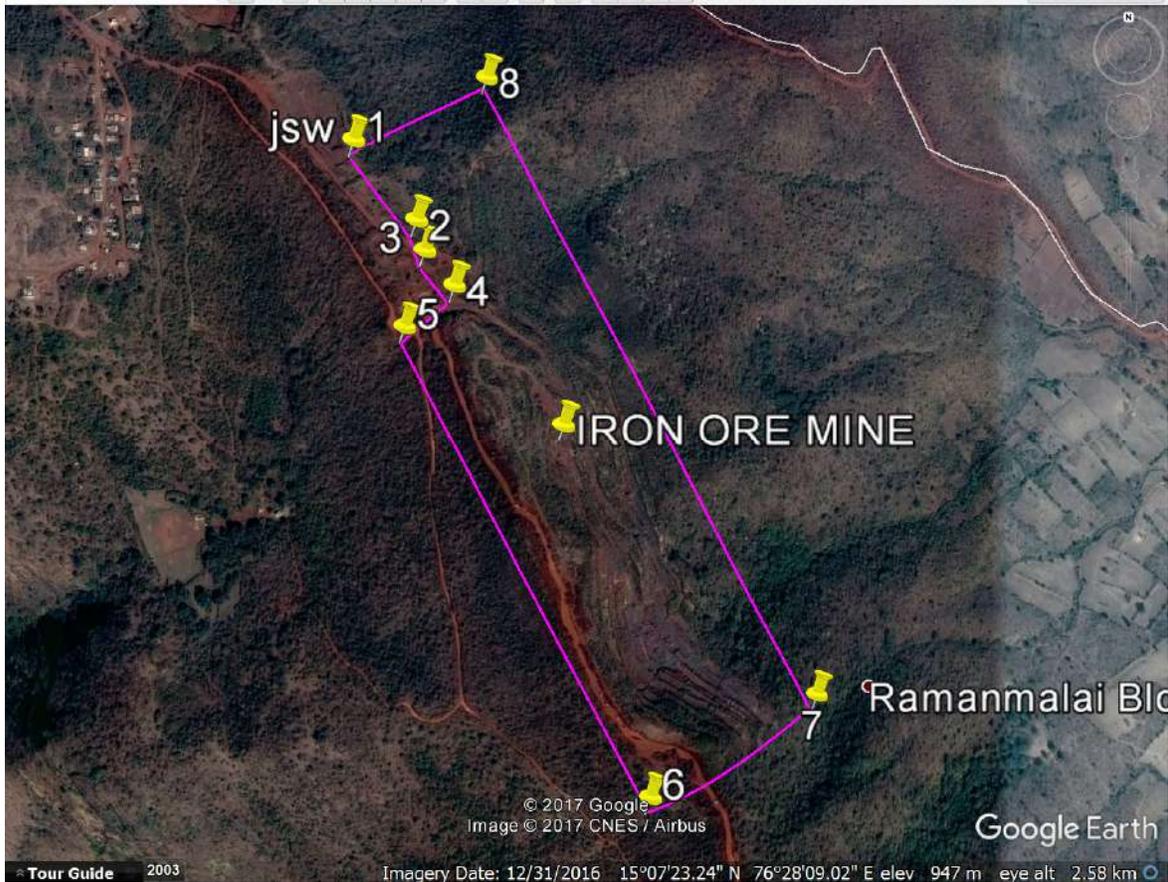


ZOOLOGICAL SURVEY OF INDIA

CHENNAI-600028

SEPTEMBER, 2018

**WILDLIFE CONSERVATION PLAN FOR
RAMA IRON ORE MINES
OF
M/S. JSW STEEL LTD.**



**SOUTHERN REGIONAL CENTRE
ZOOLOGICAL SURVEY OF INDIA, CHENNAI-600028**

WILDLIFE MANAGEMENT PLAN FOR RAMA IRON ORE MINES
OF
M/S. JSW STEEL LTD.

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**WILDLIFE MANAGEMENT PLAN FOR RAMA IRON ORE MINES OF
M/S. JSW STEEL LTD.**

Chapter I. Introduction

Preamble

Rama Iron Ore Mines is one of the “C category” of Mines that was allocated to M/s. JSW Steel Ltd., through an e-auction process conducted by the Govt. of Karnataka vide LOI no. DMG/MLS/CCA/12/2621/2016-17(Annexure-1) dated 26.10.2016. Rama Mine is spread over 33.80 Ha area of Forest Land of Ramgad range, Ramgad village, Sandur Taluk, Ballari District.

As per the directives of the Hon'ble Supreme Court (Judgement dt. 30.07.2015), Environmental Clearance of Rama mines has been transferred by the State Level Impact Assessment Authority (SEIAA) Karnataka for 0.5 MTPA vide *letter no. SEIAA /4/MISC/2017* dated 04.02.2017. A fresh Forest Diversion was initiated by the M/s. JSW Steel Ltd, for the entire 33.80 ha as the erstwhile lessee has not obtained Forest Clearance. The proposal was accorded Stage I Forest Clearance by MOEF&CC vide letter no. F. No. 8-24/2018-FC dt.27th July, 2018 for 32.56 ha (revised).

For Rama Mines, one of the Stage I Clearance conditions states that, “Presence of Wildlife has been reported in the area. State Government shall prepare a Wildlife Management Plan (WMP) for the area and the same shall be implemented by the forest department. The cost of implementation and preparation of plan shall be borne by the user agency. The copy of approved Wildlife Management Plan by Chief Wildlife Warden shall be submitted to MOEF&CC and the cost of the plan should be deposited in CAMPA fund prior to the final approval”.

Accordingly, the content of the report was discussed and Southern Regional Centre, Zoological Survey of India (ZSI) – an MOEFCC organisation, was engaged for one year (2018-19) to formulate the Wildlife Management Plan (WMP) by undertaking field surveys, extensive literature studies and referring “Working Plan of Ballari Forest Division, Karnataka (2013-14 to 2022-23)”. The experts of ZSI travelled extensively in the project area, villages and also interviewed local people on their perception about presence of various wildlife species.

Interactions with people was aided by pictorial field guides. The **Draft Report** of the Wildlife Management Plan (WMP) prepared by the ZSI was submitted to the **Office of Principal Chief Conservator of Forests (PCCF), Wildlife** on 30.08.2018 for his kind perusal & approval.

The matter was discussed and the Hon'ble PCCF, Wildlife had invited suggestion from the *Member, State Board of Wildlife* regarding awareness programs for human – leopard conflict in Sandur area. The inputs thus received (annexure I) were incorporated and the **Final Report** inclusive of adequate financial provision towards its implementation (page 62) is submitted to the **Office of Principal Chief Conservator of Forests (PCCF), Wildlife** on 6.09.2018 for his approval.

Objectives of the Study

Concept & Philosophy:

Anthropogenic and commercial activities in the forest areas always create disturbances in the ecosystem. In the present context, many activities of commercial nature such as mining and allied activities are un-avoidable. This is because the entire Rama Iron Ore Mine is located on the forest area. Also the mine was once operational by the erstwhile lessee M/s. Rama Rao Paol, ML No. 2621 and later closed in year 2011 due to violations. The same mine was reallocated to M/s. JSW Steel Ltd., in the year 2016, through a transparent e-auction process. Since the mine is not operational from year 2011 to 2018, chances of movement of wildlife from adjoining areas do exist. In order to ensure survival of such wildlife around the mining lease once the mines become operational, the Ministry of Environment, Forests & Climate Change has in its Stage I Forest Clearance had asked to prepare Management Plan for the Wildlife to avoid adverse impact of mining operations on Wildlife and compensating it by sound management practices.

The objectives of the conservation plan must necessarily secure the values identified in the area in question. Planning should set the course for desired conditions in future. Planning should be helpful in conservation, maintenance, regulation, restoration and creation of desired

conditions. Conservation programme may also enable the people living in the area to participate effectively in the management of natural resources and conservation of vulnerable elements of nature.

Some of the objectives of the proposed Wildlife Management Plan are:

Wildlife Conservation:

- Conservation of wildlife in the surrounding of the mining area i.e. within 10 km radius of the periphery of mining area by adopting suitable strategies
- Augmentation of existing natural vegetation with native species of flora.
- Creating water holes/wetlands in critical wildlife habitats.

Conservation Education and outreach:

- Awareness on causes of human – wildlife conflicts and remedies to minimize them
- Establishing nature clubs and conservation education in local schools
- Conservation education, training and equipping villagers for reducing man animal conflict in particular and protection of flora and fauna in the plan area in general

Strengthening Conservation action:

- Soil and moisture conservation in the plan area for making sufficient water available to the wildlife. This will ensure good moisture regime in the area, thereby improving health of the ecosystem
- Equipping forest department with patrolling vehicle, camera traps and communication equipment for mitigating man-animal conflict.
- Construction of field staff quarters and watch towers for improving conservation management.
- Eco-development of the villages to reduce biotic pressures on forested areas of the buffer zone
- General protection of forest by reducing illicit felling, grazing and protection from other adverse factors
- Adopting best mining practices by the mining authorities to minimize the adverse impacts and carrying out extensive planting in dumps and other afforestation measures

in consonance with the prevalent rules of forest and environment department to create near natural conditions in the plan area

Organization of Report:

The report has been organized under following sections:

- Background information of the project area which includes location, statutory clearances, land use, topography, hydrology & drainage, human habitation within 10 km radius, occupational profile of local communities, dependency of human and cattle on forest resources etc.
- Present status of flora, fauna and habitat of major wildlife species in the core and buffer areas as well as in project impact areas, movement of mega-fauna in the project impact areas and conservation plan for schedule I Species, impact of project activity on flora and fauna
- Information on records of human-wildlife conflicts and suggestions for mitigation. Special emphasis on human-leopard conflict minimization through awareness
- Working plan prescriptions for management of wildlife of the study area and selection of activities that can be included in the wildlife management plan
- Proposed Management Plan for Wildlife detailing activities and estimated budget.

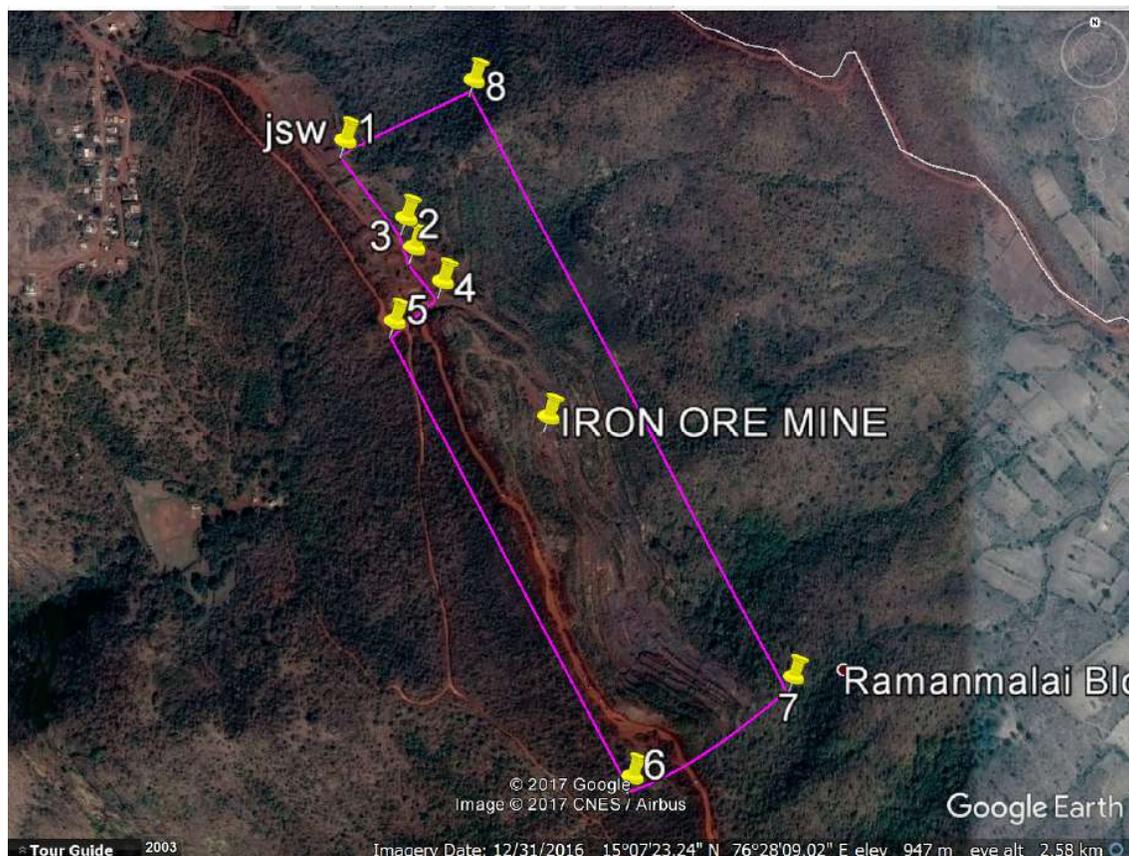
This Wildlife Management Plan thus formulated, is submitted herewith for kind perusal and approval from the Office of the Principal Chief Conservator of Forests (PCCF) – Wildlife, Bangalore. Once approved, the estimated cost will be remitted in the *Adhoc* CAMPA, online.

Background information on the project area

Location of the project:

The lease (MLNo.2621), is located in Ramgad village, Sandur Taluka, of Ballari District of Karnataka. It is spread over 32.56 Ha area of Forest Land of Ramgad range. The google earth Map is provided as Figure 1.

Figure 1. Google earth image of Rama Mine



Mining lease area is a part of the Survey of India (SOI) Toposheet No.57/A/8. The site falls A) $15^{\circ} 7'3.11''N$ - $15^{\circ} 7'37.12''N$ and B) $76^{\circ}27'55.94''E$ - $76^{\circ}28'21.40''E$ with an average altitude of 956 m above MSL.

Location of Rama mine and other 4 mines allocated to JSW Steel Ltd., with respect to the nearest protected areas (map superimposed on the Toposheet).

Fig. 2: Degree sheet showing 10 km radius around the Rama and other 4 mines of JSW Steel Ltd. and distance from the nearest protected area (Daroji and Gudekote WLS).

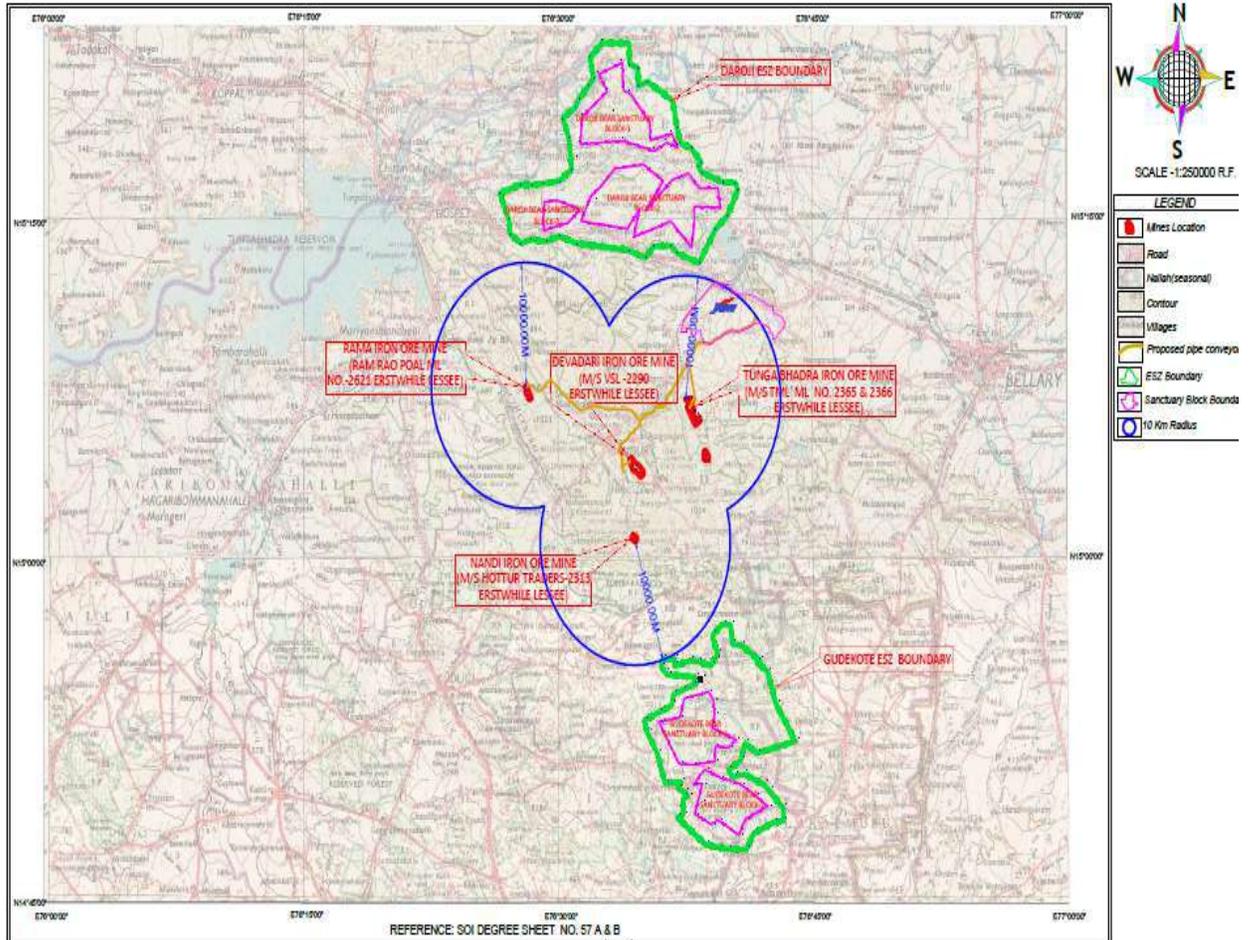
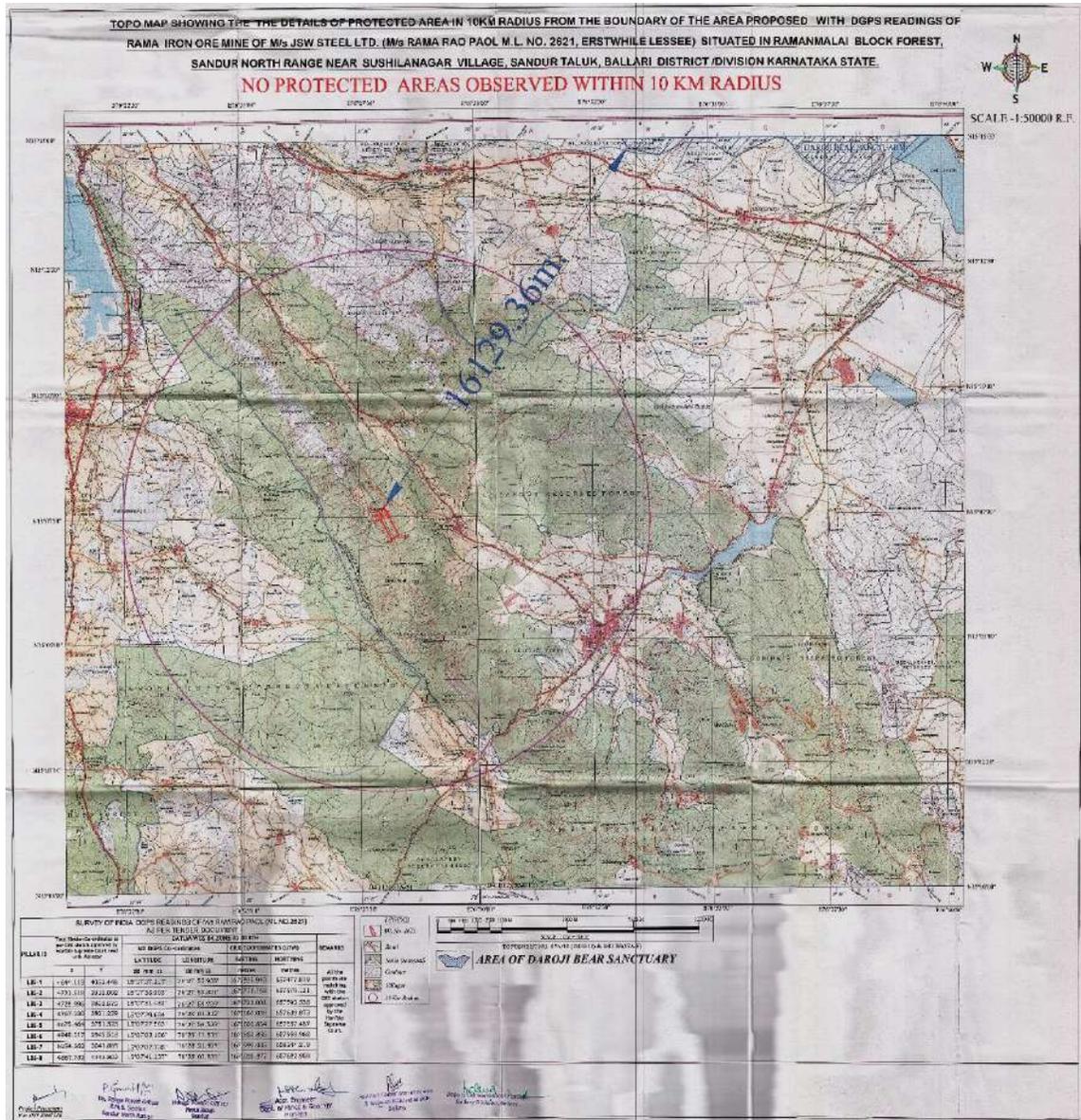


