

Blood Carbon: how a carbon offset scheme makes millions from Indigenous land in Northern Kenya

These people have sold our air

Emanuel, Rendille people, Northern Kenya

#BloodCarbon



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Research conducted by Simon Counsell and Survival International.

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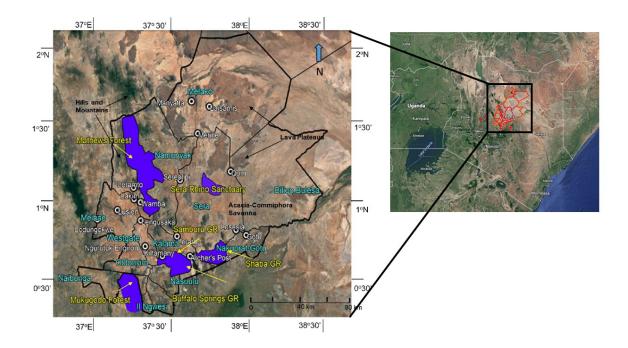


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1. Executive Summary

The Northern Rangelands Trust (NRT) claims that its Northern Kenya Grassland Carbon Project (NKCP) is "the world's largest soil carbon removal project to date and the first project generating carbon credits reliant on modified livestock grazing practices". The project covers half of the four million hectares now included within NRT's grouping of 'Conservancies' – areas which are notionally being managed for the benefit of wildlife as well as local people. Thirteen more-or-less contiguous conservancies are involved in the project (see map, Figure 1).



Note that the area outlined in red on the right hand map, which is generated using a shapefile provided by the project, appears to include some conservancies in the north which have not been part of the carbon project to date.

The area has more than 100,000 inhabitants, including indigenous Samburu, Maasai, Borana, and Rendille people. All are pastoralists, whose way of life is inseperably bound up with their livestock – principally cattle, but also camels, sheep and goats. Grazing typically follows local and regional rainfall, sometimes involving migration routes that may extend hundreds of kilometers. Grazing patterns are traditionally dictated by elders according to long-standing sets of rules, allowances and sanctions.

The project, which started in January 2013, is based on the notion that replacing what it calls the traditional 'unplanned' grazing with 'planned rotational grazing' will allow vegetation in the area to (re)grow more prolifically. This in turn, the project claims, would result in greater storage of carbon in the conservancies' soils - averaging around three-quarters of a tonne of additional carbon per hectare per year. Thus the project would allegedly generate around 1.5 millions of tonnes of extra carbon 'storage' per year, producing around 41 million net tonnes of carbon credits for sale over a 30-year project period. The gross value of these could be around US\$300 million – US\$500 million, but potentially much more.

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NRT, undated c.

It is Project #1468 in the Verra registry. The Verra system is supposed to ensure that carbon offset projects generate real, credible and permanent emissions reductions². Verra says that it uses a "rigorous set of rules and requirements" to verify that emissions reductions (or additional carbon storage) are "actually occurring"³.

The project is an example of a so-called 'nature-based solution', wherein conservation programmes are funded through the sale of carbon credits to polluting companies, generating extra revenue to both expand and intensify the preservation or 'restoration' of land for wildlife⁴. The project has been described by the European Commission as the model on which is intends to base a forthcoming large funding programme for conservation projects in Africa called 'NaturAfrica'⁵.

In its first crediting period (2013-2016), the project generated 3.2 million carbon credits. By January 2022, all of these had been sold. The exact total gross value of these sales is not known, but is likely to have been between US\$21 million and US\$45 million. Most were sold in large blocks, including 180,000 to Netflix and 90,000 to Meta Platforms (formerly Facebook). A second batch of credits, for 2017-2020, was claimed by the project in April 2022; although no verification report of these had been published by the end of January 2023, another 3.5 million credits were verified, and the credits started to be issued in December 2022. By February 2023, 1,3 million of these had been sold, mostly again in very large (and anonymous) blocks.

This assessment of the Northern Kenya Grassland Carbon Project raises many questions about the credibility of the offsets being generated as well as the likely impact of it on the area's Indigenous peoples. The report finds that:

- Impacts on communities. The project relies on major changes to the way in which the area's Indigenous pastoralists graze their animals breaking down the long-standing traditional systems of gada and mpaka, for example, exercised respectively by the Borana and Samburu people, and replacing them with a collectivized, centrally controlled system more akin to commercial ranching. As well as being culturally destructive, this could also serve to endanger livelihoods and food security, by requiring livestock to remain inside the project area and disrupting or preventing migrations following rains during seasonal droughts (which are worsening).
- Additionality: The project does not present a credible case for its carbon additionality. It
 is based on a presumption that the traditional forms of grazing were causing degradation
 of soils and that only the carbon project could remedy this. But the case that the area was
 being degraded through 'unplanned grazing' is not supported with any empirical evidence,
 and indeed the project ignores that the 'unplanned grazing' is in fact subject to traditional
 forms of governance which have sustained pastoralism within broadly sustainable limits for
 many centuries.

² See for example, Verra, 2019

³ Verra undated, c

⁴ See for example, Funes, Y, 2022; Lang C and Counsell, S, 2019.

⁵ Mayaux, P, 2021; European Union, 2021

Rather than showing that the project was additional because there was no other way of financing the intended changes to grazing regimes, it chose to show that its additionality lay in the fact that there were many barriers to achieving what was wanted by the project, and that it was least like what had had happened in the past. This method of demonstrating additionality has the highly perverse effect of incentivising an approach (centralized, rigidly planned grazing within prescribed geographical areas) that is in fact strongly both contrary to the cultural norms of the area's Indigenous pastoralists, and also potentially highly dangerous to people and the environment.

There is no empirical evidence drawn from direct assessment or data that the project's purported 'planned rotational grazing' is either a/ actually occurring across most of the project area or b/ actually any better for soil carbon accumulation than the traditional pattern of pastoralist land management. On the other hand, there is evidence that prevalent traditional grazing is not strongly correlated with either vegetation changes or the variable levels of soil carbon.

- Baselines: As with additionality, the baseline for the project (i.e., what is claimed would have happened in the project's absence) is merely drawn from a presumption that the traditional forms of grazing are causing degradation of soils, and would continue to do so, without this being based on any empirical evidence. The limited information provided by the project purporting to show a decline in vegetation quality prior to the project does not in fact show this at all. Evidence presented by NRT indicates that, if anything, the quality of vegetation has declined since the project started; if, as the project asserts, vegetation cover is correlated with soil carbon, this would suggest that soil carbon in much of the area is in fact also declining.
- Leakage: There are major issues with carbon 'leakage' from the project, particularly in the form of livestock moving off-project. The project purports to be able to quantify how many 'livestock days' are spent out of the project area, but analysis of the monitoring data on which these claims are based especially the monthly grazing reports show that these are for the most part wholly inadequate for such a purpose. Many are entirely lacking in credible information about where livestock are at any given point in time, with little or no information about where large number of livestock have moved to. The quantification of leakage is in fact little more than guesswork.

Related to this issue, it is clear from both the livestock reports and other project documentation, that the project has no meaningful control over its boundaries, which is in fundamental non-compliance with the methodology (VM00032) under which the project was developed. The validation and previous verification audits scrutinized this issue but wrongly accepted the project's reassurances that it has mechanisms to detect and monitor movements of livestock off-project. In reality, as interviews with residents during a site visit by the author in 2022 confirmed, there is no such mechanism; the 1,000-kilometre project boundary is highly porous, and almost impossible to monitor in any meaningful way. Even though it proved impossible for the project to demonstrate that it complied with this most basic eligibility conditions to be a VCS carbon offset project, it was nevertheless both validated and verified, and the eligibility question was simply delayed to some future time and for a later verifier to deal with.

The containment of livestock within proscribed boundaries is, as the project itself admits, anyway contrary to the long-established traditional grazing patterns which can include short-and long-term, long-distance migrations. These can be essential for survival of both livestock and people, especially during times of drought.

