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# CONSERVATION AND SECURITY: NEW CHALLENGES, NEW OPPORTUNITIES, AND THE US-AFRICA LEADERS SUMMIT

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**Vanda Felbab-Brown** [00:00:15] Good morning. And good afternoon, good evening, depending where in the world you are joining. Thank you for joining us today for our exploration of the multifaceted relationship between security and conservation issues in Africa. I am Dr. Vanda Felbab-Brown, senior fellow at the Brookings Institution. I direct the Initiative on Nonstate Armed Actors that also deals with illegal economies such as poaching, wildlife trafficking, illegal logging, and where I co-direct the Africa Security Initiative. On December 13 through 15, the Biden administration is holding the U.S. Africa's Leaders Summit. Among its many goals are fostering new economic engagement and the green economy in Africa, advancing peace, security, good governance, democracy and human rights in Africa, strengthening regional and global health security as well as public safety, promoting food security and, of course, responding to climate change. What is the picture of conservation, biodiversity, poaching? You do not think diseases, wildlife trafficking, and the impact of climate on all those issues, as well as basic security and human well-being, and how do we improve policy to address those issues are the topics of today's webinar with our most distinguished guests, whom I will introduce as I turn to each of them for their opening remarks.

Before I do that, let me briefly set the scenes. Three years ago, the zoonotic disease COVID-19 sent the world into a massive public health and economic shock, wiping out 25 years of anti-poverty efforts, causing millions of deaths and undermining the security and well-being of many people in many countries. Yet we have only seen meager efforts to address many of the underlying sources of zoonotic diseases. In some cases, such as preserving tropical forests, we have seen significant decline in the effectiveness of conservation since then, or more precisely, we have seen the adoption of policies that undermine conservation. Many issues, many other sources of zoonotic diseases remain unaddressed. In fact, the economic shocks of COVID intensified bushmeat poaching and income, as income, from, for, from tourism for local communities, and park rangers collapsed. Patterns of wildlife trafficking have changed— they were changing already prior to COVID— but certainly the issue of international wildlife trafficking and the risks that it poses to biodiversity, being a source of zoonotic diseases persists.

As we are talking today, large parts of Africa— particularly the Horn of Africa— is in the grip of a multiyear drought. In fact, parts of Horn of Africa are really in the state of famine, even though the term has not yet been officially declared. Particularly in Somalia, hundreds of thousands of people are at the risk of dying in the next several weeks, many of them young children. The drought in the horn is

just one aspect of the significant water stress and water loss and scarcity that large parts of the continent face, compounded by climate change, but also compounded often by problematic policies that have long been in place. This is also the case with many other aspects of environmental and human animal conflict and challenges in Africa, such as overgrazing, that, along with other sources of desertification, has triggered significant farmers-herders conflict in both the eastern and western parts of the continent.

And of course, the issues of hardcore security, terrorism, insurgencies have unfortunately not gone away. Despite 20 years of counterterrorism, counterinsurgency efforts, we still have many sources, many places in deep crisis, two large arcs of insecurity, one spanning the Horn of Africa to Mozambique, another one in the west, running across Nigeria with its many different sources of insecurity and violence, and then running through the Sahel, Cameroon, Chad, Mali, Sudan, with many different dimensions of ethnic, communal and jihadist conflict. And all those issues are impacting the ability to preserve conservation and enhance it and make it more effective. But they are also compounded when conservation and biodiversity climate and environmental degradation intensify.

So I'm absolutely delighted to be able to have a multifaceted conversation with the most distinguished, knowledgeable and subtle set of speakers today. Let me start with Mr. Andrew Campbell, who is the chief executive officer of the Game Rangers Association of Africa, an organization that was founded in 1970, and that is a nonprofit organization, the oldest, largest, most representative ranger association in Africa. Its mission is to benefit Africa's rangers by providing networks representation and ensuring that Rangers have the necessary capabilities and support to perform their duties in protecting wildlife and environments in Africa. It has over 1900 members from more than 26 countries, and a part of a larger conservation network. Mr. Campbell, who heads the Africa office, has, in my view, the immense privilege to have been born and raised in, on a farm in the KwaZulu-Natal Midlands in the shadows of the iconic uKhahlamba-Drakensberg Park, something that I wish was my childhood. And more importantly, he has used this fortune of devoting himself to protecting biodiversity and promoting conservation in Africa.

Mr. Campbell, I am absolutely delighted that you have joined us today, and please let me start with you. Three years since the onset of COVID, where are we in terms of what's happening with

poaching, what's happening with international wildlife trafficking? Have we been able to recover from the shocks that COVID imposed on conservancies, on rangers, as tourism and income declined?

**Andrew Campbell** [00:07:30] Thanks, Vanda, and it's a pleasure to be here with, with all of you today. I just wanted to start off with just explaining a little bit about the role of the Ranger in conservation, because sometimes that's misunderstood. So obviously, Rangers work, they work primarily in law enforcement in protected and conserved areas, but they do a host of other work in those areas to protect and conserve the wildlife and the wild places where they work. So they would be doing wildlife monitoring, they would be doing general conservation work like lighting and fighting fires when required, controlling alien invasive species, working with communities, you know, rangers, they come from the local communities, they work with the local communities involved in mitigating human-wildlife conflicts so they, you know, their work is very diverse and very critical. The law enforcement aspect is obviously a big focus in many areas, especially where poaching risks are high, and that's often the area that people focus on.

But just to start off the conversation with, you know, some sensitization around the other important work that they do. The other thing to recognize as well is we often think of rangers working on terrestrial environments, but there are also Marine Rangers that do incredible work on our oceans and and water bodies around, around Africa. And I think they are vastly underrepresented when we, when we discuss things like poaching. So just to keep those, those in the back of the mind. If we look at yeah, we often say rangers work at the at the source of, of wildlife crime, you know, essentially many of the wildlife products which are traded internationally are taken from conserved and protected areas. And that's where the Rangers are working, and part of their jobs is to manage those areas and to conduct patrols and to try and reduce, obviously, poaching and illegal wildlife crime. Also recognizing here that poaching when I when I talk about poaching, I'm talking about more than just meat poaching or poaching of high value species. We're also talking about illegal logging. I think you mentioned earlier, massive problem in Africa. We're also talking about marine poaching of resources such as abalone. So I think we just need to think broadly when we talk about these topics.

What we saw uncovered was, you know, it varied. Once again, poaching is something that, you know, often people think of poaching, poaching of rhino and elephant for ivory and rhino horn, just to also unpack that a little bit more. But you know when we talk about bushmeat poaching, we talk about it on two levels. One, being commercial bushmeat poaching, which is done on huge scales

where bush meat is taken into urban areas and sold into large, you know, large urban populations and done for commercial purposes and has huge, obviously huge impacts on, on wildlife. And then we also have subsistence poaching where people are literally poaching to feed themselves and their families, two very different scales that we look at in bushmeat poaching. And then we obviously have the poaching of iconic high value species such as rhino, elephant, pangolin, etc.

