

A New Model of Coexistence

The unique mixed use community conservancy of Pardamat, and Kenya's Wildlife Tourism College (WTC) of the Maasai Mara.

- People, wildlife, livestock living together-

In Kenya's world famous Maasai Mara, a groundbreaking model for coexistence offers a blueprint to tackle the urgent challenges of shrinking spaces for wildlife and overstretched resources made worse by climate change.

The Pardamat Conservation Area, or PCA, using a unique triple-use approach to protect land for people, livestock and wildlife, is being led by a community partnership between a remarkable movement of Maasai landowners and the not-for-profit-trust, Basecamp Foundation and many other partners and stakeholders.

Finding ways for people, their livestock on which they depend and wildlife to coexist in sharing the same space is a complex challenge, but Pardamat's innovative coexistence model of conservation is flourishing, protecting an irreplaceable wildlife corridor while generating economic opportunities.

It is one of the newest and largest community-protected zones - areas known as conservancies - in the Greater Mara ecosystem.

Unlike other conservancies in the Mara where land is leased to set aside space for wildlife only - paid for by revenue generated through tourism, Pardamat is a place where both people and wildlife live.

The Basecamp Foundation, following on from its instrumental role in establishing the flourishing neighbouring conservancy of Naibosho, was asked by the community to spearhead efforts in Pardamat.

Due to the multi-use nature of the land, a new conservation model of lease agreement was developed with landowners alongside a state-of-the-art college providing youth vocational training and awareness building for a more sustainable future.

Named the Wildlife Tourism College of the Masai Mara (WTC), it also generates income for the conservation programme.

That twin approach of the college and Pardamat offers sustainable support to a community working to protect a remarkable ecosystem.

- **Pardamat's importance** -

Pardamat builds on the long legacy of community conservancies in the Mara; the unfenced, patchwork of lands leased from Maasai landowners that surround the government-protected 1,510 km² (580 square miles) Maasai Mara National Reserve.

The complex patchwork of 22 community conservancies, crucial for ensuring the stability of the greater Mara ecosystem, all work to safeguard wildlife while offering economic opportunities to the people whose land it is.

Pardamat, 64,000 acres of rolling grasslands, hills and bush, is not only one of the biggest of those conservancies.

It is also exceptional for its innovative mixed use model of livestock grazing, settlement and wildlife conservation taking place side-by-side.

“We have wildlife in Pardamat, but we also have here settlement: there are schools, even clinics, here,” said Johnson Soit, a local primary school head teacher in Pardamat, who is chair of the PCA Landowners Committee (LANCO).

“What we are doing is not making people leave Pardamat, but encouraging people to leave their land open for wildlife and to share the grazing with them.”

Pardamat, home to around 850 families, is the first large conservancy in Mara where the community stays in the conservancy they have created.

Many of those families living in Pardamat settled there after renting out their plots of land in other conservancies for wildlife.

As well as being a wildlife corridor necessary for the health of the wider Mara ecosystem, it is also home to wildlife populations of elephant and antelopes, while its hills offer shelter to endangered species such as African wild dogs and pangolin.

“Pardamat is an important wildlife corridor, that without it would pose a risk to the Mara’s ecological integrity,” said Dr. Irene Amoke, executive director of the Kenya Wildlife Trust.

Dr Amoke pointed to populations of wild dogs, elephants, lions found in Pardamat, as well as the “key hydrological role” it plays, providing streams supporting a wide variety of wildlife.

The hills are a fundamental water tower, the source of the spring that provides the fresh water for a wide area.

- **The challenges** -

Old ways of managing land are changing at breakneck speed.

In the past half century, the transition from a system of communally-owned land shared by all who live there – people, livestock and wildlife – to individual land tenure has seen the once open rangeland divided into separate and private plots.

As settlements have grown, people have demarcated their land with wire fencing, blocking off routes for wildlife.

With a rapidly rising population, estimated at over eight percent annual growth, land plots are being split and subdivided.

Lack of opportunities also provides a challenge: nearly two-thirds of the population are young people, and many of them are unemployed. Unemployment rates are as high as 80 percent. Conservation and tourism underpin so much of the economy in the Mara, but efforts have to be made to ensure there are opportunities for all, especially the young.

As the impacts of climate change become more acute, driving the potential for conflict as cattle herders struggle with changing weather patterns, the need for livelihood improvements at a large scale become ever more important.

- **How it began** -

In 2017, landowners through the umbrella body of Maasai Mara Wildlife Conservancies Association (MMWCA), approached Basecamp, which had earned a reputation for its support of Maasai communities.

The challenges were huge, but Svein Wilhemsen, who founded Basecamp Explorer and the Basecamp Foundation in 1998, realised how important it was to support Pardamat.

“If you have wildlife-only conservancies for wealthy international tourists, all the people are living outside,” he said. “Then they are marginalised, and you could easily create even more conflicts between those inside and those outside.”

An initial USAID grant in 2016 set up infrastructure, including a conservancy headquarters and paying initial staff salaries.

With that established, Basecamp Foundation was then able to come in and start the key work of agreeing to lease land from the landowners.

