

Human-Wildlife Coexistence



ENSURING PEOPLE AND WILDLIFE COEXIST IN SHARED WILD SPACES

Background

Human-wildlife conflict is a serious and growing problem in rural Africa wherever wildlife, especially large dangerous species, and people compete over scarce resources as a result of increasing population density, habitat loss and fragmentation. It imposes major costs on those people who share their range, including threats to life and loss of productive assets such as livestock and damages to property. Furthermore, it contributes to poverty and in some cases, such as in major crop-raiding incidents, can lead to an immediate subsistence crisis. People first try to protect themselves and their farms, and sometimes retaliate by injuring or killing animals. This then results in the erosion of support for conservation and feelings of resentment towards wildlife authorities and conservation organisations.

Human-elephant conflict is now the leading cause of elephant mortality in Africa today, undermining broader conservation efforts and affecting public support for conservation. In some elephant range states, such as Botswana and Gabon, human-wildlife conflict is such a significant and contentious issue that it has become a defining issue in national elections, directly affecting results and defining policy agendas. The management of human-wildlife conflict poses a major challenge for the future survival of many species of large mammals, particularly for elephants and apex predators in Africa.

With people and wildlife increasingly sharing these natural spaces, we need to move from conflict to coexistence. There are a range of tools that have been experimented with to address the complexity of this problem. Based on over 15 years of experience in researching and understanding human-wildlife conflict in rural Africa, Space for Giants' approach is focused on both household- and landscape-level interventions, using land use planning, electrified fences, monitoring and the management of "problem individuals" to drive conflict down to tolerable levels.

Over the past decade, we have implemented a range of human-elephant coexistence solutions, sharing learnings across the countries we work in and with the range of stakeholders that must come together for effective, long-term coexistence - government, communities, private developers, land use planners, NGOs and researchers.

The coronavirus pandemic has also had major impacts on African country's economies and populations particularly in terms of global and local tourism which is an important income source for many local communities around conservation areas. The global pandemic has exacerbated problems already present in communities and increased the urgency with which they need to be addressed. It is therefore critical now more than ever that livelihoods and farmers' lands are protected from damage by wildlife and to prevent households from being pushed below the poverty line.



Space for Giants' approach

We acknowledge there is no 'one size fits all' approach to the challenges we are facing - they are complex, ever changing and are profoundly devastating to our natural environment. We adjust our approach to the realities of the countries where we operate in partnership with the national governments.

1. National-level strategic planning






Escalating levels of human-wildlife conflict is one of Africa's greatest conservation challenges and one that will continue into the future as populations increase and competition for scarce resources intensifies. At the invitation of Governments, we develop national-level strategies that assess key human-wildlife conflict hotspots within a country and identify the most appropriate mitigation measures such as electric fences, as well as alternatives including deterrents, compensation and "problem animal" control.

2. Smart elephant fences

As Africa's population increases, farmers are increasingly competing for land that currently supports wildlife, bringing elephants ever closer to crops they love to feed on. Our pioneering 'short-post' fence designs keep them away from fields and innovative one strand fences in Gabon are helping to transform subsistence farms livelihoods across the countries that we work.. Space for Giants has successfully constructed and managed electrified fences in savanna and forest environments in Kenya (Laikipia), Gabon, Uganda and Botswana.

3. Monitoring and evaluation

Ongoing, on the ground monitoring and evaluation enables us to:

-  Continually adapt and refine our approach to respond to local context
-  Develop and share innovative solutions to the conservation challenges that we face
-  Support wildlife authorities with decision-making frameworks to prioritise interventions and national human elephant conflict policies, including where to approve development, where to manage as protected areas, and what conflict mitigation measures are most effective at promoting coexistence
-  Shape policy in our countries of operation
-  Deploy scouts to gather vital data utilising mobile phone-based real time monitoring technology in Earth Ranger



Space for Giants' approach

4. Holistic on-the-ground human-wildlife conflict management

Space for Giants provides science-based on-the-ground support to monitor and manage human-wildlife conflict along key sections of the areas where we work and have electrified fences. This involves the use of satellite GPS collars to understand how target species move in time and space. Our research guides the approach to establishing specialist mobile teams with local protected area authorities to provide security, coordinate problem animal control units on procedures, to police fences as well as to push wildlife on the ground away using vehicles and helicopters from community land to conservation areas through wildlife “drives”. We also train and deploy mobile scouts to collect data on human-wildlife conflict incidents in the areas where we work, identify hotspots of conflict and maintain fences as required.

5. Promote sustainable livelihoods next to and within fences




Space for Giants pilots' approaches that see electrified fences move from being just a barrier to wildlife movement to providing value to rural communities living next to conservation areas. This involves promoting sustainable agricultural practices in forest environments, innovating technology to create benefits from solar fencing solutions and stimulating microbusiness in rural areas.



Our work and Achievements

In Gabon - home to most of Africa's endangered forest elephants - we have been asked to undertake the largest ever human-elephant conflict intervention in sub-Saharan Africa by the country's government. Through this, we have helped draft the first national human-wildlife conflict strategy focusing on electric fencing and pioneered a new mobile fencing strategy that protects individual households. We are rapidly scaling this project up in a country where an estimated 80% of small-holder farmers experience human-elephant conflict.

Some other highlights:

-  In Kenya, we completed a county-wide fencing strategy in one of Kenya's most important elephant habitats to keep elephants out of farmers' fields and have transformed the livelihoods of thousands of people to build tolerance across the Laikipia landscape.
-  In Uganda, the construction of electric fencing in the Queen Elizabeth Conservation Area and Murchinson Falls Conservation Area has resulted in zero crop raids and a 90% of people reporting improvement in crop yields.
-  Over the last 12 years, we have collared 63 elephants in Kenya and 12 in the Kavango-Zambezi Transfrontier Conservation Area (KAZA region) to monitor their movements. This provides invaluable data and insights into human elephant dynamics, social behaviours of elephants and their adaptations to increasingly-human dominated landscapes.

Length or number of fence built, overseen, rehabilitated or maintained to date in 2023:

144K M

Kenya

101K M

Uganda

104 fences

Gabon

Acres protected of smallholder farms:

106,750

Kenya

2,456

Gabon

34,000

Uganda

Number of people's livelihoods impacted:

215,000

Kenya

76,555

Uganda

1,637

Gabon



Endorsement from government of key partner

“Space for Giants constructed a demo fence in a high crop raid area. It is good that they introduced this version of fence to us, and with proper maintenance and monitoring it could be very effective. This will greatly reduce spending on compensation.”

JAN DEKOKER,

Senior Wildlife Warden (Projects) Department of Wildlife and National Parks, Botswana

2025 Strategic Roadmap

- 1 By 2025, Space for Giants will have contributed to supporting at least five African countries with the implementation of human-wildlife conflict mitigation measures to combat human-wildlife conflict.
- 2 This support will involve research and development of innovative solutions (such as bespoke fence designs that stimulate micro businesses and promote well being) that reduce the costs of living next to wildlife and build the value of wildlife for people living next to protected areas.
- 3 Develop bespoke human-wildlife conflict mitigation solutions that incorporate innovative designs that target key species, monitoring and evaluation frameworks to measure socio-economic impacts.

Key Partnerships

Kenya Wildlife Service; Laikipia County Government; Elephant Corporation; Elephant Crisis Fund; Leopardess Foundation in Kenya; US Fish and Wildlife Service; Uganda Wildlife Authority; Assala Energy; Agence Nationale des Parcs Nationaux (ANPN) du Gabon; Ministere d’Agriculture and Eaux et Forêt du Gabon.