So what we saw during COVID was obviously a, most areas and most rangers that we spoke to saw an increase in bushmeat poaching that was to do across, you know, a couple of factors. Obviously, one being a lot of people were back at home, they had been furloughed from jobs, kids were allowed to go to school in some countries, they were back home. We even had reports from one area where they said, you know, youngsters were poaching just to pass the time as a recreational activity. So definitely bushmeat poaching I think across the continent, I'd say generally people did see an increase in that. The high value species was quite interesting because obviously the trade routes for that, the market for those is not in Africa itself, it's elsewhere. And obviously with trade routes cut off, we actually saw a decline in some of the high value species in the short term. April, I think it was, what was it, April 2020, we saw zero rhino poaching in the Kruger Park for the first time in, I think about ten years, just because no one was going in and out of the park, you know, we had no tourists, we had no contractors, we only had rangers and park management officials inside the park and there were no poaching instances. So it had, what we knew at the time, though, was that this was going to be short lived, you know, different countries in Africa had, had different experiences.

And that's another thing just to recognize is now very context specific, you know, we spoke to Rangers that saw no difference in their parks pre-COVID post COVID or during COVID, and other parks had huge differences, you know, we're looking at over 6000, 6500 protected areas in Africa. So that's pretty hard to give one answer for everyone. So I think that, you know, that cutting off the trade routes definitely had a massive impact. What you've seen as those as lockdowns have, have eased, you know, those trade routes have obviously opened up again and become viable options. I have read anecdotally about an increase in online, online distribution and marketing of illegal wildlife products as well. So I think that broadly speaking, I would say things are, are starting to go back to the status quo. I think those trade routes are all open again. You know, we're seeing, I saw some stats coming in today from Namibia. There are no poaching stats. Over 65 carcasses farmed this year. You know, that's the highest it's been since about 2017, 2018. We see in South Africa, rhino

poaching carcass numbers starting to come up again. Places like [inaudible], uMfolozi in KwaZulu-Natal, the worst ever run of poaching that they've experienced on record in the last ten or 15 years has happened this year where they've lost over 150 animals. So, you know, it's, I think things are returning, unfortunately, to, you know, to pre-COVID levels.

We’re also bearing with a massive reduction in resources available to rangers and conservation teams, just, you know, the results of economic stress and economic hardships on protected areas, whether it's from donors not having enough, you know, disposable income to make small donations to these parks to assist park management or governments, you know, not collecting, having had their tax base eroded through a decrease in economic activity or, you know, the tourism sector had a, had a massive, you know, shock sent through it and obviously a lot of tourism incomes do go back to supporting park management in some areas. So we're seeing the sort of ripple effect of all of those, parks are under extreme pressure, and so are communities, our communities surrounding parks also have experienced massive economic hardships and stressors. We hear about increased human wildlife conflicts, you know, pressures, things like droughts drive that pressure up.

So at the moment, if we're talking broadly outside, we are in a really stressful situation in conservation. It seems to, we seem to go from one crisis to the next. We try and see the light at the end of the tunnel, but it is it is a serious situation, as always. And the odds against which Rangers work is extremely high at the best of times and even in some of the best, you know, the most supported parks in Africa, where, you know, where we have good park management, good governance and strong economic models, us rangers are still out there facing huge odds. They work with dangerous wildlife in these hot environments, these are not easy places to work. You know, if you look at the terrain and the weather, harsh climatic conditions.

So, yeah, it's, it's it's a stressful time. I think it always is. And conservation, you know, what there is, there is, there are some, you know, some good examples of what I'd call winning models, models that have made progress. There are some good initiatives that have taken place, the parks being restored. You know, in the West we talk about rewilding. For me, that concept hasn't really taken on in Africa from a description of rewilding. But what we are doing in Africa now, if you look at the work of some of the NGOs like African parks and WCS and essentially, we are starting to rewild some of the parks that have been depleted to the point of failure and taking proactive decisions in park management, putting models in place and restoring ecosystems. And that is taking place.

Obviously, we'd love to see a lot more of that across, across the continent, but it's important to also look and see what can be done and where people and wildlife can live and utilize the same landscapes. It is possible we see it working in areas. It's a very difficult thing to get right, but we can't, you know, we can't lose sight of that. It is an achievable goal. And I think there's some very good models out there to, to look at that and see how they're doing, and how they have achieved what they have. Some of the most resource-scarce environments produce some amazing results. And that's where you have good people doing amazing things on the ground and then really contributing to the conservation cause. So I think some of the other speakers will share some of their experiences, I know Derek and them do an amazing job up in this really difficult environment to work on. And I look forward to hearing some of the things that he's going to share with us later.

**Vanda Felbab-Brown** [00:17:35] Excellent. Thank you so much, Andrew, for this overview and indeed perfect segue to Mr. Littleton, to Derek, whom I will introduce just in a second. Thanks for the very comprehensive picture. I want to highlight two aspects that you mentioned. One is the distressing return to the pre-COVID poaching and wildlife trafficking. I'm not surprised to hear that, but nonetheless, that is very distressing. The 65 rhino carcasses in Namibia is a very large number for a country that often is highly successful in conservation. And also KwaZulu-Natal having the worst poaching on record in rhinos, as you mentioned, very significant, very distressing. But it just highlights the need to both remain constant and vigilant in the inescapable, crucial enforcement efforts, but also think how to bring in communities.

And I could hardly imagine a better speaker to reflect with us how to combine community support with the necessary law enforcement function than Mr. Derek Littleton, who is a third generation Zimbabwean and currently the general manager and director of Conservation and Law Enforcement of the Luwire Wildlife Conservancy in Mozambique. He started his career with Zimbabwe National Parks and Wildlife Management, where he also then transitioned to the Wildlife Unit of the Forestry Commission. And it was during this period that he played a very significant role in setting up the early CAMPFIRE program, a highly celebrated, in some cases even a revered and successful conservation program that gave rights to communal, to local communities to manage and sustainably benefit from their wildlife resources. And CAMPFIRE is often followed as really the model of how to reduce human animal conflict and bring communities into conservation. Mr. Littleton was also very effective in setting up of successful anti-poaching operations. Eventually he transitioned to

doing conservation in Mozambique, itself a very large challenge, including because the devastating civil war in Mozambique decimated conservation and law enforcement rangers and conservation capacities overall, and he started rebuilding them.

And now your work, Mr. Littleton, at Luwire finds itself once again caught up in violence, this time with the insurgency of the jihadi groups that calls itself al-Shabab, although it's not really connected to Somalia's Al Shabab, something, by the way, we will be talking about on December six. So your conservance is in the thick of violence and you need to be doing conservation, really, amidst extreme insecurity. I would love to hear your reflection of how that can be done, but also what lessons from CAMPFIRE can carry into these very difficult settings, whether in the context of insecurity or in the context of community oppositions or struggles to conservation. Over to you, Mr. Littleton.

