establish their numbers and distribution and other demographic parameters in some of the known habitats in the Selous. This is one area of utmost importance for which country requests assistance.

The *D.b.michaeli* population in the Serengeti is steadily increasing since our last meeting with an additional birth early this month making the number to be 8. This is realized from a founder population of 2 females and one male put together at one locality in 1996.

The Ngorongoro Crater has lost a total of 5 animals since mid-2000. Lions preyed upon one calf in May 2000 and the mother of the fateful calf died in September 2000. It has recently been brought to the attention of NCAA that the mother might have died of serious injuries (possibly following an encounter with an elephant or sustaining injuries after falling off the crater rim). However, more dramatic this year, an unconfirmed Babesiosis (a tick-borne protozoan disease) is suspected to have claimed the lives of a one-year female calf (August 2000) and two cows, both in January 2001. As I present this information, the Permanent Secretary and the Director of Wildlife are visiting the Ngorongoro to listen to a report by veterinary experts. A prolonged drought that claimed lives of many other herbivores including some 300 buffalos on the Crater floor is suspected to have contributed greatly toward poor animal health and consequently boosted tick-borne disease attacks following poor animal conditions.

Measures taken to safeguard the crater population

Between 23 and 29 January 2001, Dr Peter Morkel, with Tanzanian vets, embarked on a prophylactic treatment of the remaining crater population (13 animals) by darting them with a dose of *Berenil*. After the treatment, further investigation was recommended to involve experts from outside Tanzania. Everybody is worried as to whether the unconfirmed disease will spare this rhino population. The *D.b.michaeli* in Mkomazi is doing fine while expectations of new calves from this re-introduced population (since 1997) are haunting the author.

Discussion

Mr du Toit said that there appeared to be problems with administrative issues in Tanzania. The 1997 national rhino strategy had been approved but not endorsed, and the MoU for the Selous Rhino Trust had not been approved. There was little enablement of rhino conservation effort by the Government of Tanzania. On the strategy, Mr Maige said that there had been problems of resentments by successive Directors of Wildlife of their predecessors, and individual internal clashes were responsible. There would be a new workshop to review the rhino strategy document. A meeting of the rhino steering committee was pending. On the MoU, there had been a problem of inclusion of a clause relating to tax-free exemption; SRT is a charity, so not exempt. Mr du Toit asked if the SADC forum could assist on the ratification of the strategy. Mr Maige said that there was no need for intervention on MoU.

Zambia (George Kampamba)

Introduction

Wildlife in Zambia is the main basis for tourism development. The Ministry of Tourism is entrusted with the responsibility to foster ahead Zambia's economic development through tourism. The level of management profile and participation by constituent stakeholders will determine how Zambia realises consumptive and non-consumptive tourism potential in full.

Transformation from national parks and wildlife service to Zambia Wildlife Authority

The process of change from a Government Department to an autonomous company, the Zambia Wildlife Authority (ZAWA), took effect on 01 November 1999. The Ministry of Tourism provides policy guidance to the Zambia Wildlife Authority. The Zambia Wildlife Authority was established by the Government of the Republic of Zambia and is governed by Zambia Wildlife Act, No. 12 of 1998. The Board of Directors heads the Authority (Zambia Wildlife Authority, 1998). The primary objectives of ZAWA are as follows:

- To control management of National Parks for conservation and enhancement of wildlife ecosystem and biodiversity;
- To promote opportunities for the equitable and wise use of resources in National Parks;

- To develop and implement management plans to enhance the benefits to local communities and wildlife resource;
- To promote local community development in wildlife areas in order to enhance wildlife productivity and maintenance of sustainable biodiversity in National Parks and Game Management Areas;
- To reverse the decline in wildlife resources;
- To raise the profile of wildlife management for sustainable flow of benefits accruing from wildlife utilisation;
- To promote participation of local community and private entrepreneurs in order to improve the wildlife resource base.