Fig 3: Location map of the Rama Mining Lease and its distance from the nearest protected area.



The lease area lies in the Toposheet No. 57A/8 of Survey of India. Nearest railway line connecting Hospet – Swamihalli of South Western Railway line is at a distance of 1.8 km in WSW direction to the Mining lease area. Nearest railway line connecting Hospet – Ballari of South Western Railway line is at a distance of 11.7 km in Northern direction to the Mining lease area.

The National Highway (NH- 13 Change NH-50) connecting Hospet – Kudligi is at a distance of 11.7 km in WSW direction to the Mining lease area. The National Highway (NH- 63 Change NH-

67) connecting Hospet – Ballari is at a distance of 12.1 km in N direction to the Mining lease area. The nearest railway station is Ramgad RS which is 2.0 km in Western direction.

Extent of forest land in project area:

Entire mining lease area falls i.e. 33.80 ha (revised 32.56 ha) falls under forest land located in the Ramanmalai block (Ramandurg Range) of Sandur schist belt forming part of the Ballari-Hospet group of iron/manganese ore deposits. This schist belt is the smallest of the three basins and covers an area of just 960 sq. km.

Proposed land use pattern of the project area:

The existing land use pattern of the lease area has been provided in **Table 1**.

Table 1. Land use pattern of the lease area of Rama Mine (ML.No. 2621)

Sl. No.	Particulars	Land use pattern at the end of Plan Period (Area in Ha)
1.	Area for mining	10.92
2.	Area for waste dump	-
3.	Roads	1.32
4.	Green Belt/ 7.5m safety zone	2.20
5.	Infrastructure (C&S plant, Office, Weigh bridge etc)	0.51
6.	Temporary Dumps	2.20
7.	Mineral Storage	0.50
8.	Engineering Measures	0.21
9.	Virgin/ Unbroken area	15.94
	Total	33.80

Status of Statutory Clearances:

Status Mining Lease

- Precambrian Iron Ore Mine of Shree Ram Rao M Paol (Mine Lease No. 2621) with an extent of 32.56 ha is situated near Ramgad village, Sandur Taluk, Ballary District, Karnataka.

Status of forest diversion:

- A fresh Forest Diversion was initiated by the M/s. JSW Steel Ltd, for 33.80 ha as the erstwhile lessee has not obtained Forest Clearance. The proposal was accorded Stage I Forest Clearance by MOEF&CC vide letter no. F. No. 8-24/2018-FC dt. 27th July, 2018 for 32.56 ha.

Status of Environmental clearance:

- Environmental clearance has been transferred by the SEIAA, Bangalore for 0.5 MTPA in favour of M/s. JSW Steel Ltd., vide letter dated 4.2.2017. Environmental Clearance for expanding capacity to 0.94 MTPA is in progress (Public hearing is scheduled on 5.10.2018).

Villages and habitations within the project area and project impact area of 10 km radius.

The population profile shows that total population of the study area villages is 2,15,995. The villages falling in this Study area are Ramgad, Susheelanagar, Siddapur, Emmihatti, Garaga, Krishnanagar, Sandur, Lakshmipura, Doulatpura Yeswanthnagar, Somalapura, Byalakundi, Nagalapura, Gunda, Jaisingapur, Venkatagiri. Sandur has the highest population (1,81,097). The total population density of the study area is about 687 persons/sq. km.

Demographic profile of the study area is given in Table 2.

Table 2. Demographic Profile of the Study Area

S.NO	Aerial Distance	No of villages present	Name of the Village(s)	Total Population of the Village (Census 2011)
1	0.0 km – 0.5 km	1	Ramgad	271
2	0.5 km – 3.0 km	1	Bhavihalli (Re named as Susheelnagar)	1559
3	3.0 km – 5.0 km	2	Siddapur	1468
			Emmihatti	110
4	5.0 km – 7.0 km	1	Garaga	2258
5	7.0 km – 10.0 km	12	Krishnanagar	7027
			Sandur	181097
			Lakshmipura	1874
			Dharmasagara	1874
			Ubbalagundi	1713
			Yeswanthanagar	6847
			Somalapura	3658
			Byalakundi	1074
			Nagalapura	5568
			Gundlavaddigeri	891
Jaisingapur	2714			
Venkatapura	1658			

Total Population (17 Villages)	221661
Male Population	112696
Female Population	108965
Household Size	4-5
Sex Ratio	967

Source: - Census: 2011

Occupational profile of these villages:

The male workers in the study area account to 64.2% of the total working population. The female workers in the study area account to 35.8% of the total working population.

It has been observed that household activities such as pre-cooking, cooking, post-cooking, washing clothes, cleaning house, collection of fuel wood, care of children are left to women with negligible involvement of men. The details are given in below table.

TABLE 3. WORK PARTICIPATION: MALE & FEMALE

Category	Study Area			
	Male		Female	
	No.	%	No.	%
Total Workers	62349	64.2	34772	35.8
Main Workers	54802	69.4	24208	30.6
Marginal Workers	7547	41.7	10564	58.3
Cultivators	21193	70.4	8918	29.6
Agricultural Labourers	11042	39.3	17074	60.7
Household Industry Workers	1062	57.6	783	42.4
Other Workers	29052	78.4	7997	21.6

Dependency of NTFP and other Forest Produce:

The major source of income of the household members is cultivation and agricultural labour wages, and few members are having income from petty business. Others are earning from being jeep drivers, and doing some labour works. 114 households out of total 120 individual households examined during the EIA study, were having their income up to Rs.12000/- and 6 members were earning Rs. 12000 to 25000/-.

The forests in the areas is classified as notified forests (Sec. 4 of Karnataka Forest Act 1963) and un classed forests. For the study area, forest contributes to around 60% of the total area.

As per the working plan document, the mean density of 210 stems/ ha has been recorded. The highest density of 508 stems/ha was found in Swamimalai Block of Sandur Forest Range followed by Ramana Malai Block at 447 stems / ha. The Bellary division is rich in forest products in significant quantities. Sandal is most valuable product and reported to be extracted in the range of 80-413m³ in the year 2003-04. Among Non-Timber Forest Produce (NTFP) includes charcoal, beedi leaves and tamarind which is extracted in significant quantities.

Cattle population and dependency on the forest for grazing and wildlife interaction:



According to the 2011 Livestock Census, in mine affected 50 villages, 5173 buffaloes, 19986 goats and 51961 sheep and 21374 cattle (bulls and cows) are reported. With the continuous increase in

mining activity, the decrease in livestock population, including that of sheep, is attributed to marked decrease in availability of grazing land. This, in turn, resulted in reduced quantity and quality of fodder, increase in labour cost and relatively low profitability in dairying. All these factors have contributed to changing to more profitable mining-related activities.



Among faunal elements 4 species across schedules of wildlife protection act were reported during the study. These include wild boar, Indian fox, Mongoose and Indian peafowl. All these

species have wide habitat preferences that ranges from agricultural areas to various categories of forests (evergreen to open scrub vegetation). These are not sensitive species and therefore have not included in the schedule I or II of wildlife protection act. Anyway, they enjoy legally strong protection.

Local communities have occasionally mentioned sightings of panther and wild boars. Both these animals are also reported in the working plan of the forest department. Two reserves viz. *Daroji* Bear sanctuary and *Gudikote* Bear Reserve have been specially created for these species which are within 30 km from the study area and good population of these species are conserved there. Home ranges of these species are high and hence occasional movement of these species can be a possibility.

NTFP collection is not very prominent in and around the mining areas. Occasional sighting of wildlife such as Jackal, Wild boar and Panther have been reported, while Bear is rarely reported. Recently, panther attack on human and cattle lifting has been reported from the Sandur region.

Description of Topography, natural drainage lines, whether the particular landscape is the source or origin of any stream/ river. Presence of water bodies, if any, in the study area.

Topography:



The lease area of Rama Iron Ore Mine, ML No. 2621 characteristically comprises of valleys and altitude varying between 600 to 1023 m above MSL, surrounded by rugged hills, marked by discrete, NW-SE trending

ridges, separated by flat or gently sloping land. The area has got sub-dendritic pattern of

drainage. The terrain is hilly with alternate valleys. The hill contains erosion resistant rocks like banded hematite quartzite (BHQ), banded hematite jasper (BHJ), granite, argillites etc. some steep escarpments are encountered in these hill ranges.

Core zone- the mining lease area forms part of fairly high range of hill trending NNW to SSE, occurs between village Deogiri and Hosapete town. The lease area occupies the crest and slopes of this range for about 1170m. the crest of lease hold comprises a narrow plateau of about 40 to 60 m. wide, with steep slopes towards East. The slopes are traversed by a few seasonal nallahs draining into the valley. These nallahs are small and narrow and act only as flood channels during rainy season and none of them are perennial. The lease area termed as core zone is steeply sloping revenue land having thick iron ore float and iron ore reef.

The maximum and minimum elevation is 995 m. & 956m above MSL respectively.

Climate:

The area around Rama Iron Mines is dry and hot in the summer months. However, the temperature is relatively cool compared to adjoining areas because of good elevation and vegetation. The maximum temperature rises to about 43°C in peak summer and falls to 18 °C in peak winter.

Rainfall at Sandur occurs mostly during the period June to September with an average rainfall of about 515 mm per annum. There is no perennial source of water within the mine lease area.

Hydrology and Natural Drainage pattern:

The study area characteristically comprises of valleys and altitude varying between 600 to 1023 m above MSL, surrounded by rugged hills, marked by discrete, NW-SE trending ridges, separated by flat or gently sloping land. The area has got sub-dendritic pattern of drainage. The terrain is hilly with alternate valleys. The hill contains erosion resistant rocks like banded hematite quartzite (BHQ), banded hematite jasper (BHJ), granite, argillites etc. some steep escarpments are encountered in these hill ranges.



The Mine Lease falls in the *TayammaKolla* micro-watershed of Narihalla Sub-Watershed of Tungabhadra River Catchment in the major Krishna River Basin of Karnataka Region.



The Core Region Mine lease area has a narrow plateau of about 60 m width on the crest. The remaining area has steep slope to the East. Four parallel natural seasonal run-off drainage courses descend towards east following the gradient, converge in a valley and travel further into plains to reach Narihalla Sub-watershed region. Towards west of the lease area seasonal courses converge in *TayammaKolla* valley at a distance of about 500m and travel towards SW to reach Byalakundi micro-watershed network and another course originating on the northern side flows toward NW to meet Raya Channel Course.

All the drainage courses in the Core Zone and its immediate neighbourhood are ephemeral in nature and carry large quantities of water for short duration during rains and remain dry afterwards.



The details of linear infrastructure & facilities

The proposed project and its surrounding areas experiences mining activities. Iron ore production of 0.94 MTPA is planned to meet the captive requirement of Steel Plant. Life of the mine @ 0.94 million tonnes per annum of production for the mineral reserves of 25.67 million tonnes would be 27 years.

The mine operation will be by fully mechanized open cast method of mining by drilling and blasting and by deploying HEMM equipment like hydraulic drills, excavators, wheel loaders and dumpers.

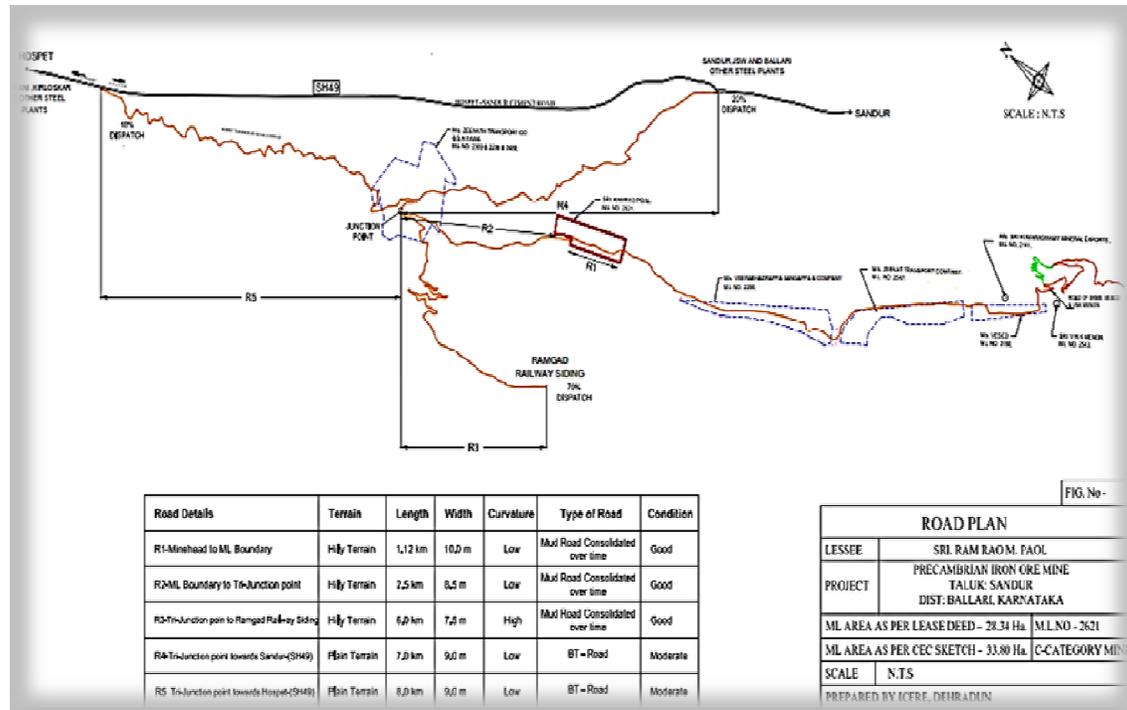


The additional infrastructure because of the establishment of Rama mines would be Mines office, well-equipped workshop, stores, and first-aid station. Other provisions and other facilities would include power supply, water supply and fuel storage facilities for smooth running of the mine.



Development of communication, road, and connectivity has generally been viewed as the most important infrastructure which will boost local economic development. It was observed that for all the 12 villages, except Ramgad, that the roads are existing and communications like Post office, mobile networks, and news-papers are available for the 11 villages.

Iron ore transportation plan



Impact of Linear Infrastructure on the Wildlife

The working Plan of Bellary Forest Division (2013-24) in its appendix XXIX have listed Black



buck, Common Langur, Common Fox, Fruit bat, Hyena, hare, Indian Porcupine, Indian Wolf, Jackal, Jungle cat, Mice, Mongoose, Panther, Rat, Squirrel, Sloth Bear, Spotted deer and Wild boar as mammals from the Bellary Division. However, during the survey no Black bucks and Wolves were either sighted or reported by the local

communities residing around the Devadari mines.

Among faunal elements 4 species across schedules of Wildlife Protection Act were reported during the study. These include wild boar, Indian fox, Mongoose and Indian peafowl. All these species have wide habitat preferences that ranges from agricultural areas to various categories of forests (evergreen to open scrub vegetation). These are not known to be sensitive to smaller

disturbances and known for their presence in agricultural fields and outskirts of human settlements.

