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**RETAINING AND ENHANCING HUMAN
RESOURCES FOR RHINO CONSERVATION**



SUMMARY OF GUIDELINES FOR: RETAINING AND ENHANCING HUMAN RESOURCES FOR RHINO CONSERVATION

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Effective rhino conservation depends on a wide range of expertise, from modern skills such as those of a veterinarian to informally acquired skills such as those of a tracker. The informally acquired skills must not be overlooked as wildlife management authorities establish their grades of manpower and recruit staff members into these grades.

The management authority in a range state that is in the process of re-establishing its national rhino population will not initially possess the full range of required expertise within its ranks. This gives additional reason to maintain linkages with other management agencies, via a regional rhino network, in order to draw on regional expertise when the needs arise.

Because the range of expertise that is required for rhino conservation is broad, and because institutionalized training opportunities in the region are limited in their scope and in their availability, capacity-building is best achieved through in-service training. Senior conservation managers should undertake needs assessments for capacity-building within their staff, and then find suitably experienced individuals within their agencies, or within other national or regional institutions, to undertake the in-service training.

A considerable body of information as well as training tools have been developed by the SADC Regional Programme for Rhino Conservation and can be used to help identify and to meet some of the needs for in-service training.

7.1 The need for varied expertise for holistic rhino conservation

Effective rhino conservation involves a blend of “high-tech” inputs and informally-acquired “low-tech” skills of bushcraft and tracking. It must be remembered that poachers are typically from rural backgrounds and their poaching technology is limited to firearms (and possibly also cellphones, in the more developed parts of the SADC region). Therefore, getting to grips with these poachers will require that the protection effort includes a number of men who are equally proficient in bushcraft and hunting skills, and can anticipate the “low-tech” tactics of the poachers in relation to the area’s terrain, habitats, water distribution, rhino distribution, etc.

The same skills are required for aspects of rhino management. The most cost-effective way to capture rhinos within a large area is to deploy a tracker unit that locates the rhinos or at least their fresh spoor, then uses radio communications to summon a surveillance aircraft and to direct it above the rhinos, which the aircraft orbits while calling in and directing a helicopter and veterinarian to dart them. The aircraft then guides a specialized four-wheel-drive vehicle to each immobilized rhino, and the capture process is completed through the crating of the rhinos and the transport of the crates out of the area on the truck (or, alternatively, a large helicopter carries each rhino out of the area in a net). Thus, a large range of different skills are exhibited on a rhino capture operation (tracking, radio procedure, piloting of fixed-wing aircraft and helicopter, veterinary inputs, rough-terrain driving, etc.), with the first step in the process entailing basic bushcraft. As noted in Section 4.11.2, staff can be trained in rhino ID techniques, but finding specific rhinos through tracking and interpretation of other field observations involves skills and experience that cannot generally be imparted through formal training courses.

There has been a tendency on the part of wildlife management authorities in the SADC region to go through drastic restructuring exercises, which include retrenchments, re-grading of staff and the implementation of new staff selection criteria. These processes invariably down-grade or exclude men with informal skills in favour of those with formal educational qualifications or training certificates.

National rhino conservation strategies must therefore recognize this actual or potential loss of key expertise for rhino conservation, and include measures to retain, and give due professional credit to, men with significant field experience.

One of the foremost advantages to be gained from the SADC Regional Programme for Rhino Conservation is the sharing of regional expertise within the varied disciplines that are needed for holistic rhino conservation projects. It will not be cost-effective or practical for every range state to try to build expertise in all disciplines. For instance, the wildlife management authority within a minor range state is unlikely to be able to employ a full-time veterinarian with specific experience in rhino management, and can instead benefit from veterinary expertise from another range state, mobilized via the regional programme when significant needs such as rhino capture operations arise.

