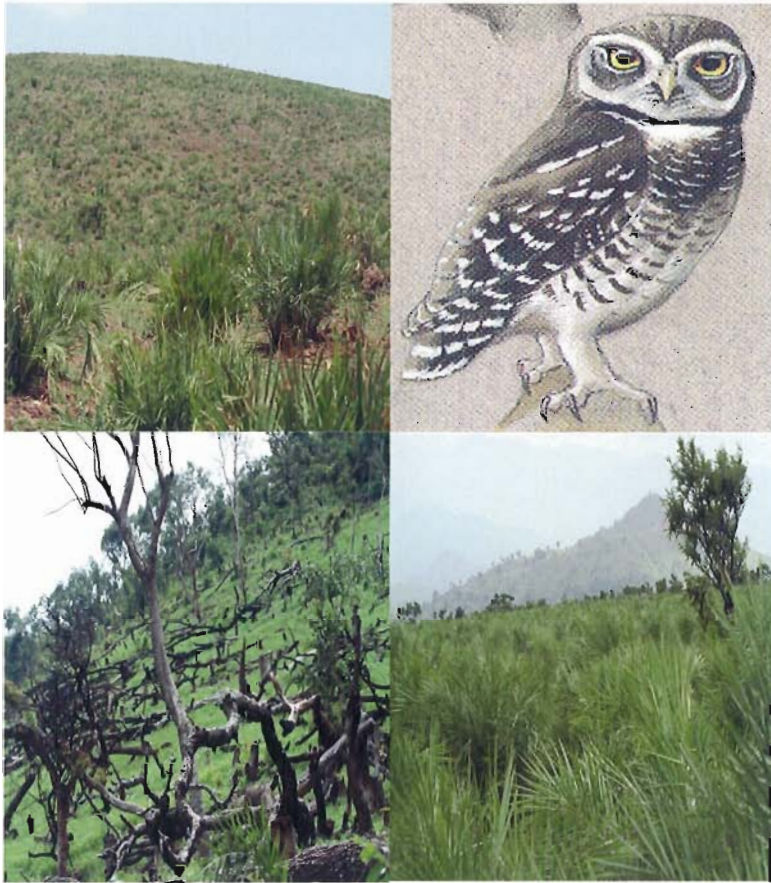


**STATUS OF BLEWITT'S OWL IN ARAKU VALLEY AND
ENVIRONMENTAL MANAGEMENT PLAN IN VIEW OF THE
PROPOSED BAUXITE MINES**



Report Submitted to

**ANDHRA PRADESH MINERAL DEVELOPMENT CORPORATION,
LIMITED, HYDERABAD**

PA Azeez, S Bhupathy, SN Prasad, Rachna Chandra and T Selva Kumar



**Salim Ali Centre for Ornithology & Natural History
Coimbatore, Tamil Nadu
March 2008**

**STATUS OF BLEWITT'S OWL IN ARAKU VALLEY AND
ENVIRONMENTAL MANAGEMENT PLAN IN VIEW OF THE
PROPOSED BAUXITE MINES**

Report Submitted to

**ANDHRA PRADESH MINERAL DEVELOPMENT CORPORATION,
LIMITED, HYDERABAD**

PA Azeez, S Bhupathy, SN Prasad, Rachna Chandra and T Selva Kumar



**Salim Ali Centre for Ornithology & Natural History
Coimbatore, Tamil Nadu
March 2008**

CONTENTS

Introduction 1
 Preamble 1
 Origin of the study 2
 The objectives of the study 2
 The target species of study: Blewitt's owlet 4
 Features of the target species 5
 The study area 6
 Study locations 9
 Methodology 11
 Field surveys 11
 Bird survey 11
 Vegetation survey 12
 Observations 14
 Bird Diversity 14
 Owls observed in the area 17
 Major threats to bird population 26
 Mammals 26
 Reptiles and amphibians 27
 Butterflies and Spiders 29
 Vegetation 30
 Mining, environmental threats and perturbations 39
 Key concerns 40
 Environmental management plan 43
 Air quality control 44
 Water quality control 44
 Noise and vibration control 45
 Overburden / debris storage and management 46
 Wastes 46
 Land disturbance / soil 47
 Transportation 48
 Work force 48
 Vegetation 49
 Felling trees and compensatory afforestation 50
 Fauna 51
 Environmental monitoring 51
 Summary and Conclusions 54
 Acknowledgments 56
 References 57

FIGURES

Figure 1. Visakhapatnam district showing the Araku valley at the top right corner 8
 Figure 2: Map showing the Araku valley with reserve forests and bauxite deposits 10



SUMMARY AND CONCLUSIONS

- The Andhra Pradesh Mineral Development Corporation (APMDC) proposes to exploit the vast bauxite deposits available in Araku Valley area, in the Eastern Ghats of Vishakhapatnam district. Three locations namely Rakthakonda, Galikonda and Chittamgondi are identified for the mines. However, in view of an unconfirmed report of Blewitt's Owl from the Araku, the APMDC, requested Sálím Ali Centre for Ornithology and Natural History (SACON) to investigate the presence of the species in the mining areas, and if the species is present in the area to propose an appropriate Environmental Management Plan. SACON undertook the study during October 2006 to February 2008. However, expanding the scope, detailed surveys of the biodiversity of the area was conducted to strengthen the EMP.
- The target species of study the Blewitt's Owlet *Athene blewitti* was not recorded in the proposed mining sites. The species was also not recorded from the whole area of Araku Valley during the study period spanning over one year.
- The study area is rich in wild biodiversity. In all, 151 species of birds were recorded. 414 species of plants, 12 species of mammals, 70 species of butterflies, 8 species of spiders were also recorded there. It may be noted that the Araku valley is rich in owl species; 11 species are encountered from the area, several of which were nesting.
- The mine activities are likely to have impact on the local environment, especially on the biodiversity and wildlife. Proper work plan, management plan for debris and waste disposal, appropriately minimizing and scheduling blasting activities, controlled vehicular activity and safeguarding the slopes and valleys from the spill over impacts may help to mitigate the impacts.
- As the species targeted of the study was not encountered, an EMP for the conservation of the species seems redundant. However, it was felt that utmost care should be taken to eliminate stress on the slopes and valleys, and hence a general

Status of Blewitt's Owl at Araku Valley - EMP

EMP is proposed. It is appropriate that the slopes and valleys are shielded from the impacts during mining. The large trees and rocky cliffs along the slopes of the hillocks are important for several species, especially the owls.

- From that standpoint of precautionary principle, we have supplemented some of the probable impacts of the mining activity and also deliberated upon applicable mitigation methods that may help to reduce the impacts.
- Looking at the need for resources in the country, the proposed project assumes importance. Nevertheless, the project construction and operation is likely to have notable impact in the area. It may be possible to lower the impact on the environment, biodiversity and wildlife with proper planning and implementing appropriate measures.