- The linear infrastructures such as roads and transmission lines are known to exist for



more than a decade in and around the project area. Given the fact that the mine was operational for several years and even today, mines in the vicinity are operating and some

of them are share the same haulage road.

- Additional linear in terms of pipe conveyor is planned which is more environment friendly. It is closed conveyor system, above the ground at minimum height of 5 meter and hence will not disturb the movement of wildlife in the area. Also compare to transportation of the road, it does not generate dust and does not require precious water to sprinkle for dust suppression. It relatively silent and noise pollution also taken care off.
- The mining areas were once operational and have been stopped a few years ago. The



operations being restricted during day hours, is not expected to have impact on nocturnal animals like bear, leopard, hares, porcupines, etc.

- Local communities have occasionally mentioned sightings of panther and wild boars. Both these animals are also reported in the working plan of the forest department. Two reserves viz. Daroji Bear sanctuary and Gudikote Bear Reserve have been specially created for these species which are within 20-30 km from the study area and good population of these species are conserved there. Home ranges of these

species being large, occasional movement of these species is reported. However, these are nocturnal animals and our operations mostly restricted to day time only. These operations will be also be restricted to the allocated mine lease areas of 32.56 ha and using existing haulage road. Also, camera traps near some of the Reclamation and Rehabilitation structures, especially the surface water structures is proposed for knowing presence and movement of wildlife around the lease area.

- We have not planned any beneficiation activities within the project area / mine lease and hence no activities requiring high quantity of water are proposed. No colony for workers is proposed, as most of workers will be sourced from nearby areas.

Chapter II. Flora and Fauna of the area

Description of flora and fauna of the project area

Faunal elements:

The working Plan of Bellary Forest Division (2013-24) in its appendix XXIX have listed Black buck, Common Langur, Common Fox, Fruit bat, Hyena, hare, Indian Porcupine, Indian Wolf, Jackal, Jungle cat, Mice, Mongoose, Panther, Rat, Squirrel, Sloth Bear, Spotted deer and Wild boar as mammals from the Bellary Division.

Among faunal elements 4 species across schedules of wildlife protection act were reported during the study. These include wild boar, Indian fox, Mongoose and Indian peafowl. All these species have wide habitat preference that ranges from agricultural areas to various categories of forests (evergreen to open scrub vegetation). These are not known to be sensitive to smaller disturbances and known for their presence in agricultural fields and outskirts of human settlements.

Floral elements:

As per the working plan document, the mean density of 210 stems/ ha has been recorded. The highest density of 508 stems/ha was found in Swamimalai Block of Sandur Forest Range followed by Ramana Malai Block at 447 stems / ha.

The largest population of trees were found in the smallest diameter class of 9 cm to 15 cm (56.60%) indicating regeneration potentiality. In the highest diameter class that is 20 cm and above only 11% of individuals are found. The volume analysis for the entire division has shown growing stock of 4.30 M³/ha. The Raman Malai block has shown growing stock of 9.088 m³/ha. Table 4, 5, & 6 provides summary of tree enumeration report undertaken for the Rama mines by the Forest Department.

Table 4. Tree enumeration list of Block A of Rama mines

Tree Enumeration List of 33.80 Ha Forest Land For M/s Precambrian Iron Ore Mines Rama Iron Ore Mine) ML No. 2621 of M/s JSW Steel Ltd. (A Block)					
Timber List					
Sl. No.	Local Name	Botanical Name	Girth (in Mts)	Approximate	Total in Cum
				Height (in Mts)	
1	AllaleKaie	<i>Terminalia chebula</i>	0.9	2	0.101
2	Hippe	<i>Bassia longifolia</i>	2.24	4	1.254
3	Basari	<i>Ficus infectoria</i>	3.19	2	1.272
4	Jagalagante	<i>Diospyros montana</i>	1.03	3	0.199
5	Gubse	Jungle wood	0.9	4	0.203
6	Nelli	<i>Emblica officinalis</i>	1.13	2	0.160
7	Khadaga	<i>Anthocephalus cadamba</i>	2.13	4	1.134
8	AllaleKaie(A)	<i>Terminalia chebula</i>	0.9	2	0.101
9	Nelli	<i>Emblica officinalis</i>	0.95	3	0.169
10	AllaleKaie	<i>Terminalia chebula</i>	0.94	2	0.110
11	Thumbre	<i>Diospyros melanoxylon</i>	1.03	2	0.133
12	Jagalagante	<i>Diospyros montana</i>	0.95	3	0.169
13	Nulluvae (A)	Jungle wood	1.17	2	0.171
	Nulluvae (B)	Jungle wood	1.05	2	0.138
	Nulluvae (C)	Jungle wood	1.08	2	0.146
14	Jani	<i>Grewia tiliaefolia</i>	0.98	2	0.120
15	Gorase	<i>Ixora arborea</i>	0.95	2.5	0.141
16	Kare	<i>Randia uliginosa</i>	1.13	4	0.319
17	Muruke	<i>Buchanania latifolia</i>	1.02	2	0.130
18	Thapasi	<i>Holeptelia integrofolia</i>	1.02	3	0.195
19	Nulluvae	Jungle wood	1.37	2	0.235
20	Budure	<i>Terminalia tomentosa</i>	0.97	3.5	0.206
21	Jagalagante	<i>Diospyros montana</i>	0.92	2	0.106
22	Basari (A)	<i>Ficus infectoria</i>	1.02	3	0.195
23	Kare	<i>Randia uliginosa</i>	0.97	3	0.176
24	Muruke (B)	<i>Buchanania latifolia</i>	0.9	2	0.101
25	Nelli	<i>Emblica officinalis</i>	0.99	2	0.123
26	Neralae	<i>Syzygium cuminii</i>	1.39	3	0.362
27	Jagalagante	<i>Diospyros montana</i>	0.98	4	0.240
28	Basari	<i>Ficus infectoria</i>	1.25	2	0.195
29	Bore	<i>Zyzyus jujuba</i>	1.16	2	0.168
30	Taare (B)	<i>Terminalia bellerica</i>	1	2	0.125
31	Jani	<i>Grewia tiliaefolia</i>	0.9	2	0.101
32	Udaya	<i>Stereospermum chelonoides</i>	1.19	2	0.177
33	Nulluvae (A)	Jungle wood	1.24	2.5	0.240
	Nulluvae (B)	Jungle wood	0.9	3	0.152

34	Nulluvae (B)	Jungle wood	0.92	2.5	0.132
35	Neralae	<i>Syzygium cuminii</i>	0.96	2	0.115
36	kallahatti	<i>Ficus microcarpa</i>	1.18	2	0.174
37	Thapasi (A)	<i>Holeptelia integrofolia</i>	1.03	2.5	0.166
	Thapasi (B)	<i>Holeptelia integrofolia</i>	0.98	3	0.180
	Thapasi (C)	<i>Holeptelia integrofolia</i>	1.17	2.5	0.214
38	Holimaavu	<i>Schleichera oleosa</i>	0.93	3	0.162
39	AllaleKaie	<i>Terminalia chebula</i>	0.97	2	0.118
40	Aralimara(A)	<i>Ficus religiosa</i>	1.08	2	0.146
41	Aralimara(A)	<i>Ficus religiosa</i>	1.6	3.5	0.560
	Aralimara(D)	<i>Ficus religiosa</i>	1.31	2	0.215
42	Udaya	<i>Stereospermum chelonoides</i>	1.07	3.5	0.250
43	Budure	<i>Terminalia tomentosa</i>	0.92	3	0.159
44	Neralae (B)	<i>Syzygium cuminii</i>	1.02	3	0.195
45	Basari	<i>Ficus infectoria</i>	1.1	4	0.303
46	Thapasi	<i>Holeptelia integrofolia</i>	0.9	2.5	0.127
47	AllaleKaie (B)	<i>Terminalia chebula</i>	1.1	4	0.303
48	AllaleKaie (B)	<i>Terminalia chebula</i>	1	4	0.250
49	Neralae	<i>Syzygium cuminii</i>	0.94	4	0.221
50	AllaleKaie(A)	<i>Terminalia chebula</i>	0.92	2	0.106
	AllaleKaie(D)	<i>Terminalia chebula</i>	1.1	2	0.151
51	AllaleKaie	<i>Terminalia chebula</i>	0.95	4	0.226
52	Neralae	<i>Syzygium cuminii</i>	1.18	4	0.348
53	AllaleKaie	<i>Terminalia chebula</i>	0.98	3	0.180
54	Basari (A)	<i>Ficus infectoria</i>	1.1	2	0.151

Table 5. Tree enumeration list of Block B of Rama mines

Tree Enumeration List of 33.80 Ha Forest Land For M/s Precambrian Iron Ore Mines (Rama Iron Ore Mine) ML No. 2621 of M/s JSW Steel Ltd. (Block B)					
Timber List					
SI No.	Local Name	Botanical Name	Girth (in Mts)	Approximate	Total in Cum
				Height (in Mts)	
1	Thapasi (B)	<i>Holeptelia integrofolia</i>	1.01	3.5	0.223
2	Holimaavu	<i>Schleichera oleosa</i>	1.38	3	0.357
3	Aala (A)	<i>Ficus bengalensis</i>	2	2.5	0.625
	Aala (A)	<i>Ficus bengalensis</i>	1.09	2.5	0.186
4	Holimaavu	<i>Schleichera oleosa</i>	1.16	3.5	0.294
5	Holimaavu	<i>Schleichera oleosa</i>	0.95	2.5	0.141
6	Jagalagante (B)	<i>Diospyros montana</i>	0.98	3	0.180
7	Jagalagante	<i>Diospyros montana</i>	1.25	3.5	0.342
8	Hippe (A)	<i>Bassia longifolia</i>	0.9	3	0.152
	Hippe (B)	<i>Bassia longifolia</i>	0.98	2.5	0.150

9	Jagalagante	<i>Diospyros montana</i>	1	3	0.188
10	Jagalagante	<i>Diospyros montana</i>	0.95	2	0.113
11	Muruke	<i>Buchanania latifolia</i>	0.98	2	0.120
12	Taare	<i>Terminalia bellerica</i>	0.98	3	0.180
13	Muruke	<i>Buchanania latifolia</i>	1.33	4.5	0.498
14	Muruke	<i>Buchanania latifolia</i>	1.3	4.5	0.475
15	Jagalagante	<i>Diospyros montana</i>	1.05	3.5	0.241
16	Taare	<i>Terminalia bellerica</i>	0.95	2.5	0.141
17	Hippe (B)	<i>Bassia longifolia</i>	0.95	3.5	0.197
18	Taare	<i>Terminalia bellerica</i>	1.03	3	0.199
19	Holimaavu	<i>Schleichera oleosa</i>	1	2.5	0.156
20	Jagalagante	<i>Diospyros montana</i>	1.15	3	0.248
21	Jagalagante (A)	<i>Diospyros montana</i>	1	4	0.250
	Jagalagante (C)	<i>Diospyros montana</i>	1.5	4	0.563
22	Holimaavu	<i>Schleichera oleosa</i>	1.1	2.5	0.189
23	Kumkuma	<i>Mallotus philippensis</i>	0.92	2	0.106
24	GanteHoo	<i>Tecoma stans</i>	2.11	4	1.113
25	Budure	<i>Terminalia tomentosa</i>	1.05	3	0.207
26	Budure	<i>Terminalia tomentosa</i>	0.9	2	0.101
27	Jagalagante	<i>Diospyros montana</i>	1.12	3	0.235
28	Holimaavu	<i>Schleicheraoleosa</i>	0.98	4.8	0.288
29	Dindala (A)	<i>Anogiessus latifolia</i>	1.05	3.5	0.241
30	Jagalagante	<i>Diospyros montana</i>	0.95	3	0.169
31	Kare	<i>Randia uliginosa</i>	1	3	0.188
32	Jani	<i>Grewia tiliaefolia</i>	0.97	3.5	0.206
33	Taare	<i>Terminalia bellerica</i>	1.37	3	0.352
34	Arali (A)	<i>Ficus religioosa</i>	1.22	2	0.186
	Arali (B)	<i>Ficus religioosa</i>	1.32	2	0.218
35	Nulluvae	Jungle wood	1.25	3	0.293
36	Holimaavu (A)	<i>Schleichera oleosa</i>	1.5	4	0.563
37	Aala (A)	<i>Ficus bengalensis</i>	0.95	2.5	0.141
	Aala (B)	<i>Ficus bengalensis</i>	1.02	3	0.195
38	Holimaavu	<i>Schleichera oleosa</i>	1.5	4.5	0.633
39	Holimaavu	<i>Schleichera oleosa</i>	0.93	3	0.162
40	Jagalagante	<i>Diospyros montana</i>	2.05	4.5	1.182
41	Jagalagante	<i>Diospyros montana</i>	1.05	2.5	0.172
42	Jagalagante	<i>Diospyros montana</i>	1.1	2.5	0.189
43	Khadaga	<i>Anthocephalus cadamba</i>	1.03	2.5	0.166
44	Nelli	<i>Emblica officinalis</i>	1.03	3	0.199
45	Budure	<i>Terminalia tomentosa</i>	1.05	3.5	0.241
46	Holimaavu	<i>Schleichera oleosa</i>	1	2	0.125
47	Budure (B)	<i>Terminalia tomentosa</i>	1	3.5	0.219
48	TottilaKayi	<i>Capparis moonii</i>	1.13	5	0.399
49	Channangi	<i>Lagerstromia parviflora</i>	1.17	5	0.428
50	Khadaga	<i>Anthocephalus cadamba</i>	0.95	3	0.169

51	Jani	<i>Grewia tiliaefolia</i>	1.06	3.5	0.246
52	Channangi	<i>Lagerstromia parviflora</i>	1.75	3	0.574
53	Nulluvae	Jungle wood	0.9	4	0.203
54	Thapasi	<i>Holeptelia integrofolia</i>	1.06	2	0.140
55	Thumbre	<i>Diospyros melanoxylon</i>	0.9	3	0.152
56	Dindala	<i>Anogiessus latifolia</i>	0.92	2	0.106
57	Dindala	<i>Anogiessus latifolia</i>	0.9	2.5	0.127
58	Holimaavu (A)	<i>Schleichera oleosa</i>	0.93	2.5	0.135
59	Kumkuma	<i>Mallotus philippensis</i>	1.1	3	0.227
60	Kumkuma	<i>Mallotus philippensis</i>	1.37	4	0.469
61	Kumkuma	<i>Mallotus philippensis</i>	1.12	4	0.314
62	Dindala (A)	<i>Anogiessus latifolia</i>	1.3	2.5	0.264
	Dindala (B)	<i>Anogiessus latifolia</i>	0.9	2	0.101
63	Jagalagante	<i>Diospyros montana</i>	1.12	3.5	0.274
64	Holimaavu	<i>Schleichera oleosa</i>	1.02	3	0.195

Table 6. Tree enumeration list of Church area of Rama mines

Tree Enumeration List of 33.80 Ha Forest Land For M/s Precambrian Iron Ore Mines (Rama Iron Ore Mine) ML No. 2621 of M/s JSW Steel Ltd. (Church)					
Timber List					
SI No	Local Name	Botanical Name	Girth (in Mts)	Approximate	Total in Cum
				Height (in Mts)	
1	Jagalagante (A)	<i>Diospyros montana</i>	1.25	2.5	0.244
2	Nelli	<i>Embllica officinalis</i>	0.9	2	0.101
3	Kallusirsha (A)	<i>Albizzia lebbeck</i>	1.3	2	0.211
	Kallusirsha (B)	<i>Albizzia lebbeck</i>	0.95	2	0.113
4	Udaya	<i>Stereospermum chelonoides</i>	0.9	2.5	0.127
5	Nerale	<i>Syzygium cuminii</i>	1.25	4	0.391
6	Jani	<i>Grewia tiliaefolia</i>	1	2	0.125

LULC studies of the project area: The vegetated area constitutes around 60% of the land use of the study area comprising of proposed mining and its 10 km radius. Agriculture and fallow lands contribute around 15% of the land use. This has called for detailed investigation of floral and faunal elements and its impacts on them. Before arriving at likely impacts of mining activities on the flora & fauna, we herewith provide key features of the floristic and faunal elements:

- No protected areas or ecologically sensitive areas are located within 10 km radius from the proposed mining area

- No important areas of wildlife such as biosphere reserves, wildlife corridors, conservation reserves, community reserves or breeding or nesting grounds are located in 10-km radius from mine lease boundary.
- No rare, endemic or endangered **floral elements** as per IUCN RED list reported from the study area
- No rare, endangered floral taxa was found as per Botanical Survey of India (BSI)
- Among trees species *Diospyros montana*, *Stereospermum chelenoides*, *Syzygium cumini*, *Dalberia paniculata* are most abundant species in the area.
- Most of the buffer area comprises of Agricultural lands, Open lands, Reserve forest blocks and very few water bodies. The agriculture crops like Red gram (*Cajanus cajan*) and Groundnut (*Arachis hypogea*) as cash crops. The other crops taken are Sunflower (*Helianthus annuus*), Bajara (*Pennisetum* sp.) and Jawri (*Sorghum vulgare*) are cultivated. The vegetables such as tomato (*Lycopersicon esculenta*), Brinjal (*Solonum melongena*) and onion are common. The important fruit plants are *Musa paradisica* (Banana), *Mangifera indica* (Mango), *Carica papapya* (Papita), *Psidium guyaya* and *Syziguim cumini* (Jamun).
- Among **faunal elements** mammals such as Common Langur, Common Fox, Fruit bat, Hyena, Indian hare, Indian Porcupine, Indian Wolf, Jackal, Jungle cat, Mice, Mongoose, Panther, Rat, Squirrel, Sloth Bear, Spotted deer and Wild boar are reported from the area.
- Among these Indian Wolf, Leopard, and Sloth bear are in Schedule I of the wildlife Protection act, 1972. The detailed list of mammals and its status as per WPA and IUCN threatened category and CITES list are provided as Table 7.

