



Roads, Sensitive Habitats and Wildlife

Environmental Guideline for
India and South Asia

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PREFACE

The distribution of the World Bank's *Roads and the Environment Handbook* (since 2000, as an electronic document on the Bank's web site) marked the start of a new approach to guidebooks for the World Bank; namely the creation of a 'parent' Handbook on environmental issues related to land transportation development, with a view to encouraging more detailed region or topic-specific handbooks.

This Guideline is the first such 'offspring' and its initiation can be credited to Dr. Chris Hoban, now the Bank's resident advisor in New Delhi.

The original thought was to call this document a "Best Practice Guide" focusing on tigers and leopards. In undertaking the background investigation and examining lessons learned with other projects, it became clear that limiting the guide to a few "charismatic" species would do little to advance road-wildlife impact reduction and that there is often no 'Best Practice', but rather a number of well documented approaches and avoidable pitfalls in the planning of land transportation development in proximity of sensitive wildlife habitats. It was therefore felt that a broader framework was needed and that "Environmental Guideline" would be a more appropriate title.

Land transportation projects are perhaps the greatest direct and indirect causes of wildlife degradation in any type of development project. Not only can they bring out physical displacement of species and cause habitat degradation but they can also induce increased resource stress and depletion by making human access to an area possible or easier. Thus, it was considered to bring out this Guideline.

Well known mitigative measures exist, yet they are typically poorly understood and implemented. A basic "how-to" guideline was therefore considered to be a useful tool for Bank staff, borrowers and consultants in South Asia, but also for the land transportation sector as a whole.

The work was also given a regional emphasis, since there is a huge emphasis on road development in India and South Asia. For example, in India over 13,000 km of roadway is now in the planning stage and 11,285 km in Sri Lanka and 201,182 km in Bangladesh are now already in use. With this activity there are consistent documented recurring environmental

concerns related to roads and wildlife. As well, the countries in the region are in the process of strengthening their environmental institutions, regulations and policies, and this Guide was seen as contributing to this momentum.

It is hoped that it will inspire others to contribute case studies on 'lessons learned'. The team's idea is to create a web-based document, where the submission of case studies would be encouraged, then added to the website database and made available to all users. I hope that this volume will stimulate other regional, national or sub-sector specific works, such as for Pakistan, or Bangladesh or coastal zones and urban transportation.

The Guideline, in its present form, evolved from a need to provide a critical mass of information to transportation sector professionals. Based on a knowledge of the expectations of Indian and South Asian professionals, the notion of a short report as originally envisioned by the World Bank-WII-CEC team, did not meet that need. After consulting the Bank, WII and CEC Ltd. moved forward to publish this volume. This Guideline will also be available, in a slightly abridged form, on WII's and CEC's website.

Geza C. Teleki

President, CEC Ltd.

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