



Project Proposal to the African Elephant Fund (AEF)

- 1.1: Country:** Kenya
- 1.2: Project title:** Managing Human-Wildlife Conflict Amid the COVID-19 Pandemic in Agro-Pastoral Communities Neighbouring the Lewa Wildlife Conservancy, Kenya
- 1.3: Project location:** Lewa Wildlife Conservancy, Meru County, Kenya
- 1.4: Overall project cost (USD):**
Amount Requested from African Elephant Fund (USD): 42,725
Co-funding source and amount (if applicable) in USD: 73,159
- 1.5: Project duration:** 12 months
- 1.6: Project proponent:** Lewa Wildlife Conservancy
- Other project partners (if any)(please submit or attach an endorsement letter from national government entity responsible for wildlife):
- 1.7: Name and institution of project supervisor:** Geoffrey Chege, Lewa Wildlife Conservancy
- 1.8: Address of project supervisor:** P.O. Box Private Bag, Isiolo-60300 Kenya
- 1.9: Telephone number:** +254722203562/3
- 1.10: Email:** geoffrey.chege@lewa.org
- 1.11: Date of submission:** July 06, 2020

2.0: Project summary (overall rationale, objectives of the project, expected outputs and expected results maximum 1 page) (How is this project addressing COVID-19 related challenges that are hampering elephant conservation?)

Lewa Wildlife Conservancy (Lewa) respectfully requests USD 42,725 to address human-wildlife conflict (HWC) in agro-pastoral villages contiguous to Lewa. HWCs jeopardise the harmonious coexistence between threatened wildlife and families who are ever more dependent on their crops in light of the COVID-19 pandemic. The proposed project will mitigate human-elephant conflicts (HECs), which threaten African elephants (*Loxodonta africana*) and agricultural livelihoods in Lewa's neighbourhood.

The Lewa landscape is utilised by approximately 400 elephants that migrate from the Mt, Kenya Forest Reserve/National Park to the south into the northern Kenya rangelands. These elephants are part of the 7,000+ individuals that roam throughout the year in the northern Kenya range areas encompassing the Laikipia-Samburu-Isiolo-Marsabit-Meru ecosystems. As



populations of wildlife and people grow, competition for food and natural resources intensifies. In the Leparua and Ntalaban villages, which are a part of the Il Ngwesi Community Conservancy, contiguous with Lewa to the north, elephants raid farms for food, damaging crops, disrupting livelihoods and accidentally injuring or killing people. In retaliation, the elephants are wounded or killed by the communities. The impact of COVID-19 in Kenya has led to a loss of tourism revenue, leaving workers in Il Ngwesi area unemployed and increasingly turning to subsistence farming to provide for their families. Left unaddressed, farm invasions by elephants will exacerbate HEC, endangering wildlife and humans, a situation that has seen an increase in both elephant and human fatalities and injuries in the general area of the two villages in the last five years.

With rising HEC incidents, especially in the midst of the COVID-19 pandemic, there is an urgency to construct 14.2-km wildlife protection solar-powered fences to reduce HEC, mainly crop-raiding by elephants in the Leparua and Ntalaban villages. Lewa will work with the local communities residing in the two villages and conservation partners on fence maintenance and HWC prevention efforts. The ultimate result is a contribution to the long-term food production and economic resilience that allows humans and wildlife to peacefully coexist amid and beyond the COVID-19 pandemic.

3.0: Which priority objectives, strategies and activities of the project (there may be more than one) are related to the African Elephant Action Plan (AEAP)?

Objective 3: Reduce Human Elephant Conflict (HEC)

Managing HEC during and beyond the COVID-19 pandemic is important in order to minimise crop destruction and secure long-term food resilience as well as avoid injuries and deaths to both elephants and humans caught in such conflicts. Specific to this project, the objective is to reduce HECs in the two community villages that neighbour Lewa to the north during and beyond COVID-19, contributing to sustainable and food security while protecting elephants and other wildlife and encouraging peaceful co-existence with humans.

