Co-management of protected areas by NGOs and African countries helps reduce deforestation

In order to better protect ecosystems and biodiversity, several African countries have set up innovative management models in which protected areas are co-managed by government bodies and international or national NGOs through partnerships that can span several decades. An international research team, led by INRAE and involving Le Havre University, reviews this collaborative management model in 127 partnerships covering almost 1 million square kilometres. Their results, published in PNAS, indicate that, on average, deforestation is reduced by 55% in the protected areas managed by these models and by up to 66% in the most at-risk protected areas.

Sub-Saharan Africa is home to 13% of biodiversity and represents approximately 20% of the world's forests. Protected areas play an essential role in protecting biodiversity and ecosystems. Since the first protected area was set up in 1925 in the Democratic Republic of the Congo, the Virunga National Park, several thousand parks have been established. But the structural lack of funding, limited management capacities, weak institutions and governance complicate the missions of these areas to protect wildlife and their habitats effectively. To alleviate these difficulties, innovative management models have been set up over the last 20 years: states and NGOs co-manage these parks through public-private partnerships. These collaborative management partnerships (CMPs) can also go as far as delegating the full management of thousands of square kilometres of a territory in one or several states to national or international NGOs. Another specificity of these CMPs is their duration: the collaborations are set up for several decades (around 25-30 years, even 40 years in certain cases), while NGOs usually support projects over 2 to 5 years. CMPs facilitate substantial, long-term funding (P. Lindsey et al. 2021 *Biological Conservation*), making it possible, for example, to recruit and train staff and park rangers, as well as to build infrastructure to help local populations to reduce their dependence on park resources and improve their living conditions (power stations around the Garamba and Virunga Parks, roads, tourism infrastructure, etc).

The researchers examined this change in approach to see whether these investments have made protected areas more effective. Their study identified 127 partnerships across 16 countries in Sub-Saharan Africa in 2023, involving 48 NGOs, 21 of which are national and 27 international. These areas cover almost 1 million square kilometres, nearly twice the size of France. The researchers assessed the impact of CMPs by comparing the rate of tree cover loss before and after they were established. Their results show that CMPs have reduced deforestation by an average of 55% in protected areas. They are particularly effective in protected areas under a high level of anthropogenic pressure, where the reduction in deforestation reaches 66%.

These results illustrate that long-term CMPs between governments and non-governmental organizations can be part of the solution to improving biodiversity protection. However, the duration of CMPs requires states to implement monitoring mechanisms to assess their impact. In addition, future research will need to determine whether the improvement in environmental conditions benefits the populations living near these parks.

Reference

S. Desbureaux et al. (2024) Collaborative management partnerships strongly decreased deforestation in the most at-risk protected areas since 2000, *PNAS,* DOI: https://doi.org/10.1073/pnas.2411348121

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