

# Regional Project for the Conservation of Rhinos and Community Development in **SADC Region**

- › CAPACITY BUILDING
- › ECONOMIC DEVELOPMENT
- › ENVIRONMENTAL SUSTAINABILITY
- › TRANS-NATIONALITY





## Background and rationale

Over the last two decades, it has been acknowledged at the global level that the loss of biodiversity implies at the same time a tremendous damage for humanity in bio-ethical terms and strong economic consequences.

The latter is of particular significance for developing countries, where important opportunities for social and economic development go amiss because of the loss of fauna and flora resources.

The rhinoceros is one of the few remaining terrestrial pachyderm mammals. It can be considered a flagship taxon for biodiversity loss, but at the same time its disappearance constitutes an important economic damage for the African countries concerned. The South Africa experience in fact shows that breeding rhinos can become an important direct and indirect source of income. Besides the direct market value of each pachyderm in the context of safari hunting, the presence of rhinos originates a range of indirect benefits through

connected tourism activities. There are five species of rhino worldwide, three of them living in Asia and two in Africa. The Southern African region is home to the two species of African rhinoceros: the white rhinoceros (*Ceratotherium simum*) and the black rhinoceros (*Diceros bicornis*). The two subspecies of the white rhino and three (out of four) subspecies of the black rhino are recognised in the region. The browsing black rhino used to be widely distributed across the continent, adapted to a range of habitats and climate. By 1970, its total number in Africa was approximately 65,000 and by 1992, 96% of these rhinos had been lost, going extinct in four Southern African Development Community (SADC) countries. Since then, the population has stabilised and in 1999, about 2,700 animals were estimated to live. 80% of these were in Namibia, South Africa and Zimbabwe. The SADC region accounts for 84% of all surviving black rhinoceros and for the entire populations of the two subspecies *D. b. minor* and *D. b. bicornis*. The white rhino used to have a discontinuous range, as this grazer lives in grasslands and savannah woodland. In 1895 only 20 animals of its Southern subspecies (*C.s. simum*) were left. Since then, numbers have climbed back to over 10,000 as a result of one of the few conservation success stories world-wide.

Over 90% of the present population live in South Africa. Small populations also exist in Botswana, Namibia, Swaziland, Zambia and Zimbabwe. The SADC region accounts for 98% of the present population of this subspecies. The African rhinoceros have been brought to the verge of extinction by killing for sport and meat and to supply the horn trade. The demand for rhino-horns in markets far away from Africa has been the major culprit for the shrinking rhino populations over the last few decades. However, threats to rhino populations often have deep roots. Wherever vast swaths of savannahs are converted into agricultural land, there is no room for these mega-herbivores. Likewise, poaching is not only due to the demand for rhino products in the Far East and in the Gulf, but it is also linked to a complex set of factors among which widespread and deep poverty plays a major role.

Nowadays, the largest share by far of the surviving populations of Southern African rhinos live in Protected Areas. The conservation and management of rhino populations require first of all the in-depth study of their ecological and conservation status, including the distributional pattern of genetic diversity and population dynamics. Other key factors are the following:

- effective field protection and surveillance through intense





patrolling, intelligence, detection and control of poaching activities, maintenance of infrastructures and human resources, relations with neighbouring human population, etc.;

- conservation of the genetic viability of populations: in the frequent case of small and fragmented populations, remnant groups need to be brought together and breeding animals need to be exchanged, in order to create a "meta-population" with controlled gene flow;
- stabilisation of the demographic trends of rhino populations, through the estimation of ecological carrying capacity and the direct intervention on stocking densities.

The management of rhino populations requires significant technical expertise and know-how, institutional capacity, financial resources, specialised equipment and moreover a conducive policy context. Without this capacity, efforts to conserve remnant rhino populations are often frustrated. However, where firm conservation measures can be implemented, they invariably boost the general

conservation of biodiversity within the areas of rhino project activity. The SADC region as a whole does not lack the necessary expertise for undertaking the required rhino conservation activities, but this expertise is concentrated in a few countries.

