

Management of National Parks and Sanctuaries in India

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The protection of nature is a very old tradition in India, deep-rooted in its cultural history. Hunter-gatherer societies established sacred groves several thousand years ago, which remain widespread today. As early as the 4th century BC the establishment of forest reserves and special sanctuaries for wild animals was advocated in the *Arthasashtra*, a manual of statecraft. Subsequently many rulers set up and maintained reserves for hunting purposes. A number of these have remained largely intact and provided the basis of the present network of national parks and sanctuaries in India, which dates back to the early part of this century. The number of protected areas has risen rapidly in recent decades, from 65 national parks and sanctuaries in 1960 to 472 by 1989, extending over a total area of about 131,800 sq km, or 4 per cent of the country. In view of the numerous other pressures on land this achievement is remarkable.

Establishing protected areas is, however, only the first step: managing them in the face of mounting pressures is becoming an increasingly formidable task, demanding the reconciliation of wildlife interests with human needs and aspirations. Aware of many of the deficiencies in the existing network, the Government of India is to be congratulated for sponsoring a survey of its protected areas, the results of which are reported in this book. The survey, using a questionnaire

approach, was carried out by the Environmental Studies Division, Indian Institute of Public Administration, under the direction of Shekhar Singh. Based on a sample of 249 protected areas, this study must rank as among the first of its kind and the dedication and disciplined approach of the research team is evident in its meticulous and exhaustive treatment of the data. The report is divided into five sections, with chapters on legal status, natural resources, human activities, management and recommendations, supported by numerous tables of statistics, which fill over half the volume.

Perhaps the most startling finding is that only 40 per cent of national parks and 8 per cent of sanctuaries sampled are legally designated; the rest have only been initially notified and await completion of legal procedures. The boundaries of the great majority of protected areas, therefore, are not final—some may change during the settlement process. With some 56 per cent of national parks and 72 per cent of sanctuaries inhabited (at densities exceeding the national average of 2.5 persons per hectare in 10 sanctuaries), it is perhaps not surprising that legal procedures take on average 3 years, and in some cases up to 8 years, to complete.

Protected areas are subjected to ever-increasing pressure from exploitation, both legal and illegal. Grazing of livestock, for example, is permitted in 39 per cent of national parks and 73 per cent of sanctuaries, but the incidence of illicit grazing is much higher. Similarly, timber continues to be legitimately extracted from 16 per cent of national parks and 43 per cent of sanctuaries. It would appear that, in general,

management is not equipped to deal with the scale of the problems that threaten many of India's protected areas. Only an estimated 50 per cent of national parks and 31 per cent of sanctuaries have management plans. Most of these are never approved by respective chief wildlife wardens, which means that budgets are seldom met in full or on time.

The study has its shortcomings and the authors readily acknowledge the fact that responses to the questionnaires have not been independently verified. This is being addressed, with each protected area being visited as part of an ongoing project to produce state protected area directories.

Overall presentation of the data is clear and concise, although statistics summarizing some of the geographical and biological features of protected areas in Chapter 2 could have been presented in a more meaningful context. Data showing the frequency distribution of forest types within protected areas, for example, could have been accompanied by statistics summarizing the national coverage of the different forest types, in order to identify gaps in the network. In the annexed section on international conventions, it is unfortunate that no mention is made of the World Heritage Convention, in which India is an active participant, with five natural properties designated under the Convention to date.

Such criticisms do not detract from the value of this report. Not only does the study provide a wealth of useful information on India's protected areas for wildlife managers, scientists and politicians alike, but it also serves as a model that could be usefully adopted in other countries.

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