

People
and
plants

C O N S E R V A T I O N S E R I E S

BIODIVERSITY AND TRADITIONAL KNOWLEDGE

EQUITABLE PARTNERSHIPS IN PRACTICE



EDITED BY SARAH A. LAURIE

THE TAI NATIONAL PARK IN CÔTE D'IVOIRE: DEVELOPING RESEARCH RELATIONSHIPS THAT BENEFIT THE PARK AND LOCAL COMMUNITIES¹

Jeanne Zoundjihépon, Bilé Mathieu and Michael J De Pauw
(WWF Côte d'Ivoire)

The Tai National Park

Situated in the south-west of Côte d'Ivoire, the Tai Forest represents one of the last remnants of West African dense humid forest, having survived the great periods of the quaternary era (Riezebos, 1994). It is highly diverse, with a number of endemic species (Guillaumet, 1967; 1994; Aké Assi, 1984; Oates, 1983; Allport et al, 1994). As a result of its biological diversity, the Tai National Park (TNP) has attracted the attention of the international research and conservation community.

The history of the national park goes back to 26 April 1926 when a park refuge was created with a surface of 960,000 hectares (ha). Since this time, the park refuge has undergone several subsequent transformations. Decree 72.544 of 28 August 1972 established the TNP for the propagation, protection and conservation of wild animal and plant life for scientific and educational purposes, and for public recreation. On 28 April 1978, the TNP was included as a biosphere reserve as part of the United Nations Educational, Social and Cultural Organization's (UNESCO's) Man and the Biosphere (MAB) Programme. On 17 December 1981, the TNP was included as a world heritage site by UNESCO.

In 1993, the TNP was placed under the management of the autonomous PACPNT (Autonomous Conservation of the TNP project) for a seven-year trial period. If this approach is effective, the project could become a model for the management of other national parks in Côte d'Ivoire. Core funding is supplied by KfW (the German Kreditanstalt für Wiederaufbau) and by the Ivorian Ministry of Environment and Forests through its DPN (Department for the Protection of Nature). Additional financing is supplied by MESRS/DR (the Department of Research of the Ivorian Ministry of Higher Education and Scientific Research), GTZ (the German Gesellschaft für Technische Zusammenarbeit), WWF and Tropenbos-CI, the Tropenbos Foundation in Côte d'Ivoire. Each of these partners has its own responsibility in pursuing the long-term protection of TNP. GTZ deals with training and sustainable development activities in the area surrounding TNP. WWF is responsible for surveillance and training of park wardens, and Tropenbos-CI coordinates the scientific research component of the project.

Research permitting process

Research is the only legally authorized activity within the park. Researchers wishing to work in the TNP must apply for permission to the Ministry of Higher Education and Scientific Research (MESRS). Applications are coordinated by the TNP Scientific Council, which was established to prioritize and guide research activities in the TNP. The Scientific Council comprises some 20 members and includes all project partners, representatives of local communities and non-governmental organizations (NGOs) working in the area. The permanent core of the council includes MESRS, Ministry of Agriculture and Livestock (MINAGRA), PACPNT and the Tropenbos-CI.

The Scientific Council reviews requests to conduct research in the TNP in light of park objectives and research priorities set by the council, and interest to avoid damage to the park, and advises MESRS, which authorizes research based on this advice. Authorization papers are then sent to the DPN, which grants permits to enter the park. Thus, research activities within the TNP are subject to the granting of a dual authorization:

- 1 a research permit granted by the research department of the MESRS following recommendations made by the Scientific Council;
- 2 an entry permit into the TNP delivered by the Department for the Protection of Nature of the MINEF.

These permits include both general and case-specific obligations that bind researchers. General obligations include sharing of research reports (three copies for MESRS and two for MINEF); good researcher behaviour and conduct in the field; respect for rules of the park; and avoidance of damage to the park through research.