“We focused on the strategic wildlife corridors,” said PCA LANCO chair Johnson Soit.

“We knew it was not possible to lease the whole area, because Pardamat includes settlements, schools and clinics.”

As well as the wildlife corridor, leases also focused on protecting a rugged ridge of hills, the source of the water spring was well as a wildlife zone.

Initial funds provided a four-year lease of 6,000 acres: through the Basecamp Foundation, the first large grant to come in 2018 from The Norwegian Agency for Development Cooperation, Norad, as well individual philanthropists and foundations.

“It is a model of its own, and it sowed the seed of the idea of conservation,” said Johnson. “Landowners knew the importance of land, but they also know the importance of wildlife, because they are earning from it.”

In 2022, 18,500 acres of Pardamat had been leased from around 300 landowners, around half of what the conservancy aims to lease eventually, targeting 30-35,000 acres.

Those landowners have come together to create a self-governing democratic organisation to face the threats as one.

“If the community and involved in conservation and benefit from it, then that makes it strong,” said Johnson.

- Donor support -

In other conservancies, set aside for wildlife only, lease payments are high. Land is expensive, so you have to have a very high end tourist product to support the leases.

The income is generated through the tourism revenue from the visitors who come to marvel at the wildlife.

Since the mixed use model of Pardamat means landowners remain with their herds on the land and not exclusively for wildlife, to be financially sustainable, lease payments have to be lower. However, to succeed, conservation must still be an attractive choice for the people who live on the land.

“That means you have to add other benefits, directly linked to resilient livelihoods: infrastructure, water, primary schools, for example,” said Svein, Basecamp’s founder. “And that means it comes with a high upfront fundraising need to ensure success.”

The Basecamp Foundation is supported by donors, so, as soon as it is practicable, it is planned that tourism partners, the first amongst them being Saruni-Basecamp, will be able to take on part of those leases through investing in tourism camps, to ensure the viability in the long run.

“Our sustainability plan is vital: we cannot rely only on donor funds for the long-term: they will say: ‘Your pregnant cow had better produce milk soon’”, said PCA manager Jackson Sasine, a herder, conservationist and community leader from the area.

Critical conservation work here is bringing positive change to a vast area, ensuring significant wildlife corridors needed for the long-term survival of the wider ecosystem remain open.

“It is what makes Pardamat different: we are balancing people, livestock and wildlife,” added Jackson.

“We are bringing back a traditional way of land management that was thought to be lost due to land division, but with conservation, we are also paying benefits to landowners.”

- Conservation through community and education -

Key for that is the creation in the heart of Pardamat of the Wildlife Tourism College, or WTC, a pioneering higher education centre training young people in the skills needed to get jobs supporting conservation in the Mara – and to generate income.

The modern multi-purpose community-owned centre is providing the training, skills and employment opportunities for the people of this land to ensure the long-term future of the remarkable global natural treasure is secured.

Built at the foot of the Pardamat Hills, the centre brings together some of latest ideas, with students learning amongst the very nature the courses are focused on, said Moriaso Nabaala, the principal, who comes from the Mara.

“We have built a college to the highest of standards: top quality equipment, teaching staff, and, with both local and international partnerships, lifting the WTC to the calibre of an international institution,” Moriaso said.

It is a community-owned college, based in the community and for the community – but with a global reach.

“Our courses offer developed training that is in demand by the tourism industry here in the Mara,” said Moriaso. “It gives local youth training so they can get jobs and earn a livelihood for their families.”

The college, which will open in late 2022, offers government-accredited vocational certificates ranging from safari guiding to tourism industry skills, including camp and hospitality management.

The WTC also offers diploma-courses running for two years in wildlife management and in environmental management, providing students with information for practical running of conservancies and of ways to mitigate the growing impact of climate change.

Building the WTC was funded by grants, amounting to close to USD 3 million: the crucial focus is now fundraising for an initial three years of operation.

The largest donors to date for WTC & PCA via Basecamp Explorer Foundation being NORAD, AKO Foundation, Baggins, Summa Foundation, LGT Venture Philanthropy, Rising Tide, and Kristiansand Dyrepark.

The aim is for the college to not only become self-sustaining but generate income for the wider conservancy as soon as possible.

“The college addresses a core challenge – youth unemployment,” Svein said. “Our innovative model means that as we do this, we are also supporting the community, through contributing to income through the lease payments.”

Of the 40 Kenyan students each year, at least 80 percent are earmarked for local young people from across the Maasai Mara hoping to work in tourism and conservation. The rest of the spots will be open to students from across Kenya.

“Graduates will have skills, practical and theoretical, including internships during the course – that means they will be fully ready for immediate employment,” Moriaso said.

In addition, international students will join the WTC helping generate income for its operations, and it will also offer a base for academic researchers from the across the world studying the Mara.

“That offers a unique opportunity; it is both a local college as well as for international students,” Moriaso added.

“Education tourism will serve several purposes: to provide some finance for running the college, as well as also for training, while the research arm will provide a place to stay, logistics, and be a venue for meetings.”