**Derek Littleton** [00:21:06] Good afternoon, Vanda. Thank you very much. Good afternoon to the panel and to all the, the team from Brookings Institute. Andrew, also thank you. That was very informative. And, you know, these, these trends are important to watch. It's very sad that we are sliding back into, into a pre-COVID state. The context that I will be putting forward now is, is for one small conservation area. You know, Africa is big, we have many very varied conservation areas. But I hope the very basic principles have some, some value to some of the people who are listening. We began our projects in Luwire in BLOCK L7 in the Niassa Reserve some 22 years ago. The country was recovering from a horrendous civil war that was officially recognized as the poorest nation on earth at that point in time. And despite that, though, there was this, this feeling of hope. It was a time when, when we began, when small interventions were having a disproportionately large impact, positive impact. We'd taken over a conservation area of just over a million acres in the middle of an even larger conservation area, the Niassa Reserve, which is roughly the size of Switzerland. And like Switzerland, I'd, I'd figure that people had had enough of, of conflict that we'd have a period of peace. Within our area, we had a clustered population of some 3500, 3800 people who were on the, on the main road into the reserve. These people over the, over time have become the backbone of all our staffing needs, despite the fact that they had no formal skills.

So we began from scratch and slowly worked our way through creating, creating a skills base. The first thing we did was trained a small law enforcement team which has grown into, in response to, to much needed work over time. It's important to remember that northern Mozambique, well, I guess this could be said for, for most of Africa, but it had suffered heavily under the slave trade. It had seen

very few benefits from, from colonization. And again, after, after independence, it had fallen behind the rest of the country in terms of development, social development. So the initial response of the people in the area when we arrived was, was a passive resistance. They just didn't want anybody around, new people, it didn't matter what, what we were saying to try to convince them of our positive intentions. And it took patience and, and 17 years of study and, and hard work to break that barrier down. In the meantime, we had to deal with the— and finally overcome— a wave of commercial elephant poaching which took place between 2011 and 2000 and, the end of 2017.

One of the factors that was important during this conflict was that it actually put us in direct, indirect conflict with the, with the elements of the community, which was unfortunate with it with the rest of the work that we were doing. Running along this side was the buildup to our present fundamentalist insurgency. Insurgency might not be exactly the appropriate term for this, as a lot of this is homegrown. There's several, several reasons that have contributed to, to this resort to, to radical Islam. One of the first things is a disenfranchized youth who resent the neglect of the government up until this point, and see no role for themselves in the, in the future development plans and access to, to some incredible resources. The second thing is the superabundance of natural resources that we find up in the northern north of Mozambique. Gas, rubies, gold, timber. These, these are affected by varying levels of foreign and internal interest and participation. Recently the local movement has been, has been, this local radical movement has been franchised, franchised by IS, Islamic State, resulting in the, the international community now coming in to the, to the theater and sending in military support. So we now have two, two foreign players fighting each other within, within northern Mozambique on, on, on certain levels. Within, within the several contexts, it's the rural population most at risk, and. [cuts out]

**Vanda Felbab-Brown** [00:28:09] It appears that Derek's feed from Mozambique has frozen. Hopefully it'll, the Internet connection get restored. Let's give it another minute to see if the feed is coming over. Have we lost Derek altogether. I think maybe Derek might have to rejoin. I hope that we can get [cuts out] let me suggest that as we are working to restore Derek's connection, I will now turn to Mr. Nnamdi Obasi and then be able to come back to Derek, hopefully will be able to restore the feed. Certainly it has been absolutely fascinating to hear, too, the challenges of doing conservations in the context of both communities, not surprisingly, being skeptical, perhaps even reluctant to accept conservation efforts that they might see as interfering with their economic opportunities. But also then

the challenge of preserving that work and that accomplishment in the context of a jihadi insurgency and the sense of deprivation and marginalization that feeds that militancy. Which is not in many ways that different from the issues of farmers-herders conflicts that we are seeing breaking out across the continent, both in East Africa and West Africa. A lot of it is fed by problematic policies, some of which stem from cultural preferences, others which are simply back policies. And I see that we are getting Derek back online. So let me continue with you, Derek and Nnamdi, I will turn to you as soon as Derek finishes.

**Derek Littleton** [00:30:33] Apologies, everybody. I seem to have had a drop in my connection here.

**Vanda Felbab-Brown** [00:30:40] Fully understood and we are delighted that we have you back. Derek, last we heard was your description of the sense of marginalization, some lack of opportunities fueling the Shabab militancy. Over to you.

**Derek Littleton** [00:31:00] Thank you very much, Vanda. Let me try and pick up with where I was. Going, going back to, to my time in Zimbabwe in the early eighties, we were looking for solutions to, to some fairly similar problems. At this point, the landowners owned, owned the land, owned the animals on their properties. And so they valued it, they started protecting it. The common lands, however, the game and animals were owned by the state and therefore it wasn't, it was not protected by the local people. Poaching and human wildlife conflict killings were, were rife. The CAMPFIRE program sought to try to change that and to give people the rights and ownership of that resource. And they were then able to, to negotiate with commercial safari operators to utilize that, that quota and the, the the poaching, the amount of the number of animals killed supposedly for, for problems with the human wildlife conflict dropped, and the real benefits started to be realized for the first time.

And I'm pleased to say that 30 years later, many of those projects are still robust and working well, despite attempts at political interference and, and corruption. Within, within Niassa, we are attempting a similar approach through CBNRN. Again, it is based on the principle of, of ownership of the natural resources. It's, it's a bit of a mouthful. It sounds a little bit like my friend Professor Brian Child trying to say the alphabet after a couple of beers. It's communal, community based natural resource management. And again that, it tries to give people a true sense of ownership. And through that, they often become the greatest guardians of, of, of those resources.

Going back to the, to the conflict since, since 2017, northern Mozambique has seen 71,500 politically related armed attacks. Four and a half thousand people have been killed. More than about 2000 of those are civilians, have been civilians, and more than a million people have been displaced. There are obviously larger conflicts in Africa but when you look at the, how low the actual overall population is up here in the north, it'll give you some, some idea of the significance of, of what is actually happening up here. Our greatest challenge during this, this conflict is to keep the young people from the temptation of illegal trade and from fundamentalism. As game rangers and wildlife, wildlife managers, we no longer have the, the privilege of, of simply protecting wild, wild areas. People are at the core of, of the future, of, of protection of these areas. Meeting their needs and aspirations must be, must be factored in. To meet these needs, we need to factor in ownership of the resource with real benefits. People, people know and realize very easily when, whether they're getting a fair deal or not. We need to factor in food security for these people. Alternative livelihoods. Skills that can jump the education barrier. Up in the north here, the schooling system is very poor. Most teachers are sent up here where they consider it to be a punishment posting. So we have this large gap. When the military and the police do a a recruitment drive across the country, they don't even bother coming to us because nobody matches the criteria they required to be in, to be employed as police or soldiers.