4.0: Project Rationale – Why is this project necessary? What threats face this elephant population? (for example, what information you have regarding population details, trends in population (downward or upward), ivory seizure information, details about levels of poaching, human/elephant conflict, habitat loss etc.) (2 pages maximum)

This project involves securing the livelihoods and mitigating HEC in Leparua and Ntalaban, two agro-pastoral villages adjoined to Lewa's northern boundary. Lewa (37.36247°E and 0.25106°N) is merged with Borana Conservancy, forming the 93,000-acre Lewa-Borana Landscape (LBL), which is part of the Ewaso ecosystem that comprise Laikipia, Samburu, Marsabit, Isiolo and parts of Meru counties.

Lewa is home to 400 migratory elephants and provides connectivity to a proportion of over 7,000 elephants that migrate from Mount Kenya to the northern Kenyan rangelands and back. Lewa is among Africa's most successful sanctuaries, safeguarding 13% of Kenya's rhinos. It also protects 11% of the world's Grevy's zebras and is a hotspot for 70+ other large-bodied mammals, 440 bird species and other beloved megafauna. These conservation successes have made Lewa part of the Mount Kenya UNESCO World Heritage Site and Man and Biosphere Reserve, as well as an IUCN Green Listed Site.

Lewa is surrounded by several conservation areas, forming an intricate matrix of wildlife and



migratory landscapes. The Maasai-owned and managed Il Ngwesi Conservancy (37.35353°E and 0.36064°N) is to Lewa's immediate north. The predominant livelihoods in the area are conservation, pastoralism and small-scale agriculture, supported by the Il Ngwesi Lodge's sustainable tourism activities.

Leparua and Ntalaban villages are part of the Il Ngwesi Conservancy whose tourism livelihoods have been substantially negatively impacted by COVID-19. Agriculture is now a crucial part of the community members' livelihoods, notwithstanding that it is greatly vulnerable to wildlife attacks, mainly elephants. Farm raids by elephants further reduce people's resilience and tolerance to wildlife species.

From 2012 to 2018, the number of elephants in northern Kenya increased at a rate of 2.4% per annum (p.a.). As this species' population in the area increases, competition with humans for food and water has intensified, contributing to an increase in HWCs. Consequently, there have been regular incidents of elephants encroaching on farms, destroying crops and other human properties in Leparua and Ntalaban. This inevitably leads to HECs, where people and elephants are attacked or killed in retaliation. In the last five years, three people have been injured by elephants, while 15 elephants have been killed and/or injured from poaching and HEC-related causes in the Il Ngwesi Conservancy area. This is not ideal considering that the Proportion of Illegally Killed Elephants (PIKE) has reduced from an all-time high of 77% p.a. at the height of poaching in 2012 to 30% p.a. in 2019 from data collated in the Northern Rangelands Trust (NRT) conservancies, an umbrella organisation of 39 community conservancies including Il Ngwesi Conservancy, in Samburu and Laikipia counties. However, elephants dying from HEC have remained a big contributor to the overall PIKE levels.

The loss of tourism caused by the COVID-19 pandemic has led to an immediate loss of jobs and income for people living in communities neighbouring Lewa as well as in Il Ngwesi Conservancy. The pandemic has also taken away funding for local development projects from organisations that connect communities to their basic needs. To cope, people are depending more on agriculture and other livelihoods accessible to them in order to provide for their families. If a solution to wildlife raids on agro-pastoralist areas is not found, pressure on communities already affected by COVID-19 will increase, leading to rising HEC incidents and other unsustainable practices. This will endanger wildlife and people, creating a cycle of conflict.

To mitigate HECs, the Kenya Wildlife Service (KWS) and Lewa occasionally send rangers to drive crop-raiding elephants away from farms in Leparua and Ntalaban, This is not a sustainable solution considering that the nearest KWS station and Lewa headquarters are 40 km and 25 km away from the two villages. By the time any of these teams respond, the elephants would have already caused damage to crops. Lewa and its partners have previously constructed solar-powered electric fences and successfully separated elephants and humans/farmlands. Solar-powered electric fences with enough voltage and proper maintenance is adequate to keep elephants away from the communities and farms, thus providing a more effective and lasting solution.



5.0: Detailed Proposal – including activities to be carried out, anticipated milestones), timelines, reporting channels and procedures, etc. (3 pages maximum).
In responding to this section, it would be helpful if you could divide it into five phases (see below tables):

5.1.1: Planning

This project will be completed in one year. We have divided the project into 4 quarters (Q1-Q4) starting with the month when the funds are disbursed to Lewa.

