Executive summary

Fifty million years ago, dozens of rhinoceros species lived on earth but today only five remain. In total, no more than 12 000 to 12 500 rhinoceros remain in the wild, with 80 per cent found in Africa.

Over much of their former range, habitat destruction as a result of land transformation has contributed to major declines in rhinoceros numbers this century. Fortunately in some range States, (India, Kenya, Namibia, Nepal, and South Africa) the area of available rhinoceros habitat has increased in recent years following the re-establishment of new rhinoceros populations in both State–run and privately managed conservation areas. However habitat degradation and land transformation is still a significant threat, although this is more so for the Javan Rhinoceros *Rhinoceros sondaicus* and Sumatran Rhinoceros *Dicerorhinus sumatrensis* inhabiting the tropical rain forest which continues to decrease in extent.

The major immediate threat to all species of rhinoceros today, however, remains poaching for horn. Rhinoceros horn has been an ingredient in traditional Chinese medicine (TCM) for thousands of years. In TCM, rhinoceros horn is used to treat delirium, convulsions and serious illness due to "internal heat excess". Rhinoceros also face demand for their horn in the manufacturing of traditional dagger handles in Yemen and Oman, where the most prized dagger handles are made from rhinoceros horn. Rhinoceros horn is preferred for handles because it is lightweight, durable and has a distinctive lustre which improves with age.

However, while demand for horn has been the underlying cause of recent population declines, poverty, corruption, civil wars, widespread availability of automatic weapons, apathy, lack of institutional capacity, inadequate government/private sector expenditure and effort on field rhinoceros conservation, and only limited financial support for field conservation efforts from non–range states have all facilitated and catalysed the poaching and illegal trade.

In both Asia and Africa, rhinoceros have almost been poached out of the large expansive areas they used to roam and where law
enforcement effort was not concentrated enough to offer them sufficient protection and to have a high probability of detecting poachers quickly and hence act as a deterrent. The majority of rhinoceroses are now in better protected and managed, smaller fenced sanctuaries; rhinoceros conservation areas; and unfenced Intensive Protection Zones (IPZs). However, where there has been success, it has come at a high cost. It has been calculated that expenditure on rhinoceros conservation in both Africa and Asia has been as high as US$1000–1500 /per square kilometre annually. With notable exceptions (such as in Garamba National Park, Zaire), the bulk of this expenditure has been funded internally by the governments or private sector management authorities. Being able to maintain sufficient levels of expenditure is a major problem facing most rhinoceros conservation departments in Africa, the budgets of which have been declining in real terms for a number of years. Some key rhinoceros parks in India are also suffering from reduced funding levels.

In other poorer range States, or those that do not accord conservation a high priority, government budgets for field conservation have simply been inadequate, and the international community in general has only contributed relatively small amounts to offset these severe funding shortages. In both Asia and Africa, the rhinoceros populations currently suffering the biggest declines and under the greatest threat invariably occur in areas with lower field conservation expenditure, limited or no biological monitoring and management, and inadequate deployment of anti-poaching patrols and intelligence gathering networks.

The entire Rhinocerotidae family has been listed in Appendix I of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) since 1977, thereby banning all international commercial trade in rhinoceroses and their parts except in exceptional circumstances and pre-Convention specimens.

In 1981, at the third meeting of the Conference of the Parties to CITES, the Parties adopted Resolution Conf. 3.11, requesting a halt in all trade in rhinoceros products by placing a moratorium on sale of government and parastatal stocks. At the sixth meeting of the Conference of the Parties to CITES, Resolution Conf. 6.10 was adopted urging all Parties to destroy all government and parastatal stocks of rhinoceros horn.

However, listing all rhinoceros species in Appendix I, together with other interventions pursued under the auspices of the Convention, failed to arrest the decline of rhinoceros populations. For example, between 1970 and 1993, more than 95 per cent of the world's Black
Rhinoceros *Diceros bicornis* disappeared and populations of Javan and Sumatran Rhinoceroses hovered on the brink of extinction.