- Roots in guiding school -

The WTC builds upon the work of the Koiyaki Guiding School, which began in 2005 in the neighbouring Mara conservancy of Naibosho.

Training took place in a cluster of simple single-story block classrooms and dormitories, painted green and blending into the bush.

Since then, it has trained 377 guides – 293 men, and 84 women – with a growing demand for female guides.

“Those guides are now working both across the Mara as well as Kenya, champions for tourism and conservation,” said Moriaso, who before starting the WTC, ran the guide school.

The WTC expand on the early efforts to provide skills for the guides, when the KGS was established to reset the balance, because at that time, very few of the people employed in tourism the Maasai Mara were actually Maasai.

“We wanted to ensure that the role of guiding was in their hands,” said Ron Beaton, who played a major role in setting up the KGS, and was also one of early pioneers establishing safari tourism camps in the Mara.

“For many of the Maasai students, they already knew all about life in the bush: they were experts in tracking. The key focus was communication, because so much of guiding is communication.” It was also Ron who urged that the guides should not dress in khaki uniforms commonly worn by other safari guides elsewhere, but to keep proudly wearing their iconic colourful Maasai dress of red-checked blankets, a symbol of their identity.

Steve Olkumum, a guide now working for Basecamp in Naibosho for the past decade, the school offered him the change to pursue his dreams.

As a young herder growing up in Pardamat, he would see safari vehicles driving past – with guides and drivers not from the Mara.

“I didn’t think that was right,” he said. “My father wanted me to be teacher, or a doctor, but I wanted to be a guide to show visitors the animals of my home. I have always been passionate about wildlife, and I wanted to also represent my community.”

After 16 years of KGS producing guides alone, prospective employers were looking for extra training to fill employment gaps in the market.

The WTC provides a far wider training programme tailored to industry needs and job prospects. The old buildings will now be used by rangers and other conservancy staff, while the name “Koiyaki Campus” will be used for some of the classrooms at the WTC.

Relocating the school, and incorporating it into the larger WTC campus in Pardamat, will widen its reach to attract pupils from across the Mara and beyond.

- Award-winning designers -

Approaching the new college, it takes an expert eye to spot the dark-coloured roofs nestled among the trees. Even up close, it merges into the bush.

The college was designed to fit into the surrounding environment with as little disturbance as possible.

At the heart of the college is a circular open air amphitheatre for discussions, debates and lectures. A tall acacia tree on one side of the stepped circle, where many of the early planning meetings were held, provides cool shade.

It is just one of several areas across the college designed to encourage people to interact and swap ideas, a two-way exchange between local students and those from abroad.

“We wanted the design to bring people together,” said Ajas Mellbye, from Mellbye Arkitektur Interiør, who along with fellow Norwegian architect Ingrid Bull, from Bull Arkitekter, took a break from their usual large-scale commercial businesses in Oslo to design the plans pro bono. “It is aimed to help build a sense of community,” Ingrid said.

A light-filled circular two-storey tower, providing sweeping views far across the conservancy, forms the library and study space.

The classrooms draw inspiration from traditional Kenyan classroom design, but added touches - including ceiling dormer windows cut in to provide both extra light as well as natural cooling ventilation. They have been designed to be flexible to allow for potential changing needs of the college.

“The WTC was designed to have as light an environmental impact as we could,” said Ingrid. Accommodation is in canvas tent dormitories, with a solid construction of a wash and toilet block attached. At the tent’s entrance, a wide shaded wooden veranda provides another area for students to meet.

“For the Maasai students, it gives a feel of what it is like to be a guest in a camp,” Ajas said.

- Practical courses industry needs -

While the old school offered guiding training alone, the new WTC expands into four key areas. “We need to continue to provide skills so people can earn a livelihood -- and not just any livelihood, but one that relates to their natural environment at their doorstep,” said Moriaso. The old programme has been turned into a Nature Tour Guiding and Hosting certificate, a one-year course with internship placement, covering natural history, ecological studies - and how to communicate that information.

Newly introduced in 2022 are Camp and Hospitality Management courses, ranging from the front office skills, housekeeping, to food and service.

In addition, there are two important diploma courses: two-year programmes in Wildlife Management and Environmental Management.

Those, each with practical placements, provide technical know-how for a practical application to tackle the challenges in the Mara.

That includes applying their skills to mitigate human wildlife conflicts and resolve community issues in a wildlife tourism setting.

It also targets issues of climate change adaptation: of managing scarce water and energy sources, as well as the complexities of carbon financing and assessment.

- **Locally based, international reach** -

Classrooms have also been built so that international lecturers can teach remotely.

“We are bringing teaching resources and lecturers from across the world,” said Moriaso. “We are collaborating with international education colleges, universities and experts.”

Those include the Southern African Wildlife College, based in the Greater Kruger National Park, and the Wisconsin-based Madison Area Technical College in the United States.

Other strategic partners include Aarhus University in Denmark, Oxford Brookes in the United Kingdom, and in the United States, The Smithsonian Institution in Washington, Norwegian University of Life Science (NMBU) and Colorado State University.

