SACON Project Report # PR-201

IMPACTS OF THE PROPOSED EIGHT-LANE ACCESS CONTROLLED CHENNAI-SALEM GREENFIELD CORRIDOR ON THE MOUNTAIN ECOSYSTEMS (HILLY REGIONS)

Final Report

submitted to

National Highways Authority of India (NHAI)

Sálim Ali Centre for Ornithology and Natural History

A Centre of Excellence under the Ministry of Environment, Forest & Climate Change,

Govt. of India. Anaikatty (PO), Coimbatore,–641 108

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EXECUTIVE SUMMARY

The National Highways Authority of India (NHAI) proposes to develop an eight lane access controlled greenfield corridor of 277.3 km between Chennai and Salem in Tamil Nadu. The proposal was considered by the Environment Appraisal Committee (EAC) of the Union Ministry of Environment, Forest and Climate Change (MOEF&CC) during its 195th meeting on 31st August 2018. The committee *inter alia* suggested an additional study on the impact of proposed alignment specifically on the Mountain ecosystem (hilly region) from a reputed agency. Further to the request received in this regard from the NHAI, SACON undertook a six month study on the impact of the proposed eight-lane Chennai-Salem Greenfield Corridor on the Mountain Ecosystems (hilly regions).

The study was conducted along the alignment of the proposed road focusing intensive studies on the 2.8 km road stretch at Manjavadi Ghat section, that pass through the major hill forest area between the hills of Kalrayan and Shevaroys. The proposed road alignment at this area falls along the existing Salem-Harur State highway. Implementation of the proposed eight lane highway would primarily involve expansion of this existing state highway here.

During the present study, we conducted intensive field studies for four months (January to April 2019), after an initial reconnaissance in December 2018. We documented the faunal and floral species occurring in the project area covering 500 m on either side of the proposed Road alignment, using standard methods. Our results indicated that the area harbours a good biodiversity including several conservation important floral and faunal taxa. The area would require careful planning and implementation during the development of the proposed eight lane road along this stretch, in order to minimize the impacts and ensuring connectivity of habitat and free movement of wildlife between the forests of Kalrayan and Shevaroys.

A fully elevated road (viaduct) over the 2.8 km stretch at Manjavadi Ghats is suggested for the sake of best habitat connectivity and minimal impacts on the wildlife. Alternatively, we suggest three animal passes, each of 300 m wide along the 2.8 km stretch as the minimal requirement for effective habitat connectivity and wildlife movement across the proposed eight lane road at the Manjavadi Ghats area. Integration of rainwater harvesting mechanisms along with road construction and appropriate camouflaging of the pillars of the overpasses/ viaduct are also suggested.