MOZAMBIQUE (Task 1.2 – 1.10)

Review by Rob Brett (Programme Co-ordinator) (Country visit with Giuseppe Daconto (CESVI): 19 – 22 September, 2000)

1 MECHANISMS FOR PLANNING AND COORDINATING NATIONAL RHINO CONSERVATION EFFORTS

1.1 Rhino Management Authority

The rhino management authority is the *Direcção Nacional de Florestas e Fauna Bravia* (DNFFB), which currently sits under the Ministry of Agriculture.

1.2 National Rhino Strategy

There is no formal rhino conservation strategy document.

1.3 Action Planning

There is no action plan for rhino conservation in Mozambique.

1.4 Coordination Mechanisms

There is no formal committee or structure for planning rhino conservation in Mozambique.

1.5 Focal Point

Following requests, both in an initial letter from SADC WSTCU requesting assistance with this country review, and during the country review itself (to the DNFFB National Director, Mr Cuco), DNFFB have notified the SADC WSTCU that Mrs Felismina Longamane Langa will be the focal point for the SADC rhino conservation programme.

1.6 Potential for facilitation by SADC rhino programme

Although this was not requested by any DNFFB representatives interviewed during the country visit, there is potential for facilitation or assistance by the SADC RPRC for DNFFB to produce a strategy document. Given the uncertainty about the presence of any rhinos in Mozambique, the development of any agreed framework for rhino conservation in the country will probably have to wait until presence of rhinos has been confirmed and follow-up surveys have been carried out. The appointment of a single person to act as focal point for any assistance from the programme would be a very useful first step, particularly for gathering compiling information on reports of rhino remaining in the country, coordinating follow-up activities (surveys and monitoring, etc), and monitoring information on rhino horn trade.

2 EXISTING MECHANISMS FOR COLLABORATION WITH OTHER RANGE STATES (Excluding SADC Rhino Programme)

2.1 Co-ordination with other range states

There are a number of existing trans-frontier conservation initiatives involving Mozambique and its neighbours, including South Africa, Zimbabwe and Tanzania, although none have any specific focus on rhino conservation. Nevertheless, the future development of conservation areas on the borders of Mozambique has major implications for rhino conservation, particularly where there is potential for rhinos to be protected within a larger area of suitable habitat within a TFCA (e.g. Kruger NP/Coutada 16).

Before independence, there was formal co-operation with South African wildlife authorities. In 1969, Natal Parks Board moved 71 white rhinos from Umfolozi GR to Maputo Special Reserve, and 12 to Gorongoza NP (all subsequently killed during the civil war in Mozambique, and during the presence of SADF, particularly in Maputo SR). More recently, existing co-operation on rhino conservation between SANP, the Malawi DNPW, and Mozambique DNFFB was proposed (A Hall-Martin), involving the possible capture of remaining black rhinos from Mozambique and their translocation to Liwonde sanctuary in Malawi to increase the genetic diversity of that population. The ultimate intention was to

move surplus rhinos from Liwonde back to a protected area in Mozambique, and to Kruger NP. It is not clear whether there was any formal communication with Mozambique over this proposed plan, and these plans have had no result.

The Catuane project (TFCA) on the southern border of Mozambique with South Africa involves cooperation with KZNW (Ndumo GR), and there are presumably rhino and law enforcement-related links between DNFFB and KZNW, particularly when (or if) rhinos stray from South Africa into Mozambique. Finally, the Endangered Species Protection Unit (ESPU) of the South African Police carried out a survey of Mozambique (available through TRAFFIC SA), although it is not clear what degree of cooperation this work had with DNFFB.

2.2 Existing commitments with other SADC range states

Beyond the present TFCA programmes with South Africa and Mozambique, there are not believed to be any commitments with other SADC rhino range states (e.g. to transfer rhinos, or undertake joint law-enforcement).

3 RHINO POPULATION STATUS

3.1 Summary Statistics on rhino numbers, distribution and trends

Indications of presence of rhinos in Mozambique persist in the form of reports of sightings or sign of rhinos from three areas in the past 12 months (Niassa GR, Tete Province, Gaza Province (Coutada 16)), and possibly from two others (Zinave NP, Gile GR). The information is insufficient to make any estimate of numbers of rhinos, and in general the reports of rhinos have not been followed up or confirmed.