Another, another factor that needs to be factored in is continual communication. You, we need to spend a lot of time communicating with, with the local communities and building their trust. People respond very well to trust. And at some point in time, you, we hope to do a devolution of certain law enforcement roles to the community. When I first arrived, we had an expression that basically we were protecting the resources from the Mozambicans for the Mozambicans. Sounds a little insulting, but there was a vital period where we needed to just get a firm grip on, on, on the situation, and until such time as, as things had settled down and we were able to move ahead. We can all, we can all play an important role in in what is happening in these protected areas. But it finally depends on, on adequate funding and on political will. I think I'll, during, during the little brief break there, I may have actually skipped.

**Vanda Felbab-Brown** [00:37:20] Well, Derek, thank you so much. I think this has been enormously comprehensive and I am really struck by not just the challenge of doing conservation in the context of intense insecurity, but also of some of the joint factors that you highlight, that drive people both into joining militancy but also poaching, sense of economic deprivation, marginalization,

sense that the rules and resources are not dedicated to them, and perhaps some of the answers of how to do better conservation, effective conservation such as in Luwire and in CAMPFIRE that you pioneered, have replicability, also for how to reduce the drivers of militancy. I will come back to you as we go into the question-and-answer period and have a conversation.

But let me now transition, mindful of time, to Mr. Nnamdi Obasi, and have him reflect on the issue of farmers-herders conflict. That is not a new phenomenon in Africa, but it's certainly intensifying in Africa for many reasons, often loss of pastures due to overgrazing, due to climate change. It's intensely taking place also in Nigeria, but it often overlaps with communal, religious and other conflicts. Mr. Obasi is a senior adviser for the Nigeria program at the International Crisis Group. But his research has covered many dimensions of security development, such as militants and violence in the Niger Delta, the Boko Haram insurgencies, communal and religious tensions, Biafra separatism, electoral violence and military reforms. Prior to joining the Crisis Group in 2006, he was the senior research fellow and later head of Department of Peacekeeping and Humanitarian Affairs at the Center for Strategic Studies and Research at the National Defense College of Abuja. And between 84 and 94, he worked as a journalist on the editorial board of Concord Newspapers in Lagos, at the time, the largest selling newspaper in Nigeria. He has authored two books, Ethnic Militias and Vigilantes and ethnic separatism, Ethnic Separatist Groups in Nigeria, and 'Small Arms Proliferation and Disarmament in West Africa.' And I must say that I find Nnamdi's work on the herders-farmers conflicts some of the most insightful. And I'm absolutely delighted, Mr. Obasi, that you can join us and would love to hear your thoughts on the farmers-herders conflict. Perhaps also in the context of the conservation issues that we just heard from.

**Nnamdi Obasi** [00:40:31] Thank you very much, Vanda. And thank you, Andrew and Derek, very interesting listening to your perspectives on conservatism, I mean, conservation from other parts of Africa. I will speak, the herder-farmer conflict largely from a Nigerian perspective. My research has been focused on Nigeria and elsewhere in the Sahel. But where I have the in-depth knowledge to offer, it's on what's happening in Nigeria. I would start by saying that the, the far north of Nigeria is a semi-arid belt. It's the driest part of Nigeria. So it has, you know, somewhat limited vegetation compared to the southern parts. So already it was a fragile environment. But then over time, the last few decades, a number of factors have added stress to that environment.

First of all, climate change. There's still a debate about whether it's change or variability here. But there's no doubt that certain factors, such as the climatic factors, have changed in the far North. First of all, there is less rain than there used to be decades ago. Two, the rain has become very irregular, less predictable than it was before, and that has implications for managing the environment, whether from a farming or from a pastoralist's perspective. Then the second stress on the environment also has been population growth. The demographic pressure in all of Nigeria, the northern parts, the far north also has the highest rate of reproduction. The child-mother ratios are in the region of 1 to 7. And that's, you know, extremely high. It's, it's probably Niger Republic alone that you have that kind of high, high rates. Again, there's a cultural practice of polygamy, which is very common. So it's not unusual for a man to have four wives and the whites have seven children each, and that's within one generation. What was three or four or five people, you know, has become 30 people. And that puts a lot of pressure on ground, especially in a very fragile environment that has dispersed vegetation. So these two factors, the climate is pushing, impressing them, stressing the environment.

Population pressure is also stressing the environment, that has also led to massive environmental degradation that in areas that had some vegetation before, they're having less now and some areas are becoming semi, Saharan Desert, very arid areas. As a matter of fact, all the states across the far north of the country are completely now, for some reason. So some, to some extent, desertified. Sorry, I have to turn off the video because of the connection. So with that, some herders have lost their livestock because of the environment, the carrying capacity of the environment is diminished. But also adding to that is that the conflict in the northeast of the country, the Boko Haram insurgency, also limited grazing areas and lots of herders in the northeast began to move either to the northwest or into the north central zone of the country.

Now, some of those who moved into the northwest had already lost all their cattle. And so they had to, some of them turned criminal and then began to raid others who had cattle. So suddenly cattle rustling became a huge industry and then it's become very, very dislocating to society. I mean, this is a part of the country, the north west of the country, the part of the country where you have virtually I mean, if you are not a pastoralist, you're an agro-pastoralist, you have livestock, you have a farm, or you are a farmer, but also you use livestock sometimes, you have cows to till your ground for your crops. So animals are very, very important to people living in those places. And then when

something happens that deprives people of those animals, then it's certainly a very destabilizing factor. And some of the herders they're moving away from that, running from climate change, running from insecurity, move into the central part of the country. Some move to the southern part of the country, and then more problems arise, because now you are moving across ethnic and religious fault lines and questions about culture and communication now become a lot more difficult.

So you're having more friction, there's more disputes, and much of it is turning into violence. And then the nature of the violence also has changed over time, you know, whereas they used to be small disputes in which people, you know, fought with some very basic tools, at most say, machetes or whatever. Then there's been this influx of rifles, automatic rifles coming in from across the Sahel, some of them traced to Libya, some traced to the central Sahel. But then there's a lot more guns in circulation. Herders have had to be armed because of rustlers and then because the herders move around with arms, they sometimes take the arms, you know, attacking farming communities. So farming communities also have to get their arms.