“We can offer the space for community meetings, conferences and research gatherings,” Moriaso. “We are a place to bring people together.”

It is also planned to provide physical base at the WTC for the One Mara Research Hub, a collaborative of important conservation researchers from Kenya and abroad.

The hub works to coordinate efforts to provide comprehensive information – identifying knowledge gaps and facilitating researchers work together – to compile the needed data on wildlife and their migratory routes, people and settlements, to ensure effective conservation efforts are made.

With researchers also based at the WTC as a logistical hub, that will also open the potential for a ready collaboration with students, with an easy two-way exchange of ideas and support.

- **Educational experience** -

The international students will generate income for the college for its operations, allowing it to do its work contributing to the wider Mara community.

Pardamat offers the opportunity to be able to learn about community conservation in practice in the place they are studying.

A key partner is EDU Africa, which offers specialised courses tailored to suit the needs of each group can run from two weeks to up to six months.

That includes both individual study programmes, as well as faculty-led trips for educational organisations, including schools, colleges and universities.

“It is exciting to be involved in both the WTC and Pardamat, not only because of the positive changes that are happening there, but to be also able to contribute to that in a real way,” said

Sean Anderson, managing director of EDU Africa.

“The unique location of the WTC is perfect, right in the heart of the community conservancy.” For students, it offers a host of topics: from ecology and biology, carrying out camera-trap monitoring, to learning to about the community-based conservation efforts happening on their doorstep.

“People can really get involved in the work around them,” Sean said.

The practical work in gathering data that students can carry out during their learning including wildlife transects and predator monitoring.

Previous study projects in the Mara conservancy of Naibosho provided researchers with access to regular data sets to monitor wildlife, at a far wider area and greater time frame than they would have been able to manage alone.

The college also offers something different: at the WTC, the international students stay at the same campus as Kenyan students.

At other locations, international students can be somewhat isolated from the communities they have come to learn from.

“That is a huge benefit to the learning experience – that exchange is really powerful to study alongside their Kenyan peers,” he said.

“In addition, of course, is the financial aspect: that because the WTC is community-run, the accommodation itself is really making a contribution to the conservancy itself.”

- Working with partners -

Fees for the WTC are \$2,400 a year in 2022 per person: a sizable amount for any student.

Alongside Basecamp and many other Tourist partners and other partners, a key partner in that scholarship programme is Asilia Africa, one of East Africa’s leading safari operators.

“With the help of our guests, that means we can really make a significant positive impact towards the communities and wildlife that call the areas we work in home,” said Gerard Beaton, a trustee of the WTC, also head of operations for Asilia Africa.

The Tourist Partners backing the college, will offer internships to students as part of the practical element of their course – a useful way to scout for new hires.

“The development of the WTC provides skills in a different league,” Gerard added. “It really is a world-class facility.”

- Studying in nature -

At dawn and dusk, the thick bushes and trees between the buildings are full of birdsong.

“The college is in the wild, so students feel that the wildlife is there, outside their tents,” said Moriaso.

That made it a challenge to construct, but said the builders, well worth it.

“There were almost no bushes or trees cut down, apart from the absolute footprint of the building,” said Josh Knowles, who heads the main contractor, Highmark Construction.

“One of the biggest challenges in the construction was when we were laying out foundations, and ensuring the vegetation was preserved: we had to have 10 men making sure that buffalo didn’t run us over.”

Building materials were sourced as locally as possible, with sandstone rocks forming the base of the classrooms.

Every classroom roof is designed to utilise one of the most precious resources in the often dry Mara – water.

Gutters direct rainwater to an 80,000 litre catchment tank, a significant supplement to water drawn from a nearby spring, with plans for a potential borehole to be dug, depending on needs. More than two-thirds of electricity come from its own solar panels, with the potential to expand renewable sources in future with further funding.

Construction began in late 2021, with more than three-quarters of the around 100 employees working on the site coming from the local area, with many being trained on the job.

“Many of the workers have learned or developed important skills that can help them in other future work,” added Josh. “For example, some of the metal welders had never touched a welding tool before.”

The college will also bring in employment and business to Pardamat.

As well as the 40 students from the wider Mara region, 40 international students and researchers, lecturers and administration officers, there will be up to 40 support staff, a total of around 150 people.

“There will be a big multiplier effect on the community,” said WTC manager Geoffrey Ouma, who has previously run several top-end international large hotels in the Mara. “We will source food for the students from as locally as possible.”

- Skills for young people -

“Conservation is about improving people’s livelihoods, and if you get that taken care of, the rest becomes easy,” said Daniel Sopia, Chief Executive Officer at Maasai Mara Wildlife Conservancies Association (MMWCA).

“If you don’t focus on investing on the youth, that will have a significant impact on conservation in the years to come – and that is why we, as an organisation, are working with WTC to invest in the youth,” he added. “One way to do that is equipping them with the skills and knowledge to secure jobs and opportunities.”

The efforts are backed by Dickson Kaelo, who leads the Kenya Wildlife Conservancies Association (KWCA), the umbrella body uniting the diverse conservancies across the country.