In **Niassa GR**, sign of rhino has been reported by the reserve warden, Baldeu Chande, and one of the concession holders in one of the areas bordering the reserve. In **Tete** province, rhinos have been sighted south of Cahora Bassa Dam (Luis Namanha, pers comm.) close to the border with Zimbabwe. In **Gaza** province, arrests have been made of poachers and rhino horns seized (see 10 (a)). It is not clear whether these were from rhino killed in Coutada 16 or from within Kruger NP. Finally an unconfirmed report was recently received (September 2000) of rhino sign in Zinave NP (on the south side of the Zambezi), and unspecified rhino reports were said to have come from Gile GR.

Reports of rhinos in Niassa GR have been available since 1995, when a ground survey provided evidence of several animals remaining (O'Connor & McKay 1997: estimated of between 10-50 animals: E Bolton). A rhino was sighted from a helicopter and photographed in Niassa GR in 1996 (Madal/lan Craig). The most recent surveys for rhinos in Mozambique (Tete: WWF 1998, Gile GR: Chande/Zolho 1995/96) have failed to locate any rhinos. Although there may be black rhinos remaining in Mozambique (with Niassa GR the most likely area for following up reports with surveys) it seems certain that there are no viable breeding populations of rhinos (black or white) remaining in Mozambique (Anstey 2000).

3.2 Population monitoring and reporting

There are presently little or no rhino monitoring activities within DNFFB, and information on rhinos such as there is comes from isolated reports from villagers, hunters and/or scouts (e.g. Niassa GR). Consequently there is no useful information for status reporting or planning for rhino conservation activities. It is, however, encouraging that there have been recent reports of rhinos, and that arrests have been made and horns recovered (10 (a)). Communications between the remote areas where rhinos have been reported have been sufficient for these reports to be compiled by DNFFB for the SADC range states meeting held in March 2000 (Mozambique country report: Mahanjane, S B & Longamane, F).

3.3 Requirements for surveys and monitoring

Surveys and follow-up monitoring/surveillance of rhinos are required in all areas of Mozambique from where plausible reports of rhinos still come in, with Niassa GR probably the area with best prospects for a successful survey to be followed up with some form of improved surveillance and protection for animals located. However, the planning and implementation of surveys need to be based on confirmed reports or evidence of a rhino sighting or rhino spoor or sign (e.g. rhino dung, photograph of rhino midden or spoor). Such evidence has not been forthcoming in the past 24 months, and would be

an essential prerequisite to committing the resources needed for surveying rhinos in remote areas. If reports of rhinos are also being received consistently over time from a relatively small area (e.g. $< 500 \, \mathrm{km^2}$), there will also be good reason for follow-up with a more detailed survey. As was the procedure for the 1998 Tete exercise, surveys must be timed for dry season periods when water points are most limited. Ground surveys must be based on preliminary aerial reconnaissance to establish the location and distribution of water points and other areas likely to harbour rhinos. These can then be examined subsequently with more intensity.

The first measures necessary are:

- to improve the lines of communication between areas from which rhino reports are received, and a
 focal point/information officer in DNFFB and/or representatives in the provinces (e.g. SPFFB,
 private sector).
- to thereby obtain confirmation of the presence of rhinos from these areas with follow-up visits by persons able to confirm rhino spoor or sign.
- to plan subsequent survey and surveillance operation based on accumulated evidence from reports consistently received from individual areas.

The lack of information is a definite constraint to development of any strategy for plan for rhinos in Mozambique, and the SADC rhino programme is well placed to assist with support and/or coordination of survey and monitoring activities, including necessary training and equipment for field staff in situ.

4 MANPOWER AND OTHER RESOURCES FOR RHINO CONSERVATION

4.1 Anti-poaching resources

At present, there is probably inadequate manpower and capacity within DNFFB for protection of rhinos in any area of Mozambique.

Information on operating budgets for protected areas was not available. Detailed information on scout salaries was not forthcoming, but are less than 50 US\$ per month (US\$ 600 p a). Scouts in the Niassa GR are paid 700,000 Mt p m (ca. 45 US\$), plus rations.