The Project intends to provide and share expertise, specialised logistical and technical support, training, information and catalytic funding for selected regional rhino conservation targets, through a coordinated regional mechanism, in close cooperation with relevant regional and national bodies. This mechanism is expected to review the progress, ensure adequate participation and coordination and advise on regional priorities for rhino conservation. By establishing regional coordination in the management of the endangered and charismatic rhino species, a precedent will be created within SADC, so that this coordination can be extended to other wildlife species, whose conservation should be managed at a regional rather than at a local level. The regional coordinating structure includes the national agencies responsible for rhino management in each country. The Project is funded by the Italian Cooperation and is part of the wider support provided by the Italian Cooperation to biodiversity conservation and sustainable development programmes in the Southern African region. The Project is executed by the World Conservation Union (IUCN) and implemented by the Italian non governmental organisation (NGO) CESVI, together with a regional consortium which includes:

- the Wildlife Sector Technical Coordinating Unit of SADC, linking the NGOs consortium with SADC intergovernmental structure;
- IUCN-Regional Office for Southern Africa, responsible for programme coordination;



- the IUCN African Rhino Specialist Group, responsible for scientific leadership and backstopping;
- WWF-Southern Africa Region Project Office, which functions as a technical support and implementing agency;
- CESVI, which undertakes overall programme management and supports implementation activities.

All SADC range States have appointed the competent national institution to be the counterpart to the Project.

## Goal, objectives and expected outputs

The development goal of the Project is to maintain the Southern African rhino taxa in viable and well distributed meta-populations as flagship species for biodiversity conservation within the SADC region, and promote the related development of sustainable livelihood processes. The Project's specific objective is to implement a pragmatic regional rhino strategy within the SADC region.





This will be attained through the acquisition of sound information on the constraints and opportunities for rhino conservation within each country and the constraints and opportunities for rhino meta-population management at the regional level.

**Expected outputs are as follows.**

- Institutional arrangements are developed to achieve adequate coordination of rhino conservation efforts within and between SADC range States, and between SADC regional and international initiatives.
- A reporting system and confidential database for all rhino populations in SADC range States is developed.
- Rhino conservation projects that meet the conditions for support under the SADC Rhino Programme are implemented.
- The technical capacity for rhino management within SADC is enhanced, concerning the management, monitoring and protection of rhinos.
- The participation and/or awareness of local communities in rhino conservation in pilot areas is enhanced.
- The knowledge is improved within the region about the technical, economic and socio-political factors that are relevant to rhino conservation.
- Funding for additional conservation projects that meet the conditions of the SADC Rhino Programme is available.
- An effective Programme management and reporting system is established.

## Implementation and results

Project implementation started in September 1999 and will be completed by the end of 2002.

**The following areas of programme activities were defined:**

- development of institutional arrangements for rhino conservation;
- development of reporting system and database;
- implementation of rhino conservation projects;
- enhancement of technical capacities;
- enhancement of community awareness and participation;
- improvement of the existing knowledge about rhino conservation.

**Main achievements to date are the following.**

- National review studies on rhino conservation were carried out in the SADC range States to identify constraints, opportunities and requirements for programme assistance.
- National focal points were established to support the coordination of policies and interventions at a national and regional level.
- National strategies for rhino conservation in Namibia and Botswana have been developed.
- A rhino database management system has been developed to enable individual level monitoring and management of rhino populations. The system is already applied in several rhino conservation areas in the region.
- A software on rhino population has been developed, to estimate population dynamics.
- A model on the carrying capacity

of the black rhino has been developed.

- Training courses have been carried out for field staff of conservation agencies in SADC range States, on rhino monitoring techniques.
- An appraisal for the reintroduction of rhino in Zambia (Luangwa National Park) has been carried out.
- Reviews have been carried out on rhino management and conservation issues in Botswana, in Malawi (Liwonde National Park) and in Tanzania (Selous Grazing Range).
- The rhino conservation coordination at regional level has been restructured, with the establishment of the SADC Rhino Management Group and the SADC Rhino Recovery Group and the development of a cooperative programme under the latter for the reintroduction and management of rhino in range States.
- Rhino-horn fingerprinting techniques have been developed, to track source of rhino-horn.
- Radio-collars used for rhino monitoring have been improved.
- New technologies have been developed for rhino monitoring and management in the field.
- The control on rhino-horn stockpiles has been strengthened.