And the, the conflicts become more intense, and the casualties have risen tremendously since 2015. When we did the report on the northwest in 2020, it was already, the count was already about 8000 killed in the northwest between 2011 and 2020. But much of it, about 75% of it between 2015 and 2020. The same thing has happened in the middle belt North-Central zone. The casualties began to rise significantly in 2017 and then massively in 2018. There's been a drop since then, but, you know, incidents still happen, people still get killed. This, of course, as you can imagine, has also created serious humanitarian problems, massive population displacements. At the time we did the first report on the northwest in 2020, there were about 200, at least 200,000 people displaced in the northwest, and about 60,000 of them had moved across the border into Niger Republic. In the middle belt, it's even much larger than that. The Benue State Government, for instance, one of the states in the middle belt, reported earlier this year that it still had about 1.8 million people in IDP camps and scattered in host communities. And that's just one state. So the aggregate might be well beyond that. It's the silent humanitarian challenge. Little has been spoken about it.

How has the government reacted? I think, first of all, the central government, I think first of all, there was a kind of very little reaction. Some people say indifference, some people say neglect. But then with time, the government began to step up. First of all, seeing it as a security problem. So deploying security operations in the northwest and the most central zones to try to put down the

violence. But that didn't address the very fundamental issues that are driving, the structural issues that are driving the violence. So we moved a little bit from there. And then in 2019, the government decided, okay, let's have a national livestock transmission plan to limit the movement of cattle, the migration of herders across the country, which is a source of friction when they run into farming communities and also kind of endangers the livestock, because they, they get attacked by rustlers. So it's a national livestock transmission plan that provides that each state of the country can develop plans for the establishment of ranches or grazing reserves. It's not a one size fits all kind of plan. Each state develops its own plan according to its historical and geographical realities and then approaches the federal government. The federal government is supposed to provide 80% of the funding and the state government 20% of the funding. About 22 states had initially indicated interest, I understand the work has started in ranches and projects in eight of the states, there about. But then that is again being constrained by insecurity.

Well, first of all, it's constrained by the COVID-19, I mean, 2020, nothing got done because of the movement restrictions during that year and the diversion of resources, you know, to cope with the pandemic. And then since then, the security situation remains very, very challenging. And it's difficult to move into some of the areas where ranches and the grazing reserves are supposed to be built. At the local level, some of the state governments have launched tree planting campaigns, trying to regenerate the environment. But again, that's very limited response. The wider response regionally was, is what was called the Great Green Wall for the Sahara and the Sahel. It's an 8000-kilometer wall of projects, trees and projects for conservation, for environmental restoration and for improvement of livelihoods. And it runs from the Horn of Africa to Senegal on the West Coast, just a bit across the north of Nigeria that runs right through the Sahel.

But as you can imagine, the project that runs through the north of Nigeria, runs into Burkina Faso, runs into Mali, through Niger. With the security situation in those places, it's really, really challenging moving forward. So we have a vicious cycle in which climate, you know, creates security problems and security problems in the efforts to get to grips with the climate, climate challenge, climate change challenge. That's, I think, where I would stop for the moment. And you can take the rest of the discussions. Thank you.

**Vanda Felbab-Brown** [00:51:20] Thank you very much, Mr. Obasi. I looked very much forward to coming to you. Very informative and certainly both the specific issues of farmers herders

conflict spreading and intensifying in Africa and something that's not going to go away but it also impacts conservation and other communities, deserves so much more attention that it has received in policy. And the broader issue you raised of the intensifying vicious circle of insecurity and environmental degradation, something that needs to urgently become some of our primary focus. Underlying both dimensions, of course, is the issue of water scarcity, something that Africa has suffered, in various parts of Africa, have suffered for a long time, but that are again becoming even more pronounced.

I started the webinar by reminding us of the famine going on in several parts of Horn of Africa in Somalia. I would highlight here that in connection with what we just heard, that three quarters of the cattle in Somalia have died, as we are in the grip of the, of the intense drought and famine insecurity that is heading into famine. Let me repeat that. Three quarters of all cattle in Somalia has been lost in the past several months. That, of course, has enormous impact on families, on human security, but it also has a big impact of the economy of Somalia, where the export of livestock to the calf is an important source of income. So how to deal with water scarcity move to better conservation of water is critical for human security, security of countries, and is, of course, also critical for conservation.

And I'm so delighted that we now have Dr. Paul Orengoh to reflect with us on what can be done better and what must be done urgently. He is the chief of party at RTI International, an associate professor of hydro climatology at the Institute of Climate Change and Adaptation at the University of Nairobi. And Dr. Orengoh also serves as the chief of party with the USAID Western Kenya Sanitation Project. He has deep experience and accomplishments in developing, managing, implementing and evaluating complex water resource and ecosystem management projects. He has also managed a variety of important projects on sanitation and hygiene, financial modeling for sustainable water and sanitation services, watershed planning and conservation education, and of course, the issue of climate change and adaptation for climate change has featured centrally in his work. He has served as the Deputy Executive Secretary and director of Programs for African Ministers' Council on Water, the Chief of Party and Climate Change lead for USAID Kenya Feed the Future Innovation Engine, as well as in a variety of other water related and conservation related projects for the World Bank, USAID and other entities. Paul, over to you. If you can, please reflect with us on where we are with water scarcity in the Lake Chad area and how that is impacting insecurity and what can be done to break

out of that vicious cycle of environmental degradation and insecurity that Mr. Obasi was just speaking about.

**Paul Orengoh** [00:55:15] Thank you so much, Vanda, and many thanks to the great panelists. Now the story of Lake Chad, I think, cannot be discussed without looking at the continental context of things. And this year, 2022, actually last month, the World Bank placed Africa's gross domestic product at roughly $3 trillion. Now, Africa actually loses 5% of these GDP every year. Every year, 5% of its annual GDP due to lack of water infrastructure. And of course, this is something that the continent could save. But the first pointer that we are not doing something right with regards to water security. Assuming that Africa was to save this, it would save about 150 million USD every year of its GDP. And this is probably enough to run a country like Rwanda for ten years of its GDP.

Now continentally and perhaps looking at Intra-African trade, which stands at 13% as compared to approximately about 60%, 40% and 30% of intra-regional trade in Europe, North America and the Asian Region, Association of South Southern and Eastern Asia. Now, this points to the fact that intra-continental trade in Africa, which is mostly around agricultural produce, is not only low but also has the great potential to improve, if only we could address water security, perhaps beginning with improved water infrastructure.

Now around the Sahel, we have been informed about the generality of conservation, environmental management and of course, the security issues. But the countries around the Sahel, Niger, Nigeria, Chad and a few others are countries that are generally underdeveloped. But the Sahel is, again, a region that is witnessing an annual population growth of about 2.8%. So essentially this means that while we are experiencing degradation of resources, across the belt, the population keeps rising, and the competition among, you know, communities, ethnic communities across regions, you know, is ever rising due to population rise. So most affected in the region, of course, are four countries bordering Lake Chad, which is Cameroon, Nigeria, Niger and Chad. And we've had the case of Nigeria. So the shrinking, the shrinking lake is, of course, is impacting negatively on livelihood activities such as fishing, livestock farming, and agriculture, which calls for equitable management of lake and other shared water resources in the basin, as well as conducting studies on potential of groundwater to support resilience within the region.