Statement of the objectives	Activities	Time frame	Anticipated milestones	Indicators	Channels or process consultation with stakeholders
To reduce HECs in neighbouring communities during and beyond COVID-19, contributing to sustainable and food security while protecting elephants and other wildlife and encouraging peaceful coexistence with humans.	Activity 1.1. Conduct community awareness meetings to secure the Leparua and Ntalaban communities' approval on the project and fence alignment	Q1	4 public meetings to secure approval and agreement on project and fence alignment	Number of awareness meetings held and number of community members attending each meeting	Public meetings
	Activity 1.2. Undertake an Environmental Impact Assessment (EIA) and develop an Environmental Management Plan to mitigate the negative impacts of the proposed project.	Q1	Contracting an EIA expert and licensing by the Kenyan government	Acquisition of EIA license	Contact with a registered EIA Consultant
	Activity 1.3. Construct a combination of "short" and "high" wildlife protection fences in Leparua and Ntalaban within the Il Ngwesi	Q2-Q3	Fence construction completed in 4 months	14.2 km of solar-powered electric fencing constructed	Hiring of casual labour from the two villages through Il Ngwesi Conservancy Board



	community				
	Activity 1.4. Train two fencers on fence repairs and maintenance	Q2-Q3	2 fencers fully trained by 3rd month	2 fencers trained	Hiring of two fencers from the community through Il Ngwesi Conservancy Board
	Activity 1.5. Perform daily repairs and maintenance on the fence	Q4	Timely repairs of any fence breakages	Voltage of fence maintained at >6000 volts daily	Daily engagement of the fencers

5.1.2: Procurement (*goods, services, equipment, travel, workshop, accommodation etc*)
(Please explain what goods and services you will be procuring and for what purpose)

The project will involve construction of solar-powered fences to deter elephant breakages. This process will involve contracting a registered Environmental Impact Assessment (EIA) consultant to undertake an Environmental and Social Impact Assessment for the project. The EIA report will identify all the potential negative impacts of the project, and will develop an associated Environmental Management Plan to mitigate them.

The project will then proceed to the construction stage. This will be done by the Lewa fencing team supported by hired casual labour from Leparua and Ntalaban. All materials needed for construction, including fencing posts and poles, steel wires, insulators, solar panels, energizers and cement will be purchased from suppliers already pre-qualified by Lewa.

A team dedicated to repair the fence on a daily basis will also be recruited. These fencers will be trained by the Lewa fencing team. They will be deployed to maintain the two villages' fence lines once construction is completed.

5.1.3: Implementation: activity plan, timeline

Activities	Outputs	Delivery Date
Activity 1.1. Conduct community awareness meetings to secure the Leparua and Ntalaban communities' approval on the project and fence alignment	4 community meetings held, project approved and fence alignment agreed	Q1
Activity 1.2. Undertake an EIA and develop an Environmental Management Plan to mitigate	EIA license	Q1



the negative impacts of the proposed project		
Activity 1.3. Construct a combination of “short” and “high” wildlife protection fences in Leparua and Ntalaban within the Il Ngwesi community	14.2 km of solar-powered fence	Q3
Activity 1.4. Train two fencers on fence repairs and maintenance	2 fencers trained	Q3
Activity 1.5. Perform daily repairs and maintenance on the fence	Voltage of fence maintained at >6000 volts daily	Q4 onwards

5.1.4: Monitoring and evaluation measures of the project *(Please explain how the monitoring and evaluation of the project will be conducted)*

Throughout the project period, the Lewa team will measure the following Key Performance Indicators (KPIs) and examine it against the baseline figures set prior. These KPIs will be measured via meetings with the communities and quarterly assessments.