ZAWA's organisational structure

The legal establishment of ZAWA provides for de-linkage from civil service administrative structure in order to facilitate a much more efficient and effective provision of services for management of the wildlife estate. ZAWA is expected to attain high profiles of management levels and conservation of biodiversity. The philosophies and approaches of the former management regime are changing rapidly in terms of strategic objectives, roles and functions.

The new organisation structure presently reflects the following attributes (Zambia Wildlife Authority, 2000):

- Wholly mandated autonomous entity;
- Vividly top class managerial capabilities;
- Allocation of roles and functions that strengthen coordinated approach to achieve institutional policies and objectives;
- Strong motivation for positive response to execute policies and instruments of wildlife management.

The Chief Executive Officer will head the Authority. Below him are five Directors:

- Director Conservation and Management
- Director Planning, Research and Information Services
- Director Commercial and Corporate Services
- Director Finance and Human Resources
- Director Game Management Areas

Rhino conservation in Zambia

Brief background: Both black rhino (*Diceros bicornis minor*) and white rhino (*Ceratotherium simum*) were widely distributed at high densities in Zambia. The white rhino ranged the upper Zambezi while black rhino population was in most parts of the country. Lack of proper management strategies, objectives and appropriate policies on rhino management resulted into the decimation of Zambia's population.

Creation of metapopulations of rhino: We believe that biotic diversity is good and has the intrinsic value. Re-establishment of subpopulations and high profile management in Zambia will contribute to the conservation of a sub regional metapopulation. In certain cases rhino populations have been split with no contact of individuals between subpopulations. Such are situations in National Parks, ranches and zoos that host subpopulations of the rhino that came from contiguous populations. In this regard ZAWA has planned to pursue management interventions which will re-build rhino populations and allow gene flow between the national subpopulations. The rhino re-introduction plan of ZAWA is to re-establish ecological balance and increase the population size in areas of historic range.

Rhino Policy: The history about the species is seen as crisis management of the animals in the wild that lead to their decimation national wide. In view of this it is the intention of the Government of Zambia to reverse the trend and restore the rhino as a national heritage. Zambia through ZAWA commits itself to a rhino rehabilitation plan.

ZAWA plans to embark on re-introduction of black rhino and intensively manage the white rhino in Mosi-oa-tunya National Park. The working paper on development of the policy for rhino management in Zambia is ready and will culminate in a legal instrument for rhino conservation.

Summary of project proposals

The newly established Research Department of Zambia Wildlife Authority (ZAWA) has developed an overall research plan and prioritised research and monitoring activities for the year 2001. The concept notes given below represent some of the priority research and monitoring activities that should be undertaken by the Department this year.

Formulation of policy for rhinoceros management in Zambia

The proposal is designed to facilitate the formulation of a policy framework for rhinoceros management in Zambia. The main output will be development of an institutional framework to guide the management and monitoring of rhino in the country. It will also ensure the species long-term survival for national and regional socio-economic benefits through the promotion of regional tourism and conservation of biodiversity. Management objectives and Action Plans are presented in draft form and will provide for promotion of rhino populations on private game ranches. The policy document will culminate into development of a legal framework by the year 2002. The support requested is therefore for a stakeholders' workshop for input to finalise the policy document.

Habitat evaluation for the re-introduction of rhino in Zambia

Stressing the importance of promoting regional cooperation through conservation of biological diversity and development of sustainable regional tourism, ZAWA recognizes the need to conduct habitat evaluation in priority National Parks to facilitate the rhino reintroduction program and the implementation of an effective rhino surveillance program; this will guard against direct and indirect human induced impacts on the species and particularly those that caused the species' local extinction. The major outcome of this strategy, after the habitat evaluation, will be the known feasibility of reintroduction by October 2001 and improved policing capacity to ensure the species' long-term survival. We are resolved to establish a population of 10 individuals by the year 2010 in North Luangwa National Park. This will be a stock seed for translocations to restock other areas and justify Zambia's membership to SADC Rhino Group.