Project monitoring: Some of the issues above are related to the project's fundamental inability to monitor key aspects of the purported implementation of planned rotational grazing. Some of the calculations used to estimate the project's claimed additional storage of carbon were based on monitoring information that was entirely unfit for the purpose. The critically important periodic reports on grazing activities submitted by each of the 13 participating conservancies (which were available to the first verification period's verifiers) are generally extremely poor in quality. They lack essential or credible information about the numbers of animals present, their location, and their movements. For the periods of both the first and second verification, the grazing reports and maps are almost entirely worthless as a means of assessing even whether 'planned rotational grazing' has been implemented, let alone its outcomes. They indicate very strongly that the project could not properly monitor its boundaries, let alone control them. They strongly contradict the project's claim that leakage of livestock out of the project area was 'negligible'. They strongly suggest that the project was not complying with the methodology requirement to be able to control its boundaries, even if the appearance of being able to monitor them improved slightly in recent years. They strongly suggest that the evidence necessary to demonstrate that 'Bunched Herd Planned Rotational grazing' was actually taking place was largely lacking.

More widely, the project depends entirely on remote sensing of proxy indicators of soil carbon (i.e, an index of vegetation cover) rather than direct measurement of soil carbon, and then manipulation of that data through further algorithms/models. The steps involved in this, on the project's admission, contain very large margins of error and inaccuracy. There are very strong reasons to question whether the grazing reports being generated by the project could be correlated with the vegetation change maps derived from satellite images. Inspection of the originals of the livestock maps (rather than the barely intelligible small versions shown in the project monitoring report), shows enormous and important discrepancies compared to the satellite-derived vegetation maps.

• **Permanence**. Even if the project were actually resulting in any real additional storage of carbon in the project area's soil – which is at best highly questionable - it is doubtful that it will remain there for very long. All the data points to long-term climate-related changes in weather patterns, and particular increased length and severity of droughts, across most of the project area. This will result in declines in vegetation and soil carbon storage. Although the project in principle acknowledges this, it dismisses such concerns by pointing to some hoped-for increases in grazing availability due to the project's own activities. However, there is no empirical evidence presented to suggest that these have had any sustained success or can in any way compensate for the long-term negative effects of climate change.

Consultation, free prior and informed consent, and grievances: To date (including the Second Monitoring Report) there is wholly unconvincing evidence presented that NRT has properly informed communities about the project, let alone received their free prior and informed consent to it. We note that this was a matter of concern in both the validation and first period verification, and that the concerns about this largely remained unresolved. Provision of information about the project has, at best, been limited to very small numbers of people, mostly those associated with Conservancy bodies (such as the Boards), and for the most part only long after the project had already advanced. There is no evidence that adequate information was provided in Kiswahili, Samburu, or other local languages. The project's response to the auditors' questions about consultation during the first verification assessment suggests that there was almost no meaningful provision of information – and hence no possibility of obtaining any form of consent. The same applies to the years 2017-2020 as covered in the second verification period. It is clear from our own investigations that, to date, very few people in the project area - including even those on the Boards of Conservancies – have a clear understanding of what the project is about, nor their roles, responsibilities and supposed benefits from it.

Contrary to Verra's current requirements, there is no mechanism for grievances over the project (as opposed to employment grievances, as referred to by NRT in the Project Document). NRT may not, as they claim, have received any complaints during the second verification period, but this could simply be because a/ almost no-one knew of the project during that period and b/ there was no complaint mechanism. There have certainly been serious complaints recently, including at least one conservancy formally withdrawing from the project.

- Legal basis of the project: There are very serious issues relating to the legal basis of the project and the way it has been implemented. At least half of the project area consists of Trust Lands, which are subject to the terms of the Community Lands Act (CLA) 2016. This places responsibilities and obligations on any bodies seeking to carry out activities on Trust Lands, and mandates a central role for County governments in holding the lands in trust until such time as they are formally registered by communities. As yet, none of the Trust lands in the project area have been registered (and community members believe that NRT is obstructing their land registration claims). There is no evidence that NRT has complied with various important requirements of the Community Land Act 2016 in its implementation of the carbon project. The very legal basis of the establishment by NRT of conservancies in Trust Lands has been challenged through a constitutional petition presented on behalf of communities within the carbon project area, and others, at the Isiolo Environment and Land Court in September 2021, a case which is still in process.
- The basis of NRT's rights to 'own' and trade carbon from the respective lands: In addition to questions about the legality of some of the Conservancies, and apparent non-compliances with the CLA, there are serious doubts about the basis on which NRT has obtained the rights to trade the carbon putatively stored in the soils of the Conservancies. A formal agreement to this effect was not signed between NRT and the Conservancies until June 2021 eight and a half year after the project started, and entirely after the period covered by first and second verifications. In other words, even setting aside (non-) compliance with the CLA 2016, NRT did not have a clear contractual right to sell the carbon during this period.

- **Distribution of benefits, and outcomes**: We have serious concerns about how the funds generated through carbon sales are being distributed. Whilst the project claims that the 30% of the total funds to be distributed to the Conservancies are for purposes which the 'communities' themselves determine, this largely proves not to be the case. 20% of the Conservancies' portion has to be spent on NRT's prescribed grazing practices (which, as above, is contrary to cultural norms) and rangers. Another 20% is distributed to conservancies for purposes which have not been specified. The remaining 60% of the Conservancies' portion of the funds is distributed at the discretion of NRT, through a largely opaque process, which community leaders in the project area believe is used to exert control over communities and to promote NRT's own priorities.
- The project's validation and verification: Far from having undergone "rigorous" assessment, numerous fundamental problems with the project were not properly addressed during its validation and the subsequent verification of its first claimed 3.2 million tonnes of carbon storage.
- Conclusions: The basic premise of the project, that it can enforce 'planned rotational grazing' within specified geographical areas runs fundamentally against the traditional indigenous pastoralism of the area, is conceptually seriously misguided, potentially dangerous and probably doomed to fail. It is based on a long colonial prejudice that sees pastoralists as incapable of managing their own environment and constantly destroying it by overgrazing. We believe that the project's claim to be permanently storing quantifiable amounts of additional carbon in the soils of northern Kenya is highly implausible. We believe that the project has no solid basis of additionality, lacks a credible baseline, and suffers from unquantifiable leakage. The project has not empirically demonstrated that it is actually achieving any real additional soil carbon storage. The project's legal basis, including whether NRT has the right to obtain some or all of the traded carbon, and compliance with applicable laws, especially the Community Lands Act 2016, are highly questionable. One of the implications of this is that project funds so far retained by NRT should probably have reverted to the relevant communities.

2. Background to the project

This report first describes briefly some of the general underlying problems with 'nature-based' carbon offset projects such as the NKCP. It then describes the project area and the context in which the project is taking place, and in sections 2.3 and 2.4 describes the process by which it was eventually certified to issue carbon offsets. In Sections 3-6, the report looks at some of the key issues relating to offset projects which determine whether the carbon credits issued to the project genuinely represent the emissions reductions or carbon capture which are claimed. These include the project's 'additionality', the calculation of its baselines, permanence and leakage (the meaning of each of these is explained in the relevant section). Section 7 considers the evidence concerning consultation and free prior and informed consent, as well as the wider legal basis (or otherwise) for the project. It describes the intended distribution of benefits from the project, and considers the impacts on traditional leadership mechanisms. In Section 8, some conclusions are drawn.