“We are today facing deep crises; we have the crisis of climate change, a crisis of biodiversity loss – and we have the crisis of youth unemployment,” said Dickson who is himself from the Mara.

“So we began asking ourselves: how can you begin to address all these three crises using one method?” added Dickson, speaking at the WTC launch ceremony in August 2022, when hundreds of community members turned up, singing and dancing, celebrating the college.

“If we practice conservation at the community level, and if we put the communities themselves into the leadership... then we have a sustainable conservation model.”

Success of the WTC brings with it support and solutions to the challenges facing the Mara ecosystem, and especially to the local Pardamat conservancy.

- Critical role of Pardamat Conservancy -

“Pardamat is central to the existence of the other conservancies that buffering the Mara Reserve from east to the west for wildlife movement,” said Daniel Sopia, from the MMWCA. “It forms a connecting corridor for wildlife.”

Without Pardamat, the rest of the Mara would slowly struggle, he explained.

“For wildlife, their life is about movement, and the moment they don’t get that movement, that will impact them,” he said.

If the conservation efforts stopped, it would remove a key part of the jigsaw of interlocking land pieces, crucial for the connectivity for wildlife moving from other conservancies.

Ecologists have repeatedly shown that diversity helps stability.

Our heating planet means weather is shifting into ever more extreme patterns, including longer droughts, and more intense rainfall and floods. The ability for animals to move to seek the conditions they need is now more important than ever.

“Without Pardamat, what you will find is that wildlife will be affected within the wider landscape,” he said. “Wildlife movement would be cut off.”

- Protecting endangered species -

Pardamat is also significant for biodiversity found on its lands itself, with herds of elephants and giraffes, zebra and antelope grazing amongst domestic livestock.

A pack of Painted Dogs, also known as African wild dogs, have returned and taken up residence in Pardamat after years of being absent.

“We have also seen wildlife populations in Pardamat itself that are important: lions and wild dogs, that were not there before, perhaps a pride or pack that have relocated there because their habit was disturbed somewhere else,” Daniel Sopia added. “We are seeing elephants now spending most of their time in the Pardamat Hills.”

Some species are rarely seen, but are just as significant - including the highly endangered pangolin.

“We are very proud to have pangolin on our land,” said Jeremiah Kereto, 25, a volunteer for the Pangolin Project, working to protect the unique scaly mammals.

Jeremiah helps monitor reports of the rarely sighted animals - he has seen three in the conservancy - and raises community awareness of them.

“Pangolins curl into a ball if threatened, and that defence makes them extremely vulnerable of people want to kill them,” Jeremiah said. “So we make sure people know how important they are - and of the need to protect the land, because it is their home too.”

In time, as wildlife numbers rebound, the lush hills and rangelands of Pardamat offer the opportunity for tourist operators to set up camps for visitors as another channel to raise funds for the community operations.

- Wildlife corridors threatened -

Key to protect the biodiversity in Pardamat is the essential work of ensuring major corridors of land remain open for wildlife to freely move in, alongside the cattle, sheep and goats of the the residents.

Before Pardamat conservancy began its work, the land available to wildlife was rapidly shrinking. In recent years, around 2014, people began to put up fences, a trend that became popular across a wide area.

What was once open grassland – individually owned plots, but without barriers between the areas – were rapidly divided at alarming speed by wire fencing, some of which is electrified with powerful bursts.

When one landowner erected fencing, their neighbours, keeping up with the people next door, worried that their cattle seemed more at risk – and so they too invested in posts and wires.

It is the job of Gideon Pesi, the PCA conservancy's community liaison officer, to persuade landowners to remove their fences to allow wildlife to move as it had always had done.

People depend on their land and livestock for all their income, so convincing them to change is a challenge.

But Gideon knows his clients: he once herded cattle barefoot across Pardamat as a boy, before studying project management in Nairobi, then returning to his home area.

“People invested considerable money into erecting their fences, so in addition to the monthly payment, when a landowner agrees to take down their fence, the conservancy pays for what they spent on the infrastructure,” said Gideon.

“You must persuade people with the idea: is this conservation better than livestock keeping? What are the benefits? I have to explain: conservation can pay. With a lease, it is like a regular salary – something to ensure you have the money to send your children to school, or collateral that you can get bank loans.”

Yet while some herders are hesitant of anyone telling them what is best for their own land, what the conservancy officers are trying to do is open the land up – the opposite of trying to restrict it or take it away.

Each individual landowner has to be won over.

Just across the border to the south, in neighbouring Tanzania, where there are reports of attempts at the forcible eviction of Maasai people from their land, mean the worry of land being taken away remains a real fear.

“The ideas of conservation, of protecting wildlife and the environment, of ensuring the health of land: these are concepts at the heart of every Maasai,” Gideon said. “But many people still fear it is a trick to take their land: that conservation is just the work of outsiders to come and buy their land.”

- Defencing the land -

One of landowners, and among the earliest conservancy members, is Wilson Sairowua.