The Scientific Council undertakes consultations with a range of affected stakeholders – including local communities and NGOs active in the area – in order to identify priority needs for research and any concerns associated with the research process. The council draws up a multiyear research plan or 'PPA'. The most recent plan was elaborated by Tropenbos in 1994 and revised and adopted in April 1997. Research priorities for TNP identified in the PPA include, in particular:

- inventory of the current knowledge on biological diversity of the park, and synthesis of existing information and knowledge of the TNP;
- study of means to restore biological diversity in the exploited areas;
- identification of the indicators for maintaining biological diversity in the park;
- analysis of the costs and benefits derived from the conservation of the park;
- study of species of special concern;
- optimal use of land;
- ecological interactions important for the conservation of biological diversity;
- influence of human activities on the biological diversity of Tai National Park and its surrounding area;
- social and cultural perception of the forest by local communities;
- participation of local communities in the management of Tai National Park and the study of mechanisms employed in participatory land-use planning;
- identification of new sources of food and monetary income for the local communities.

The Tropenbos Foundation coordinates the implementation of research and integrates results in ways that are relevant for park management. Many research activities proposed for the TNP will not fall within the PPA, but the council often approves them in order to further scientific understanding of important problems. For example, the World Health Organization (WHO) has undertaken studies related to the Ebola virus in the park.

The TNP is the only protected area in Côte d'Ivoire with a functional Scientific Council. The Scientific Council acts as a mechanism for granting prior informed consent for research in the park, but has no legal means to enforce the conditions it attaches to research. To date, issues raised by the Convention on Biological Diversity (CBD) are not

explicitly incorporated into the permitting process. A national access and benefit-sharing framework is needed to guide research within the TNP and elsewhere in Côte d'Ivoire, in keeping with recommendations made by the summit of Organization of African Unity (OAU) heads of state in June 1998 in Burkina Faso.

Ways in which biodiversity research might benefit the park and local communities

Some 2500 publications have been written on the biological diversity of the TNP. Although a review of several decades of research in and around Tai National Park has been compiled into a book, *Le Parc National de Tai, Côte d'Ivoire* (Riezebos et al, 1994), many of these publications are not made available in French and few are disseminated to park staff or within the country. It is often the case that even MESRS does not have access to critical information generated by studies of biological resources. Decree 96,613 of 9 August 1998 established a Centre for Research in Ecology (CRE) to help coordinate ecological research by setting up a network for information and data exchange concerning ecology and the environment; and to promote regional and international cooperation in the field of ecological research. The centre is working to gather and make available documentation concerning each of the parks and reserves in Côte d'Ivoire.

Research can generate a range of benefits for the country, and it is important to ensure that these benefits are realized. For example, research generates data and collections that are important for national conservation efforts, including providing information important for park management and policy development. Research can include training of national researchers and research assistants in the park; and researchers can produce results in materials that are useful for local communities and also for ecotourists. For local communities, research projects can provide training, build infrastructure in the village and help with micro-enterprise projects. In Paule Oula, for example, some researchers paid for a school, educational materials and teachers' salaries. The population can also benefit from increased income from ecotourism.

For the park, research provides invaluable data on plant and animal species and helps with more effective in-situ or ex-situ conservation. For example, in the TNP, research results helped to develop a domestication programme, *Coula edulis*, which furnishes wood resistant to termites and *Tieghemella heckelii* (Makoré), a species in great demand. This project aims to domesticate forest trees prized by farmers and to reduce pressure exerted on the park. In another project, researchers are extending their results to farmers regarding green fertilizers, such as *Pueraria spp*, *Mucuna spp* or *Chromolaena odorata*, which can replace chemical fertilizers. Finally, research has also drawn attention to the enormous biological diversity of the TNP, and has led to national and international attention on the park.

In order for these benefits to be realized, however, a core of problems must be resolved, including: lack of translation of publications into the working language (French); poor dissemination of research results; lack of monitoring results and poor communication between researchers and park managers; and limited translation of research results into a useful form for local communities and non-specialists. By addressing these problems, government ministries, the Centre for Research in Ecology, and the Scientific Council, in collaboration with the Tropenbos Foundation, can help to establish the basis for equitable research relationships in line with the objectives of the Convention on Biological Diversity.