

# South Africa's Golden Gate Highlands National Park management plan: Critical reflections

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The Golden Gate Highlands National Park (GGHNP) is on the foothills of the Maluti Mountains and is the only national park in the eastern Free State Province of South Africa. The park is famous for its impressive sandstone formations.<sup>1</sup> It was established in 1963 for the purpose of protecting a pristine area with much emphasis on conserving the sandstone formations and the montane and Afro-Alpine grassland biome.<sup>2</sup> The GGHNP is situated in QwaQwa, which is well known for lacking sustainable development,<sup>3</sup> and has been declared a Presidential Nodal Point because of high poverty, population growth and unemployment. These problems persist despite the fact that the park is the province's major tourist attraction. Previous research in and around the park has focused on geology, palaeontological finds, slope forms and the prominent lichen weathering,<sup>1</sup> and remarkably little has been done on the institutional framework and policy environment governing the management and conservation of park resources. The current park management plan was compiled in 2011. This plan provides the legal base for managing resources in the GGHNP. The absence of a comprehensive database on heritage sites complicates the park management process. Whilst remarkable progress has been made in zoning the park to establish a coherent spatial framework, more still needs to be done in using GIS to develop an Environmental Management System. Here we explore the extent to which the current institutional framework and policy initiatives in the management plan foster collaboration between community and national bodies, for purposes of enhancing conservation and the economic potential of heritage resources whilst broadening the scope for scientific research. The broad objective of the park management plan is to conserve biodiversity, with an emphasis on provision of an excellent learning platform, sustainable tourism opportunities and building of cooperation between stakeholders in order to promote local and regional economic development.

## Golden Gate Highlands National park management plan: The bad

Despite the presence of good strategies and initiatives in the park management plan, there are areas of concern that may compromise the long-term future management and conservation of resources in the GGHNP. Although the park management plan states the need to stimulate conservation in communities and alleviate poverty, the situation on the ground suggests otherwise. The park has a tradition of shipping important archaeological and palaeontological findings to distant museums, both in the country and abroad. An important palaeontological discovery – fossil dinosaur eggs containing foetal skeletons – dating to the Late Triassic (200–230 million years ago) was made in the park.<sup>4</sup> Although this discovery would have provided excellent learning opportunities and tourism potential for the local area, the fossil eggs were sent to museums which are hundreds of kilometres from the park, outside the community and the province in which they were discovered. This arrangement does not promote local economic development, let alone conservation of park resources by adjacent communities. The park management plan omits the fact that without a local museum, adjacent communities are being deprived of benefiting from their heritage resources. It has been observed that local communities have historically co-existed with tourism attractions such as museums.<sup>5</sup> Park management plans that undermine co-existence of local communities and park resources are self-defeating. The park management plan should rather foster establishment of an integrated approach in which ex-situ (museum) and in-situ (immovable land-based features) park resources can be managed together while simultaneously broadening the scope for scientific research and economic development. The absence of a local museum which could house important discoveries from the GGHNP is undoubtedly worrisome to local communities, given that museums can significantly contribute to the local economic development by providing tourism potential. Museums are tourist destinations which are widely ignored as a development tool and their potential to contribute to poverty alleviation efforts is rarely considered.