2.1 Introduction: the problems with 'nature-based' carbon offsetting projects

Carbon 'offsetting' is a concept where supposed reductions in emissions of climate change-causing pollution (or additional storage of carbon, such as in trees or the soil) in one place can be 'traded' against continuing pollution elsewhere. Hence major producers of carbon emissions, such as oil companies and airlines, claim to have a lower impact on the climate by buying so-called carbon credits from projects elsewhere that claim to have somehow avoided emissions or taken CO2 out of the atmosphere. This can include projects which replace polluting energy generation (such as coal-fired power plants) with renewal energy sources, or direct prevention of pollution. Or so-called 'nature-based' projects, such as those that prevent forests being destroyed or plant new trees. Central to the claim that these 'compensate' for the emissions is the requirement that these offset projects have prevented emissions that would otherwise have been released - for example, protecting forests that were at real risk of being destroyed, or that stored additional carbon by planting trees that would not otherwise have been planted. The starting point for calculations that result in the issuance of carbon credits is thus always a hypothetical story of what could have happened, or not happened, in the absence of the offsetting project.

The concept of additionality is particularly questionable in the case of 'nature-based' offset projects, because it is very difficult or impossible to know what might happen to a forest, a peat-bog, or any other piece of land in 10, 20 or 100 years hence. It is very easy to create a story of how a forest could be completely destroyed. Once the offset project has started, it is impossible to disprove whether this counter-factual story might have been true or not. Claiming that a forest would be very rapidly destroyed means that, even if a carbon offset project allows actual deforestation to increase, it can still claim that there are fewer carbon emissions than there would have been in the absence of the project. The difference between the actual emissions and the supposed very high future emissions is what can be sold as carbon credits. The result can be no real gain for the climate, whilst the pollution from fossil fuels continues. Nature-based carbon offset projects also suffer from the problem that the carbon stored in trees, soils or other ecosystems can very easily be released back into the atmosphere, thus negating any temporary benefit it may have provided.

Nature-based offset projects typically require vast areas of land. Countries with weak governance, insecure land tenure and poor rural people are usually preferred – as this is where land is easiest and cheapest to gain control of and to clear of people where necessary. As many of the most intact (and hence carbon-dense and biodiversity-rich) forests and other ecosystems are found in Indigenous lands, inevitably many Indigenous communities find themselves confronted with such projects. As companies in the rich world have increasingly sought to show that they are 'net carbon neutral' – usually by buying carbon credits – so the number of offset projects in poor countries has grown. Scores if not hundreds of new projects are being developed. Land the size of continents would be required if public corporate 'net carbon neutral' pledges were to be met with 'nature based' offsets, as currently projected by many corporates. Hundreds of millions of people could be affected.

Projects which claim to store additional carbon in the soil are particularly problematic. Even proponents of nature-based offsets acknowledge that measuring uptake of carbon in soils and whether the carbon remains stored or is released again after a short period of time is very challenging⁶. The amount of carbon stored in soils can vary greatly over short periods of time, and over short distances, both horizontally and vertically. Measuring the level of carbon in soils can be very complex, and continued testing over potentially large areas can be very expensive, yet still remain imprecise. Understanding how much carbon could or should be stored in soils, and how long it will remain there under different circumstances, is extremely difficult. Yet the Northern Rangeland Trust claims to be doing this with its soil carbon project in northern Kenya. This report analyses their project.

2.2 The project land, its inhabitants and the basis of the carbon project

The project area consists of roughly half of the 4 million hectares of the conservancies organized under a NGO called the Northern Rangelands Trust. It consists of 13 'community conservancies', institutions which have a specific legal status and are notionally governed through some degree of community-based mechanism. NRT describes its mission as "Grassroots conservation aimed at enhancing people's lives, building peace and conserving the natural environment" and states that it is "a membership organisation owned and led by the 43 community conservancies it serves in northern and coastal Kenya". The organisation was formed in 2004 by lan Craig, whose family owned the 62,000 hectares Lewa ranch in Meru county, and who set out to convert this into a 'conservancy' to benefit wildlife and to develop tourism⁸. The idea of establishing further areas as conservancies was promoted to other communities, initially nearby in northern Kenya but later also in the country's coastal region. According to NRT, it now "serves a total of 43 community conservancies spanning 63,000 square kilometers". This represents more than ten percent of the entire area of Kenya.

⁶ See for example, Schenkel, S, 2022.

⁷ NRT, undated d.

⁸ NRT, undated d

⁹ NRT, 2021b

Prior to and alongside the carbon project, NRT has received large amounts of funding from international donor agencies, including US\$32million from USAID since 2004¹⁰, and grants from the European Union, Denmark and France. Although NRT does not publish annual accounts - and hence its funding and sources cannot be independently verified - USAID claims that in 2022, NRT had "46 donor partners that average an annual contribution of over \$25 million". The European Union has recently described the NRT conservancies programme as a 'model' for the kind of conservation projects it wishes to roll out under a new 'NaturAfrica' programme, which will span more than 30 countries in Africa¹¹. In 2022, at the UN climate COP#27, the project was awarded a 'Lighthouse' award by the global corporate greenwashing outfit, the World Business Council for Sustainable Development¹².

The project area is mostly arid, becoming more so further north. The area is described as rangeland or savannah, with occasional tree cover and some woodlands in pockets in valleys or hillsides. Large flat plains are interspersed with steep rocky hills. The area has distinct dry and wet seasons, though within these, rainfall is unpredictable and sporadic. There is evidence that the regional climate has broadly been drying in recent decades, likely as a consequence of climate change¹³. Serious droughts have occurred in recent years, such as in 2016-17, resulting in the loss of livestock and serious hardship for the human inhabitants. Following four years of failed 'long rains', by June 2022 the entire area was described by international experts as experiencing either a food security 'crisis' or 'emergency'¹⁴. The area is habitat for many of Africa's 'charismatic megafauna', including elephants, rhinos, giraffe, wild buffalo, and ostriches.



The northern Kenya landscape (after rains) - photo from Nakuprat-Gotu Conservancy.

According to a 2009 census, there were around 112,000 inhabitants in the 13 conservancies¹⁵, including Samburu, Maasai, Borana, Rendille, Somali, and Turkana people. All are pastoralists, whose way of life is inseperably bound up with their livestock – principally cattle, though increasingly camels and sheep and goats (the latter usually referred together as 'shoats').

- 10 USAID, 2022
- 11 Mayaux, P, 2021.
- 12 NRT, 2022
- 13 See for example, NASA, 2022
- 14 NASA, 2022
- 15 VCS/CCB, 2020, p70

Being broadly 'semi-nomadic', clan or extended family groups traditionally typically occupy semi-permanent bomas, enclosed groups of homes which may be abandoned or relocated for various reasons. The grazing of cattle will typically follow local and regional rainfall, meaning that male herders may be absent from the family with their cattle for months at a time, following broad migration routes that may extend hundreds of kilometers. Grazing patterns are traditionally dictated by elders according to long-standing sets of rules, allowances and sanctions, and designed to maximize success within the ever-changing patterns of rain.

Conflict between some of the peoples is frequent and long-standing, and often related to grazing, watering rights, semi-ritual cattle-rustling, and seasonal migration. The conservancies involved in the project are mostly aligned with specific Indigenous peoples; the most populous peoples (and hence the most conservancies) are Samburu and Borana, though some are also mixed¹⁶.

The project proponent, NRT, claims that the carbon project is "the world's largest soil carbon removal project to date and the first project generating carbon credits reliant on modified livestock grazing practices" As the project explains:

"This project aims to remove greenhouse gases from the atmosphere by implementing sustainable grazing management over a large area of northern Kenya savannas and grasslands. Past overgrazing by pastoralists from more than six indigenous ethnic groups in the region, including Maasai, Samburu, Burana, and Turkana, has depleted soils of organic matter, greatly reduced perennial vegetation cover and the potential production of forage for livestock." ¹⁸

Without the project, claims NRT, "People will likely compensate with increasing long distance migrations to higher rainfall areas in neighboring areas of Kenya, including protected areas and privately held lands" In order to deal with this 'problem', the project proposed to:

"have local communities, oriented around 13 wildlife Conservancies ...engage in new planned rotational grazing practices, as opposed to repeated, permanent grazing simultaneously on all grazing lands. These new practices, **which would not occur without significant carbon revenues to motivate change in herder behaviour**, will allow recovery of perennial grasses and the restoration of soil organic carbon."²⁰ (emphasis added).