Numbers of scouts deployed by protected area are shown below:

Area	Type	Size	Scouts	km²/Scout
Zinave NP	S	4207	25	168
Maputo GR	S	876	40	22
Gorongoza NP	S	5204	45	115
Niassa GR	S	>25000	65	>380
Coutada 16	S	11116	10	1112

4.2 Expertise available for specialised aspects of rhino management

There are several qualified wildlife veterinarians in Mozambique (Carlos Lopes Pereira, Samero Magane, Bartolomeo Soto, Samuel Bila (trained at Kruger NP on a course financed by FNP)), although the extent of their experience with rhino capture and translocation is probably very limited or nil. Some DNFFB staff at medium-level have received training in wildlife management at the SAWC and Mweka College (Tanzania). Otherwise there is probably no rhino-specific expertise available in Mozambique.

4.3 Specialised equipment available for rhino management

There is no specialist equipment available in Mozambique for rhino management, including capture equipment or vehicles.

5 PARTICIPATION OF NON-STATE AGENCIES IN RHINO CONSERVATION

5.1 Community Involvement

There are several initiatives and existing projects for community involvement in wildlife conservation, but none have a specific rhino component (yet). These include:

- Tchuma Tchatu Programme, DPAP, Tete Province: direct benefits to community from wildlife
- · Catuane Project (FNP): training
- SGDRN (Niassa Development Society): partnership between DNFFB, private sector (Madal), and communities for management of Niassa GR and surrounding blocks and community use zones

The future development of proposed TFCA areas that already have rhino populations (e.g. Kruger NP, Coutada 16) will necessarily have substantial community participation, and will probably depend on such. Future zoning of these areas for community and private sector involvement will have major implications for the opportunities for rhino conservation, particularly with regard to the requirement for fencing in areas of Mozambique adjoining Kruger NP (Coutada 16, Mapulanguene). The possible involvement of Italian Aid in the GKG TFCA through a project for a buffer area in Gaza province, presently under discussion, may provide additional facilitation in the future.

5.2 Local and International NGO Involvement

WWF (SARPO) has had recent specific involvement in rhino surveys in Tete province (WWF 1998), and is presently advising on the development of a management plan for Niassa GR. USFWS, Tusk Trust, and the Disney Corporation have contributed support to the SGDRN (Niassa Development Society): for running the Niassa GR (including law enforcement activities). Apart from the historical assistance to Maputo Game Reserve, there is no other specific NGO assistance to rhino conservation in Mozambique.

5.3 Private Sector Involvement

Grupo Madal is one of the constituents of the SGDRN (Niassa Development Society), which has an obligation of a minimum annual investment to Niassa GR. SGDRN manages the Niassa GR, including the provision of ground patrols and law enforcement in areas that are still believed to harbour black rhinos.

A recent study (Dinson 2000) of the Mapulanguene area (adjoining eastern boundary of Kruger NP, south of Coutada 16) has outlined potential zoning, wildlife stocking and ecotourism development within and around a core area of ca. 8,500 km², presently inhabited by an estimated 20,000 people. Estimates for eventual wildlife stocking include 931 black rhinos and 1,150 white rhinos. A lodge concession in the area (Sabi Nzonguene) has already been approved by the Mozambique Council of Ministers.

6 PROPOSED PROJECTS

Rhino Surveys in Niassa GR

SADC RPRC Activities: 2.1, 4.1

Lead agency: WWF

Collaborating agencies: SGDRN, DNFFB

Possible Timing: Semester 4

Given confirmation of the presence of rhinos within and/or bordering Niassa GR, a series of surveys will be carried out, initially using aerial reconnaissance to select target areas, followed by systematic foot patrols to locate rhinos and determine approximate numbers and range. Expertise for the surveys would be provided, including on-the-job training of DNFFB scouts by imported trackers, follow-up for continuous surveillance of any rhinos located, and development of plans for security and management of Niassa rhinos. Surveys and follow-up would be planned to preclude security risk to any rhinos as a results of these same activities (i.e. making any rhinos located more vulnerable to poaching). This exercise could be extended to other areas where reports of rhinos in Mozambique still emerge.