Drawing on discussions with community members, it has been conclusively established that the majority of residents adjacent to the park has not significantly benefited from activities taking place within the GGHNP. The exception is a few individuals who graze their livestock in the park or harvest thatch grass and medicinal plants or those who take part in the activities that take place at the Basotho Cultural Village. In some cases, resources such as grass, firewood and wild animals are harvested illegally, thus limiting the benefits that trickle to local communities. The participation of local communities in park-based tourism is minimal. This finding concurs with that of Schoemann<sup>6</sup>, who observed that the tourism industry in the Free State Province does not currently contribute significantly to the economy of the province. Consequently, some community members tend to vandalise heritage resources in the park, such as the San paintings, even though the park was proclaimed to conserve them. Some of the paintings that have been vandalised are about 8000 years old.<sup>7</sup> The park also has a heritage site where a battle was fought during the Anglo-Boer war. Large quantities of ammunition that was used during the war can still be found at the site. The site constitutes an important record of South Africa's history and struggle for independence from the Boers. Surprisingly, the site is easily accessible to tourists and passers-by, making it prone to vandalism. If the park management plan accommodated a more socially oriented benefit sharing scheme, then communities living adjacent to the park might more readily embrace it, and thus illegal harvesting of park resources would be minimised. Although the management plan states the idea of incorporating public opinion and society towards promoting conservation values, it is regrettable to note that public involvement is not from a grassroots but an elitist level.

The GGHNP, like many other African heritage sites, is threatened by various forms of economic development.<sup>8,9</sup> The park is home to domestic livestock which is overgrazing and competing for food with wild animals. Agricultural activities and settlement expansion of adjacent communities is worsening this situation. However, the GGHNP management plan does not adequately demonstrate combative measures. In discussions held with 20 local

community members who herd domestic livestock in the park, 80% stated that livestock grazing was the best way to benefit from the park. Such a situation creates a conflict between land uses. Even if alternative land is made available to resettle communities which live a few metres away from the park, research must be done to determine whether these communities would be prepared to move to a new area. A raft of measures should be put in place to deal with vegetation loss from grazing by domestic animals, in addition to loss from veld fires, invasive alien species and climate change. Elsewhere, heritage sites faced with similar threats include the iconic World Heritage Site of Mapungubwe which has been in the media for the last few years because of threats posed to its integrity by mining.<sup>10</sup> In Sudan, vast stretches of cultural landscape hosting valuable heritage are under threat from dam construction.<sup>11</sup> Undoubtedly, national heritage resources can be used as a foundation for poverty eradication, for example, heritage sites such as Goree Island in Senegal, Timbuktu in Mali and Robben Island in South Africa are famous for attracting large numbers of tourists; even human origins sites like the Cradle of Humankind in South Africa are now significant revenue generators.<sup>10</sup> The GGHNP could also become an important revenue generator and possibly promote local economic development.

Often there are uncontrolled fires in the park which can destroy important heritage sites, both known and as yet unknown. Whilst the park management plan acknowledges the significance of fire in the ecosystem, which evidently is becoming uncontrollable and often occurs unexpectedly, fire management requires huge financial and human resource investment. A revision of the current fire management policy is necessary in light of new and advanced global fire-fighting strategies. Wetlands in the park are being destroyed by fire and the magnitude and severity of this destruction is unknown. Immediate research on the impact of fire on wetlands is called for because the biophysical environment is being altered.

A prominent feature of the park is that it forms a huge watershed which provides water to most parts of South Africa. However, the ecological integrity of the park to maintain water quality and quantity is being compromised by erosion and invasive species. Gullies are fast becoming the prominent feature of the park. Some of the gullies are a few metres away from the provincial R712 road which passes through the park and, sooner or later, the road will crumble. Furthermore, this road allows uncontrolled access to the park, which is a matter of concern. The R712 road is also the shortest route from the port of Durban in South Africa to Maseru, the capital city of Lesotho, and almost all imports from abroad to Lesotho are transported via this road.<sup>12</sup> Uncontrolled access into the park means the revenue collection base of the park will remain low. The management plan fails to demonstrate mechanisms to control traffic passing through the park using this road. Huge volumes of traffic may cause pollution of air and water bodies inside the park, both of which are vital resources for wildlife. The management plan omits to acknowledge that noise from vehicles may also cause stress, and consequently affect the mating and feeding habits of wild animals in the park. This road also increases the potential of poaching because it gives access to secondary roads in the park that could be used by poachers,<sup>12</sup> and itself provides an easy getaway route.