Table 7: List of Scheduled species reported from the project area

Common Name	Scientific Name	WPA, 1972	IUCN	CITES	CMS
Indian Wolf	<i>Canis lupus</i>	Sch I (Part I)			
Common Leopard	<i>Panthera pardus</i>	Sch I (Part I)			
Sloth Bear	<i>Melursus ursinus</i>	Sch I (Part I)	VU	II	
Hanuman langur	<i>Semnopithecus entellus</i>	Sch II (Part I)	NT		
Indian Fox	<i>Vulpes bengalensis</i>	Sch II (Part I)			
Jackal	<i>Canis aureus</i>	Sch II (Part I)			
Jungle Cat	<i>Felis chaus</i>	Sch II (Part I)			
Common mongoose	<i>Herpestes edwardsii</i>	Sch II (Part I)			
Spotted deer	<i>Axis axis</i>	Sch III			
Hyena	<i>Hyaena hyaena</i>	Sch III			
Indian hare	<i>Lepus nigricollis</i>	Sch IV			
Indian porcupine	<i>Hystrix indica</i>	Sch IV			
Indian Fruit Bat	<i>Pteropus giganteus</i>	Sch IV			
House mouse	<i>Mus musculus</i>	Sch IV			
House rat	<i>Rattus rattus</i>	Sch IV			

***CITES** (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) and **CMS** (the Convention on Migratory Species)

Table 8. Images of Bird species observed during site surveys

		
Little Brown Dove	Black Shouldered kite	Kite in flight
		
Common crow	Yellow wattled lapwing	Red vented Bulbul

		
Indian Robin	Weaver Bird	Common Babbler

Table 9. Birds species reported as per the Working plan and actual signing during field survey.

Sr.no.	Common Name	Scientific Name
1.	Small Button Quail	<i>Turnix sylvatica</i>
2.	Small-blue Kingfisher	<i>Alcedo atthis</i>
3.	Green Bee-eater	<i>Merops orientalis</i>
4.	Asian Koel	<i>Eudynamys scolopacea</i>
5.	Lesser Coucal	<i>Centropus bengalensis</i>
6.	House Swift	<i>Apus affinis</i>
7.	Rock Pigeon	<i>Columbia livia</i>
8.	Spotted Dove	<i>Streptopelia chinensis</i>
9.	White-breasted Waterhen	<i>Amaurornis phoenicurus</i>
10.	Yellow wattled Lapwing	<i>Vanelius indicus</i>
11.	Black-shouldered Kite	<i>Elanus caeruleus</i>
12.	Little Egret	<i>Egretta garzetta</i>
13.	Cattle Egret	<i>Bubulcus ibis</i>
14.	Pond Heron	<i>Ardeola grayii</i>
15.	Bay backed Shrike	<i>Lanius vittatus</i>
16.	House Crow	<i>Corvus splendens</i>
17.	Large billed / Jungle Crow	<i>Corvus macrorhynchos</i>
18.	Black Drongo	<i>Dicrurus macrocercus</i>
19.	Indian Robin	<i>Saxicoloides fulicata</i>
20.	Magpie Robin	<i>Copsychus saularis</i>
21.	Brahminy Myna	<i>Sturnus erythropygius</i>
22.	Common Myna	<i>Acridotheres tristis</i>
23.	Red-rumped Swallow	<i>Hirundo daurica</i>
24.	Red-whiskered Bulbul	<i>Pycnonotus jocosus</i>
25.	Common Babbler	<i>Turdoides caudatus</i>
26.	Common Peafowl	<i>Pavo cristatus</i>
27.	Ashy-crowned Sparrow Lark	<i>Eremopterix nigriceps</i>
28.	House Sparrow	<i>Passer domesticus</i>
29.	Purple Sunbird	<i>Nectarina asiatica</i>
30.	White Browed Wagtail	<i>Motacilla maderaspatensis</i>
31.	Sparrow Hawk	<i>Accipiter badius</i>

Table 10. Conservation Status of reported bird species

Common Name	Scientific Name/Family	WPA, 1972
Hawks	Fam. Accipitridae	Sch I (Part III)
Peafowl	<i>Pavo cristatus</i>	Sch I (Part III)
Lesser Hill-myna	<i>Gracula indica</i>	Sch I (Part III)
Babblers	Timaliinae	Sch IV
Barn Owls	Tytonknae	Sch IV
Bulbuls	Pycnonotidae	Sch IV
Doves incl. the Emerald Dove	Columbidae	Sch IV
Drongo	Dicruridae	Sch IV
Egrets	Ardeidae	Sch IV
Falcons	Falconidae	Sch IV
Jungle fowl	Phasianidae	Sch IV
Kingfishers	Alcedinidae	Sch IV
Munias	Estrildinae	Sch IV
Mynas	Sturnidae	Sch IV
Orioles	Oriolidae	Sch IV
Owls	Strigidae	Sch IV
Parakeets	Psittacidae	Sch IV
Partridges	Phasianidae	Sch IV
Pheasants	Phasianidae	Sch IV
Pigeons	Columbidae	Sch IV
Quails	Phasianidae	Sch IV
Rollers or Blue Jays	Coraciidae	Sch IV
Spurfowls	Phasianidae	Sch IV
Sunbirds	Nectariniidae	Sch IV
Thrushes	Turdinae (Turdinae)	Sch IV
Weaver Birds or Bayas	Ploceidae	Sch IV
Woodpeckers	Picidae	Sch IV
Common crow	Corvidae	Sch V

Table 11. Reptiles reported as per the Working plan and its conservation status

Common Name	Scientific Name	WPA, 1972
Large Bengal Monitor Lizard	<i>Varanus bengalensis</i>	Sch I (Part II)
Python	<i>Python molurus</i>	Sch I (Part II)
Indian Chamaeleon -	<i>Chamaeleozeylanicus</i>	Sch II (Part I)
Checkered keel back -	<i>Xenochrophispiscator</i>	Sch II (Part II)
"Dhaman or rat snake -	<i>Ptyas mucosa</i>	Sch II (Part II)
Spectacled cobra	<i>Najana</i>	Sch II (Part II)
Russel's viper	<i>Daboia russelii</i>	Sch II (Part II)
All other Snakes		Sch IV
Forest Lizard	<i>Calotes versicolour</i>	Sch IV
Freshwater frogs	<i>(Hoplobatrachustigerinus), Euphlyctis hexadactylus, Hoplobatrachus crassus</i>	Sch IV
Indian star tortoise	<i>Geochelone elegans</i>	Sch IV

Description of forest and habitat & terrain of the study area:

The vegetation of the study area is representative of Southern Dry Deciduous Mixed Forest as per the Classification by Champion and Seth, 1968. Prominent tree species in the study area are *Acacia*, *Albizia*, *Ailanthus*, *Anogeissus*, *Azadirachta*, *Bauhenia*, *Boswellia*, *Diospyros*, *Dalbergia*, *Holoptelia*, and *Terminalia* species. They are no ecologically sensitive areas such as Biosphere reserves, National Parks, Wildlife Sanctuaries or other protected areas within a distance of 10 km from the core area. Distribution of vegetation is largely influenced by desiccated conditions in the pre-monsoon and post-monsoon seasons with very few waterbodies which are seasonal in nature.

Core area is of 33.80 Ha of terrain is undulated with few scattered trees, shrubs and herbs. There is no aquatic ecosystem present here. Within the site, there is no forest or agriculture

land. The vegetation type is mixed scrub, consisting of Red soil mixed loamy, rocky & sandy soil. Tree species such as *Anogeissus latifolia*, *Dalbergia paniculata*, *Chloroxylon swietenia* & *Cassia fistula* are the common tree species visible in the core area. Green belt plantation has been noticed on either sides of internal road and in open lands.

Most of the buffer area comprises of mining areas, agricultural lands, Open lands, Reserve forest blocks and very few water bodies. The agriculture crops like Groundnut (*Arachis hypogea*), Sunflower (*Helianthus annus*), Bajara (*Pennisetum* sp.) and Jowar (*Sorghum vulgare*) are commonly cultivated. Vegetables such as tomato (*Lycopersicon esculenta*), Brinjal (*Solanum melongena*) and chilli (*Capsicum annum*) are cultivated in the buffer areas. The important fruit plants are *Musa paradisica* (Banana), *Mangifera indica* (Mango), *Carica papapya* (Papita), *Psidium gujaya* and *Syziguim cumini* (Jamun).

- Species reported above, show wide habitat preferences that ranges from agricultural areas to various categories of forests (evergreen to open scrub vegetation). Species reported as per the Schedule I or II of wildlife protection act enjoys highest protection. A separate conservation plan is readied for scheduled I species. Anyway, all species unless in Schedule IV (vermin's and pests) like the mouse, rats and wild boar enjoy legally strong protection.
- The proposed mining lease is surrounded by 5-6 mining leases and hence presence of these species and direct impact on these species is not envisaged.
- However, since mining involves various activities, it is important to list these activities and delineate possible impacts of these activities on the floral and faunal elements.

Chapter III. Mega fauna and conservation concern species

Movement of mega wildlife and conservation plan for Schedule I species

Local communities have occasionally mentioned sightings of panther and wild boars and Sloth Bears. These species are also reported in the working plan of the forest department. Two reserves viz. Daroji Bear sanctuary and Gudikote Bear Reserve have been specially created for these species which are within 30 km from the study area and supporting good population of these and various other species. The location of these protected areas from the mining lease is more than 15 km.

SPECIFIC MEASURES FOR CONSERVATION OF SCHEDULE – I SPECIES

BLACKBUCK: *Antilope cervicapra*

Though Black Buck is reported in the forest working plan, survey in the study area and interviews with local villagers revealed that there are no black bucks in the study area.

INDIAN WOLF: *Canis lupus*

The Indian wolf (*Canis lupus*) though reported in the working plan, its presence in the project area is not evidenced. Also interviews with local villagers revealed no recent sightings of the species in the vicinity of mining areas of Sandur. However, the conservation measures are proposed to address some of the common concern of the species.

INDIAN LEOPARD: *Panthera pardus*Habitat:

Leopards are very adaptive and found in well forested habitats to the scrub vegetation and even closer to human habitats. Occasional sighting of Leopard is reported by local people. Leopards have survived outside protected areas in many parts of India since historical times and even today high density of Leopards do occur among high human densities, although associated levels of conflict can also be high. With increase in human populations, conversion of potential Leopard habitat to agricultural areas is also increasing. Indian leopard has high capability to adopt any type of habitat where it can get sufficient food and cover.

Behaviour:

Highly adaptable and widely distributed, Leopards can persist in areas where other large carnivores have been extirpated. However, Leopards are declining throughout most of their range. Leopards prefer to hunt in areas that provide sufficient cover despite Leopards are famous for their ability to go undetected. They are highly territorial. In India three collared Leopards in human dominated landscapes exhibited home range sizes between 8 to 15 km².

Food Habits:

Leopards are generalist predators and feed on variety of animals including domesticated dogs and poultry. Near human habitations and agricultural landscape, they exclusively depend upon domesticated animals.

Status:

There are no robust estimates of the total number of mature individuals range-wide, but several Asian subspecies were assessed as Endangered and Critically Endangered on The IUCN Red List in 2008. The species has been included in Schedule I in The Indian Wildlife (Protection) Act, 1972. The Leopard is also included in CITES Appendix I. **The estimated**



abundance of leopards in the Sandur South and North region is around 17 individuals (annexure I).

Man –Leopard Conflicts:

Major conflict arises when leopards start preying on livestock. The conflict becomes more severe when some leopards become man-eaters. While interviewing local communities, we came to know recent (July 2018) lethal

attack of Leopard in Sandur region (image attached) and a few cases of cattle lifting. Realising this matter, PCCF-Wildlife had advised us to incorporate, a detailed awareness program to reduce the Human-Leopard conflicts. The same is obtained from the Member of State Wildlife Board and provided as annexure I.

Threats:

The primary threats to Leopards are anthropogenic. This includes habitat fragmentation, reduced prey base and conflict with livestock. Conversion of forest habitats and grasslands to agriculture, mining, livestock farming and urban sprawl have significantly reduced Leopard habitats. This leads to the depletion of natural prey species in these areas. The Indian leopard is facing the crisis of adaptation. Despite being the most widespread cat, the Indian leopard faces several types of threat. The animal shares its habitat with other

animals, which may kill leopard cubs if given a chance. Apart from its natural enemies, the leopard's main threat is human. For years, it has been threatened, due to loss of habitat and poaching. A rapidly increasing threat to Leopards is the poisoning of carcasses targeting carnivores as a form of retaliation as well as a means of predator control.

Conservation:

Since the majority of Leopard range is outside of protected areas, conflict mitigation strategies such as livestock husbandry, compensation/ insurance programmes and public awareness have all been used to assist farmers and increasing tolerance for living with leopards.

The MoEFCC has issued Guidelines for Dealing with Man-leopard Conflict, through its Press Note, Ministry of Environment and Forests, Govt. of India. The guidelines suggest a three pronged strategy to deal with man-leopard conflict as a means to their conservation:

- Awareness generation among local communities, media and officials of various departments.
- Establish trained teams at two levels; the primary response team and the emergency response team, and
- Use of latest technology and scientific know-how to improve efficacy of capture, handling, care and translocation of the animal.
- Implement programs like the Assam Leopard Conservation Information Facility (ACLIF) for mitigating human-leopard conflict.
- Follow MoEFCC guidelines to deal with man-leopard conflict. Details are provided as annexure I.
- Livestock sheds in the villages should be strong, robust and leopard proof.
- Guards will be appointed as Watch and Ward
- Stop habitat conversions in known leopard habitats

SLOTH BEAR: *Melursus ursinus*Introduction:

The sloth bear is endemic to the Indian subcontinent, with a historical distribution from the foothills of the Himalayas in northern India to the dry slopes of the Western Ghats in the South. However, sloth bear populations are currently limited to 5 regions in India: northern, north-eastern, central, south-eastern, and south-western populations. This drastic range contraction has rendered the species Vulnerable to Extinction (IUCN 2013) and led to its inclusion in Schedule I of the Indian Wildlife (Protection) Act as amended in 2003. Currently, only about 10% of the species' current distribution in India contains high-quality habitat and protected areas.

Habitat:

Sloth bears, in the area, occupy a wide range of habitats including forests, scrublands, and grasslands where boulders and scattered shrubs and trees provide shelter. The most common shelter is a den, a cavern like structure generally in rocks. Sloth bears occurred over a large expanse of sites in reserved forests outside the protected region, emphasizing the need for their protection and uninterrupted management. Locally, there are reports of their presence in Agoli Reserve forest, Benakal Reserve forest and Bukkasagara Reserve Forest. Among the protected areas they are found in large numbers at Daroji WLS and recently declared Gudekote Bear Sanctuary.



Sloth bears avoid areas where human disturbance is high, however, the bear raid peanut, maize, and fruit crops. Sloth bears like to escape from the heat of the day and forage for food at night. They will start to become active as the sun starts to set. This is also the time when many insects such as termites are more active.

Food:

Sloth bears subsist primarily on termites, ants, and fruits. This is the only species of bear adapted specifically for myrmecophagy (ant and termite-eating). Most bears are opportunistic omnivores. As such, their activities are governed by the availability of food items and dietary components within their habitat. When trees are in fruit, sloth bears dine on mango, fig, ebony, and other fruits, and also on some flowers. They have special liking for the honey for which the animal can climb trees and knock down honeycombs. Beetles, grubs, ants, and other insects round out their diet. During food shortages, sloth bears will eat carrion. They will also eat leafy plants, sugar-rich fruits, nuts, root, tubers, berries, vegetables, eggs and small vertebrates like rodents.

Threat:

Major threats to this species are habitat loss, poaching and conflict killings. Poaching is mainly for the commercial trade in bear parts. Encounters resulting in conflicts between people and sloth bears occur mainly where the habitat has become severely degraded but still being used by both.

Conflicts:

The sloth bear is more inclined to attack man unprovoked than almost any other animal. Reduced cover and food resources outside Protected areas, have led to increased human-bear conflicts, including frequent maulings. Persons going to the forest for the collection of wood or other forest produce also encounter the bear, inadvertently resulting in conflicts. This is mainly because, unlike other animals, bears have poor eyesight and when they encounter humans, it suddenly reacts aggressively.

Status:

Sloth Bears are listed in Appendix I of CITES and are completely protected under Schedule I of the Indian Wildlife Protection Act of 1972. They are also protected to varying degrees by national laws in the other range countries. However, they can be killed to protect life or property. Sloth Bears are reported to exist in 174 Protected Areas (PAs) in India, which include 46 National Parks and 128 Wildlife Sanctuaries (Chauhan 2006). Populations appear

to be reasonably well protected when inside these Protected areas, but face deteriorating habitat conditions, reduced cover and food resources outside protected areas.

Conservation Measures:

- Strict protection to Daroji and Gudikote bear sanctuaries and also to the reserve forests such as Agoli RF, Benakal RF, and Bukkasagara that known to harbor bear population
- Strict protection and immediate action on removal of trees, including the ones not fed on by bears. Dead trees harbor termites and its food for bear.
- Because the sloth bear is the umbrella species in the region, its habitats could be enriched by planting of native tree species (fruit-bearing or otherwise), which can serve as hiding, cover or food resources.
- Moisture content of the soil is to be maintained within a range that facilitates nesting by termites (Wood 1988).
- Long-term monitoring of the population and emphasizes mitigation of human-bear conflicts
- Creating awareness for protecting sloth bear
- Planting of fruit trees more particularly the spp. of Ficus.
- Promoting native flower plant species that attracts honey bees in the area. This will improve availability of honey in the area
- Guards will be appointed as Watch and Ward
- Walkie-talkie sets will be provided to the watch and ward persons
- Identifying critical habitats and corridors used by bears, especially those outside protected areas for vigil and monitoring

INDIAN PEAFOWL: *Pavo cristatus*

The Indian Peafowl (*Pavo cristatus*), is also known as the Blue Peafowl, and Peacock. It is the national bird of India.

Habitat:

This species has an extremely large range, and hence does not approach the thresholds for Vulnerable under the range size criterion (Extent of Occurrence <20,000 km² combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation).

The population trend appears to be stable, and hence the species does not approach the thresholds for Vulnerable under the population trend criterion (>30% decline over ten years or three generations). For these reasons the species is evaluated as Least Concern in IUCN Red List. It is found in forests, but can also live in cultivated regions and around human habitations and is usually found where water is available.