Support for Focal Point/Rhino Information Officer in DNFFB

SADC RPRC Activities: 2.1, 4.1

Lead agency: DNFFB

Collaborating agencies: IUCN Possible Timing: Semester 3

This project would facilitate the appointment of a focal point for the SADC rhino programme, and support his/her activities with technical input for an 'information officer' activities:

- establishing good communications with areas from which rhino reports continue to originate in Mozambique
- planning follow-up actions following initial reports, particularly confirmation and verification of rhino presence.
- · co-ordinating subsequent survey and monitoring activities

Planning for rhino conservation in TFCA area(s)

SADC RPRC Activities: 4.1, 4.2, 5.2

Lead agency: MET, NP PRU

Collaborating agencies: KZNW, SADC Rhino Management Authorities on request

Possible Timing: Semester 3

With current development of TFCA areas on the borders of South Africa and Mozambique (Kruger NP/Coutada 16/Mapulanguene), there is considerable potential for including rhino conservation areas within Mozambique included (e.g. Coutada 16, Mapulanguene), and adjoining Kruger NP. This project would extend existing facilitation provided by IUCN/SADC in the TFCA process with present donors (WB, KfW) to include planning for rhino conservation areas within future land use and management plans (KFW 2000). This would ensure that as agreements are reached on the development of these areas (control, zoning, participation, fencing, timing), protection and management of rhinos is still possible over areas with sufficient capacity to develop large viable populations of black and white rhinos within Mozambique, and extending from existing range within Kruger NP. The possible involvement of Italian Aid in the GKG TFCA through a project for a buffer area in Gaza province, presently under discussion, may provide additional facilitation in the future.

7 NATIONAL LEGISLATION AND POLICIES

Mozambique has a complex suite of legislation including sections relevant to rhino conservation, some of it old and outdated, but much in the process of revision. The context for rhino conservation is also complicated by the possibility of removal of some or all protected areas (e.g. selected National Parks with tourism value) to come under the Ministry of Tourism. Further, responsibility for co-ordinating environmental issues, including environmental law, presently falls under the Ministry of Environment.

The detailed **wildlife legislation** still operating is the hunting law dating from colonial times (EdeM 1955). This law covers hunting, protected areas (NPs), hunting areas (e.g. Coutadas) and regulations, and also lists of protected species (Mapa V, p 63), including black and white rhinos, and their (1955) value. The list of protected species (including black and white rhinos), and their value, was updated after independence (RdeM 1978). The existing protected areas are all described in the 1995 law; in some cases the reasons for their creation no longer exist, and their justification may no longer be valid. The system of Protected Areas in Mozambique is in need to revision to reflect this reality, and could involve the shedding of some Pas, the incorporation of other areas of great value that currently have no protected status, with some trade-off between the two.

The **land legislation** has been recently revised (RdeM 1997), and defines all aspects of land tenure. All land belongs to the state. However, land tenure can be secured after 10 years of occupancy *in good faith*, but this does not apply to Total Protection Areas (NPs, etc). There is a Biodiversity Strategy & Action Plan (1987), produced by the Ministry of Environment, which identifies a few places for special status, but has no framework for implementation. There is no provision for large mammals, or 'flagship' species. With the exception of elephants (DNFFB 2000), there are no strategies for individual species. Mozambique is a signatory to the African Convention on Conservation of Nature and Natural Resources (1981), and to CITES (1981).

7.1 Penalties

Recently, a new Forestry and Wildlife Law (RdeM 1999) has come into effect, which is framework legislation, still relying on the details of the old hunting law (EdeM 1955) for operation (Annex 7.1). However, it specifies offences (Article 41) including one for "committing acts that perturb or disturb wildlife" (1.(a)), which is punishable by a fine between Mt 2,000,000 (ca. US\$ 120) and Mt 100,000,000 (ca. US\$ 6000). "If the offence committed involves a rare plant and animal species, or those threatened by extinction as well as any others whose exploitation is forbidden" (which presumably includes both rhino species), "then the fine applied shall be 10 times the maximum value provided for in this article". A fine of Mt 1,000,000,000 (ca. US\$60,000) is clearly warranted for offences involving rhinos (including disturbing, unlicensed import or export, illegal hunting). There are additional aggravations (increased penalties, e.g. if a scout commits an infraction). The offences covered and penalties provided by this legislation are all infractions, rather than crimes; they are not brought to court, and no custodial sentence is prescribed, except in cases of failure to pay the fine (when the infraction becomes a crime). There is no provision in the 1978 revision for offences for possession of rhino horn.