In the words of Ibrahim Thiaw, the U.N. special adviser for the Sahel, and this is what he states, there used to be a major drought every ten years. Now it is happening every other year. And

this is in reference to the Sahel. But the challenges within the Sahel arising from the reduced water levels in the lake Chad comes with security, economic, social and climatic challenges. So the extreme climatic change has disrupted the region's security, economic and social stability. And in this way, of course, first through the reduced farm yields, as I mentioned, the rising population and the receding water level, as well as the unpredictable rainfall pattern, means that there is a strain population that is having to grapple with livelihood activities. And this is a region that mainly relies on agricultural production.

Of course, the pasture shortage, which threatens livestock rearing and trading for agricultural practices, which again sparks conflict over reduced grasslands and of course, the equilibrium of traits which brings about inflation, disruptive supplies and low buying power and of course low investment in water infrastructure, which brings about the abundance of cartels. The erratic water reliability is also bringing about a lack of sustainable market-based water infrastructure and indiscriminate use of groundwater resources and its aquifers. Of course, pollution of both surface and groundwater, because if groundwater and surface water, especially those that have transboundary nature, are not co-managed in an agreed manner within a specific framework, then it comes about with a set of challenges.

Of course, the other challenge is the adherence to developmental water related regulations, policies and laws. We acknowledge, I acknowledge existence of RECs, regional economic communities, especially ECOWAS and Zadari (phonetic), but also the Lake Basin Commission, the Lake Chad Basin Commission, which struggles to address this. But again, the different data sets, data protocols and policy frameworks in the Member States prevents specific, concise development of a framework that helps in core management of this. But again, there is an opportunity. An opportunity to be able to frame these challenges together, bring back the principle of collective action, and manage the resources around Lake Chad, by specifically the countries that are around Lake Chad, I would call the basin countries, the basin states. So there is a need to do more, especially to secure water-based infrastructure in the region, first by protecting the water resources or the water sources that are there, especially the groundwater that still promises productive aquifers.

There is also the need to bring about climate responsive, regionalized policies and agreements that every member state subscribes to, and especially that takes into account differing data management protocols and the involvement of state and then state actors. These are some of

the approaches and opportunities that exists for the countries, especially the member countries across the Sahel and specific to Lake Chad.

Now, as the African leaders head to the U.S. for the U.S. Africa Leadership Summit, I think there's also a huge opportunity to elevate hydro diplomacy and place water issues at the center of conservation and the conversation around trade, peace and stability and, of course, economic development, both individually as countries, but also collectively as a continent. And some of the issues that African leaders could put to the table, and especially leveraging on the U.S. competence, experience and collaborations, is to collaborate with American institutions and platforms to remodel continental platforms and frameworks to better respond to water security challenges, and of course, specifically, and by extension, climate change, including capacity strengthening.

We also do have the Africa Water Vision, which guides continental water sector development. And this is yet another opportunity that African leaders could engage their U.S. counterparts to support with the evaluation of the water, Africa Water Vision 2025, which is seemingly off track in terms of achieving the targets to inform the development of a new sectoral development blueprint post 2025. This could include interrogating what worked well, what did not, and the missed opportunities altogether. Of course, the issue of forging intentional collaborations and partnerships is necessary to drive regional and continental water agenda, and this could rest within the hands of the regional economic communities like ECOWAS, the economic community of West Africa, the African Union Commission, and the African Minister's Council on Water, AMCOW.

African leaders and especially the Sahel leadership, could also initiate and promote the principle of collective responsibility amongst political leadership and political institutions. And this, of course, needs to give credence to the hydro diplomacy efforts championed by various continental institutions and to provide leverage to existing transboundary co-management institutions. For instance, the Lake Chad Basin Commission provides for specific co-management principles that not every member state subscribes to. And so the principle of collective responsibility is one of those opportunities that could be leveraged. Most importantly, the development of regional and continental water infrastructure financing frameworks and models, which includes viable public private partnerships for water secure continent is needed and of course, to complement initiatives around food security, intercontinental trade and economic growth. Within Africa, we are aware that intercontinental trade is only 13% and that 13% is mainly around agricultural produce. So with

reduced production, food production around the Sahel as a result of climate change, the impact of climate change, the receding water levels of Lake Chad means that intracontinental trade can only go down.

**Vanda Felbab-Brown** [01:06:03] Thank you, Paul. This has been enormously informative and obviously we are just scratching the surface of the enormous amount of issues related to water, but I'm very mindful of the time. So I look forward to coming to you on specific water questions a little bit later in the time we will have remaining for the Q&A. But let me now turn to Ms. Catherine Semcer and ask her to reflect, based on what we have heard from all the panelists of how those issues of water scarcity, communal conflict, such as among farmers and herders, a loss of habitat poaching, wildlife trafficking, pose opportunities for the Biden administration to highlight and develop new programs and opportunities coming out of the U.S. Africa Leaders Summit.

Ms. Semcer is a research fellow at the Property and Environment Research Center, as well as a research fellow at the African Wildlife Economy Institute at Stellenbosch University and a chair-elect of the Wildlife Society's International Wildlife Management Working Group. At PERC, she leads the Wild Africa Initiative, and she is also a doctoral candidate in biology at the University of Oxford, where she is specializing in the issues of conservation. She's also serving as, she also sits on the advisory board of the Game Rangers Association in Africa and is a member of the Sustainable Use and Livelihoods Working Group of the International Union for Conservation and Nature. Catherine, what can or should be done with what priorities and what opportunities does the summit pose for the Biden's administration efforts to support conservation, green economy, food security in Africa?

**Catherine Semcer** [01:08:19] Well, thank you, Vanda. Thank you to all of the panelists. Listening to you all I'm left with some, some of the following thoughts. For most of Conservation's history, the dominant context that the mainstream has provided it is that the purpose of conservation is to protect aesthetics and to provide recreation. And these are, of course, valid reasons to protect nature. We see this dominant mindset in the reliance of African conservation on tourism, primarily from from the global norm. Now, the COVID 19 pandemic, as Andrew discussed, revealed the fragility of that reliance and that that mindset in facilitating conservation and the lived experiences discussed and described by all of the panelists make it very clear that conservation has a much wider context and a much greater importance than just protecting aesthetics and providing for outdoor recreation.

Now, this understanding of the wider context and the wider importance of conservation has been present in successive national security strategy and other documents issued by the US Government. But we have yet to see this understanding really become mainstreamed within our political dialogue. Most of our policies and most of our practices as the United States are still very much geared towards just this idea of conservation being primarily to facilitate recreation and to protect aesthetics. The summit that's coming up, I think presents an opportunity for the Biden administration to really highlight the clear and distinct and hard linkages between conservation, livelihoods and human security, and to begin reflecting with our African partners on how our policies might either enable or discourage the attainment of shared security interests.