As will be explored below, the project broadly aimed to expand an approach which NRT had already developed within the conservancies: regulation of grazing, the setting aside of some areas either as 'core' areas essentially for wildlife or very limited grazing, the establishment of strictly protected areas in some locations, and the establishment of (mostly high-value) tourism through the construction of visitor lodges. Cadres of rangers are deployed to deter 'poaching', enforce the law and intervene in inter-ethnic conflict. Additional income generating activities have been promoted.

Through the conservancies, NRT has funded certain development activities, including the construction of schools and clinics, digging of wells, supporting entrepreneurs, and paying for school bursaries and other training.

- 16 VCS/CCB, 2020, p13
- 17 NRT, undated c.
- 18 VCS/CCB, 2020, p9
- 19 VCS/CCB 2020, p34
- 20 VCS/CCB, 2020, p9

Northern Rangelands Trust has, however, been implicated in serious human rights abuses. A report by the US-based Oakland Institute in 2021 found that the organisation "allegedly dispossessed pastoralist communities of their ancestral lands, through corruption, cooptation, and sometimes through intimidation and violence, to create wildlife conservancies"²¹.

At least some of the preparatory work undertaken to develop the carbon project was funded by USAID²².

2.3 How Verra-verified offset projects are created

The methodologies and processes behind the development and ultimate 'verification' of carbon offsets - particularly those involved in 'nature-based solutions' such as the NRT North Kenya Carbon Project - can appear highly complex. The documentation for any given project can run to thousands of pages (as is the case with the NKCP). But such projects all have a common feature: they all rely on the projection of a future scenario describing what is claimed will happen to an area of land in the absence of the project (ultimately, described in terms of estimated future carbon emissions), and then claiming what will happen in the presence of the project. Project proponents describe how they intend to change the land use predicted in the future scenario without the project. The carbon credits generated by offset projects are essentially the difference between what is claimed would have happened, and what actually happens under the project. As one observer has put it, carbon offsets are "are an imaginary commodity created by deducting what you hope happens from what you guess would have happened" 23.

It is important to appreciate that this process necessarily relies on unprovable counter-factuals: once a project has started, it is of course no longer possible to know definitively whether the 'without project scenario' would have happened or not. The creation of carbon credits is, in that sense, a quantification of the plausibility of the 'story' created to describe what would have happened without the project. This process allows enormous scope for creation of 'hot air' carbon credits, where projects rely entirely on a story projecting major loss of carbon from a forest or other ecosystem, that may in reality not have been particularly threatened. Other 'tricks' can be applied to ensure that the offset projects maximise the number of credits being generated, even if the actual emissions from the area increases over time²⁴.

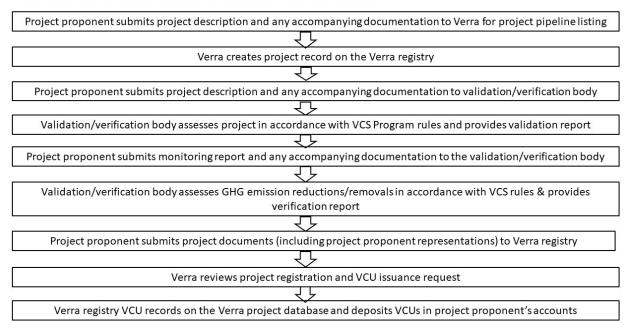
In the case of the NKCP, the story is that continuation of 'over-grazing' (the occurrence of which is not in fact proven) will result in continued loss of soil carbon, whereas the project will reverse this trend.

The diagram below (Figure 2) briefly explains the main steps of a typical offset project, from conception to issuing of carbon credits²⁵. The process shown is specific to projects developed and carried out with the intention of selling credits in the voluntary carbon markets, using the Voluntary Carbon Standard (VCS, or Verra) process. The key steps in the process shown in the diagram, and which will be referred to many times in the following assessment of the NKCP, are:

- 21 Oakland Institute, 2021
- See for example, USAID, 2015
- Welch, D, 2012, cited in SSNC, undated.
- See for example, Crezee, B and Gijel, T, 2023
- A more complete explanation of offset project development can be found here.

- Project validation this usually happens shortly after the actual start of the project, though can be delayed by several years, as in the case of the NKCP. Many projects effectively backdate their declared project start date anyway, in order to maximise credit generation. The validation is where a third-party (typically a consultancy or certification company) checks that the project is compliant with whatever VCS-approved methodology for project development has been used. The auditors also assess if the project has an acceptable plan for monitoring its implementation. This stage does not create carbon credits, but supposedly confirms that the project is compliant with VCS's requirements. This includes an assessment of the plausibility of assumptions the project proponents make about the future without the offset project. Following a successful validation, the project can proceed to the monitoring and verification stage.
- Project monitoring this happens according to a pre-determined plan, and is shown in the
 monitoring reports which the project proponent itself submits periodically for verification,
 usually every 1-5 years, depending on how frequently the project proponent wishes its
 carbon credits to be verified and become available for sale. Project monitoring reports
 contain claims that specific amounts of greenhouse gas emissions have been 'avoided' (or
 extra carbon stored), and requests that these are then verified.
- Project verification where the specific project monitoring reports are checked by a third party (which can at the start of the project be the same organisation that carried out the overall validation of the project) as complying with the requirements, and in particular the calculation of allegedly avoided emissions or storage of carbon in trees or soils. If the project is found to be in compliance with the requirement, the verifier typically confirms the amount of carbon savings claimed by the project, thus allowing these to be issued and registered, and to become available for sale as carbon credits, or 'verified carbon units' (VCUs), in the case of projects verified under the Verra system.

Figure 2: Verra/VCS Project life cycle and offset credit registration process



(Adapted from Verra, 2019b)

In practice, these three supposedly distinct phases can conclude more or less simultaneously, especially if there has been a long (indicating 'problematic') process of validation, with the validation report, project monitoring report and verification report all being finalised and entered in the Verra project database within a few days or weeks of each other.

2.4 The process of gaining VCS validation and verification for the NKCP

The project had an extremely long gestation period. The project notionally started at the beginning of 2013, though was only 'validated' under the Verra system of offset project validation and verification in 2020. A draft project document dated 15 June 2013 is held on the Verra document repository²⁶. A further draft is dated June 2015²⁷. According to this, the project would be developed under a VCS offset methodology referred to as 'Sustainable Grassland Management through Adjustment of Fire and Grazing', although this methodology was not actually approved by VCS until July 2015²⁸. A further draft project description appeared in August 2016²⁹. The project implementation period was initially 2012-2014 (with a full lifetime of 30 years for carbon accounting, as has remained the case). The project proponents on the draft document were stated as Soils for the Future, LLC, The Nature Conservancy, and The Northern Rangelands Trust. Soils for the Future is a small US-based consultancy founded by a Syracuse University biologist named Mark Ritchie³⁰.

A final project description was issued on April 28th 2020, on which only The Northern Rangelands Trust was listed as the 'Project Proponent', although this document had been prepared by Mark Ritchie³¹. Ritchie was also the author of the VCS offset project methodology for 'Sustainable Grassland Management' (known as 'VM00032') under which the project was finally prepared. Ritchie had therefore designed the project to comply with a standard which he himself had written. He was further the developer of the soil carbon model used to determine changes in soil carbon as a consequence of planned rotational grazing management, which will be discussed later³².

Given this, the difficulty in then 'validating' the project which Ritchie had designed according to his own carbon project methodology is notable. Validation is the process carried out by a third party to ensure that a project complies with the approved VCS and/or CCB methodology for that type of project. Validation of the project was apparently completed by 7th April, 2020³³, but had evidently been a tortuous process over a number of years. The first field visit by the validators (the Ohiobased consultancy, Aster Global Environmental Solutions, Inc.) had already happened in September 2015, and there were further visits in 2017 and 2018³⁴. The final 2020 validation report (which is 330 pages long) notes that "During validation to the VCS Program, 114 findings were raised"³⁵.