7.2 Ownership of Rhinos

Ownership of game is covered by the new framework law (RdeM 1999: Annex 7.1). If game is reintroduced to a game farm or concessions area, it can be privately owned. Otherwise, all game is owned by the government of Mozambique. Article 29 deals with restocking of wildlife, and states that "anyone who causes the decline of wildlife shall be required to restock the affected species according to terms and conditions to be determined by a special decree".

8 DATA SOURCES

8.1 Names, addresses and contact details of all informants/interviewees

Arlito Cuco, Director Nacional, Direcção Nacional de Florestas e Fauna Bravia (DNFFB), Ministério da Agricultura e Desenvolvimento Rural, Praca do Herois Mocambicanos, C.P. 1406, Maputo. acuco@dnffb.imoz.com

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Anabela Rodrigues, Directora Geral, Sociedada para a Gestão e Desenvolvimento da Reserva do Niassa (SGDRN), P O Box 1232, Maputo.

Nigel Pollard, Special Projects, Grupo Madal, P O Box 1232, Maputo.

8.2 Documentation

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- DNFFB/IUCN (2000) National Strategy for the management of elephants in Mozambique.
- Estado de Moçambique (1955) Caça (Legislação). Compilação e Coordenação José Lourenço Farinha (dos Serviços de Veterinaria). 20th January, 1955.
- Gibson, D St C (1998) Aerial survey of wildlife in and around Niassa Game Reserve, Mozambique, October 1988
- KfW (2000) Transfrontier Conservation Areas. Financial co-operation between Germany and SADC. Draft Report on Consultant Mission 2-5-00 23-5-00.
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- República de Moçambique (1997) Sobre a Terra (Lei n.º 19/97); Regulamento da Lei de Terras.
- República de Moçambique (1999) Lei de Florestas e Fauna Bravia. Direcção Nacional de Florestas e Fauna Bravia (DNFFB), Ministério da Agricultura e Pescas. September 1999. (Free-Style translation into English by Patrick Mushove provided by IUCN Maputo).
- WWF (1998) Search for Black Rhinos in Tete Province, Mozambique (N Monks, survey team leader). WWF SARPO.

9 TRADE AND IMPORT/EXPORT OF LIVE RHINOS

9.1 CITES Management Authority

DNFFB is the CITES management authority, and the representative is S B Mahanjane. All licensing is done through National Director, DNFFB, including the import and export of live animals.

9.2 Veterinary Controls

For the import and export of live animals, licences from the National Directorate of Animal Production (Veterinary Services) are required.

9.3 Past Imports and Exports

The only rhinos known to have been translocated to (or from) Mozambique were the large batch of white rhinos moved to Maputo GR and Gorongoza NP from Umfolozi GR in the late 1960s.

Year	Source	Destination	No	Transaction
1969	Umfolozi GR	Maputo Game Reserve	71	Donation
1969	Umfolozi GR	Gorongoza NP	12	Donation

10 HORN STOCKS

10.1 Control, Storage and Identification

Black and White rhinos are on CITES Appendix I for Mozambique. DNFFB is responsible for control and storage of rhino horn, but horn is stored at a provincial level. Identification codes for rhino horns are provided from central government, and surveys are conducted from Maputo on provincial stock.

Horn is stored in the Maputo strong room (believed to be on Floor 16 of the Department of Agriculture). There is currently only one pair of rhino horns in stock: seized during arrests this year (2000) from poachers operating in Coutada 16 or possibly Kruger NP (RSA). These horns were inspected, and appeared to have come from an adult male black rhinoceros.

10.2 Involvement in AfRSG rhino horn fingerprinting project

There has been no involvement. Until recently DNFFB did not have any horn in stock to provide samples from. However, samples from the horn seized could be excellent material for testing for possible source area, particularly as Kruger NP has been sampled. In addition, the present fingerprinting method has been validated to confirm whether horn tested comes from black or white rhino.