For example, how we implement the Endangered Species Act can be very important in determining the extent to which African nations can raise the revenue that they need to to field game rangers. This is something that that's actually very much in focus right now with a proposal issued by the U.S. Fish and Wildlife service regarding elephants. We also need to begin thinking about how do we play to our strengths as a nation in helping our African partners achieve shared conservation and security ambitions? Yeah, there's a lot of indications suggesting that we're heading for a global recession. President Biden's going to be dealing with a divided Congress, and he's also going to be dealing with a very different budgetary environment that he might, might have ideally enjoyed. So I think there's a question of how do we take our private sector, which is incredibly strong here in the United States both civil society and the business community, and deploy it to enable our African partners to achieve these shared conservation and security ambitions.

Some of this will involve, you know, speaking up for the positive role that businesses can have in delivering conservation, something that has become politically controversial in the United States and is a discussion that that we know that Republicans in Congress are planning to have. But also thinking about how do we create pathways and platforms for businesses to positively engage with African civil society and with African businesses to maintain supplies of clean water, to protect biodiversity, and really start aiming for developing those green chip investments if you will, that will provide the stability of financing and governance needed to drive us forward into a more prosperous and secure future for people on both continents.

**Vanda Felbab-Brown** [01:12:44] Well, thank you very much, Catherine. Very important, succinct remarks. And you highlighted to us not just the need to build partnership among communities

and governments or communities and private conservancies to do conservation between communities and farmers and herders, communities to do better management of resources, but also between private businesses, something that is also very important in the issue of water conservation, where both expanding the set of stakeholders to include local communities, diverse local voices from local communities as well as businesses is critical.

We now have about 15 minutes for questions, answers from the audience. I am very grateful to all the many questions you submitted that are way too many, what we possibly cannot accomplish in 15 minutes. But I will select one for each speaker in the remaining time. And I really am very grateful for the very comprehensive conversation that we have been able to have in the seminar, in this webinar, both the depth of the remarks, but the span of the issues, because all too often various aspects of conservations are tackled separately in a stovepiped manner, let alone are they integrated into the larger thinking about conservation being at the core, also about security and also about economy. The purpose of conservation is not just to preserve the planet, but to preserve all of our safe economic thriving, as Ms. Semcer so eloquently suggested in her opening remarks.

So let me start with the same question for you, Andrew and Derek. One of the questions that we got from the audience was to reflect on what is being referred to as green militarization, namely the sense that conservation efforts protecting conservation areas is geared too strongly to the law enforcement dimensions and what impact does it have on community-based conservation approaches, community based natural resource management, about which Derek so importantly spoke about. So to you, Andrew and Derek, that same question, your thoughts on the law enforcement human rights community-based conservation relationships.

**Derek Littleton** [01:15:34] So, Andrew, please, please go ahead.

**Andrew Campbell** [01:15:37] Thanks, Derek. Yeah, that's I mean, it's an important discussion to have. And I think the first thing I would say is, you know, the recognition of a difference between improved law enforcement operations and green militarization, I think is a very confused definition of what green militarization is. And a lot of people advocating against it can't give you a clear answer on what they actually mean by green militarization. So, you know, if you're meaning improved law enforcement on the ground, it's two very different things in my mind. First of all, you know, Rangers, as I said earlier, you know, Rangers come from these communities. Rangers don't work in opposition to communities. They are community members themselves. And it needs to be a

recognition of that. Where do you think the Rangers live? Where do you think their families live? Where do you think their children go to school? That's in the neighboring communities of around conservation areas.

So we need to recognize that rangers are part of the community. There is a way of doing law enforcement responsibly within acceptable human rights parameters. There's a lot of work being done in terms of we have a new Ranger code of conduct that the International Ranger Federation has released last year, sorry, towards the beginning of this year, there's a lot of work being done, you know, in terms of training rangers to how to react responsibly and, you know, doing law enforcement just as you would have with, you know, police officers or anyone involved in law enforcement, must do so responsibly and with respect for local communities. That's very much part of the job. And I don't think we can move away from a model where there's no law enforcement. We need to do it responsibly. We need to do it with communities. And I'd like to hear Derek's take on it. You know, we have community members that carry out law enforcement activities voluntarily at some parks where they're protecting their own resources. We need to understand that the resources belong to the local people so that they also have a role to play in law enforcement and conservation efforts.

**Derek Littleton** [01:17:47] Thank you, Andrew, I think you, I think you've answered that really succinctly. You know, as you have said, there is, there is in many instances, there's a transition from straightforward law enforcement to handing a lot of those, those responsibilities over to communities because they are protecting their own resources. And that obviously is the first prize. But I think what you, what we do need to bear in mind is that the illegal wildlife trade is up there with the drug smuggling, arms smuggling and all the rest. The, the values involved here are extreme.

And so the people coming in who are doing rhino poaching, elephant poaching, timber poaching. They are seriously hardened criminals, most of them, with a big economic gain to be made. And you can't counter something like that with, with a weak response. I think people fail to bear in mind that we are there to actually support governments, to protect the resources, we're there to support the communities, to protect their resources. And the intention is not to create a hard barrier with, with the communities. It's to, to actually reinforce their ability to, to look after what is rightfully theirs. Thanks.

**Vanda Felbab-Brown** [01:19:27] Well, thank you, Derek. And you know, both of your remarks both highlight the fact that law enforcement is critical. It's critical in any dimension of human life and

dealing with any economy, legal and illegal. But, of course, needs to be respectful, scrupulously respectful of human rights. And law enforcement works better when it is, when communities buy into it and people buy into the rule of law when they have economic incentives, such as rights to resources to buy into law enforcement. Paul, let me go to you now. One— [audio cuts out]

**Paul Orengoh** [01:20:13] It seems like you lost your audio.

**Vanda Felbab-Brown** [01:20:16] Sorry. My, my audio dropped. So one of the questions, Paul, that we received has to do with the great Ethiopian Renaissance Dam project in Ethiopia on the Nile that has been enormously controversial, diplomatically, the governments of Egypt, for example, being deeply uncomfortable with the filling of the dam but the successive Ethiopian governments highlight it as a key economic priority. The dam has been started being, the dam started being filled in the spring of this year. We now have had several months of, of water flowing into the dam. What kind of environmental effect have you seen so far? Negative environmental effects. How can we prevent and mitigate them? Please.

**Paul Orengoh** [01:21:10] Thank you so much for that question. I think there has been a number of environmental issues being raised up, but of course, around the gut. But I will speak to what I have personally experienced. In the recent past, Kenya signed up a regional power trade with Ethiopia and by that extension built or constructed a high voltage power evacuation transmission line between Ethiopia and Kenya. Now, this, this is supposed to evacuate green energy, hydro generated energy from the Gibe dams, Gibe I, Gibe II, and Gibe III dams in Ethiopia. Unfortunately, the Gibe II has not been producing the energy, the megawatts as was designed to produce, because this has been slowed down by the guard, the empowerment of the guard, the filling of the dam.

