EIA-TR/10/Jan1998

IMPACT ASSESSMENT

OF THE PROPOSED INTEGRATED STEEL PLANT (SOUTHERN IRON AND STEEL COMPANY LTD., SALEM)
ON

THE BIOLOGICAL ENVIRONMENT





SALIM ALI CENTRE FOR ORNITHOLOGY & NATURAL HISTORY
COIMBATORE, TAMIL NADU

1998

IMPACT ASSESSMENT OF THE PROPOSED INTEGRATED STEEL PLANT (SOUTHERN IRON AND STEEL COMPANY LTD., SALEM) ON THE BIOLOGICAL ENVIRONMENT





Project team
P A Azeez, S Bhupathy, D Stephen and P Kannan



SALIM ALI CENTRE FOR ORNITHOLOGY & NATURAL HISTORY COIMBATORE, TAMIL NADU

1998

CONTENTS

CONTENTS	
1.0 BACKGROUND	1
2. THE PROJECT	1
2.1 Location	1
2.2 Nature of the project	1
3.0 THE STUDY	2
3.1 Scope	2
3.2 Study area	2
3.3 Methodology	2
3.3.1 Flora	5
3.4.2 Fauna	5
4.0 OBSERVATIONS	6
4.1 Impact zone	6
4.2 Flora	7
4.2.1 SISCOL project site	7
4.2.2 Impact zone I	8
4.2.3 The impact zone II	9
4.3 Floristic composition in different directional sectors	10
4.3.1 South-east	10
4.3.2 South-west	11
4.3.3 North-east	11
4.3.4 North-west	12
4.4 Fauna	13
4.4.1 Amphibians and reptiles	13
4.4.2 Birds and mammals	13
4.4.3 Bird species abundance and diversity	14
4.5 Bird species richness and abundance in the impact zones	15
4.6 Bird species distribution in different directional sectors	15
4.7 Protected and endangered species	16

5.0 IMPACT OF THE PROPOSED PROJECT	37
5.1 Impact identification	17
5.2 Project construction	18
5.2.1 Impacts during construction phase	18
5.2.2 Impacts on biotic environmental characteristics	19
5.3 Project operation	21
5.3.1 Impacts during operation phase	21
5.3.2 Impacts on biotic environmental characteristics	23
6.0 MITIGATORY MEASURES	24
6.1 Construction phase	24
6.2 Operation phase	24
7.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	26
8.0 REFERENCES	27
9.0 ACKNOWLEDGEMENTS	30
3.0 MONINO ANCED REINIEM 1.9	30

31

APPENDICES

7.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

- The SISCOL proposes construction of a steel plant adjacent to the existing ones at Potteneri, near Salem as a forward integration to their existing pig iron plant. The project is proposed in an area extending about 208 ha.
- The impact zone of this project is mostly built-up area, agricultural land, rocky outcroppings and waste land. No places with thick natural vegetation fall under the impact zone.
- 3. Nine species of amphibians, 31 of reptiles, 57 of birds and 9 of mammals were recorded in the impact zone of the proposed project during the present survey. The low number of mammal species is due to the lack of forest cover and the rapidly increasing built-up area. Most of the faunal species found in the project area and impact zone are highly adaptable and have wider distribution elsewhere in India.
- 4. No wildlife sanctuary is present in the impact zone. No reserve forest is also found close to the project site.
- 5. No notable distinction could be found among the distance from the project site and floral species diversity or evenness. Since the predicted values of air pollutants are comparatively low, no alteration in floral and faunal species composition is expected in the wind ward side of SISCOL.
- 6. In the long-term perspective, the project does not pose any serious environmental problem. The proposed project envisages control facilities to contain gaseous emissions, treatment of the liquid discharges and disposal of the solid wastes. It needs to be ensured that the air pollution control measures and the treatment plants for the liquid effluents are adequately maintained to ensure that no contamination of environment occurs during the operation of the plant. A green belt of pollution tolerant species should be established in the campus to make the operation of the project more environment friendly.