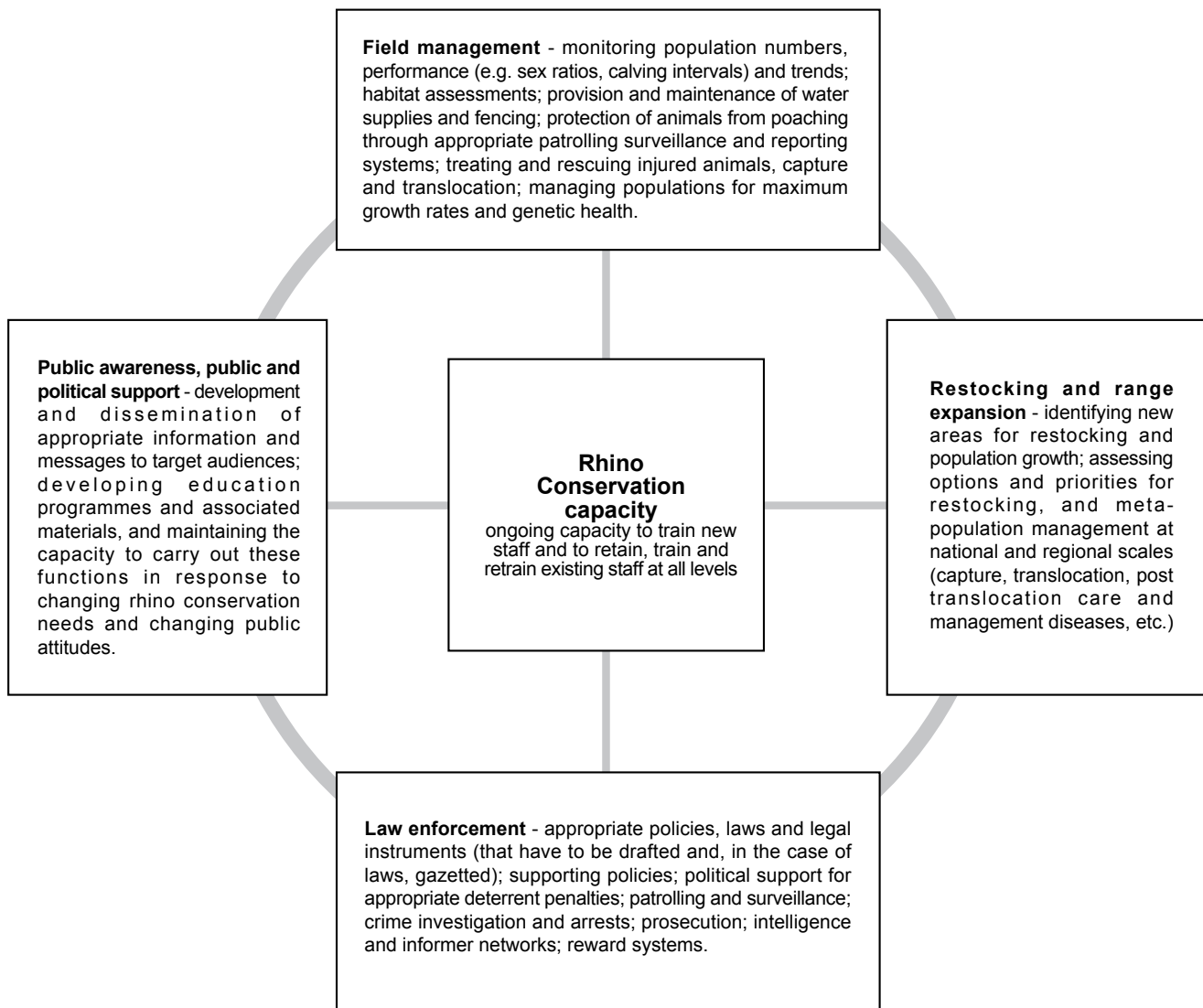
7.2 Training needs and opportunities within the SADC region

An assessment of regional training needs and opportunities, relevant to rhino conservation, was undertaken within the SADC RPRC (Cumming, 2005). Within this assessment, four main areas were identified as requiring capacity-building within the region:

- field management of populations;
- restocking and range expansion;
- law enforcement and protection;
- public awareness and political support.

These four broad categories encompass a wide range of specific activities or discrete areas of expertise requiring capacity-building, diagrammatically illustrated below.

Figure 7: Aspects of capacity-building in rhino conservation



Results of a questionnaire survey that was undertaken among 14 protected areas during the SADC RPRC review of capacity-building needs (Cumming, 2005) indicate that a very high proportion (40-80%) of existing field staff involved in rhino conservation are in need of training. The great majority of these are rangers or field scouts. Only about 20% of the staff employed were considered, by their seniors who participated in the survey, to be sufficiently experienced or skilled to train new recruits or inexperienced staff in one or more skills or activities. Table 1 presents the overall likelihood of availability of in-house training expertise for key skill areas, extrapolated from the results of the survey. Some protected areas have staff that could train at national and regional levels but their availability to take on wider responsibilities is limited by the work demands on these personnel within the areas that they are employed.

Table 1: Likely availability of in-house training expertise among protected areas staff to conduct local (L) on site training, training at national level (N), and training within the region (R).

(●●●high, ●●moderate, ● low likelihood).