Now, this is one thing that perhaps is clearly documented, but there are a number of communities, especially that connects to the northern part of Kenya, that connect to Turkana, Lake Turkana, whose aquifers and a number of streams connect through to the guard. And so what I'm saying is that there are critical hydro contestation issues already being raised around the dam. But again, the issue of data contestation, because again, when these issues are being raised outside of Ethiopia, then you have to produce your data against Ethiopia's data. But again, within the EGOT (phonetic), economic, the, the block of communities where Ethiopia, Kenya, Somalia and Sudan are part of, they do not have a concise environmental or water co-management principle or policy or framework. And so any efforts to negotiate these politically have not borne any fruit because even at

the scientific level or technical level, there has never been some arrangement that brings together like-minded, you know, experts. And so there are concerns around water. And to what extent this feeling of the dam is likely to impact on other what surface water and even groundwater bodies around the region, and especially Lake Turkana and the Gibe dams within Ethiopia itself.

**Vanda Felbab-Brown** [01:23:53] Well, thank you. And a very challenging diplomatic area, highly contested, difficult to see how we are going to move toward a breakthrough. But hopefully one dimension I would raise is also thinking about nature biodiversity as a water stakeholder, there has been some pioneering work in the United States and elsewhere in the world to define rivers as stakeholders in water and allocating them shares of water, something that should be integrated into water management issues in Africa, elsewhere, and elsewhere.

Nnamdi, one question, several questions that we received has to do with the farmers-herders conflict in Nigeria, and particularly their significance as we are heading into the presidential election in Nigeria early next year. Let me enlarge the question and ask you what are the risks and how can they be mitigated that the specific farmers-herder conflict will take on much larger ethnic or religious dimensions, is already sometimes being portrayed in Nigeria that way. How can we prevent that so that the conflict doesn't escalate? And how can we make sure that the presidential debates in Nigeria are productive in thinking about policies, how to mitigate the conflict and not inflame it into larger hostilities?

**Paul Orengoh** [01:25:36] Thank you. Unfortunately, it hasn't quite featured much in the discussions, apart from in a general sense, where the candidates promising, each of them promising improvement in security if they get into government. And it's largely about reforming the security services and ensuring they are better resourced, boosting numbers and boots on the ground and so on and so forth. There's been very little discussion or none, I have not heard any about, for instance, the National Livestock Transmission Plan and how to carry it on, because it's something that's a brainchild of this administration, of the present administration, and even some members of the administration have been somewhat reluctant to push ahead with it. It's been very difficult, a lot of inertia that has to be overcome in selling it. We are not sure what commitment there would be from another government, you know, to the plan. Associations have a table of demands that they are putting before the presidential candidates and saying, we'll have to see how you key into our

demands and our needs before we decide whether to vote for you or not. So that's about the only direction from which this issue of livestock reform is being raised.

There's been also very little discussion about environment and climate change and so on, apart from very general discussions, but we don't have any great ideas, any new ideas coming up, about how any of the candidates might face the climate change issue or the environmental issue. One of the candidates actually said you know, the words to the effect that the— and this is also a perception that is shared by many here— that climate change is a Western concern, a great deal of the emissions are from the West, not really from Africa, and therefore that if the West doesn't provide the funding for climate change projects, then we can't be bothered about that. I think that's also a sentiment that is shared by quite a number of people here. So we'll have to hope that this issue will come up maybe in the debates between now and February, we'll have a clearer view of how the various, the front-line candidates intend to approach it. But what will be more concretely evidence will be after the elections when the new government comes in. But having said that, I think it's also important that in the meetings, US-Africa meetings, that these issues be raised to, I mean concerns on both sides be raised, from the African side about the need for support for climate change programs, for conservation programs as well, but also about the need for commitment to those programs at this end to ensure that the funding isn't misused and it's applied to good effect.

And then specifically, I think that Nigeria needs a lot of support, both in terms of getting a grip on the security challenge, which is hindering conservation and climate change programs, but also a lot of technical support for things like the National Livestock Transmission Plan. We don't have a ranching tradition here, there's very limited capacity in government agriculture ministries. So they could gain a lot from exchanges with countries that have a lot more advanced livestock systems. Thank you.

**Vanda Felbab-Brown** [01:29:26] Well, thanks, and certainly it's an issue, farmers-herders conflict is an issue that's hardly specific to Nigeria, we are seeing it come up and explode across the continent, so something that the Biden administration should very much pay attention to. Catherine, last question to you, following Nnamdi's remarks. We have been talking today on the heels of the CITES Conference of Parties and on the heels of the Climate Conference of Parties. How can African nations— asks of our listeners— incentivize the West, the United States and Europe, but also incentivize China to support financial resources for conservation, for addressing water issues, for

addressing climate and helping to build resilience and adaptations to climate. Should it be solely through damages as many African countries have been asking for? What are the other financial mechanisms and incentives that can be built to provide those mechanisms?

**Catherine Semcer** [01:30:39] Well, thank you. I think one incentive that African nations can provide the rest of the world— and I think it's a very important incentive— is, is increasing the strength of tenure rights and property rights. Because when we start talking about things like damage payments, it's important to know who are you paying? And it's equally important to make sure that that money gets to the people who are actually suffering the losses that are being wrought by climate change or ecological degradation. Not every African country has the same level of strength for tenure rights, as you know, their neighbors might. And so increasing the strength of tenure rights, I think, is going to be a critical incentive to get capital flowing. It's also going to be critical to attracting more foreign direct investment.

**Vanda Felbab-Brown** [01:31:33] Well, thank you. And that's actually a theme that runs across the different issues that we explored. We know a lot of water management in addition to including a wide set of stakeholders, also very much depends on water rights and clarity about water. Right. We know that good conservation, community-based conservation is based on expanding rights to resources to communities. For law enforcement, clarity of rights and responsibilities is equally important, including in the field of countering wildlife trafficking. And of course, the issuance of rights, sharing rights, developing creative new ways to think of rights and sharing resources is so fundamental to herders and farmers conflict.

I am enormously grateful to our absolutely terrific panelists and their great remarks and insights today. We just scratched the surface of very many issues, and I look forward to having much more in-depth conversation with you on those specific issues. But I want to thank Ms. Semcer, Mr. Obasi, Mr. Orengoh, Mr. Littleton and Mr. Campbell for your terrific remarks. I want to thank our audience. The recording of our conversation today will be posted within a few hours on the Brookings website. You can go back to reviewing it and I look forward to having you join us next week when on December six in the morning, we are going to be exploring the dramatic security developments in the Horn of Africa, the breakthrough, the ceasefire and peace deal in the Tigray Ethiopia war, and developments in Somalia, as well as other issues in the Horn. And for those of you interested, we're

also doing a seminar on Monday, December 5th, on non-state armed actors in the Middle East. So thank you all. And I look forward to sharing and having conversations with you next time.