By the ninth meeting of the Conference of the Parties in 1994, the Parties' opinion on destruction of rhinoceros horn stocks had changed and it was recognised that destroying horn stocks was likely to be counter-productive as it would further concentrate horn stocks in the hands of criminal traders and increase the rarity value of horn, leading to probable increases in black-market prices, hence increased demand and in turn further increased pressure on wild populations. It was also recognised that burning stocks could reduce possible future conservation options aimed at reducing incentives to poach rhinoceroses and illegally trade in horn. Most importantly, it was recognised by the Parties that current rhinoceros conservation efforts were largely failing. In response, the Parties adopted Resolution Conf. 9.14, which called for redoubled rhinoceros conservation efforts to stop poaching and illicit trade and repealed Resolutions Conf. 3.11 and Resolution Conf. 6.10. While Resolution Conf. 9.14 continues to actively promote a range of actions aimed at reducing the illegal trade, it sought to move away from unquestioning concentration on legislative measures, without due consideration for other complementary alternatives. In recognising that there are differences of opinion as to how best rhinoceroses should be conserved, another of the main principles of Resolution Conf. 9.14 is that current and potential strategies aimed at reducing poaching and illegal trade should be evaluated, and where necessary conservation policy should be modified accordingly.

Some of the key approaches advocated by Resolution Conf. 9.14 include that:

- All Parties should implement adequate legislation, be vigilant in law enforcement efforts, and increase law enforcement co-operation among States in order to reduce the illegal trade in rhinoceros products;
- All Parties should work with traditional medicine communities to develop strategies to eliminate use of rhinoceros-based medicines;
- The CITES Standing Committee should pursue actions aimed at reducing illegal trade in rhinoceros, while ensuring that all measures are evaluated for effectiveness pursuant to the development of standardised indicators, and future actions guided by these evaluations; and
- Each range State should develop and implement a rhinoceros recovery plan that aims toward a self-sufficient conservation effort and potential donors, especially the Global Environment Facility, should assist with funding of these plans.
In an effort to determine the response by Parties to Resolution Conf. 9.14, TRAFFIC undertook a review of trade control legislation, CITES-related activities and conservation activities in 14 rhinoceros range States and 18 consumer States. This report presents the findings and was prepared in preparation for the tenth meeting of the Conference of the Parties to CITES to be held in Harare, Zimbabwe in June 1997.

Many of the activities recommended in Resolution Conf. 9.14 have taken place since the ninth meeting of the Conference of the Parties to CITES. The majority of States with stocks of rhinoceros horn hold these in marked, registered stocks. Legislation controlling trade in rhinoceros exists in all States surveyed and a ban on rhinoceros trade is in place in four range States and seven consumer States, although in many cases these bans were in place before the adoption of the resolution. Some multilateral agreements have been struck between neighbouring States. In 11 consumer States, discussions with traditional medicine communities have begun and two major workshops with traditional medicine practitioners from several Asian consumer nations have been conducted.

Rhinoceros recovery plans are in place for most range States. However, while all are deemed appropriate for the country, very few include means to re-invest rhinoceros-derived revenues into rhinoceros conservation projects. Some national conservation plans have been revised and updated since the ninth meeting of the Conference of the Parties. The IUCN/SSC Asian Rhino Specialist Group has just published a revised Status Survey and Continental Action Plan for Asian rhinoceros, while the IUCN/SSC African Rhino Specialist Group’s Action Plan for African rhinoceros is in its final draft form and will be published shortly. The IUCN/SSC African Rhino Specialist Group also began work to develop standardised indicators by which to evaluate rhinoceros conservation activities, and with support from the CITES Secretariat, this process is set to be developed further in collaboration with both the Asian Rhino Specialist Group and TRAFFIC. WWF and the Wildlife Conservation Society are also undertaking a cost/benefit analysis of rhinoceros conservation.

The GEF has provided some funding for rhinoceros conservation projects in Southeast Asia, although this support will end in 1998. A number of NGOs have also contributed substantial funds to support field conservation efforts. However, only five of the 18 consumer states have provided financial assistance with the implementation of rhinoceros conservation activities.

While this international funding support is extremely valuable, when put into context, external funding for rhinoceros conservation
remains small when compared to overall needs. Total expenditure by many government and private sector authorities responsible for managing rhinoceros populations in the range States is significantly greater. Thus, although some support for rhinoceros conservation has been forthcoming, overall levels of support have been disappointing, and efforts need to be redoubled to increase levels of support for field rhinoceros conservation from the international community.

While many of the activities recommended in Resolution Conf. 9.14 are under way, the response of Parties has been incomplete and many of the actions the Parties agreed upon in the Resolution need continued attention. This report includes recommendations for continued efforts in rhinoceros trade control enforcement, further efforts in conservation, and consideration of new avenues for exploration in the quest for conservation of the world’s remaining rhinoceroses for future generations.