

species in certain areas of Cunene and Kuando Kubango provinces but no data indicates their occurrence in the north of the country.

The existing data on white rhino refers to the introduction of ten to Kissama National Park in 1968. Since 1975 no white rhino has been found in the Park, so it is assumed that the ten were poached. The two species are classified as protected species in Annex I of the hunting legislation.

The Ministry of Fisheries and Environment is the organ responsible for environmental matters. The Ministry of Agriculture and Rural Development through the Institute for Forestry Development and National Directorate of Agriculture and Forestry has the responsibility of implementing policies and strategies regarding the sustainable use and conservation of wildlife and forestry resources.

During the last 24 years no study had been carried out to determine the status of the wildlife resources in the country due to several factors, like the instability occurring in the country since 1975, and the lack of national plan or programme on wildlife management. In order to ensure sustainable utilisation of wildlife resources and to protect biodiversity, Angola requires technical assistance to outline a national management programme for natural resources focussing on the wildlife and Protected Areas and outlining the role that wildlife can play in the rural development process of the country.

### 3.11.2 Botswana (Isaac K. Theophilus)

Black rhinos are believed to be nationally extinct. We however hope to reintroduce some starting with a deal between Namibia and Botswana. White rhinos were extinct in the 1960s and were reintroduced from Natal in the late 1960s and early 1970s. The population started building up but was severely depleted by heavy poaching in the early 1990s. Government then undertook to capture and translocate all remaining wild populations to secure protected areas. Botswana is currently developing a long-term management plan for rhino conservation. This document is expected to guide all would-be rhino owners. The long-term goal is to reintroduce rhinos back into the protected areas where they will be monitored.

### 3.11.3 Malawi (Gibson Y.A. Mphepo)

First documented evidence of black rhino dates back to 1922 when "they were found virtually everywhere." (Bhima and Dudley, 1996, quoting Dudley and Stead, 1977). In the 60s and 70s when most areas were declared national parks and wildlife reserves, black rhinos existed in 6 out of 9 protected areas (Vwaza, Kasungu, Nkhotakota, Lionde, Lengwe and Mwavi) (Ansell and Dowset, 1988). By 1985, black rhinos only existed in two protected areas: Kasungu and Mwavi (Bhima and Dudley, 1996). By 1990, black rhinos were declared extinct in Malawi (Bhima and Dudley, 1996).

Two mature black rhinos (6 years of age, a male and female) were translocated in 1993 from Kruger National Park to Lionde National Park in Malawi. In 1999, two more black rhinos (a male and a female) were translocated from South Africa to the same park, Lionde

The translocated rhinos were initially kept in bomas to assess their adaptability to Lionde. While in the boma, they were given branches of different grass and tree species to assess their food preference, rate of defaecation and urination and body

condition were also examined. They are currently kept in a 1.5 hectare sanctuary fenced with electrified wire. An artificial water hole was dug to avoid water shortage during the dry season. The rhinos are heavily guarded by law enforcement scouts working on shifts. Research is being done to monitor their movements, food preference and interaction with other mammals.

The rhinos have adapted well to Lionde. Body condition has improved, they are feeding on the dominant vegetation type, mating, interacting well with other mammals etc. The first female translocated has given birth twice (both young are females)

There have been a few problems: some tree species, such as *Euphorbia ingens*, are heavily browsed to the extent of dying; overbrowsing is likely to occur if the size of the sanctuary remains as it is now.

The rhinos will remain in the sanctuary until their security can be assured in the wider area of the park. Funds permitting, future translocations are proposed for other protected areas where rhino existed some time back. The size of the sanctuary will have to be increased with the increase in number of the rhinos and other mammals in the sanctuary.

#### REFERENCES:

Ansell, W. F. H and R. Z. Dowsett (1988). Mammals of Malawi. The Trendline Press, Zennor, St Ives, Cornwall.

Bhima, R and C. O. Dudley (1996). Observations on the two black rhinos in Lionde National Park, Malawi. Pachyderm No. 21.

### 3.11.4 Mozambique ( S. B. Mahanjane and F. Longamane )

In Mozambique wildlife has traditionally been an integral component of livelihood systems of the people. It has provided meat and skins as well as being an important part of ceremonies and culture in general.

Portuguese settlers hunted for sport, meat, skins, ivory and horn as they spread into the interior of the country. In the nineteenth century and early twentieth century, the big game hunters were still prevalent. Combined effects of commercial hunting meant that the numbers of large mammals had declined to such an extent that the colonial authorities established some protected areas. The relative isolation of the Niassa Reserve from any major centres of population may have protected to a limit extent the wildlife population during the 1960s and 1970s when illegal off-take in the rest of Mozambique is said to have been high.

As the Maputo Special Reserve was offering habitat in good condition for rhino, in 1969-70 white rhino were introduced from Umfolozi Game Reserve, South Africa. After a few years the species was extinct once more. During the civil war period, mammal populations in the country were severely affected.

Rhinos in Mozambique are presently rare and almost extinct. However, some areas still provide sporadic reports on rhino presence, such as:

The presence of black rhino within the Niassa Game Reserve, in Angonia District (Tete Province), and in Coutada 16 as well as in Massingir District in Gaza Province;

In November 1995, spoor of black rhino was found near the Meulu River in the Niassa Game Reserve in Northern Mozambique;

In May 1994, the locals around Montepuez in Cabo Delgado Province spoke of the existence of rhino in northern Mozambique. Enquiring en route from Nyamapanda