“We wanted to have good grass for our animals and that’s why we decided to erect fences,” Wilson said at the time during a ceremony marking the first 500 acres that were de-fenced.

He noted that the detrimental consequence of the barriers had been “different’ from his initial intentions.

As well as being a member of Pardamat conservancy, Wilson is also a conservation officer for the Mara Elephant Project. That programme was set up initially to combat elephant poaching, but having helped bring that under control, now focuses on longer-term threats to elephants -- human-elephant conflict and habitat loss.

“Unfortunately, the fences not only harm smaller animals like zebra or wildebeest, but also cut off key corridors for elephants,” he said. “They also are not very effective at keeping large animals like elephants out.”

Wildlife was suffering, he added.

“This is worse than poaching because we are blocking animal corridors and we are losing wildebeest and giraffes every day,” Wilson added.

As of late 2022, some 5,000 acres previously be fenced off had been opened up, said Jackson Sasine.

- Restoring the land -

The piles of poles from the former fencing are taken to a nearby school: some used as firewood for cooking meals for the children, others to be return as fence posts to protect small patches of woodland that has been planted.

With fences taken down, and wildlife returns. Many grazing animals, from antelope to zebra, happily move with the domestic flocks.

At night, some antelopes even come closer to people’s homes, because they feel safer than being out in the bush where lion prowl in the dark.

Makanika Ole Kumum, 78, a herder, has seen the landscape change dramatically over the decades. He pulled down his fences around his 30-acre plot in 2020, which lies close to a favourite hangout of a wild dog pack – despite fearing his animals would be attacked.

“In exchange for the risk, I get a payment at the end of the month,” the 78-year-old said, sitting outside his small bungalow in the centre of grazing grasslands. “But I have been herding all my life, and I have learned to live with wildlife.”

Makanika sees a future on the land with less livestock and more wildlife. “It is a balance, if wildlife brings benefits, in terms of the money we earn, then we can reduce the cattle we have,” he said.

“I said: if conservation means school for the children, jobs for our young, better roads and good water supplies, then ok, I will pull down my fences.”

- Lease agreements -

In the headquarters of the Pardamat conservancy – for now, a small rented tin-roof home turned into offices – livestock herder Loki Pesi is signing a 15-year lease for his 40-acre block of land where he has some of his 30 cows and 80 sheep and goats.

“I saw people getting a monthly fee for their land, and with this they can pay the school fees and other expenses,” Loki said, who, armed with the documents, was off to open his first ever bank account, where payments are sent directly.

“At the moment, I have to sell a cow or some sheep to raise money for those costs.”

There is a waiting list for people to sign leases, with the conservancy managers targeting those with land in key zones, especially in the route of the wildlife corridor.

In Loki Pesi’s case, his block is in an important area, a largely wooded zone dubbed by conservancy officials as the “maternity ward for elephants”.

He has land elsewhere, so he will lease his block of land outright to Pardamat and move his livestock there. Other landowners will sign a “half-lease”, meaning that they remove their fences encircling their land, but continue to keep their livestock grazing on their land, as they have always done. Rents paid for that are half the price.

Terms of the lease are explained in public at community meetings in Maa, the Maasai language, by Gideon Pesi.

While the fences are taken down, a landowner can still erect a fence within a 10% of the area: around their homestead and the area where the livestock is brought into at night, for example.

After three years, the lease payment is slowly increased.

Leases are witnessed by a lawyer and copies of the deal filed with the lands ministry.

“When the conservancy began, I didn’t really know the intentions,” Loki Pesi said, who, despite being Gideon’s cousin, took over five years to be won over by his relative.

“So I waited to see how it progressed, and I saw that those who had agreed were doing well. So I too will now take my fences down.”

- Winning people over -

Some landowners are holding out. It is a complex argument to persuade herders that removing fences and allowing both their herds to move benefits their livestock.

Ole Keretio Tobiko keeps his herd of cattle he uses for milk on land Pardamat. Yet he has already leased land he owns in other conservancies in Mara – areas agreed under the terms to be reserved for wildlife alone. Tobiko explains that, in the neighbouring conservancy of Mara North, he earns a monthly rent from leasing his land there.

“I am ‘milking’ the wild animals in Mara North with the monthly income I get there,” he said. “Here, in Pardamat, I am milking my livestock, so if the wildlife does not produce, I have my herd here.”

Even though in Pardamat, under the mixed use rules of conservancy where he could receive a monthly income while keeping his herds still on his land, he is still undecided.

“I am not against conservation,” he said. “I am just waiting to see how the situation develops.”

He is hesitant of removing his fences, believing that by blocking off wild animals, he gets more grass for his cattle.

Steve Olkumum, a Basecamp guide from Pardamat and a member of the conservancy, says he has friendly debates with fellow herders, persuading them to change their minds.

He is highly doubtful that the grass the wildlife eat really impacts the cattle, since the wildebeest and zebras have all the space to move right across the Mara as they choose.

“Wild animals would not stay for long in a heavily grazed land where there was not enough grass to go around,” Steve explained.