Study tour to rhino conservation areas in the SADC region

Aware of the urgent need to develop rhino sanctuaries as well as capacity to provide the required technical guidance to plan and implement the program, ZAWA recognizes the need for specialized knowledge, skills and capacity of the staff involved in the planning and implementation of this strategy. To that effect, ZAWA staff involved in this program, in addition to their respective professional knowledge find it necessary to undertake a regional tour to various private and publicly owned rhino management facilities in the sub region. This will provide the team with the relevant exposure, experience and skills needed to guide the implementation of this program.

Management of white rhino population in Mosi-oa-tunya National Park

Except for one young dropped in August 1995 the population has not procreated since re-introduction in 1994. This status is a source of concern to us. It is therefore important to investigate the factors that are limiting the population to low density and improve the management profile of the population. Expertise will be drawn from the Research wing of the Zambia Wildlife Authority with support from Research experts/professionals in the region. Noting that there is a potential threat of reduction or loss of genetic diversity of the white rhino population in Mosi-oa-tunya National Park, ZAWA recognizes the need to improve management of the species, to enhance the reproductive status. The target is to establish a population of at least 10 individuals by 2010.

The main outcome of this project will be improved habitat management and monitoring of the species The objective of the investigation is acquiring an understanding of the factors that are limiting the population of rhino in Mosi-oa-tunya National Park for improved management. The rhino to be studied for improved management represent remaining groups of founder populations from which the revival of future populations depend. They are a unique and formidable component of Africa's biodiversity. The rhino has always been viewed as one of the two most valuable species in Zambia, the other being the elephant. The implications therefore if this project is not undertaken are that the only rhino population available in the country would head for demise. The population may not be revived, as there has not been any reproduction since 1995. This situation needs to be investigated. We have to find a way for continued propagation.

Conclusion

Zambia recognises the rhino program and the facility as vital for conservation of biological diversity and contribution to the development of the national economy through enhanced tourism. The SADC Program has the potential to propel rhino conservation in Zambia to greater heights and the valuable support to ZAWA will help in achieving the set goals and aspirations of our people. Last but not the least I want to thank the consortium for their support to the course of rhino conservation and the SADC Regional Program for Rhino Conservation, the organisers of this meeting.

Discussion

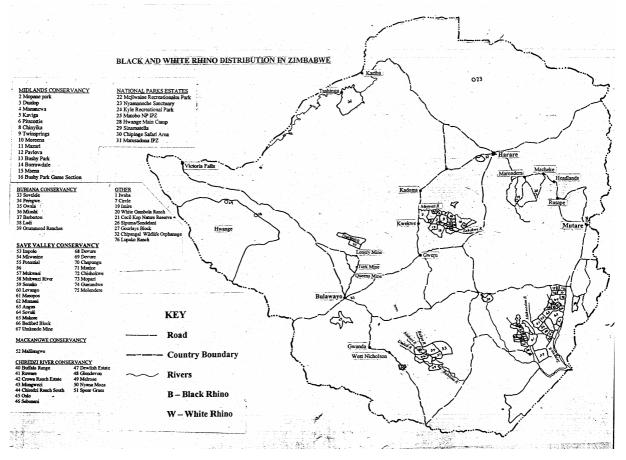
It was generally felt that the fenced area for white rhinos as Mosi-oa-Tunya NP (10 ha) was far too small, and could be the main reason for the lack of performance by this small population.

Zimbabwe (Florence Msipa)

Population

The current black rhino population is still estimated at 460 individuals and the white rhinos at 200 individuals.

Distribution/Range



There are five major conservancies in the country, namely, Bubiana, Save Valley, Chiredzi River, Malilangwe and Midlands Black rhino conservancy. The first four are collectively known as the lowveld conservancies. In addition to the five, there are 6 small conservancies (single farmer), two breeding programmes, four IPZs, two recreational parks, a sanctuary, a nature reserve and a forestry area.