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26 VCS/CCB, 2015a
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²⁷ VCS/CCB, 2015b

²⁸ Verra, undated b.

²⁹ VCS/CCB, 2016

³⁰ SFTF, undated,

³¹ VCS/CCB, 2020

³² VCS/CCB 2015, p11

³³ VCS/CCB 2020c.

³⁴ VCS/CCB 2020c, p10

³⁵ VCS/CCB 2020c, p12

This is a large number of 'findings', which is the euphemism used in such documentation meaning 'problems'. The 220-page log of these findings reveals repeated unsuccessful attempts to resolve problems and questions with Soils for the Future. Although the 'findings' were eventually almost all formally 'closed out', allowing the validation to be issued, some of them appear not to have been conclusively resolved. Some of these issues will be discussed later in this report.

In addition, at some point in the later stages of project development, Verra also requested a 'Project Review'. This is a discretionary requirement that asks the validation or verification organisation (in this case, Aster Global) to check the 'completeness and accuracy' of the project document. The final report of this process was issued on 29th April, 2020, the day after the final project document was issued³⁶. The 'review' had found 21 issues, most requiring the project document to be revised, and which were then closed out. Formulations in the document suggest that Aster Global was not entirely convinced by some of the things it was again asked to look into – but Verra closed out all the issues anyway.

Six months after validation, the project issued its first monitoring report, on October 2nd, 2020. This covered the project from its formal start date back in the beginning of 2013, to the end of 2016 (this comprising the first 'carbon accounting period')³⁷. 'Monitoring' was thus being reported for up to seven years before the project had formally been validated. Some six weeks after the first monitoring report was issued, the first verification report (also by Aster Global Environmental Solutions, Inc.) was also issued.

The key purpose of the verification is to confirm the number of carbon credits which can be claimed by the project, after which these can be put on the Verra registry as 'verified carbon units' (VCUs). Typically, whilst verification reports might contain some technical queries, they usually largely repeat what's in the project's own monitoring report, and very often confirm exactly the amount of offset credits which the project claims. This was the case with this project, which claimed that it had generated 3,210,579 tCO2e in net GHG emission reductions or carbon removals between 2013 and 2016³⁸; this amount therefore became available for sale.

It is clear that the validation of the project, the project's own first monitoring, the verification process, the 'project review', and revision of the project document were latterly all occurring more or less simultaneously, and by all the same parties. This raises questions about the separation of interests in the full assessment process. For example, Aster Global's validation had clearly involved long-running exchanges with the project proponent, Soils for the Future, resulting in changes to the project and its documentation. Aster was then responsible for verifying the project, thus to some extent checking what it itself had sought to have changed in the project. This is not unique to this project and is a structural feature of the Verra system.

³⁶ VCS/CCB, 2020e

³⁷ VCS/CCB, 2020b

Including the deduction of 611,539 tCO2e, which are allocated to a 'buffer pool', and not allowed to be sold for some years, as a safeguard in the event of major project 'reversals', as is standard practice for offset projects.

In 2022, the project submitted a second monitoring report, covering the period 2017-2020, claiming a similar number of credits as the first period (around 4 million, from which would be deducted a buffer allowance)³⁹. A verification of this, by the Colorado-based company Ruby Canyon Environmental was commenced soon after. Although no verification report of these had been published by the end of January 2023, Verra's registry shows that another 3.5 million credits were verified during 2022, and the credits started to be issued in December. The issuing of credits started a mere nine days after the project had submitted its final monitoring report for the period. By February 2023, 1.3 million of these new credits had been sold, mostly again in very large (and anonymous) blocks. Although Verra opened a public comment for the project, this was only from 12th January 2023 until 11th February, i.e., after the project had already been again verified and credits issued.

2.5 The carbon credits generated by the project, and their purchasers

As yet, only the period 2013-2016 has been verified under the VCS system, and hence it is only from this period that the project's carbon credits date. Because of the very long period of validation and verification, sales of credits from the project only started in May 2021. However, from then until January 2022, 3.2 million credits were sold, all of the credits which had been generated⁴⁰. The purchasers of nearly 90% of these are not recorded in the Verra registry. Most of these were sold in half a dozen very large blocks, suggesting that they were mostly bought by large companies with heavy carbon footprints, or possibly brokerages/carbon trading firms. Recorded buyers to the end of February 2022 include:

Buyer	Number of VCUS bought	Date(s) of purchase
Meta Platforms (Facebook)	90,000	December 2021
Netflix	180,000	June and July 2021
Kering SA	75,000	December 2021
Allbirds	16,638	May and June 2021
Salesforce	48,462	December 2021
NatWest Group	120,000	July 2021
ENGIE	1,700	July 2021

40 Verra, undated.

15

³⁹ VCS/CCB, 2022

3. The project's additionality

3.1 What additionality is, and why it is important

Additionality is a critical concept with carbon offsetting, and can alone render offset projects and credits as essentially invalid as contributions to the mitigation of climate change. Additionality is basically a test of whether the actions which are taken either to prevent emissions or capture carbon from the atmosphere would have happened anyway if the offset project had not existed. If say, an area of forest was well protected and would likely have remained standing in the future, then an offset project claiming to 'save' that forest and prevent carbon emissions should not be deemed as 'additional'; it would not represent any real carbon savings in addition to what would have happened anyway, and therefore could not be said to be offsetting emissions which are definitely taking place elsewhere.

Whether or not a project is considered additional often comes down to a question of whether the funding for the project derived from the sale of carbon credits was absolutely essential to the project taking place. Another common issue is whether the project offers any new level of legal protection, such as to land, forests or other ecosystems.

3.2 The project's additionality case

For the NRT project, a specific VCS 'sub-methodology'⁴¹ was used to determine whether the project was additional or not. Put simply, this requires that the project proponent describes what other alternative scenarios there might be for the project area if the project does not happen, alongside the 'with project' scenario. As the project title suggests, the difference the project would make in terms of carbon 'additionality' is related entirely to the grazing regimes within the area. According to the project, there were two alternatives to the project⁴²:

"Scenario 1: **Continuous, unplanned grazing**. This is the scenario that has occurred in the project area for the past 40 years. Each family is responsible for the livestock they own and makes its own decisions about where to graze and find water. Grazing committees of the Conservancies set general guidelines about which zones are available for grazing, but livestock are moved according to family determined thresholds of forage availability. Security risks to human life and livestock incentivize grazing near permanent settlements during the wet season and only migrating herds during the dry season"

Scenario 2: **Management of land as a Wildlife Conservancy**. Under this scenario, effort would be devoted to the wildlife conservation value of the land with livestock de-stocked or greatly reduced in number. Funds for the Conservancy would come from distributed tourism revenues from lodges and perhaps other enterprises such as adventure companies. Current management focuses on wildlife protection using community game scouts, but declining forage and water resources appear to be driving a decline of wildlife across Kenya, indicating that the land may lack the capacity to support thriving tourism regardless of protection."

⁴¹ VCS, 2012

⁴² VCS/CCB 2020, p34

The third scenario, which broadly describes what the project would do, was stated as follows:

"Scenario 3: **Planned rotational grazing**: Animals will be grouped into herds of mixed ownership of 50-200 animals. Herds will be actively guided and moved throughout a day and from day to day by a trained herder, either one of the owners or a hired herder. Animals will not graze the same location more than once within a wet season or once within a dry season and will be moved to a new site once available forage has been grazed to a height of 2.5 cm. Areas near settlements or water points will be used similarly to other areas in the grazing plan. Some areas will be rested to allow recovery from past grazing or to provide grass banks during the dry season or droughts, but different areas will be rested each year in order to provide animal impacts and re-establishment of a diverse plant assemblage in all areas...."

Interestingly, this 'sub-methodology' does not actually require that the different scenarios be shown to yield significantly different quantified carbon emissions to the atmosphere; it is simply assumed that the 'non-project' scenarios are undesirable.