“I tell them it is more beneficial for their livestock to be able to move: keep too many cattle in a fenced area, overstock beyond the land’s carrying capacity, and you’ll face a problem of overgrazing,” he added.

“Some people say to me: ‘Why are you wanting to bring lions back to our lands where our cattle are?’ But others who have seen how conservation works elsewhere, and the benefits you can get from it, they understand and see it would work.”

- **Protecting livestock** -

Risks to livestock are real from predators, including lion, leopard and hyena. The edges of the Mara ecosystem, places including Pardamat, have some of both the densest lion and livestock populations in Africa – and they overlap, the predators are seen as a threat.

Much of the time, the long lines of wire fencing provide little defence anyway from a determined predator, but as wildlife returns to Pardamat in ever greater numbers, the risk of cattle being killed rises too.

Many rely on the traditional defence: herding their livestock into small corrals at night known as a boma, a circle of cut thorn bushes and fence-posts guarded by dogs. They offer some protection – but still have weak points.

Ole Solol Tiapukel, an elderly herder, described how hyenas broke into his boma one night while he slept, killing his herd of over 150 sheep and goats.

“It was terrible, and I was so worried about the future,” he said. From the community, his neighbours all came to donate one or two of their own animals to Tiapukel to restore his herd.

Tiapukel has not signed a lease with the conservancy for his land, partly because it is not in the priority zone where available funds are being targeted first to open up wildlife corridors – but officers also came to help him erect a predator-proof boma.

The tennis-court sized enclosure, weaving together wooden posts and chicken-wire netting, includes a topping of a slack rubber cable that he believes deters leopards.

“Since this was built, I have not lost a single animal to attack,” he said, adding that the boma was protection enough, and that he had no plans to fence his wider land.

“My children have jobs in conservation, so I am happy to have the wildlife here,” he said, waving towards where several giraffes grazed in a nearby grove of trees.

It is one of 80 predator-proof bomas conservancy staff have helped erect, supporting the community in return for protecting wildlife. Researchers comparing the impact found the rates of herders reporting livestock lost to predators dropped from 85 percent with traditional bomas to just over 30 percent with protected enclosures – a cost-effective measure to protect livestock.¹

- Essential water management -

The conservancy is also helping bring the community together to manage, after land, its most important resources: water.

While land plots are owned individually, finding ways to equitably share common resource of water is vital.

For Pardmat, the crucial source of the Koiyaki spring lies at the base of the hills.

In 2020, Basecamp, implemented by the PCA conservancy team, fundraised for a gravity-fed pipeline from the spring to take the water in two directions.

One runs six kilometres west and the other three kilometres south to communal taps, to support communities who would otherwise have to trek to the spring to collect water.

“Maintaining it is a challenge, said PCA manager Jackson Sasine. “People wants to tap the pipeline, and elephants dig it up seeking water.”

As the consequences of climate change become ever more severe, weather is being driven to unpredictable extremes – creating longer dry periods and greater storms and floods when the rain comes.

However, the organisation and logistical manpower provided through the conservancy structure is helping organise the community to manage water supplies.

“The water management committee works to ensure it is distributed correctly, and that people maintain water points properly,” he said.

- Ranger patrol -

Alongside the work on the college, the work to ensure the ecosystem of Pardamat is protected continues.

Corporal Geoffrey Liaram, pushing through the tangled bushes at the foot of the Pardamat hills, led a patrol of six men and women, part of a team of 28 rangers, dressed in neat green fatigues, complete with an embroidered badge of the conservancy on their chest of an elephant.

Kneeling down on the earth, the conservancy ranger peered at the scuffs in the dust marking the tracks of animals, as they patrolled along the route of a wildlife corridor, land leased by the conservancy to allow animals to move freely.

He scoured the ground searching for signs of a pack of endangered wild dogs, which had been sighted recently nearby.

This time, the pizza-sized footprints are those of a herd of six elephants, who had been in the shade of a grove of yellow barked fever trees.

“Our daily job is ensuring the security of the area and to monitor the wildlife,” Geoffrey said.

The rangers have had a clear impact: in the two years immediately before the force was formed in 2016, there were more than two dozen elephants killed on the hills of Pardamat, some by poachers directly for their ivory tusks.

Since 2016, the year the force was recruited, there have been no recorded cases.

- Providing security -

Corporal Geoffrey Liriam pulled out his phone to take photographs of the elephant prints and dung, which would be later uploaded with details of estimated animal numbers, movement and GPS locations to the WildLife app, providing daily tracking of animals.

The rangers also record problems too, ranging from poaching to charcoal burning.

The Pardamat rangers, in seven bases including remote observation outposts, keep a close eye on any problems, ready to act when needed.

Apart from the latest recruits still awaiting their turn, all have completed the tough residential training course run by the national government rangers, the Kenya Wildlife Service, KWS.

“We are community rangers, so we do not have rifles as there is no need,” said Dominic Sitany, PCA Warden and chief ranger.

He knows all too well what being a ranger entails: he is a veteran who served with KWS in the 1990s, when the battles to stop heavily-armed poachers and stem the slaughter of elephants and rhinos across Kenya at times was one step away from being a war zone.