Area of Training Skills/Expertise	Likelihood of in-house availability of training capabilities		
	L	N	R
1. Field Management			
1.1 Rhino monitoring	●●●	●●	●
1.2 Tracking	●●●	●●	●
1.3 Population performance	●	●	●
1.4 Habitat assessment	●●	●	●
1.5 Water and fencing	●●	●●	●
1.6 Capture and translocation	●	●	●
1.7 Surveys and population estimates	●●	●	●
1.8 Monitoring database use	●	●	●
2. Re-introduction & range expansion			
2.1 Assessing areas for restocking	●●	●●	●
2.2 Metapopulation management	●	●	●
2.3 Rhino conservation strategies	●	●	●
3. Law enforcement			
3.1 Legislation and polices	●●	●●	●
3.2 Lobbying political support	●●	●	●
3.3 Patrolling strategies and tactics	●●●	●●	●
3.4 Scene-of-crime investigations	●●●	●●	●
3.5 Prosecution	●●	●	●
3.6 Intelligence systems	●	●	●
3.7 Managing reward systems	●	●	●
3.8 Rhino horn stocks and databases	●●	●	●
4. Public Awareness			
4.1 Developing awareness material	●	●●	●
4.2 Dissemination of messages	●●	●●	●
4.3 Developing education programmes	●	●	●
5. In-service training (IST)			
5.1 Developing IST programs	●	●	●

The most appropriate people to provide training and transfer of experience, in the various technical and management skills required in rhino conservation, are experienced practitioners engaged directly in rhino conservation in the field. These practitioners range from highly capable, but often illiterate, trackers to trained scientists with years of field experience in rhino conservation. Not all of them will have the time or the aptitude to engage in mentoring staff or running training courses. However, they represent a very important pool of expertise (which is often overlooked) that can assist in the development of training materials and can advise on training and capacity-building matters. This is particularly relevant to those essential skill areas where local knowledge and informal qualifications and experience can be critical factors (e.g. monitoring and tracking, as well as local public outreach and awareness). Therefore,

the development and facilitation of in-service training programmes offers the best prospects for sustainable capacity building for rhino conservation in the region.

Additional training capacities and opportunities in southern Africa can be found in specialist NGOs, associated with relevant conservation initiatives. These NGOs can be enlisted by Government conservation agencies to support and develop effective in-service training programmes. Wildlife training colleges and universities also provide additional resources and opportunities. Table 2 summarises the potential key advantages and disadvantages of these sources of training capacities.

Table 2: Sources of training capacities for rhino conservation skills

(elaborated from Cumming, 2005)

	Potential Advantages	Potential Disadvantages
In-service training	<ul style="list-style-type: none"> • Cost-effective. • Most suitable to skills areas benefiting from local knowledge and experience. • Amenable to train-the-trainers programmes. • Government agencies can partner NGOs in training programmes. 	<ul style="list-style-type: none"> • Unavailability of training capacities in key skill areas. • Staff with technical skills might not have training skills or time. • Lack of formalised in-service training programmes and schedules in most agencies. • Lack of formal professional qualifications and uniform standards of competence.
Specialist NGOs	<ul style="list-style-type: none"> • Availability of specialist expertise and training capacity, including some training “toolboxes”. • Flexible; can complement and support in-service training programmes. 	<ul style="list-style-type: none"> • Dependent on external/donor funding. • Work on project basis, sometimes with limited continuity and sustainability.
Wildlife training colleges	<ul style="list-style-type: none"> • Availability of training expertise. • Availability of formal qualification systems. • Can provide modular courses to support in-service training programmes. 	<ul style="list-style-type: none"> • Expertise and curricula might not be relevant to actual needs. • Unevenness in accreditation systems. • Often under-funded. • Offer limited opportunities for hands-on training.
Universities	<ul style="list-style-type: none"> • Availability of training capacity in foundation areas (graduate/post-graduate). • Availability of formal qualification systems. • Best suited to long-term development of scientific and technical capacity through research grants for young cadres. 	<ul style="list-style-type: none"> • Lack of specialised curricula and courses.

The SADC RPRC published a Knowledge Base on CD ROM in 2006. It contains over 60 technical reports and documents on state-of-the art methodologies and experiences in rhino conservation in southern Africa. It also contains dedicated software and manuals, developed or co-funded by SADC RPRC, for techniques and systems ranging from estimation of rhino population numbers and analysis of demographic performance, to management of databases (for law enforcement/intelligence, analysis of patrol effort, rhino horn stock pile records, rhino horn seizure records, and rhino monitoring at area and national level, etc.). The reports and software can also be accessed on the SADC RPRC website (www.rhino-sadc.org). This body of information is therefore available as input to capacity-building programmes, both academic and practical, for rhino conservation in the region. Cumming (2005) provides a summary and assessment of these various outputs of the SADC RPRC, in the context of capacity-building.