Rather than showing that the project was additional because there was no other way of financing the intended changes to grazing regimes, the project proponents chose to show that its additionality lay in the fact that there were many barriers to achieving what was wanted by the project, and that it was least like what had happened in the past. Specifically, it claimed, the barriers which the carbon project alone was able to solve were almost entirely cultural, such as that:

"Scenario 3 has significant barriers in the form of cultural barriers that promote livestock-keeping since livestock act as personal wealth, are integral to the ethnic history of most groups in the project area, and (1) do not rely on community cooperation to provide revenues which discourages lower, more sustainable livestock densities... (2) Cultural barriers also favor livestock herding by boys under the age of 12, which effectively prevents planned long distance movements with livestock that are integral to planned rotational and migratory grazing. The concept of paying cash to adults to herd livestock is largely outside the ethnic groups' cultural experience, but is likely necessary to allow families to access health care and schools but manage livestock in a mobile manner. (3) Sheep and goats are not typically moved in large herds, but instead are kept near residences as sources of milk and cash... Without carbon finance to pay grazing assistants and coordinators to provide guidance and discourage theft and grazing of grass banks or other conservation areas, the management practices associated with the project scenario would not be adopted" 43

Apart from some of this being questionable in its veracity, this 'additionality through difficulty' approach creates an extraordinarily perverse incentive to favour projects which are culturally damaging or extremely likely to face rejection by the affected communities and failure. The additionality of the project in fact rests on breaking some of the deep cultural practices of the pastoralist communities, including family roles and responsibilities, and grazing patterns. Further discounting the agency of local people, the project goes on to claim that "On communal lands, virtually all pastoralists currently lack the physical security and financial resources to coordinate such planned grazing as in scenario 3."

The additionality argument goes on to hint more precisely at the kind of outcome the project seeks to achieve, referring to some private ranches that formed part of the early constellation of NRT's conservancies:

43 VCS/CCB, 2020, p67

"Planned rotational grazing was practiced in the region prior to the project start date, but only on three private ranches, OI Pejeta, OI Lentille and Borana ...Fencing and security provide control of the forage resource, and forage is abundant enough to sustain the finishing of livestock for sale on meat markets. The economic focus is on production of young livestock, not the accumulation of assets in the form of live livestock. Market-driven cash flow supports the infrastructure and expertise to properly implement rotational grazing. Rotational grazing on private lands [in these conservancies] may reflect the ultimate target of improved livestock grazing in communal lands..."

Also, the project said in its monitoring reports that it plans "to devote some project revenues to establishing livestock finishing infrastructure (protected pastures and fencing, transportation hubs, etc.) to help shift community values from the number of livestock to the quality of livestock" In other words, ignoring the fact that the private ranches (based on colonial acquisition) are further south nearer Mount Kenya and benefit from more reliable and abundant rain, what the project was essentially aiming to achieve was to move the herder occupants of the community conservancies out of their traditional grazing regimes and into one more resembling the private ranches. This would imply an enormous cultural shift from where livestock are considered as integral to peoples' lives, representing essentially their entire 'wealth' and status, to one in which cattle were considered essentially as a commodity, and meat merely a means to accumulate cash wealth. As will be seen below in Section 7.4, a key element of this plan started failing even before the first payments from carbon credits arrived in northern Kenya.

Some features of the project's additionality argument are important to note:

1. The **first scenario**, which is essentially a 'business as usual' scenario, dismisses the existing grazing regimes as 'unplanned'. This is a mis-characterisation. While families do indeed determine where livestock are grazed on a day-to-day basis, this also happens within a framework where elders guide the wider grazing patterns. The traditional grazing regime is in fact codified under, for example, the gada system of the Borana people, and the mpaka system of the Samburu (these are two most populous Indigenous peoples in the project area). These traditional regimes ensure that grazing is regulated though, importantly, they are necessarily adaptive. The wider grazing patterns over a year or longer have to follow unpredictable seasonal variations in the rains as, in this generally arid area, rainfall can be highly localized and has a huge influence over the availability of grazing in any locality at any given time. Any grazing regime can only be 'planned' up to a certain point. The consequences of over-prescriptiveness in where grazing can and cannot occur could be fatal.

As will be explored in more detail later, local leaders spoken with by the author of this report dismiss the project's claims that a new grazing regime has been installed. They say that, in practice, the traditional regimes mostly hold sway. The Conservancies' Grazing Committees, which are supposedly responsible for overseeing the project's planned grazing regime, were almost universally characterised as 'ineffective'. Examples of the grazing reports and maps generated and used by the project to supposedly demonstrate a pattern of 'planned' and centrally monitored grazing were dismissed by Councils of Elders, and ridiculed as being essentially 'fictitious' (these project grazing maps are discussed in more detail in Section 3.3 and 3.4 below).

⁴⁴ VCS/CCB, 2020, p68

⁴⁵ VCS/CCB, 2020b, p20

In other words, one of the key arguments for the additionality of the project was that it would bring 'planned' grazing into being where there formerly was none, but this is challenged both because there was already a form of traditional regulation of grazing, and secondly because the project's 'planned grazing' is proving ineffective and not implemented as reported. This not only raises questions about the project's additionality, but also hints at how the project has systematically sought to ignore, diminish or by-pass traditional governance structures, leadership, knowledge, and influence (this is explored more below in Section 7.5).

- 2. The second scenario, which is a kind of 'business as usual-plus wildlife conservation' scenario, is particularly interesting because it essentially dismisses the success, effectiveness and sustainability of the work of the Northern Rangelands Trust in developing the community conservancies. Many international donors which have for many years been told that the project was achieving huge successes with their funding, and they in turn had frequently repeated such claims. For example, in 2022 USAID said that its US\$32 million in funding for NRT had led to the development of "43 independent and sustainable community-conservancies" which were "driving development in conservation, economic empowerment, and peace and security" The need to undermine or deny often long-running claims of conservation success is a dilemma which is likely to face any carbon offset project based on an area with some level of existing protected status.
- **3.** According to the VCS 'additionality tool', "All identified land use scenarios" (including those that broadly represent what the project intends to do) "must be credible" As will be seen later, the **third scenario**, representing the project, should have been seriously questioned in the validation process for its credibility.

3.2 How plausible is the additionality?

The project document repeatedly states that it will achieve additional carbon savings through the introduction of "planned" and "improved" grazing patterns:

"The project will yield significant removal of CO2 from the atmosphere, through improved grazing management, verified as altered grazing intensities, records of the time, timing and number of livestock grazers using different portions of the project zone, and vegetation change across 2.01 million ha. With expected annual removals of approximately 0.75 metric ton CO2e/ha on average, the project should eventually annually remove more than 1.8 million tons CO2e and 50 million tons CO2e over the project lifetime.⁴⁸

Specifically, under the 'improved'/'planned' grazing regime:

- "1. Animals will be actively herded and moved to new forage throughout a day and from day to day.
- 2. Animals will not graze the same location more than once within a wet season or once within a dry season.