The park management plan is commendable for stating the need to document the cultural heritage sites in the park. Nevertheless, the management plan does not have information on the actual number of heritage sites in the park. Knowing the actual number of heritage sites is important in identifying and declaring sites of national importance. Furthermore, the promotion of responsible tourism and development of route tourism can only be successful if sites of national importance are identified. The development of detailed heritage inventories is essential because robust risk management frameworks require the establishment of up-to-date inventories and GIS databases for management purposes, in particular for saving heritage during disasters and conflict.<sup>10</sup> The current database has GPS coordinates for only a few sites and GIS maps showing the location of heritage sites in the park must be created.

Finally, the park management plan fails to quantify and account for the resources being harvested from the GGHNP by adjacent communities. Resource harvesting is allowed within South African protected areas

under certain conditions as part of benefit sharing to strengthen relationships with communities living adjacent to parks.<sup>13</sup> However, the GGHNP management plan does not adequately demonstrate what is being harvested, or the extent and impact of harvesting in the GGHNP. Consequently, the capacity to monitor, evaluate and set the boundaries for such harvesting is limited.<sup>13</sup> There is, however, a general lack of published research on resource extraction from protected areas in South Africa,<sup>14</sup> particularly in national parks.

## Way forward

There must be speedy documentation of cultural heritage sites to promote route tourism development. In several parts of the world, heritage routes are used particularly in the context of promoting rural tourism.<sup>15,16</sup> According to Meyer<sup>17</sup>, routes are a good opportunity for the development of less mature areas with a high number of cultural resources that appeal to tourists. Given that QwaQwa is undoubtedly one of the poorest areas in the eastern Free State Province of South Africa, general development pressures from tourism and rural residential perspectives do exist for the area.<sup>18</sup> The GGHNP has rich cultural and heritage resources, yet is unable to effectively preserve them and to turn these assets into tourist attractions that earn revenue and provide opportunities for local economic development. This development requires creativity, commitment and resources, which is precisely what the GGHNP management plan lacks. There must be serious engagement of the government, given that heritage funding ranks very lowly in terms of government priority scales.<sup>10</sup> It is also noble for the park management to immediately engage academics and researchers, for instance those from the local University of the Free State (QwaQwa Campus), which is a mere 5 km from the GGHNP. Academics from this local university could contribute significantly to research and sustainable management of park resources, and, unlike previous researchers who came from faraway places, will not disappear with heritage trophies collected from the area or publish research results elsewhere without providing feedback on the state of park resources. On the issue of revenue generation, the park must man various viewpoints in order to stop unpaid viewing of the park's beautiful scenery. In addition, a small levy should be charged to motorists using the provincial road. Furthermore, access to the park and heritage sites should be only for those visitors who check in at certain control points and are issued with tickets or entry permits. The controversy surrounding the road must be resolved for the park to generate enough revenue. There is a need for close cooperation between various stakeholders to come up with a management plan that embraces sustainable development principles. Management of park resources is a complex undertaking which requires technologies and support tools such as GIS. GIS and remote sensing technologies encourage the adoption of ecological principles in land-use policy and management plan formulation, as well as collaboration of various stakeholders, which is essential for establishing comprehensive environmental databases<sup>19</sup> for the GGHNP.

## Conclusion

The GGHNP management plan can only succeed in promoting biodiversity and heritage conservation if it provides livelihood opportunities that safeguard continued socio-economic benefits.<sup>20</sup> Local communities must embrace the existence of the GGHNP if resources are to be conserved for current and future generations. Park resources, if managed properly, can provide long-term sustainable benefit to individuals, communities and institutions. However, there are areas of concern in the GGHNP management plan that need to be addressed. Whilst the park management plan has its own remarkable strengths, it lacks depth – arising mainly from the multiplicity of unpublished sources that were consulted in the process of its compilation. Apart from the analytical flaws discussed here, the park management plan provides a good basis for developing a comprehensive scheme for natural and heritage resource stewardship.

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