Food:

It is an omnivorous bird. Its diet consists of small mammals (mice), reptiles (lizards and snakes), amphibians (frogs), arthropods, insects, termites, ants, locusts and scorpions. It also feeds upon seeds, fruit, vegetables, flowers, leaves, and minnows in shallow streams and so on. With its strong bill it is able to kill a snake. Around cultivated areas, peafowl feed on a wide range of crops.

Conservation Status:

Least Concern (IUCN Red List) and Schedule I-Part III, Indian Wildlife (Protection) Act, 1972.

Threat:

Poaching of peacocks for their meat, feathers and accidental poisoning by feeding on pesticide treated seeds are known threats. Feathers are decorative and associated with religious importance. However, presently, there is no severe threat to this species, primarily for its status as a National bird and secondarily due to religious belief this species is protected. Since its feathers are in great demand for commercial purposes, its main threat to its survival. Their loud calls make them easy to detect. In natural habitats, panther and tigers are major predators.

Conservation Plan:

Following activities will be done to assist conservation of the species in the area:

- Guards will be appointed as Watch and Ward
- Walkie-talkie will be provided to the watch and ward persons
- Awareness programs will be run with the help of experts
- Strict vigil on trade of feathers
- Creating green belt and water harvesting structures so that it will increase its food in the natural habitat

MONITOR LIZARD: *Varanus bengalensis*Conservation Plan for Bengal monitor lizard (*Varanus bengalensis*)Habit:

All monitors were reported diurnal, reaching their full activity level when the sun is up and their habitat has warmed up. The plains and the desert monitors use their claws as tools to dig out dens. All monitors feed on small animals. It preys on insects, small lizards and the nesting of small mammals. Monitors reported to have a very special preference for eggs. They are often found in agricultural areas, scrub forest, river banks, and rocky outcrops. It occupies burrows, dens, hollows of trees, rock cracks and crevices.

Behaviour:

Mainly ground dweller, but is a very good climber as well. Bengal Monitors are usually solitary. In the night their body temperature drops below ambient. In the morning they raise their body temperatures by basking before commencing activity and for this reason they are rarely active early in the morning and most active in the afternoons when temperatures are high.

Food:

Their normal prey base consists of beetles, grubs, scorpions, crabs, snails, ants, and other invertebrates. Vertebrate prey is comparatively rare and includes frogs, fish, rats, other lizards, snakes, birds, eggs and rodents. They sometimes capture roosting bats.

Threat:

Varanus has been assessed as Least Concern as per the IUCN Red List. This species has a wide range of occurrence across south central and Southeast Asia and it inhabits a variety of habitats. However, certain threats are affecting the species, and this has led to eradication in parts of its range. It is hunted for food, for its fat which is used for medicinal purposes, and for its skins which are sold commercially.

These animals were still hunted for illegal export of skin through border countries like Bangladesh, Nepal and Pakistan. They were also extensively used within the country to make musical instruments, extract oil for medicines to treat body ailments and meat for food. In some places, they were killed thinking that these animals are poisonous. Its eggs are considered a delicacy and the entire animal is also eaten. Unani - the Greco-Arabian system

of medicine, recommends the use of various body parts of monitors to cure numerous ailments.

Conservation Status:

Least Concern species (IUCN Red List) and Schedule I of Indian Wildlife (Protection) Act, 1972.

Conservation Plan:

Following activities will be done to assist conservation of the species in the area:

- Surveys of poorly known species to assess distribution in the area
- Identification and Protection of critical habitats
- Strict vigil to prevent illegal hunting and trade.
- Awareness programs to revive support for monitor lizard conservation
- Training and awareness programs and Watch and Ward

PYTHON: *Python molurus*

Python molurus is a large non venomous python species found in many tropic and subtropic areas of the Indian Subcontinent and Southeast Asia. It is known by the common names Indian python, black-tailed python and Indian rock python. The color pattern is whitish or yellowish with the blotched patterns varying from shades of tan to dark brown. Pythons inhabit a wide range of habitats including wetlands, open forest, scrublands, harsh desert, rainforests, woodlands, grassy marshes, river valleys, rocky slopes, and grasslands.

Habitat:

Python occurs in wide range of habitats including grasslands, swamps, marshes, rocky foothills, woodlands, open jungle and river valleys. Sometimes they can be found in abandoned mammal burrows, hollow trees, dense water reeds and mangrove thickets.

Food:

Like all snakes, the Indian python is carnivorous. Its diet consists primarily birds and mammals. Python uses its sharp rearward pointing teeth to seize its prey, then wraps its body around the prey, at the same time contracting its muscles, killing the prey by constriction. Sometimes Pythons are found near human habitation due to the presence of rats, mice, and other vermin as a food source. This also leads to python preying on

poultry. Exceptionally large pythons may even require larger food items such as pigs or goats, and are known to have attacked and eaten crocodiles and deer.

Conservation Status:

It is protected under Schedule I of Indian Wildlife (Protection) Act, 1972.

Conservation Measures:

Pythons have historically been slaughtered to supply the world leather market, as well as for folk medicines, and captured for the pet trade. Python is killed for extracting fat. Some of the species like Burmese python have been declared as "Vulnerable", by IUCN, reflecting its overall population decline. Important reasons for the decline are trade for skins and for food. In some places, habitat degradation is cause for their decline.

Conservation Plan:

Conservation plan include educational materials, signs, and instil pride amongst the locals as caretakers of the last populations of python in their habitation.

- Public awareness will be created
- Strict vigil will lead to reducing incidences of poaching and hunting
- Awareness will be created in local communities so as to not to harm the python and report any cases of poaching
- Effective communication network will be developed between local people, forest officers and conservation experts to reduce the risk of the human conflict with python, hunting and poaching activities.

Man-Leopard Conflicts:

Major conflict arises when leopards start preying on livestock. The conflict becomes more severe when some leopards become man-eaters. They can prey on children and even enter homes at night to attack humans.

Threats: The primary threats to Leopards are anthropogenic. Habitat fragmentation, reduced prey base and conflict with livestock. Conversion of forest habitats and grasslands to agriculture, livestock farming and urban sprawl have significantly reduced Leopard range. This leads to the depletion of natural prey species in these areas. The Indian leopard is facing the crisis of adaptation. Despite being the most widespread cat, the Indian leopard faces several types of threat. The animal shares its habitat with other animals, which may kill leopard cubs if given a chance. Apart from its natural enemies, the leopard's main threat are people. For years, it has been threatened, due to loss of habitat and poaching. A rapidly increasing threat to Leopards is the poisoning of carcasses, targeting carnivores as a form of retaliation, as well as a means of predator control.

Data on animal kill / injury, cattle kill and crop damages (working plan data).

With huge human and livestock population, there is a constant pressure on the forests to support them, and this has given rise to more close contact with wild animals which has resulted in increasing conflict between man and wild animals. The conflicts could be livestock predation, human injury or death, wild animal mortality and crop damage.



Changing land use pattern, encroachment of forest land for agricultural activities, etc have resulted in tremendous pressure on wild life that are forced to frequently visit human settlements in search of easy prey like cattle, dog, poultry, etc.

Panthers and Sloth bears are the important wild animals around the project area that are responsible for injuries to human and livestock. Encounters with these wild animals have resulted in an antagonistic attitude among the farmers towards wildlife. In some cases, local

villagers have retaliated it by shooting wild animals and poisoning the carcass to kill the carnivore predator. Details of the resultant cases such as human mortality, injury, livestock mortality, crop depredation and compensation, which is recorded at the division level for the last decade, is given in the table no. 12.

Table 12: Statement showing the Compensation paid from 2003-04 to 2015-16 for the entire division (Source – Working Plan)

Sl. No.	Year	Human Death		Cattle Killed		Crop damage		Injury		Total	
		No. of Cases	Amount	No. of Cases	Amount	No. of Cases	Amount	No. of Cases	Amount	No. of Cases	Amount
1	2	3	4	5	6	7	8	9	10	11	12
1	2003-04	3	300000	10	20553	6	17200	30	84247	49	422000
2	2004-05	0	0	4	8000	5	14500	11	24390	20	46890
3	2005-06	1	100000	5	15500	1	5000	15	112371	22	232871
4	2006-07	1	100000	4	10400	28	93700	9	77900	42	282000
5	2007-08	1	100000	6	23500	40	89950	16	124721	63	338171
6	2008-09	0	0	5	14222	10	16300	7	49478	22	80000
7	2009-10	0	0	7	23275	49	151780	2	14071	58	189126
8	2010-11	1	150000	4	10250	43	142233	7	65207	55	367690
9	2011-12	0	0	9	57000	62	214579	1	20000	72	291579
10	2012-13	2	1000000	12	36000	35	164716	3	56004	52	1256720
11	2013-14	0	0	9	53428	55	183607	6	83285	70	320320
12	2014-15	0	0	14	49500	151	443726	6	86369	171	579595
13	2015-16	4	2000000	96	611899	449	1190152	11	157535	560	3959586
	Total	13	3750000	185	933527	934	2727443	124	955578	1256	8366548

In addition to the data and statements made above, it is likely that, opening of once closed mine, may result in some distress to the animal if it had taken shelter in the project area. The mine was not working for last 7 years. Also likely presence of some wildlife species was mentioned during the site inspection by the Forest Advisory Committee (FAC). The project authorities would exercise due care during the execution of the project. **Detailed plan on awareness to address human-leopard conflict is provided as annexure I.**

Working plan prescriptions for management of forests and wildlife

As per the working plan, mining for iron ore had increased since 2000 in Ballari district due to increase in demand for the ore in the international market. Satellite imageries of the region pertaining to 2004 show that around 1500 ha of land has been opened for mining, 156 ha for dumping mining waste and 223 ha for quarrying. Presently total land area which

has been leased for mining is 6,484 ha which is part of reserve forest land. As per the previous working plan, around 5500 ha of forest land had been leased for mining activity.

Preparation of Reclamation & Rehabilitation Plan as measure to Conserve Soil Moisture:

- As regards preparation of the Reclamation and Rehabilitation (R & R) Plan, the State Government had entrusted the preparation of the Plans to the Indian Council of Forestry Research and Education (ICFRE), Dehradun. Accordingly, to reduce the impacts of mining on its environment, scientific R & R plan have been in place including that of Rama mine.
- These are site-specific plans and are required to be prepared for individual mining leases
- ICFRE had prepared these plans after studying baseline status of the lease area in terms of various local and regional parameters such as climate, physiography, topography, geology, land use pattern, soil, air, water, flora, fauna, social environment, etc. It was followed by study of environmental impacts of mining on landscape, ecology, air quality, noise and vibration, water quality, soil quality, aquatic life, society, etc. Various activities prescribed for implementation have been grouped in the following categories:
- Reclamation and Rehabilitation of the area under encroachment: Measures recommended under this category include planting (in mining pit, overburden dumps and other areas) and stabilization of dump by erection of various structures like retaining wall, catch water drains, silt trap, check dams, gully plugs, etc in the encroached portion of the mining lease area.
- Stabilization of dump: This refers to various measures prescribed to stabilise the dumps within the lease area. The works include erection of toe walls, various types of check dams, garland drains or catch water drains, silt traps or silt settling tanks, planting (in case of inactive dumps), etc.
- Surface Water Management: This refers to works prescribed for erosion control by various means such as diversion drains/catch water drains, silt retaining and grade stabilization structures such as gabion check dams, earthen check dams, stone masonry check dams, silt settling tanks, rain water harvesting pit (RWHP), etc.

- Biological Measures: These include planting and sowing of native species including grasses and legumes, planting of avenue trees, planting in safety zone or green belt, afforestation, etc.
- Biodiversity Conservation Plan: Considering the importance of the forest ecosystem in terms of its environmental services, certain portion of the mining lease area rich in plant diversity is recommended for further enrichment by planting and sowing of more indigenous species.
- Management of flora and fauna: Here suggestions are given for overall management of floral and faunal components in and around the lease area. Prescriptions regarding fire protection, raising of public awareness, etc are also given.

CHAPTER V. IMPACT OF PROPOSED ACTIVITY ON FLORA AND FAUNA

Impact of the project on the Environment

Introduction

Open-cast mining in forest areas often involves removal of native vegetation on the surface to have access to ore beneath. Although such practices result in degradation on environment, operation of once operational mines will have relatively lesser impacts on the vegetation. Rama mine was operational by the erstwhile lessee for several years and hence, re-commencement of this mine may not have additional significant impacts on the flora & fauna.

For the operational mines, environmental impacts are linked with the method of mining, actual quantum of ore, ore to waste ratio, management of overburden waste materials, status of neighbouring areas of mine (forest, human habitation, mining, industries etc).

In this chapter, an attempt has been made to understand the possible impacts of mining on air, water, noise, land, ecology and socio-economic environment of the Rama Iron Ore Mine (ML No. 2621).

Impact on Landscape & Its Management

The extraction of ore, construction of haulage road and other infrastructure, dumping of waste material, etc., does resulting large scale changes in land use pattern of the forest land of the lease.

As of now, a total of 33.80 Ha area will be utilized in the mine lease area for mining pit (10.85 Ha), waste dumps deposition (0.00 Ha), office/infrastructure (0.15 Ha), mineral stack (0.95), and road (1.32 Ha). As the area is hilly in nature, land use changes owing to mining and dumping of waste materials will lead to profound impacts on the soil and water

environment. The landscape together with the forest cover of the area surely has an influence on the microclimatic regime of the area. Thus, changes in landscape structure will be affecting the normal drainage pattern of the area there by leading to a decline in the surface and ground water recharge. Reclamation of the area utilized for mineral extraction and waste dumping should be adequately planned to prevent further deterioration of the environment from the mining activity and to reinstate the normal contour of the area. To address such issues both the surface water management plan and dump management plan are required to be sound. In the presence the ICFRE has formulated sound R & R Plan and hence impacts at landscape level are adequately addressed.

Impact on Ecology & Its Management

Although mining in fresh areas known to have impacts on the ecology of the area, operating once operational mines, will have relatively far lesser impacts. However, since the mining lease is located on the forested areas, some impacts it still will have on floral and faunal elements in adjoining forest areas. For example, re-opening of mining activities would lead to migration of faunal elements that had taken shelter in the abandoned mine to the adjoining areas.

Impacts on such biodiversity elements can be further reduced by series of following measures:

- Development of thick green belt around the mining lease as proposed in R & R Plan
- Plantation of native species & protection of existing floral and faunal elements, etc.
- Soil & Moisture Conservation Plan: Since survival of wildlife species depends mainly on vegetation cover, the project proponent had already sought help of Central Research Institute for Dryland Agriculture (CRIDA) and had prepared comprehensive soil and moisture conservation plan. This is in addition to the exhaustive Reclamation & habitation (R & R) structures recommended by ICFRE, Dehradun. Implementation of these measures would result in greening of the area and augmentation of habitat for various faunal elements such invertebrates, herpetofauna, burrowing rodents and small mammals, insects, etc.
- Avoiding exotic species: ICFRE has suggested avoiding of exotics like *Acacia auriculiformis*, *Acacia mangium*, *Cassia siamea*, *Casuarina equisetifolia*, *Eucalyptus*

spp., *Grevillea robusta*, *Tecoma stans*, *Leucaena leucocephala* in plantation. This will help promotion of native species and associated flora and fauna.

- Efforts should be made to collect seeds, tubers and other planting materials of natural undisturbed areas of mine lease and propagate the same in the nurseries.
- It is also advised to discontinue with planting of single species. While undertaking afforestation program care should be taken to include Herbs, Shrubs, Climbers and tree species occurring in the neighbourhood of the mine sites for planting.

Impact on Air Quality & Its Management

Exploration, development, construction and operation activities of mining causes air borne emissions. The most common source of environment pollution in the mine area is particulate matter emanating from excavation, blasting and transportation of materials. Besides, CO, SO₂ and NO_x from fugitive emissions, exhaust emissions and gas emissions from all the operational activities including the vehicular sources also contribute to air pollution. These atmospheric pollutants are hazardous to all the living organisms in the biosphere. The semi-arid climatic condition coupled with mining activities on the top of the hills by open cast method escalates the impact on air quality. If remained uncontrolled it will lead to several health implications.

The high concentration of particulate matter in the ambient air negatively affects the growth of agriculture crops. Although, air quality is being periodically monitored by the company, strict mitigation measures are absolutely essential to control the pollutants from entering into the atmosphere.

Following measures have been suggested to control fugitive dust:

- Wet drilling to suppress the dust emission from the drill machines at its source by inbuilt water injection system.
- Regular water sprinkling on haul roads with water tankers.
- Use of sharp drill bits for drilling holes and arrangements for bit regrinding.
- Charging the holes by using optimum charge and using time delay detonator.

- Regular grading of haul roads and service roads to remove accumulation of loose material.
- Covered transportation of ore and waste material
- Timely maintenance of machinery to minimise emissions
- Afforestation and green belt development
- Operator cabins in all major HEMM equipment will be air conditioned to minimize dust exposure of the operators.
- Crusher will be provided with Mist water spray.
- Fugitive dust generation will be controlled by regular water sprinkling on site & roads by movable water sprinklers and water Tankers and records will be maintained.

Impact on Noise & Its Management

In open cast mines, the sources of noise pollution are drilling, blasting, excavation, sizing and transportation of ores. The cumulative impacts of all these can significantly affect the human life as well as disrupts the normal life of wild animals in the surrounding forest areas. Though vibrations are associated with operations of many types of mining equipment, blasting is considered as the major source. Blasting vibrations may also deleteriously affect the normal life of wild animals, domesticated animals and the local residents.



Some of the control measures proposed are:

- Proper and regular maintenance of vehicles, machinery and other equipment.
- Limiting time exposure of workers to excessive noise during shift operations

- The noise generated by the machinery will be reduced by proper lubrication of the machinery and equipment.
- The workers employed will be provided with protection equipment, earmuffs and ear-plugs, as a protection from the high noise level generated at the mine site wherever required.
- Noise levels will be controlled by using optimum explosive charge, proper delay detonators and proper stemming to prevent blow out of holes.
- Speed of tippers in the mines area will be limited to moderate speed of 25 kmph to prevent undue noise from empty tippers

Impact on Water Quality & Its Management

Open cast mining involves handling of large quantum of waste which usually dumped to form a heap within the lease area. Most often these waste dumps are unscientifically processed and left unattended without providing any kinds of protective measures. The impacts on surface water mainly arise due to soil erosion from waste dumps, pits, haulage roads, etc. Since the lease area is located in hill ranges which are traversed by many seasonal *Nalas*, there are ample chances of sediment loaded rainwater entering into the seasonal water course and ultimately to the water tanks downstream.