⁴⁶ USAID, 2022

⁴⁷ VCS, 2012

⁴⁸ VCS/CCB 2020, p4

- 3. Animals will be moved to a new site once available forage has been grazed to an average height of 2.5 cm.
- 4. Animal herds will be moved across the landscape so as to avoid over-use of areas near settlements or water points.
- 5. Some areas will be rested for one year to allow recovery from past grazing or to provide grass banks during the dry season or droughts, but different areas will be rested each year in order to provide animal impacts and re-establishment of a diverse plant assemblage in all areas.
- 6. Herders follow agreed-upon plans for livestock movement from grazing committees headed by community elders. Grazing "assistants" employed by the project in each Conservancy will monitor and advise herders in the field.⁴⁹

In order to generate carbon credits, these planned grazing regimes (and the resulting extra storage of carbon in the soil) would have to be new and additional (and to actually take place). However, the 'new' pattern involved largely reflects the traditional grazing patterns, including the use of 'grass banks' - areas customarily set aside as an insurance against drought. The project document itself admits that:

"The project amplifies this historical and culturally imbedded system by planning when and how different herds from different Conservancies will use these regional grass banks in order to avoid conflicts over grass and water." ⁵⁰

An academic study of the project reported how the specific grazing plans in one of the conservancies participating in the project were based on the traditional patterns:

"They [NRT] divide Meibae conservancy into blocks and each of these blocks has its own grazing plan. A grazing plan includes wet season grazing areas and dry season grazing areas. These grazing plans are based on the already existing plans and initiatives, such as the mpaka."⁵¹

Of course, in order to deal with issues of seasonal rainfall patterns – traditionally necessitating much larger movements of livestock over longer distances - and more recently the regional effects of climate change, much wider coordination of grazing would be needed. According to the project document, "Multiple communities and ethnic groups will participate in an annual regional grazing plan that allows livestock to move over long distances and efficiently use wet and dry season range." We could find no evidence that such a project mechanism has had any real effect above and beyond the customary migration practices that have long been in use in the region.

Beyond the question of how much the project adds to what was customarily exercised in the region, some of what the project claims to need carbon funding for appears already to have been in place through NRT's earlier activities. According to the project document, NRT's efforts to install planned/rotational grazing had already started as early as 2009.

⁴⁹ VCS/CCB 2020, p19

⁵⁰ VCS/CCB 2020, p24

⁵¹ Schrijver, A P and Lenkaina, D, 2017

⁵² VCS/CCB 2020, p4

"The education process began with workshops...first in Westgate and then in Kalama, Lekurruki and II Ngwesi Conservancies in 2009-2011. Workshops ... to discuss the need for rotational grazing and restoration of grazing lands were conducted ...in 2012, including Wamba (in Namunyak), and Isiolo. In 2013 and 2013, as new Conservancies (Melako, Leparua, Nasuulu, Nakuprat-Gotu) were added to the NRT group, administrative training by NRT staff included training on planned rotational grazing." ⁵³

A 2015 version of the project document contains a 'grazing plan status map' which indicates that most of the conservancies were already practicing rotational grazing by 2013, seven years before the carbon project was eventually validated (see Figure 3 below)⁵⁴. This map did not feature in the final, validated project document, which instead had a table purporting to show when rotational grazing started in the respective conservancies. Those which in 2015 were shown as implementing rotational grazing already in 2012 (West Gate, Kalama and Lekurruki, in dark green in the map below), were now shown as in the 'initial implementation of planned grazing' on January 1st, 2013 – the very first day of the carbon project⁵⁵. In other words, the project changed the dates at which it was claimed planned grazing was started, making it appear to be as a result of the carbon project.

However, the project's first monitoring report then said that:

"Planning through a hierarchy of grazing decision-makers was implemented in October 2015 and led to the explicit inclusion of grazing plans in overall conservancy management plans for 8 conservancies" ⁵⁶.

In other words, according to the project itself, the grazing plans upon which the entire project rested were not actually adopted in most conservancies until nearly three years into the first four-year carbon accounting and crediting period – and even then for only a portion of the conservancies taking part in the project.

Hence, there are doubts first about the extent to which the project intended to implement much of difference in grazing to what was already happening under traditional grazing regimes, then doubts about whether the supposed new grazing regimes actually came into being during the project or before it, and finally about whether any new grazing regimes that were implemented were actually only installed well after the project had started – raising doubts about whether any real carbon savings could have been claimed.

⁵³ VCS/CCB 2020, p36

⁵⁴ VCS/CCB, 2015a, p9

VCS/CCB 2020, p24. Lekkurruki conservancy was not eventually included in the carbon project accounting area.

⁵⁶ VCS/CCB 2020b, p4

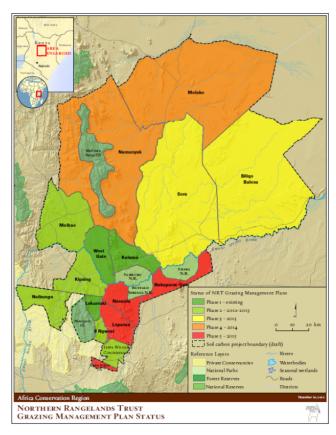


Figure 1. Map of project area and the 14 participating Conservancies. Phase 1 Conservancies implemented rotational grazing in 2012, and Phase 2 in 2013, Phase 3 and 4 ended up implementing grazing in 2014, and Phase 5 are implementing in 2015, along with Naibunga (see Table 2, Section 1.7)

3.3. Unenforceable boundaries

According to the project document, each Conservancy would develop and implement its own annual grazing plan;

"with grazing blocks established separately in both dry and wet season ranges and to include both cattle and other livestock (sheep, goats, donkeys and camels). The expectation is that each Conservancy's livestock can operate within the boundaries of each Conservancy"⁵⁷.

This restriction of grazing was an important part of the project; any grazing of livestock from within the 13 conservancies outside the combined project boundary was considered as 'carbon leakage'.

Notionally, any grazing of the conservancies' cattle outside the project area would help conserve or increase the project area's soil carbon, but commensurably reduce it elsewhere (outside the project area) thus resulting in zero net benefit⁵⁸ – see Section 6 below). The project explained how containment of livestock and prevention of 'leakage' was being enforced:

⁵⁷ VCS/CCB 2020, p24

⁵⁸ VCS/CCB 2020, p106

"Further feedback to control leakage is provided by annual distribution of revenues which is in part influenced for individual conservancies by whether their herders followed project grazing plans and/or left the project area. This mechanism issues economic penalties to whole communities as a consequence of individual herders' decisions and creates social pressure to follow Conservancy grazing plans." ⁵⁹

In fact, it is a condition of eligibility of the Verra methodology under which the project was developed that:

"the project must be structured to keep livestock within the project area, and the Project Proponent must be able to enforce the boundaries of the project area." ⁶⁰.

This therefore placed an obligation on the project to monitor the constant movement of cattle across the entire two million hectares to show that they were staying within the project area (and being subject to the 'regular, planned' grazing). With a project area boundary of nearly 1,000 kilometers in length, most of it in extremely remote, inaccessible, roadless and sparsely populated areas, and most of it unmarked, this was never likely to be complied with. The problem of 'leakage' of cattle into and out of the project area raised serious concerns at the time of the project's validation, and six separate 'findings' were raised. The validators accepted NRT's assurances that "Herders and scouts are aware of the borders. Numbers and locations of animals are reported. but neither the project's reassurance that such leakage was 'negligible', nor the raw grazing reports and maps provided to them, convinced the auditors that the project was actually monitoring or controlling the borders. Three of their 'findings' about the control of the borders remained "unresolved" about 15 and 15

In fact, the project's own first monitoring report noted that:

"Any pastoralist system of livestock management cannot be defined by hard boundaries, and pastoralist culture reflects norms that ensure reciprocity: a community will share grazing with another provided that no livestock...under the idea that the hosting community has grass this month, the visiting community might have grass next month...when rains fail, herders often travel long distances to share the range with relatives, or with fellow tribe members. Consequently, pastoralist communities establish traditional migration destinations under unexpected conditions, as well as certain seasonal movements into unsettled lands." 64

In an extraordinary contortion, it then claimed that this did not demonstrate that the project had no control of the boundary, as was required, rather that there couldn't really be a boundary at all:

"The project zone and surrounding areas do feature geographies and social dynamics that produce traditional movements of livestock off the project area. In our opinion, this should not be viewed as a lack of control of the project area but rather the consequence that no specific, finite boundary can be formed that would encompass 100% of herder movements." ⁶⁵

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59 VCS/CCB 2020b, p11
60 VCS, 2015
61 VCS/CCB 2020c, p120
62 VCS/CCB 2020c, p123
63 VCS/CCB 2020c, pp124-127
64 VCS/CCB 2020b, p94
65 VCS/CCB 2020b, p95
VCS/CCB 2020d, p12
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In other words, the project proponent was admitting what should have been recognised from the outset; that the boundary requirements of the carbon methodology which it itself had developed could not realistically be applied in such an area, and the project was thus fundamentally flawed.