Project Results	Indicators	Target/Baseline
R.1. The project will be approved by the community and Kenyan Government through the National Environment Management Authority of Kenya (NEMA)	I.1.1. Number of awareness meetings held and number of community members attending each meeting	>95% of community members agree on the project and fence alignment
	I.1.2. Acquisition of EIA license	Environmental Management Plan for the fence project created
R.2. Reduced incidences of human-elephant conflicts (HECs)	I.2.1. Number of HEC incidences annually	Reduction of HEC by 10% annually compared to the previous year
		Contribute to a PIKE level of <40% annually
	I.2.2. Daily fence voltage	>6,000 fence voltage maintained daily
	I.2.3. Number of policies on fence operations and sustainability made by the Il Ngwesi Conservancy Board	100% of fence recurrent expenditure met by operational budget of Il Ngwesi Conservancy in the year after the project
R.3. Increased agricultural output for Leparua and Ntalaban	I.3.1 Quantity of harvest per crop from sample farm units	A 5% p.a. increase in the quantity of harvests per crop from 2021 baseline (to be



villages		measured at the start of the project)
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5.1.5: Technical and financial reporting - *(You will be expected to submit interim and final reports for this project in the UN standard template: Please provide details of the responsible officer/entity who will be responsible for preparing these reports and please confirm your capacity to comply with these requirements)*

The interim and final reports will be reported using the UN standard template. This will be done by Geoffrey Chege, the Head of Conservation and Wildlife at Lewa. Geoffrey has an MSc in Conservation Biology. He has extensive knowledge in project design, execution and reporting. He has been part of Lewa's grant programmes from sourcing, oversight of execution and reporting in both single- and multi-year projects of varying amounts for more than 10 years.

6.0: Please explain long term measures to ensure sustainability of the project.

Lewa will sustain and maintain the electric fences and other local efforts to curb HECs with the support of the Il Ngwesi community. The involvement of local communities and other conservation partners in its work is central to Lewa's holistic community-based conservation model. The Conservancy's community neighbours are its most important conservation partners. Through community initiatives, including the proposed project, Lewa supports local communities in sustaining their livelihoods and accessing their basic needs. In turn, the communities support and participate in wildlife protection.

More specifically, Lewa will sustain this project's impact through the following:

- Encouraging community ownership over fence maintenance: In addition to training two personnel from Il Ngwesi on the maintenance and monitoring of the electric fences, Lewa and the Il Ngwesi Conservancy Board will facilitate community consultations with the residents of Leparua and Ntalaban on a quarterly basis to gather feedback. The information will then be sent to Lewa's management team to ensure that the communities' needs and priorities are incorporated into Lewa and Il Ngwesi's decision-making processes and future interventions. Additionally, involving the community members will enable them to exercise ownership and accountability over fence maintenance, contributing directly to HEC prevention and wildlife conservation.
- Incorporating the fences' sustainability into the Il Ngwesi Conservancy's programmes: Lewa and the NRT will work with the Il Ngwesi Conservancy Board to integrate this project's results into their programmes aimed at preventing HWCs and for wider wildlife conservation. More specifically, the project will be tied to the proposed black rhino sanctuary that Lewa, Il Ngwesi and NRT are also working on. The sanctuary, which will be completed in the next 2 years, will establish Il Ngwesi as a protected space for black rhino reintroduction and conservation. The systems created from both projects will contribute to Il Ngwesi's wider conservation programmes.

7.0: Will this project receive any other funding other than AEF? Give all relevant details (for



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example, amount in USD, source of funds, any restrictions? Please specify.

Lewa has also applied for funding for this project from IUCN SOS. We expect to receive at least USD 73,159. We hope to combine the AEF grant with the IUCN SOS grant to fully execute the project based on the overall budget outlined below.



7.1: Please provide a detailed proposed activity-based budget for this project (in USD) as per table below. (N/B: Expenses that fall under incidental procurement* which amounts to \$20,000 or above, or 15% of the total budget (whichever is lower), will require that the implementing partner be subject to the UN procurement assessment.)