Protective measures have been planned after studying the flow of water, topography of the area and dimensions of the water course. Some of the suggested measures are:

- In order to avoid impact of run-off water from the core zone during the monsoon period on the surface water sources, ICFRE proposed Surface Water Management Plan will be implemented.
- JSW proposes to construct garland drains all along the mine pit with check dam at discharge end to prevent siltation of nearby water courses.
- Mining activities will not intersect the groundwater table and hence will not have impact of ground water levels.

Impact on Soil Quality & Its Management

Opencast mining can have impacts on soil quality if agriculture field receives wash off from the waste dumps and mine pits. Soil erosion and subsequent sedimentation is another concern that impacts agriculture crop productivity in the vicinity.

Following measures have been proposed to minimise impacts on soil quality:

- Garland drains and check dams will be constructed as a measure for prevention and control of soil erosion and management of silt.
- Inactive dumps would be vegetated with suitable plantation immediately after the terraces are made.
- All the plantation activities would preferably be taken up during monsoon seasons to enjoy the benefit of rainwater for the same.

Impact on Aquatic Life & Its Management

Water from the areas carries enormous quantity of suspended materials in the form of sediments to the water bodies downstream. The impacts mainly arise due to sedimentation of the water. The sedimentation deleteriously affects the primary productivity and thereby the loss of majority of aquatic life. Most of the water bodies around the mining lease areas have turned to become muddy due to increased soil erosion from the catchments where extensive mining is practiced. Following mitigation measures have been suggested:



- The run-off of water from the core zone during the monsoon period may have adverse effect on the surface water sources. Runoff if not properly managed is likely to carry the silt from the mine area. JSW proposes to construct garland drains all along the mine pit with check dam at discharge end to prevent siltation of nearby water courses.

Impact on Society and measures to enhance socioeconomic status

The mining area does not cover any habitation. The mining activities don't involve any displacement of human settlement. No public buildings, places, monuments etc., exist within the lease area or in the vicinity. The mining operations did not disturb / relocate any village or need resettlement. The mining lease area is part of Forest Land.

Employment potential both direct and indirect coupled with business opportunities and strong social commitment of the company in the form of better educational and medical facilities would result in enhancement in the status and standard of living of the local populace.

Measures suggested by ICFRE towards Biodiversity Conservation:

- Removal of exotic species
- Promotion of native species
- Identification and Protection of natural habitats outside the mining lease areas
- Providing a corridor for the dwelling and movement of Herpetofauna by planting grasses and herbaceous species
- Creation of Habitat for Avifauna by planting fruit, fodder and shelter providing trees such as *Alangium salvifolium*, *Annona squamosa*, *Bombax ceiba*, *Erythrina suberosa*, *Pithecellobium dulce*, *Syzygium cumini*, *Ficus benghalensis*, *Ficus racemosa*, *Ficus religiosa*, *Madhuca longifolia* var. *latifolia* and *Ziziphus mauritiana*
- Reducing anthropogenic pressure like no mining activity after 6 PM
- Banning of vehicular traffic between 6 pm and 6 am.

- Bio-engineering measures such as plantation of grasses along slopes, contour drains, mine boundaries and backfilled areas and gabion structure; check dams, rock fill dams to be taken up for addressing impacts on the aquatic life
- Dense green belt consisting of shrubs and trees of different species must be created (as suggested under section 5.6) around the mine lease areas and also along the haul roads which will act also as a dust and noise barrier
- Awareness programs amongst the local people as well as mining staff, regarding the importance of biodiversity, wild life, their habitats, should be organized so as to improve their participation in protection of wildlife in mine area.
- Rock fill dams and check dams should to be constructed in the mine lease areas to prevent the soil erosion. This will be able to store sufficient quantity of filtered water in the area and will act as water holes for the faunal life present in the region.
- Green cover loss due to construction of haul roads and heavy vehicular movements will restrict the animal movements to the adjoining areas. Therefore, development of a green belt and massive afforestation program of fruit bearing and shade bearing plant species around the mine lease areas will provide food and shelter for them.
- Fire plays hazardous role in the destruction of habitat. It is suggested that lessee should take keen interest to protect the forests from fire. It is suggested that the lessee should take preventive measures in 2 sq.km area around the mine. It is also suggested that fire preventing squad should be formed to fight the fire. Training should be provided to the squad members through the State Forest Department.

CHAPTER VI. CONSERVATION STATUS AS PER WORKING PLAN

Status of conservation of major wildlife

Although the forest cover of Ballari division is not substantial, the forests are inhabited by a variety of animal life. It is said that tigers used to roam occasionally in Sandur forests between 1900 and 1925. Tigers even rendered the road from Hospet to Ramgada dangerous to the solitary traveller. At present they are not to be found anywhere in the district. The other mammalian wild life is typical of the thorn and scrub forests of the region. Spotted deer, wild boars and jackals are found in the open areas of the district. Occasional herds of Black buck are seen in Sandur forests. Sloth bears (*Melursus ursinus*) are plenty in the hill forests around Jarmali, Gudekota and Kampli hills.

Black bucks are found in the plantation areas but not in the vicinity of mines. Hyenas and wolves are seen occasionally in the Western taluks. Panthers are sometimes seen in the hilly areas of Hospet, Kudligi and Sandur taluks. The commonly occurring reptiles are the monitor lizard [*varanus*] and the Indian mugger which inhabits the Tungabhadra River. Among the poisonous snakes, cobra, viper and krait are commonly seen all over the district. Rodents like squirrels, rats and mice are common. Hares are plentiful on the hill slopes.

Daroji Bear Sanctuary: The Bilekallu reserved forest with its rugged terrain has been an ideal habitat for sloth bears. Though the bear is often regarded as an incarnation of 'Jambava', the population is threatened on account of destruction of habitat. The bears were being hunted by the Boyas by turning them out of their caves with spears and torches. Heavy interference due to biotic factors had affected the breeding pattern and there was a need to protect the bear population. With this objective the Government of Karnataka, vide their notification No. FEE-159-FWL-91, dated 17-10-1994 have declared Bilekallu reserved forest extending over 8900 hectares as Daroji Bear Sanctuary. The estimated bear population as per 2010 census is 83 and the projected population for 2012 is 95.

In addition to bears the sanctuary boasts of a large presence of leopards and a fair number of wild boars, porcupines, jackals, striped hyenas, monkeys, peafowl, hares, partridges etc.

Gudekote Sloth Bear Sanctuary: Forests of Kudligi range such as Gudekote RF, Gudekote extension RF, Appeyanahalli RF, Halsagara RF are rich in wildlife including sloth bear, wolf, wild dog, hyena, fox and jackal. These forest blocks harbour variety of avian and reptilian fauna. Kudligi forests have the potential to be developed as a sanctuary. During 2013 Gudekote sloth bear sanctuary was declared over an area of 3,848 hectares to give protection to this important wildlife habitat. Habitat improvement works like de-silting water holes, providing salt licks, soil and moisture conservation works, planting fruit yielding trees, etc have been taken up in the newly created sanctuary. A separate wildlife range has been created with head quarters at Gudekote to take up various wildlife conservation works in the sanctuary as per wildlife management plan approved by the Chief Wildlife Warden, Karnataka.

There are cases of poaching and hunting towards the fringes of the Andhra Pradesh border which must be kept under check. Intelligence network must be strengthened, surveillance works must be enhanced so as to procure more information about the hunting and poaching of the wild animals.

CHAPTER VII: PROPOSED WILDLIFE MANAGEMENT PLAN FOR RAMA MINES DETAILING ACTIVITIES AND BUDGET

Proposed management strategies with budgetary allocation

The protection and conservation of flora and fauna in the surrounding of the mining lease will be done by preparing plan of operation. The plan includes major 2 categories

- General protection works
- Specific conservation measures

Apart from protection of forests surrounding the mining lease and undertaking exhaustive Reclamation and Rehabilitation plan involving comprehensive soil moisture conservation activities, following activities will be taken up as a part of habitat development and conservation.

General management strategies

- Fire Protection:
Strict fire control will be maintained in the mining lease and its surroundings. The fire lines clearing and burning will be done in time and 4 watchers will be employed during the pre-monsoon / summer season. Other activities related to fire protection, if mentioned by the executive agency (Forest Dept.) will also be carried out after approval from the authorities.
- Protection from grazing and illicit felling:
As per existing laws certain grazing units are allowed, but grazing is strictly prohibited in plantation areas, coupes, areas closed for regeneration and area undergoing recent forestry operations.
However areas bordering the forest areas will be planted with fodder and grass species so as to prevent cattle entering in the forested areas. Provisions will be made to collect fodder species grass seeds for cultivation.

- Nala protection for protecting aquatic fauna:

Water along with silt emanating from the mine areas contaminates the freshwater sources. Increased flow of suspended solids and sediments into the streams and nalas downstream affects the aquatic fauna. To prevent such contamination, it is therefore proposed to let water go through a series of biological and engineering measures which traps the silts & sediments, under safeguards of nalla protection.
- Soil and moisture conservation works:

One of the major issues in forest management is improvement of moisture regime in the area. During March till the onset of rains, wild animals move closer to human habitation in search of water, leading to man-animal conflict and loss of wildlife also. In order to prevent such incidences, it was decided to take up comprehensive soil moisture conservation measures. Some of planned activities include the following;

 - Trenches: Staggered trenches of 2 mt x 60 cm x 30 cm shall be dug in areas prone to erosion. The site for this should be carefully selected. It should be done in areas having high slope areas (density less than 0.3), so that surface runoff can be slowed down and erosion can be reduced. The water will percolate and thereby increase soil moisture.
 - Small dry rubble masonry structure and also check dam will be constructed across gullies and rivulets to check soil erosion.
 - Small earthen check dams will be constructed in suitable locations. The technical feasibility of these structures should be thoroughly examined before taking up such structures.
 - New water holes at suitable places having possibility of dwelling of wildlife so that drinking water may be available for them.
 - Wherever required deepening of old tanks and de-silting of dams already existing in the areas can be taken up. De-silting of the village tanks and other water bodies located within five km from the mine lease boundary so as to mitigate the impact of siltation of such tanks/water bodies
 - In open and degraded areas, plantation of suitable indigenous species can be carried out.

Many of the above mentioned measures have already been suggested by Indian Council of Forestry Research & Education (ICFRE), Dehradun in its Reclamation and Rehabilitation (R&R) plan, and is already under implementation. In addition, CRIDA has suggested comprehensive Soil and Moisture Conservation (SMC) Scheme, which would help in improving vegetation cover and availability of fodder to wildlife as well as water availability.

Specific management strategies

The area specific and habitat specific, habitat improvement activities will be taken up in the area for overall protection and conservation of wild animals in the area. This includes eradication of weeds such as *Eupatorium*, *Parthenium* etc. Also growing fodder and grass species can help the herbivore population while creation of water bodies will help wild animals not to enter human habitation for water. The overall approach for habitat improvement works should be taken with minimum disturbance to habitat.

Weeds management:

Weeds like *Eupatorium*, *Parthenium* and other exotic species will be identified and eradicated by pulling it manually. After uprooting it will be burned to avoid spreading of seeds. This required to be continued for next couple of years to ensure that we weeds don't come back. Such weeds are known to interfere with germination of native species, and ground flora. Also it is known to reduce availability of fodder for herbivores. The area will be monitoring post uprooting to find and eradicate fresh growth if any. Such areas then required to be planted by native species as a long term strategy.

Management of existing grasslands:

Natural grassland supports herbivore population. Therefore, managing grasslands is very critical component of wildlife management. Prime and quality palatable species are important for healthy ecosystem. On the slopes as a part of dump management, terracing using geotextile fiber will be taken up. In such areas, also in natural grasslands and degraded forest areas, plantation/ seeding of grass species will be taken up. Such areas will be kept

free from invasive species and woody species. Such areas often known to attract herbivores and hence water bodies also required to be created in such areas.

Following measures are suggested for managing the grasslands

- Cutting and uprooting of unpalatable grasses, before the seeding starts.
- Uprooting of weeds from these areas before the end of rainy season
- Fire protection around these grasslands
- Maintenance of water resources near or within such grasslands.

Management of specific habitats:

- Creating special Biodiversity Hotspots: In plan area many pockets where floral biodiversity is very good. These areas are repository of gene pool. Efforts should be made to identify and protect such areas.
- Providing a corridor for the dwelling and movement of Herpetofauna: A corridor will be created among the fragmented habitat by planting trees, shrubs, herbs and grasses to allow the movement of Herpetofauna.
- Creating and supporting habitat for avifauna: Fruit, fodder and shelter providing trees such as *Alangium salvifolium*, *Annona squamosa*, *Bombax ceiba*, *Erythrina suberosa*, *Syzygium cumini*, *Ficus benghalensis*, *Ficus racemosa*, *Pithecellobium dulce*, *Ficus religiosa*, *Madhuca longifolia*, wild *Mangifera indica*, *Muntingia calabura* and *Ziziphus mauritiana* will be planted to attract birds as well as other wild life such as bats and small mammals.
- Dense green belt: A dense greenbelt consisting of shrubs and trees of different species will be created around the mine lease area and also along the haul roads which will act also as a dust and noise barrier.
- Awareness program and empowering people for protection: Awareness programs amongst the local people as well as mining staff, regarding the importance of biodiversity, wildlife, their habitats, will be organized so as to improve their participation in protection of biodiversity in mine area. This is because, participation of local communities residing around the protected areas is very crucial in supporting conservation initiatives. Training and awareness programs in the villages helps to develop trust of local communities.

- Construction of check dams: Rock fill dams and check dams will be constructed in the mine lease area to prevent the soil erosion. This will be able to store sufficient quantity of filtered water in the area and will act as water holes for the faunal life present in the region.
- Improving green cover and green fencing of forest areas: The green cover loss due to construction of haul roads and heavy vehicular movements will restrict the animal movements to the adjoining areas. Therefore, development of a greenbelt and massive program of fruit and shade bearing plant species around the mine lease areas will provide food and shelter for them. Also green ore vegetative fencing of the forest boundaries requires to be taken up.
- Underpasses and culverts on the roads in the immediate vicinity of mining area: The area in the immediate vicinity of the mine is required to be surveyed to identify locations of roads that require underpasses / culverts for safe crossing passage of wildlife. This will connect two forested areas separated by road and improve movement of wildlife and result in less road kills.
- Watch Towers for wildlife and fire protection:
Prevention of hunting and fire incidences can damage flora and fauna to larger extent. Construction of watch towers near water holes and grasslands can serve purpose of wildlife census also. Because of watch towers, fire can be located from a long distance and effective steps to douse it can be ensured early. JSW will undertake preventive measures in 2 sq.km radius area around the mine. Fire preventing squad will be formed to fight the fire. Training will be provided to the squad members through the State Forest Department.
- Restricted operations: All the mining and transportation operations will be restricted to day time so as to avoid disturbance to nocturnal wildlife elements.
- Bee keeping: Species that attract bees will be promoted so that the densities of bee hives would increase. Species such as *Woodfordia* and others known to attract bees. High density of such species would increase, densities of bee hives and attract animal species like Sloth Bear while bird species like bee-eaters
- Protection of dead trees and logs: Dead trees and wooden logs fallen will not be removed. This will lead to support of insect life such as ants and termites. There are

many species that feed on insects such as birds, pangolin, monitor lizard, bear etc. This will help to increase their numbers in the area.

- Promoting tubers: Efforts will be made to collect seeds, tubers and other planting materials of natural undisturbed areas of mine lease and propagate the same in the nurseries. Later same will be promoted in afforestation areas which forms food for wild boar, bear and rodents.
- Bird nests: JSW in consultation with the State Forest department shall create and maintain alternate Habitat/home for the avifauna, whose nesting trees are to be cleared in this project. Birds' nests artificially made out of eco-friendly material shall be used in the area, including forest area and human settlements, adjoining the forest area being diverted for the project.

Things to be avoided in Wildlife Management Plan

- Avoid Planting of exotics: Exotic species like *Acacia auriculiformis*, *Acacia holosericea*, *Cassia siamea*, *Casuarina equisetifolia*, *Eucalyptus spp.*, *Tecoma stans* are strictly avoided in and around mining areas.
- Avoid Monoculture: Planting of single species or monoculture will be discontinued.
- Avoiding single growth form: Afforestation program will include Herbs, Shrubs, Climbers and tree species occurring in the neighborhood of the mine sites for planting. Only trees or only shrubs will not have the desired impact in biodiversity conservation and hence mixed habitat with diverse and native species will be promoted.

Creation of awareness

Creation of Awareness on Human –Leopard Conflict

- Awareness programs to local communities / farmers, livestock herders, industrial personnel and forest personnel as suggested by the Member, State Board of Wildlife will be undertaken. The document titled "Suitable awareness and conflict mitigation measures for reducing human – leopard conflict in Sandur area is included as **Annexure I**

of this Report. This also includes education materials such as posters and displays created for specific locations.

- In addition, small booklet containing details on the biodiversity components (Plants, birds and butterflies etc.) of the area along with attractive color photographs will be published and distributed to school and college students.

BUDGET ESTIMATED FOR WMP

Activity & Budget estimates: Activity wise Budget estimates is provided in table 13.

Table 13. Proposed budget towards referred Conservation and Wildlife Management Plan

SN.	Activity	INR (Lakhs)
1	Additional studies / surveys for fine tuning of suggested measures at the time of implementation	1.50
2	Eradication of weeds in the areas rich in wildlife	1.00
3	Creating culverts /underpasses for wildlife on haulage roads	3.20
4	Fire Protection works along the boundary areas of the mining lease	1.00
5	Soil moisture conservation works (creation of ponds and water holes, trenches, check dams, grasslands).	3.00
6	Water tanker for supply of water to water holes and ponds for wildlife	24.00
7	Provision of Artificial Birds' nests (different shapes & kinds) to evaluate bird preferences for a trial around the Devadari Mines (40 nests@500 each)	0.20
8	Vehicle for regular patrolling to curb wildlife related offenses, anti-poaching squad, equipped with communication instruments	14.00
9	General protection measures such as boundary maintenance, protection from grazing, illicit felling of trees etc	1.00
10	Awareness Programs for Human – Leopard conflict in Sandur area	4.00
11	Promoting mix culture and development of grasslands and fodder species	1.00
12	Communication network - Walkie Talkie Sets (4@25000)	1.00
13	Camera traps near check dams and Rainwater harvesting ponds for recording presence & movement of wild animals in the area (4 Camera traps @40000 each)	1.60
14	Camera traps for understanding movement of wildlife in the region (10 cameras @40000 each)	4.0
15	Appointment of Guards as watch and ward	2.50
16	Purchase of education & awareness materials	1.00
Total: Sixty Four Lakh only.		64.00

ANNEXURE I:

**AWARENESS PROGRAM TO ADDRESS
HUMAN-LEOPARD CONFLICT IN SANDUR AREA**

Sanjay Gubbi
Member, State Board for Wildlife
2208/B, Sadhana Road, K.R.Extension, Tumkur - 572 101.