Pardamat and the Mara is a very different place, and is today peaceful.

“If there is a problem, such as a case of poaching of wildlife or burning of charcoal, we can call KWS rangers or the police for backup,” Dominic said.

- Supporting the community -

The rangers, working alongside the PCA team, provide an important way to promote the work of conservation through the roughly 12,000 residents of Pardamat.

“We hold barazas (community meetings), to explain that wildlife can bring benefit,” Dominic added. “We say: think of the long-term benefit, of planning of the future for your children and grand-children.”

As well as their conservation efforts, their salaries, along with the investment into Pardamat through the conservancy, are having a ripple effect.

For Geoffrey Liriam, a former motorbike taxi and delivery driver who started work as a ranger in 2016, his ranger salary not only supports his wife and three-year-old son, but he also sends his three younger brothers to school.

At the morning parade, eight rangers are put through their paces showing their drill steps before being given their orders for the day: foot patrols monitoring an area where scrub becomes more open grassland along the base of the hills.

“We heard both lions and elephant there, so we follow up to monitor,” said Geoffrey. “Elephants can break and get inside electric fences, they get shocked and get angry.”

- Promoting Women -

The conservancy is also changing attitudes and having an impact on another vital issue.

“In the past, the culture of the Maasai was that no women had formal jobs,” said Diana Molella, 25, a mother of two girls, who started work as a Pardamat ranger in 2021. “But women have the right to go to work, and we are showing people what we can do.”

For Diana, one of four women rangers in the team, part of the work is showing people they are supporting the community, and explaining what the conservancy is doing.

“We are always out in the community,” she said, dressed in green fatigues and a floppy wide-brimmed bush hat.

“This is all part of our work to try to reduce human- wildlife conflict: we all come from the area, and from cattle herding families, so we know the challenges they face.”

The female rangers are also helping win over other women in the community to support the conservation efforts: explaining how the leasing of land by the conservancy provides a monthly, stable rent income they can use to support their family or pay for school.

That income goes straight into bank accounts, giving women access to the funds they spend on exactly what their family needs most.

“We listen and hear the challenges the women are facing,” said Gloria Selena Nkoitoi, 23, another ranger, a mother of a son and a daughter. “And as we are women, they listen to us too.”

Gloria, her polished black boots gleaming, said she was pleased to be doing a job she felt was making a difference.

“I am proud to be a ranger and to be helping to protect the environment,” she said.

- Resource management -

On the grasslands of Pardamat, keeping a wary eye out for lion with a spear in his hand, Elijah Kipeen is looking after a herd of 80 fat cattle.

The livestock, however, are not his: he is being paid a salary to guard the herd, owned by the Pardamat conservancy.

So without income from tourism facilities, for now at least, Pardamat is finding ways to generate income through a livestock fattening programme: buying thin cattle and feeding them up on fresh grass to sell for profit.

“Herders see conservancies as being for wildlife alone, but Pardamat is different,” said Kentui Parmuat, chairman of the conservancy’s livestock management committee, and himself a herder.

“The conservancy is not trying to seize land for wildlife at the expense of the traditional cattle-herding way of life,” said Kentui, wrapped in the Maasai checked blanket around his shoulders.

“It shows people that we are definitely not against livestock.”

Fences are taken down on the land, and the conservancy rents it wholesale: bringing in steers – male cattle being readied for market.

Cattle operations had begun in 2020 and built up to 150 steers – cattle being fattened up for the market for beef, he added.

- Old business, new techniques -

For many Maasai, cattle are not only their livelihood, but also a visible symbol of wealth and respect, intertwined in identity and culture.

For that reason, many place more value on quantity rather than quality.

Conservancy rangelands manager Raphael Kool has brought in modern management techniques to help turn a profit.

Traditionally, cattle are milked and blood taken from live animals for food – like donating blood in hospital, with the vein then sealed. They are killed for meat only for special celebrations.

Yet as cities grow, demand for beef is rising.

So even the basic infrastructure Raphael has built is helping the conservancy improve production to raise cattle directly intended for a swift sale, so where their weight and condition matters.

That includes a cattle dip to reduce parasites, a cattle crush pen to check the health of animals, and weighing scales to monitor and ensure progress.

“All the other herders in the conservancy are taking a very interested eye in our new ways and what we are trying to achieve,” Raphael added. “They come to watch, and learn.”

At night, cattle are kept in a special wire-fence circle, keeping them safe from predators.

The mobile boma system is also easy to move every two weeks, meaning that the manure left behind is spread over a wider area to fertilise the ground – and reduce risk of parasites when livestock are stuck in one spot.

Cattle are kept separate from community cows, lowering the risk of common diseases that would otherwise weaken the cattle and lower their weight and condition.

At best, the weight can be doubled, and pushing the profit margins higher.

“We’d like to expand our production to 300 steers annually, but we have to slowly increase,” said Raphael. “Success of the programme is ultimately dependent on rainfall and the amount of grazing, so we face challenges when there is drought.”