**Incidental procurement: equipment, vehicles, travel, furniture, supplies, commodities and materials.*

Budget						
Activity	Qty	Unit	Unit Cost (USD)	Total Cost (USD)	AEF Budget	Co-funding (Non-AEF Budget)
Activity 1: Conduct community awareness meetings to secure the Leparua and Ntalaban communities' approval on the project and fence alignment						
Community/public meetings	4	meeting	300.0	1,200	-	1,200
Transport to attend community meetings	4	trip	42.9	172	-	172
Sub-total				1,372	-	1,372
Activity 2: Undertake an Environmental Impact Assessment (EIA) and develop an Environmental Management Plan to mitigate the negative impacts of the proposed project						
EIA Consultancy	1	contract	1800.0	1,800	1,800	-
Accommodation at Lewa for EIA Consultant	8	night	52.0	416	416	-
Transport for EIA Consultant to and from the villages for community engagements	400	km	0.8	312	312	-
Sub-total				2,528	2,528	-
Activity 3: Construct a combination of "short" and "high" wildlife protection fences in Leparua and Ntalaban within the Il Ngwesi community						
Project Lead	15	day	178.0	2,670	-	2,670
Project Foreman	168	day	20.0	3,360	-	3,360
General Worker	5,040	man-day	4.8	23,990	-	23,990
Lewa Community Liaison Officer	1	month	350.0	350	-	350



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Telecommunication	12	month	30.0	360	-	360
Pipe insulators	110	piece	9.9	1,089	1,089	-
Fencing wire 12.5G	107	piece	132.3	14,156	14,156	-
Fencing posts L10', D6-7"	1,030	piece	21.8	22,454	22,454	-
Superstrain insulators	120	piece	4.3	516	-	516
Black pipe 0.5"	1,950	foot	0.5	975	975	-
Building posts L9', D4-7"	112	foot	13.6	1,523	1,523	-
Building posts L16', D7-8"	4	piece	43.8	175	-	175
Cement	250	bag	7.5	1,875	-	1,875
Ballast	60	tonne	17.6	1,056	-	1,056
R10 bar	1,720	foot	0.2	344	-	344
Battery/Solar box	2	piece	600.0	1,200	-	1,200
Battery N200	2	piece	355.0	710	-	710
Black pipe 2"	7,800	foot	1.7	13,260	-	13,260
Nails 4"	50	kilo	1.2	60	-	60
Earth rods (copper)	6	piece	15.0	90	-	90
Energizer x12i	2	piece	1162.0	2,324	-	2,324
Solar panel 180W	2	piece	180.0	360	-	360
Solar controller 30 Amps	2	piece	25.4	51	-	51
Solar cable 2.5mm	40	foot	2.9	116	-	116
Wire strainer	11	piece	20.0	220	-	220
Bolt cutter 12"	2	piece	617.3	1,235	-	1,235
Empty drums	11	piece	104.4	1,148	-	1,148
Fencing pliers 10"	2	piece	12.1	24	-	24
Flat sheet 16G	10	piece	35.0	350	-	350
Transport of fencing materials using a lorry from Kakuzi Ltd	4	trip	500.0	2,000	-	2,000



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Tractor cost	168	hour	8.5	1,420	-	1,420
Landcruiser cost	2,500	km	0.8	1,950	-	1,950
Food supplies/Rations to casual workers	744	man-weeks	8.6	6,369	-	6,369
Sub-total				107,780	40,197	67,583
Activity 4: Train two fencers on fence repairs and maintenance						
Training sessions	120	day	10.0	1,200	-	1,200
Sub-total				1,200	-	1,200
Activity 4: Activity 5: Perform daily repairs and maintenance on the fence						
Motorbike cost	36	day	16.5	594	-	594
Two fencers for repairs and maintenance	6	month	260.0	1,560	-	1,560
Uniforms	2	set	200.0	400	-	400
Equipment, posts, wires etc	3	month	150.0	450	-	450
Sub-total				3,004	-	3,004
Total Cost				115,884	42,725	73,159

The following budget items are not funded by the AEF, as agreed by the rules of procedures of the AEF Steering Committee:

1. Salaries, excluding experts/consultants hired for specific activities related to project implementation;
2. Daily subsistence allowances and accommodation, unless it is part of training or activities in remote/rural areas;
3. Flights, purchase of vehicles, excluding bicycles and motorbikes;
4. Educational programmes including bursaries & interns.

Please submit the completed project proposal to: mamadou.kane@un.org and dorris.chepkoech@un.org; with a copy to: unep-africanelephantfund@un.org

You should receive acknowledgement of receipt of your proposal within 14 days. If you do not receive such an acknowledgement, please call: +254 719744186 / +254 710602646.

Additional information on the project proposal may be requested by the Steering Committee of the African Elephant Fund.

N/B: The full project proposal should be translated into a two-page executive summary in the other working languages of the AEFSC (English/French and vice-versa).

For more information, please visit our website: www.africanelephantfund.org