The Principal Chief Conservator of Forests (Wildlife),
Karnataka Forest Department,
Aranya Bhavan,
Mallechwaram,
Bengaluru - 560 003.

03-09-2018

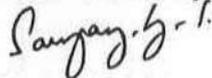
Sir,

Sub: Awareness programs for human-leopard conflict in Sandur area.
Ref: Oral request from your kindself on 31-08-2018.

This report has been submitted based on your request to provide suggestions to carryout awareness programs on human-leopard conflict in Sandur Range, Bellary Division. Hence the suggestions are provided based on our fieldwork undertaken in the area during 2015-2016 in the background of three human deaths in the area due to leopards.

We request you to kindly revert back if any further information is required.

Yours Faithfully



Sanjay Gubbi
Scientist & Member, State Board for Wildlife

Suitable awareness and conflict mitigation measures for reducing human-leopard conflict in Sandur area, Bellary Division.

We had carried out intensive surveys in the Sandur Reserved Forests with camera traps and other methodologies during 2015-16 in the background of three human deaths in the area due to leopards. During the camera trapping exercise the following mammalian species were recorded in the Sandur North and Sandur South Reserved Forests

Mammal species photo-captured in camera traps in Sandur (North and South) Reserved Forests.

Species	Schedule status under the Wildlife Protection Act 1972	Global status under the IUCN Red List ⁺
Leopard (<i>Panthera pardus</i>)	I	Vulnerable
Rusty-spotted cat (<i>Prionailurus rubiginosus</i>)	I	Near Threatened
Four-horned antelope (<i>Tetracerus quadricornis</i>)	I	Vulnerable
Sloth bear (<i>Melursus ursinus</i>)	II	Vulnerable
Jungle cat (<i>Felis chaus</i>)	II	Least Concern
Small Indian civet (<i>Viverricula indica</i>)	II	Least Concern
Common palm civet (<i>Paradoxurus hermaphroditus</i>)	II	Least Concern
Common mongoose (<i>Herpestes edwardsii</i>)	II	Least Concern
Ruddy mongoose (<i>Herpestes smithii</i>)	II	Least Concern
Bonnet macaque (<i>Macaca radiata</i>)	II	Least Concern
Southern plains gray langur (<i>Semnopithecus dussumieri</i>)	II	Least Concern
Wild pig (<i>Sus scrofa</i>)	III	Least Concern
Black-naped hare (<i>Lepus nigricollis</i>)	IV	Least Concern
Indian crested porcupine (<i>Hystrix indica</i>)	IV	Least Concern

⁺ IUCN 2016

Leopard abundance and density

Based on camera trap capture-recapture methodology the estimated abundance of leopards from the Sandur North and Sandur South Reserved Forests is 17 (± 7.9 , 6-33), and the estimated density for the same areas is 16/100 km² (± 7.3 , 5.6 - 30) (Gubbi et al. 2017). Hence, it can be concluded that this area hosts a good abundance of leopards.

The following awareness, outreach and conflict mitigation programs could be undertaken to reduce conflict between people and leopards.

I. Awareness programs to local communities/farmers

1. Exhaustive awareness program have to be undertaken in the area that should include talks and short film projection to create awareness on handling conflict situations during evenings in villages, posters and pamphlets have to be displayed/distributed at appropriate locations such as gram panchayat offices,

tea shops, etc. These awareness programs have to be especially undertaken during maize harvest season as the crop provides suitable cover for leopards to get closer to human habitations and to people harvesting maize. The earlier human deaths seem to have occurred when people were harvesting maize in squatting position and in fields close to the forests. Examples of some awareness posters/pamphlets are given in Annexure-1. However, new outreach material should be designed to ensure that the materials are site-specific (ex: how to avoid any untoward incidences during maize harvest season).

2. A dedicated conflict mitigation response vehicle along with staff should patrol the villages/crop fields bordering forests during maize harvesting season to avoid any untoward incidence, and also to instill confidence among farmers.

II. Awareness programs to livestock herders

1. Awareness activities specially designed to livestock herders should be undertaken to reduce conflict. This should include suggestions about active guarding of livestock while grazing in forests/forest edges, not to move in forests after dark, building improved livestock guarding sheds, etc.

2. LED lighting to be provided to be installed at livestock sheds to families who live in the area, and to those who have suffered human-leopard conflict in the past. This can ensure that leopards avoid entering sheds at night times to lift livestock.

3. Support could be provided to improve livestock sheds to make them predator proof.

III. Outreach activities for industrial personnel

1. Suitable protocols have to be developed for industrial personnel working in the area to train them to respond to large predator presence in the area. This would ensure safety of both personnel and wildlife.

2. Suitable awareness programs have to be undertaken to security personnel, staff working at various industrial, mining projects in Sandur Range. The programs should include on how to react when they see large mammals such as leopards and sloth bears, There are possibilities that the industrial personnel/staff come from different parts of the country, hence awareness programs have to be undertaken in different languages to ensure that the personnel are fully aware of the protocols to be followed.

3. Roadkills have been reported as one of the threats to leopards in the recent years (Gubbi et al. 2014) hence imparting awareness for drivers, especially those driving large vehicles should be taken up. Vehicular speed within the forest area should be limited to 30 km/hr.

4. No demands should be made for leopard captures from the forest or adjoining areas, except during incidences of man-eating or injuries to people.

IV. Training for forest personnel

1. Frontline staff of forest department should be trained in handling emergency conflict situations using already available material (Gubbi et al. 2016).

Reference:

Gubbi, S., Poornesha, H.C., Daithota, A., and Nagashettihalli, H. (2014) Roads emerging as a critical threat to leopards in India? CatNews, 60, 30-31.

Gubbi, S., Poornesha, H. C., Nagashettihalli, H., and Kolekar, A. (2016) Safely handling situations when leopards enter human dense areas. Nature Conservation Foundation, Mysore, India.

Gubbi, S., Nagashettihalli, H., Bhat, R., Poornesha, H. C., Anoop, A., and Madhusudan, M. D. (2017) Ecology and conservation of leopards in protected and multiple use forests in Karnataka. Nature Conservation Foundation, Mysore, India.

Annexure - 1

ಬೆರತೆಗಳು ಜನವಸತಿ ಪ್ರದೇಶಕ್ಕೆ ಬಂದಾಗ ಕೆಲವು ಸರಳ ನಿಯಮಗಳನ್ನು ಪಾಲಿಸಿದರೆ, ಜನ ಮತ್ತು ಪ್ರಾಣಿಗಾಗುವ ತೊಂದರೆಗಳನ್ನು ಕಡಿಮೆಗೊಳಿಸಬಹುದು



ತೋಟ-ಗದ್ದೆಯ ಪಕ್ಕದ ಕೊಟ್ಟಿಗೆಗಳಲ್ಲಿ ಬೆರತೆ ಕಂಡಾಗ, ಅದಕ್ಕೆ ಯಾವುದೇ ತೊಂದರೆ ಕೊಡದೆ ಬಿಟ್ಟರೆ ಕತ್ತಣಾಗುತ್ತಿದ್ದಂತೆ ಹೊರಟು ಹೋಗುತ್ತದೆ



ಬೆರತೆಗಳು ಅಪಾರಕ್ಕಾಗಿ ಸಾಯಿ, ಕುರಿ ಮುಂತಾದ ಪ್ರಾಣಿಗಳನ್ನು ಹುಡುಕಿಕೊಂಡು ಊರಿಗೆ ಬರಬಹುದು



ಬಾಯಿಯಲ್ಲಿ ಬೆರತೆಗಳು ಬಿದ್ದಿದ್ದರೆ, ತೆಂಗಿನ ನಾರು ಕಟ್ಟಿರುವ ಬಣ್ಣಿಯನ್ನು ಬಾವಿಗೆ ಇಳಿಸಿ ಬಾಯಿಯ ಸುತ್ತ ಯಾರೂ ಇಲ್ಲದಿದ್ದರೆ, ಪ್ರಾಣಿಯು ಯಾರಿಗೂ ತೊಂದರೆ ಕೊಡದೇ ಬಣ್ಣಿಯನ್ನು ಎರ ಕಾಡಿಗೆ ಹಿಂದಿರುಗುತ್ತದೆ

ಸಾಯಿ ಮತ್ತು ಜಾನುವಾರುಗಳನ್ನು ಸುರಕ್ಷಿತವಾಗಿ ಇಳಿಗೆ ಕಟ್ಟಿ

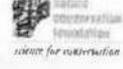


ಬೆರತೆಗಳು ಜನವಸತಿ ಪ್ರದೇಶಕ್ಕೆ ಬಂದಾಗ ಹೆಚ್ಚು ಜನ ಸೇರಿದರೆ, ಗಾಬರಿಗೊಂಡ ಪ್ರಾಣಿಯಿಂದ ಜನರಿಗೆ ಮಾರಣಾಂತಿಕ ಗಾಯವಾಗಬಹುದು ಹಾಗೂ ಅದನ್ನು ಕೊಲ್ಲಬೇಕಾದ ಸಂದರ್ಭ ಬರಬಹುದು. ಆದ್ದರಿಂದ ಅಲ್ಲಿ ಜನ ಸೇರುವುದನ್ನು ತಡೆಗಟ್ಟಿ

ಮನೆಮೊಳಗೆ ಬೆರತೆ ಕಂಡುಬಂದರೆ, ಬಾಗಿಲು ಹಾಕಿ ತಕ್ಷಣವೇ ಕೆಲಗೆ ನೀಡಿರುವ ಅರಣ್ಯ ಇಲಾಖೆಯ ದೂರವಾಣಿ ಸಂಖ್ಯೆಗೆ ಕರೆ ಮಾಡಿ ತಿಳಿಸಿ



ಸಂಪರ್ಕಿಸಿ: 18004251314 (ಶುಲ್ಕ ರಹಿತ)



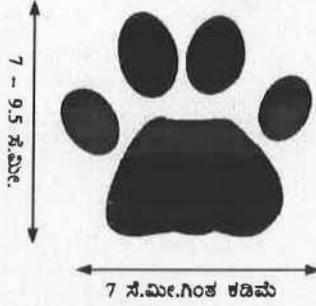
ಚಿರತೆಯೋ, ನಾಯಿಯೋ?

ಹೆಚ್ಚೆ ಗುರುತುಗಳನ್ನು ಕಂಡುಹಿಡಿಯುವುದು

ಹೆಚ್ಚೆ ಗುರುತುಗಳನ್ನು ಸರಿಯಾಗಿ ಗುರುತಿಸುವ ಮೂಲಕ ಜನರಲ್ಲಿ ಚಿರತೆಯ ಇರುವಿಕೆಯ ಭಯವನ್ನು ಕಡಿಮೆಗೊಳಿಸಬಹುದು



ಚಿರತೆ



ಚಿರತೆಯ ಪಾದದ ಗುರುತಿನಲ್ಲಿ ಉಗುರುಗಳ ಗುರುತು ಕಾಣುವುದಿಲ್ಲ; ನಾಯಿಯ ಪಾದದ ಗುರುತಿನಲ್ಲಿ ಉಗುರುಗಳ ಗುರುತನ್ನು ಕಾಣಬಹುದು.

ನಾಯಿ



ಐದಿಧ ನೆಲಗಳಲ್ಲಿ



ಚಿರತೆಯ ಪಾದದ ಗಾತ್ರಕ್ಕೆ ಹೋಲಿಸಿದರೆ ನಾಯಿಯ ಹೆಚ್ಚೆ ಗುರುತಿನಲ್ಲಿ ಪಾದದ ಗಾತ್ರ ಹೆಚ್ಚು ಒತ್ತಾಗಿ ಹಾಗೂ ಕಿರಿದಾಗಿರುತ್ತದೆ.



ಚಿರತೆಯ ಹೆಚ್ಚೆ ಗುರುತಿನಲ್ಲಿ ಪಾದ ದೊಡ್ಡದಾಗಿರುತ್ತದೆ; ನಾಯಿಯ ಹೆಚ್ಚೆ ಗುರುತಿನಲ್ಲಿ ಬೆರಳುಗಳು ದೊಡ್ಡದಾಗಿರುತ್ತವೆ.



ಕೃಪೆ:

ಚಿತ್ರಗಳು: ನೇಚರ್ ಕಲ್ಚರೇಷನ್ ಫೌಂಡೇಶನ್
ಹೆಚ್ಚೆ ಗುರುತುಗಳ ರಚನಾಚಿತ್ರಗಳು: ಕೇಬಲ್ ಕಲ್ಚರೇಷನ್ ಫೌಂಡೇಶನ್
ಬೀದಿಯಲ್ಲಿ ಪಾದಮಾಳು: ಅರಣ್ಯ ರಕ್ಷಣಾಂಗ ಮತ್ತು ಹೊತ್ತಿಗೆ, ಟ್ರಿಗರ್ ಮತ್ತು ಪೈಲರ್ಟ್ಸ್ ವಿಭಾಗ, ದುರ್ಗ ಜಿಲ್ಲಾ ಸರ್ಕಾರದ ಅಧೀನ

ANNEXURE II:

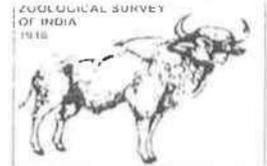
GLIMPSES OF FIELD STUDY

Details of ZSI Fauna Survey Localities							
S. No	Locality	Date	Taluk	District	Latitude	Longitude	Altitude
1	Devadari Mine Hill top	18.07.2018	Santur	Bellary	15.07225°N	76.56885°E	874.7 m
2	Northern part of Devadari mine	18.07.2018	Santur	Bellary	15.07384°N	76.56982°E	872.4m
3	Hosahalli	18.07.2018	Santur	Bellary	15.07412°N	76.58566°E	592.8m
4	Gandimaramma Temple	18.07.2018	Santur	Bellary	15.05561°N	76.51345°E	605.7m
5	Subrayanahalli	18.07.2018	Santur	Bellary	15.00528°N	76.56049°E	1021m
6	Narihalla Reservoir	18.07.2018	Santur	Bellary	15.12428°N	76.60527°E	549.2m
7	Bhujangnagar	19.07.2018	Santur	Bellary	15.08747°N	76.57673°E	564m
8	Narasapura	19.07.2018	Santur	Bellary	15.05184°N	76.60119°E	625.4m
9	Navalatti	19.07.2018	Santur	Bellary	15.02497°N	76.63367°E	698.6m
10	Donimalai Township	19.07.2018	Santur	Bellary	15.06186°N	76.59249°E	627.4m
11	Ramgad	19.07.2018	Santur	Bellary	15.12844°N	76.46223°E	985m
12	Rama Mine Boundary pillar	19.07.2018	Santur	Bellary	15.12695°N	76.46562°E	981m
13	Rama Mine Hill Top	19.07.2018	Santur	Bellary	15.12201°N	76.46940°E	929.6m
14	Santur Town	19.07.2018	Santur	Bellary	15.08705°N	76.54469°E	579.5m
15	Bannihatti	20.07.2018	Santur	Bellary	15.15365°N	76.61265°E	525.8m
16	Taranagar	20.07.2018	Santur	Bellary	15.13499°N	76.60643°E	534.8m
17	Muraripur	20.07.2018	Santur	Bellary	15.13351°N	76.58545°E	574.6m
18	Krishnanagar	20.07.2018	Santur	Bellary	15.09562°N	76.55568°E	557.6m
19	Daularpur	20.07.2018	Santur	Bellary	15.10375°N	76.53682°E	581.9m
20	Lakshmipura	20.07.2018	Santur	Bellary	15.08070°N	76.54922°E	562.7m
21	BKG Forest	20.07.2018	Santur	Bellary	15.07000°N	76.54326°E	557.9m
22	Narasimmaswamy Temple, Dharmapur	20.07.2018	Santur	Bellary	15.05909°N	76.52180°E	588m
23	Dharmapur	20.07.2018	Santur	Bellary	15.06892°N	76.53155°E	582.7m
24	Yashwanthnagar	20.07.2018	Santur	Bellary	15.04415°N	76.49997°E	599.9m
25	Somalapur	20.07.2018	Santur	Bellary	15.03469°N	76.49104°E	607.7m
26	Reserve Forest, Somlapur	20.07.2018	Santur	Bellary	15.01850°N	76.50701°E	630.3m
27	Ankammahal	20.07.2018	Santur	Bellary	14.99440°N	76.50898°E	649.7m
28	Thumbrabothi	20.07.2018	Santur	Bellary	14.94933°N	76.57097°E	722.9m
29	Gowripur	20.07.2018	Santur	Bellary	14.93486°N	76.58710°E	735.6m
30	Thumraguddi RF	20.07.2018	Santur	Bellary	14.96382°N	76.58102°E	738.2m
31	Ganglapur	20.07.2018	Santur	Bellary	15.14691°N	76.61024°E	577.1m
32	Tunga Mines Toe Wall	21.07.2018	Santur	Bellary	15.10357°N	76.64370°E	609.4m

ANNEXURE II:

GLIMPSES OF FIELD STUDY

33	Lingadahalli	21.07.2018	Santur	Bellary	15.11532°N	76.65612°E	595m
34	Ubbalagandi	21.07.2018	Santur	Bellary	15.08288°N	76.66401°E	618.7m
35	Deogiri	21.07.2018	Santur	Bellary	15.00852°N	76.62519°E	994.9m
36	Ranajitpura	21.07.2018	Santur	Bellary	15.05638°N	76.59813°E	640.2m
37	Bhadra Mine	21.07.2018	Santur	Bellary	15.11000°N	76.62516°E	779.5m



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MINISTRY OF ENVIRONMENT, FOREST
AND CLIMATE CHANGE
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फैक्स: +91-44-24642898

No. 23-141/2016-Estt./ (782/A)

13/07/2018

To,
The Deputy Conservator of Forests (DCF),
Ballari Forest Division,
Ballari
Karnataka

Subject: Request for support for undertaking Wildlife Conservation plan studies for Devadari, Bhadra and Rama mines

Dear Sir,

This is to inform you that Zoological Survey of India, Ministry of Environment, Forest and Climate Change, Southern Regional Centre, Chennai has been assigned the task of studying and preparing **Conservation plan for Wildlife for Devadari, Bhadra and Rama mines** by M/s. JSW Steel Ltd., Bellary, Karnataka. As part of this assignment, scientists and technical experts of ZSI will be undertaking visits to these mines and adjoining forested areas for a period of one year starting from 17.07.2018 and collecting data on fauna. We therefore request you to kindly extend your support to the visiting scientists and inform field staff.

As part of the study we would also would like to interact with you, discuss and share the results of the study for developing the wildlife conservation plan for the above said mines. Kindly extend your cooperation in conducting the study by visiting scientists.

Thanking you
Yours Sincerely

(K.A. Subramanian)
(K.A. Subramanian)
Scientist-D & Officer-in-Charge



प्रभारी अधिकारी
Officer In-charge
भारतीय प्राणी सर्वेक्षण
Zoological Survey of India
दक्षिण क्षेत्रीय केंद्र
Southern Regional Centre
चेन्नई / Chennai - 600 028



Landscape of the survey area



Reserve Forest



Village and agricultural fields



Existing Mining area



Insects



Poekilocerus pictus



Trithemis festiva



Grasshopper



Trithemis kirbyi



Anax immaculifrons



Therea petiveriana



Invertebrates



Land snail



***Scolopendra* sp**



***Scolopendra* sp**



Pill Millipede



Millipede



Whipscorpion



Vertebrates



Mastacembelus armatus



Oreochromis mossambicus



Psammophilus dorsalis



Melanochelys trijuga



Accipiter badius



Rhinolophus beddomei cf.



Macaca radiata



Semnopithecus hypoleucos

Field Survey Collection of insects and invertebrates

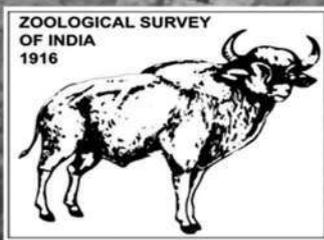


Field data collection and interaction with villagers



Interaction with villagers and survey team





**SOUTHERN REGIONAL CENTRE
ZOOLOGICAL SURVEY OF INDIA
CHENNAI-600 028**



JSW Steel Limited

Vijayanagar Works :
P. O. Vidyanagar - 583 275,
Dist. Ballari, Karnataka, India.
CIN. : L27102MH1994PLC152925
Phone : +91 8395 250 120-30
Fax : +91 8395 250 132/142
Website : www.jsw.in

**Annexure-
Condition No. 7**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby undertake to deposit the cost towards preparation and implementation of Wildlife Management Plan, as approved by the Chief Wildlife Warden of the State.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.

JSW STEEL LIMITED
For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai - 400 051
Phone : +91 22 4286 1000
Fax : +91 22 4286 3000





JSW Steel Limited

Vijayanagar Works :
 P. O. Vidyanagar - 583 275,
 Dist. Ballari, Karnataka, India.
 CIN. : L27102MH1994PLC152925
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 Website : www.jsw.in

**Annexure-
 Condition No. 10**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby undertake to submit duly signed Form-II, once received from the Office of Deputy Commissioner (DC), as a final Compliance of Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, in accordance with Ministry's guidelines.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory.

Authorized Signatory.
 B
 JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
 Bandra Kurla Complex,
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**Annexure-
 Condition No. 11**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby undertake that the fencing, protection and regeneration of the safety zone will be done at the project cost within three years and it will be maintained as per the approved working plan of the State Govt. We already have transferred the cost for afforestation on degraded forestland measuring one and half times the safety zone in Ad-hoc CAMPA Account.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory.

Authorized Signatory.

For M/s. JSW Steel Ltd.





Vijayanagar Works :
 P. O. Vidyanagar - 583 275,
 Dist. Ballari, Karnataka, India.
 CIN. : L27102MH1994PLC152925
 Phone : +91 8395 250 120-30
 Fax : +91 8395 250 132/142
 Website : www.jsw.in

**Annexure-
 Condition No. 12**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby agree to take up gap planting and soil & moisture conservation activities to restock and rejuvenate the degraded open forests (having crown density less than 0.4), if any, located in the area within 100 meters from outer perimeter of the mining lease, through the State Forest Department.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory.

Authorized Signatory.

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
 Bandra Kurla Complex,
 Bandra (East), Mumbai - 400 051
 Phone : +91 22 4286 1000
 Fax : +91 22 4286 3000





JSW Steel Limited

Vijayanagar Works :
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 Dist. Ballari, Karnataka, India.
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**Annexure-
 Condition No. 15**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby undertake to pay additional amount of NPV, if so determined, as per the final decision of the Hon'ble Supreme court of India.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory,
 B
 JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
 Bandra Kurla Complex,
 Bandra (East), Mumbai - 400 051
 Phone : +91 22 4286 1000
 Fax : +91 22 4286 3000





Vijayanagar Works :
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**Annexure-
 Condition No. 19**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby undertake to implement following activities under the supervision of the State Forest Department:

- Mitigative measures to minimize soil erosion and choking of stream will be initiated to be implemented within a period of three years with effect from the date of issue of Stage-II Clearance as specified.
- Planting of adequate drought hardy plant species and sowing of seeds, in the appropriate area within the mining lease to arrest soil erosion will be implemented as per the approved scheme.
- Construction of check dams, retention /toe walls to arrest sliding down of the excavated material along the contour will be undertaken in accordance with the approved scheme
- Stabilization of overburden dumps by appropriate grading/benching in accordance with the approved scheme.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.

 JSW STEEL LIMITED
 For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
 Bandra Kurla Complex,
 Bandra (East), Mumbai - 400 051

Phone : +91 22 4286 1000
 Fax : +91 22 4286 3000





JSW Steel Limited

Vijayanagar Works :
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 Dist. Ballari, Karnataka, India.
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**Annexure-
 Condition No. 20**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby agree to undertake the mining in a phased manner as per the IBM Approved Mining Plan and implement concurrent Reclamation Plan. We also undertake to submit the annual reports to the concerned offices at regular intervals.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory

 JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
 Bandra Kurla Complex,
 Bandra (East), Mumbai - 400 051
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JSW Steel Limited

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**Annexure-
Condition No. 21**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We undertake to implement the R&R Plan as per the R&R Policy of State Government in consonance with National R&R Policy, Government of India. The mining activity will be commenced only after the site inspection by the Central Empowered Committee (CEC) and satisfactory implementation of R&R work as per the approved R&R Plan.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory

JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai - 400 051
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**Annexure-
 Condition No. 22**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We undertake to provide nests made up of eco-friendly material, for birds whose nests are to be cleared, as per the estimation provided by the Forest Department, for creating and maintaining alternate habitat/home for the avifauna.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.

 JSW STEEL LIMITED
 For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
 Bandra Kurla Complex,
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Annexure-XXI – Imagery showing the progress in Pillar Demarcation



Authorized Signatory.
B
JSW STEEL LIMITED

Annexure-XXI – Imagery showing the progress in Pillar Demarcation



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Authorized Signatory.

B
JSW STEEL LIMITED

Annexure-XXI – Imagery showing the progress in Pillar Demarcation



Authorized Signatory.
B
JSW STEEL LIMITED



JSW Steel Limited

Vijayanagar Works :
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**Annexure-
 Condition No. 23**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We undertake that the process of demarcation of the boundary of the diverted forestland and safety zone on ground by erecting four feet high reinforced cement concrete pillars, each inscribed with its serial number, distance from pillar to pillar and GPS Co-ordinates is under progress and hereby undertake to demarcate the same before Final Approval (Stage-II Clearance).

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory.

Authorized Signatory.
B
 JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
 Bandra Kurla Complex,
 Bandra (East), Mumbai - 400 051
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 Fax : +91 22 4286 3000





State Level Environment Impact Assessment Authority-Karnataka

(Constituted by MoEF, Government of India, under section 3(3) of E(P) Act, 1986)

No. SEIAA 127 MIN 2008

Date:04.02.2017

TRANSFER OF ENVIRONMENTAL CLEARANCE

Preamble:

Attention is invited to the Environment Clearance Letter of even number dated 30.12.2009 of the State Level Environment Impact Assessment Authority (SEIAA), Karnataka regarding grant of Environmental Clearance to M/s Rama Rao M. Poal for extraction of iron ore of capacity 0.50 MTPA in an area of 28.33 Ha at Ramghad Village, Sandur Taluk, Bellary District.

Request made by M/s JSW Steel Limited, Mumbai who has been declared by the Department of Mines and Geology, Government of Karnataka vide letter dated 9.1.2017 as the "preferred bidder" for the 'C category" of mine - M/s Rama Rao Poal (Rama) in an e-auction process to transfer the EC granted to M/s Rama Rao M. Poal vide E.C. letter No. SEIAA 127 MIN 2008 dated 30.12.2009 in their favor has been considered by the SEIAA during the meeting held on January 23, 2017 in the light of the provision for "Transferability of Environmental Clearance (EC)" under para 11 of the Notification No. S.O. 1533(E) dated September 14, 2006 read with the Notification No. S.O. 4241 (E) dated December 30, 2016 issued by the Ministry of Environment Forests and Climate Change, Government of India. The Authority has decided to transfer the Environmental Clearance issued vide letter No. SEIAA 127 MIN 2008 dated 30.12.2009 in favour of M/s JSW Steel Limited, U 6th Floor, East Wing, Raheja Towers, MG Road, Bengaluru-560001 subject to the following conditions in addition to the terms and conditions under which the prior Environmental Clearance has been granted and for the same validity period.

The transferee shall be abide by all commitments made by the earlier proponent and honor them in the letter and spirit.



The transferee shall comply all the terms and conditions traversed directly or indirectly in the EC letter No. SEIAA 127 MIN 2008 dated 30.12.2009.

The transferee shall undertake mining activity in accordance with the approved mining plan based on which the environmental appraisal has been done.

The transferee shall seek fresh Environmental Clearance if there is any change/modification in the mining plan.

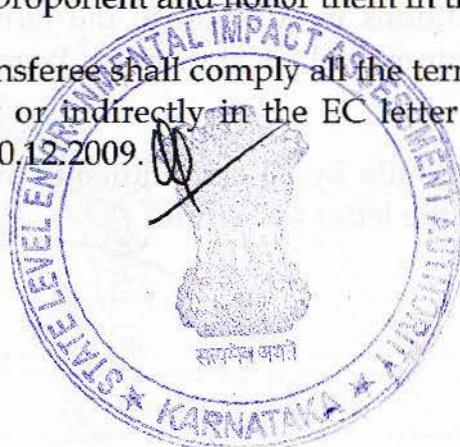
The transferee shall comply all orders, guidelines and additional conditions imposed by the Hon'ble Supreme Court, CEC and others with regard to environment safety, R&R Plan, etc.

Hence the order.

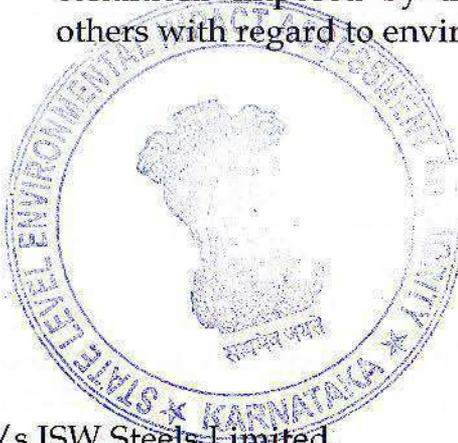
ORDER

Pursuant to the facts and circumstances traversed in the preamble, the Environmental Clearance issued in favour of M/s Rama Rao M. Poal, S/o. Late Mansingh Rao R. Poal, No. 14, Ward-9, Sandur -583 119, Bellary District by the State Level Environment Impact Assessment Authority, Karnataka vide letter No. SEIAA 127 MIN 2008 dated 30.12.2009 for extraction of iron ore of capacity 0.50 MTPA in an area of 28.33 Ha at Ramghad Village, Sandur Taluk, Bellary District stands transferred to M/s JSW Steel Limited U 6th Floor, East Wing, Raheja Towers, MG Road, Bengaluru-560001 subject to the following conditions in addition to the terms and conditions under which the prior Environmental Clearance has been granted and for the same validity period.

1. The transferee shall be abide by all commitments made by the earlier proponent and honor them in the letter and spirit.
2. The transferee shall comply all the terms and conditions traversed directly or indirectly in the EC letter No. SEIAA 127 MIN 2008 dated 30.12.2009.



3. The transferee shall undertake mining activity in accordance with the approved mining plan based on which the environmental appraisal has been done.
4. The transferee shall seek fresh Environmental Clearance if there is any change/modification in the mining plan.
5. The transferee shall comply all orders, guidelines and additional conditions imposed by the Hon'ble Supreme Court, CEC and others with regard to environment safety, R&R Plan, etc.



Ramachandra 4/2/17
(RAMACHANDRA)
Member Secretary,
SEIAA

To,

M/s JSW Steels Limited,
U 6th Floor, East Wing,
Raheja Towers, MG Road,
Bengaluru-560001.

Copy to:

- (1) The Secretary, Ministry of Environment, Forests and Climate Change, Indira Paryavaran Bhavan, Jor Bagh Road, Aliganj, New Delhi- 110003.
- (2) The Director, Mines and Geology Department, Khanija Bhavana, Bangalore-01.
- (3) The Member Secretary, Karnataka State Pollution Control Board, Bengaluru.
- (4) The APCCF, Regional Office, Ministry of Environment & Forests (SZ), Kendriya Sadan, IV Floor, E & F wings, 17th Main Road, Koramangala II Block, Bangalore-560 034.
- (5) M/s Rama Rao M. Poal , S/o. Late Mansingh Rao R. Poal, No. 14, Ward-9, Sandur -583 119, Bellary District
- (6) Guard File.



JSW Steel Limited

Vijayanagar Works :

P. O. Vidyanagar - 583 275,

Dist. Ballari, Karnataka, India.

CIN. : L27102MH1994PLC152925

Phone : +91 8395 250 120-30

Fax : +91 8395 250 132/142

Website : www.jsw.in

**Annexure-
Condition No. 25**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We undertake that tree felling will be done only when it is unavoidable under strict supervision of the State Forest Department.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory

B
JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai - 400 051

Phone : +91 22 4286 1000

Fax : +91 22 4286 3000





JSW Steel Limited

Vijayanagar Works :
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**Annexure-
Condition No. 26**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We undertake that we will not change layout plan of the proposal, without prior approval of the Central Government.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.

JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai - 400 051

Phone : +91 22 4286 1000
Fax : +91 22 4286 3000





JSW Steel Limited

Vijayanagar Works :

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Website : www.jsw.in

**Annexure-
Condition No. 27**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We undertake that no labor camps will be established on the Forest Land.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.
B
JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai - 400 051

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Vijayanagar Works :

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Phone : +91 8395 250 120-30

Fax : +91 8395 250 132/142

Website : www.jsw.in

**Annexure-
Condition No. 28**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

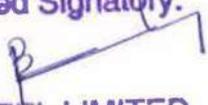
We undertake to supply alternate fuels to the laborers, if required and the staff working at site so as to avoid any damage and pressure on the nearby forest areas.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.


JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
Bandra Kurla Complex,
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Vijayanagar Works :

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Phone : +91 8395 250 120-30

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Website : www.jsw.in

**Annexure-
Condition No. 29**
UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We undertake to identify existing village tanks within 5 km radius from the mine. We also agree to prepare detailed plan for desilting of identified ponds and water bodies in consultation with forest department and submit it before Stage-II approval.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.

For M/s. JSW Steel Ltd.
Regd. Office : JSW Centre,
 Bandra Kurla Complex,
 Bandra (East), Mumbai - 400 051

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**Annexure-
 Condition No. 30**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We undertake that the diverted forest land will not be used for any other purpose that that specified in the proposal. We also undertake that under no circumstances, the diverted forest land will be transferred to any other agency, department of person without prior approval of the Central Government.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
 Bandra Kurla Complex,
 Bandra (East), Mumbai - 400 051
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JSW Steel Limited

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Fax : +91 8395 250 132/142

Website : www.jsw.in

**Annexure-
Condition No. 31**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We undertake to submit annual self - compliance report in respect of the above stated conditions to the State Government, concerned Regional Office and to this Ministry by the end of March every year.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory

JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
Bandra Kurla Complex,
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**Annexure-
Condition No. 32**

UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We undertake to abide by any other condition that the concerned Regional Office of the Ministry may stipulate, from time to time, in the interest of conservation, protection and development of Forests & Wildlife.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory
B
JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
Bandra Kurla Complex,
Bandra (East), Mumbai - 400 051

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Vijayanagar Works :

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**Annexure-
Condition No. 33**
UNDERTAKING

We, M/s. JSW Steel Ltd., Ballari, the User Agency hereby confirm that we have submitted a forest diversion proposal (FP/KA/MIN/24548/2017) under Section 2(ii), Forest (Conservation) Act, 1980, over an extent of 33.80 ha. in Ramanamalai Block Reserved Forest, Sandur North Range, Ramgad Village, Sandur Taluk, Ballari District, Karnataka. Subsequently, In-principle Approval has been issued for the said proposal vide letter no. F. No. 8-14/2018-FC dated 27th July, 2018 by the MoEF&CC, Government of India, New Delhi.

We hereby undertake to comply all the conditions of all the Acts, Rules, regulations, guidelines, Hon'ble Supreme Court Orders and National Green tribunal Order(s) pertaining to this project, if any, for the time being in force, as applicable to the project.

Place: Vijayanagar

Date: 25-10-2018

Authorized Signatory

Authorized Signatory.

JSW STEEL LIMITED

For M/s. JSW Steel Ltd.

Regd. Office : JSW Centre,
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