The validation assessment of the project recognised the problem, and after multiple attempts to obtain clarification from the project, issued a 'Forward Action Request', stating:

"A FAR is issued regarding VM0032 applicability condition #3 where "3. The project must be structured to keep livestock within the project area, and the project proponent must be able to enforce the boundaries of the project area." Future auditors are recommended to examine whether the project continues to meet this applicability condition". 66

The verification of the project's first carbon accounting period found no resolution of this problem, and indeed again had extreme difficulty in understanding the project's methods of dealing with livestock moving off or into the project area. There were up to five rounds of exchanges between the verification agency, Aster Global, and the project in pursuit of clear and compliant explanations⁶⁷. The report of this verification stated:

"Aster Global did not observe changes related to this FAR from validation to verification and continues to recommend future verifiers examine whether the project continues to meet this applicability condition." ⁶⁸

In other words, even though the project had been unable to provide reassurance at both the validation and verification stages that it complied with one of the basic eligibility requirements under the Verra methodology, it was nevertheless still validated and verified – and the problem simply kicked down the road for someone else to deal with at a later date. This should have resulted in Verra rejecting the verification report, and the validation report with it.

A 2021 report for USAID, on one aspect of a related NRT project which it had funded (see section 7.4 below), noted similar problems:

"No matter how well a local community manages its pastures, the variability of rainfall across both time and space means that in some years its pastures will be insufficient to cater for its herds. Maintaining mobility so that pastures are sometimes grazed intensively, sometimes grazed only lightly, and sometimes rested for long periods is also critical for healthy rangeland ecosystems. This raises the question of how long-distance herd mobility and sharing of pastures at the large landscape scale is to be integrated with local management by conservancies, RUAs, or other kinds of local community committees." ⁶⁹

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⁶⁶ USAID, 2021

⁶⁷ VCS/CCB 2020d, p48

⁶⁸ VCS/CCB 2020d, p11

⁶⁹ USAID, 2021

The whole notion of rotational grazing of the 'planned' kind, within a limited and artificially defined geographical area (on which the project rests), was in fact wholly unrealistic. This problem appears not to have been considered by the project proponents at the outset, nor addressed in any meaningful way. Bizarrely, in its assessment of risks to the project, the first verification concluded that the problem was not that the project design was fundamentally flawed by requiring communities to change the long-standing traditional herding migrations according to irregular rainfall, but that "The main risk is to community willingness to participate in the project and risks related to **the ability of the communities** to adapt to climate variability." (emphasis added) ⁷⁰

3.4 Mapping of livestock movements

Survival International has obtained many of the grazing reports and monthly livestock movement maps that the project submitted as evidence that the movement of cattle was being properly monitored. Examples of these are shown below. The first two sets of maps – from Melako conservancy in 2016 and Biliquo Bulesa conservancy in 2015 – were within the project's first carbon accounting period which was verified by Aster Global. The third set is for Meibae conservancy in 2020, as examples of more recent reports. We also reviewed many of the narrative grazing reports which sometimes accompanied the maps for the various conservancies. Together, the Melako and Biliquo Bulesa conservancies, shown in the first set of maps, comprise nearly half of the entire carbon project area. The sample maps for each of these conservancies are considered in turn.

3.4.1 Melako conservancy, 2016 (549,363 hectares)

It should be borne in mind that the rough sketch maps presented in Figure 4 each cover nearly 5,500 square kilometres. It can be observed that:

- They contain only extremely vague information about which livestock are where at any given time, and very imprecise numbers about how many of each type of animal there is. This is not surprising given the enormity of the area, the inaccessibility of much of it, and that, as community Elders elsewhere in the project area confirmed to us, no single person could possibly know all this information;
- The maps do not even show the conservancy's own internal grazing blocks, of which there are nearly 30;
- The maps do not show any movements of livestock either onto or out of the conservancy, nor confirm whether animals are remaining in the project area. Any movement of animals across the long northern boundary would be 'leakage', as there are no adjacent conservancies to the north participating in the carbon project.
- In terms of ensuring or monitoring planed grazing or leakage, the maps are essentially worthless. The very limited narrative reports for this conservancy at this time which we also inspected similarly contain no information about livestock movement in or out of the conservancy.

70 VCS/CCB 2020d, p183

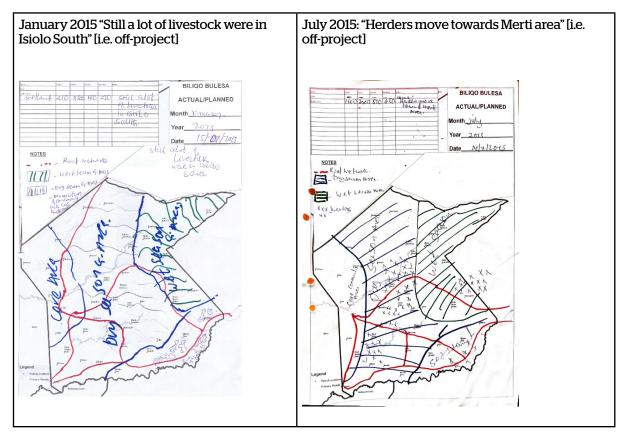
January 2016 July 2016 MELAKO ACTUAL/PLANNED ACTUAL/PLANNED Month_ July Month JANUART Year_ 20/L Year_ 2016 Date_ 28TM KEY XX - Cattle VV - Shorts 00 - Camels December 2016 September 2016 MELAKO MELAKO ACTUAL/PLANNED ACTUAL/PLANNED onth_ SEPTEMBER Month_DEC Year_ 2016 Year 1 2016 10 KEY

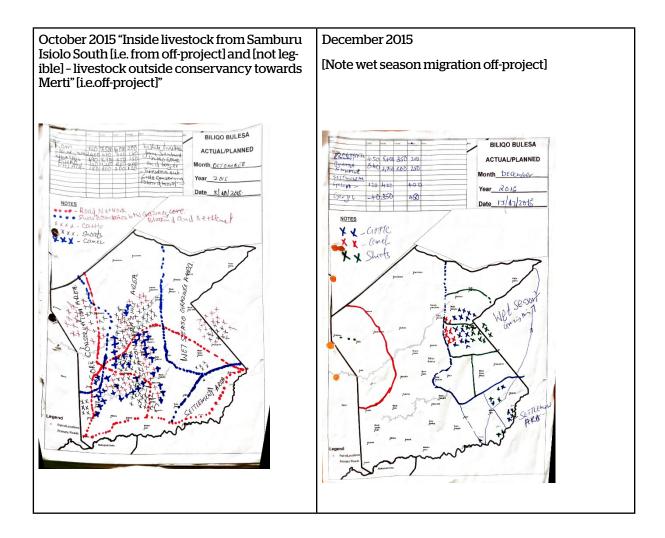
Figure 4: Sample of the project's livestock movement maps, Melako conservancy

3.4.2 Biliquo Bulesa conservancy, 2015 (378,000 hectares)

- ➤ It can be observed from Figure 5 that these maps suffer from the same general imprecision as those of Melako;
- The maps do in this case record some movements of livestock both into the conservancy from elsewhere, and out of the project area (i.e.to the south and east). However, none of these movements are quantified and so, again, these would prove useless in terms of assessing the level of carbon leakage from the project area.
- In terms of monitoring or ensuring planned grazing or leakage, the maps are also essentially useless.
- No narrative grazing reports for this period for this conservancy were available. However, the report covering the previous year noted "Encroachment issue has become big headache to me where influx of entire Samburu herders migrated and invaded the core Kom area with their livestock's without seeking consultation from Biliqo-Bulesa conservancy management."

Figure 5: Sample of the project's livestock movement maps, Biliquo Bulesa conservancy, 2015





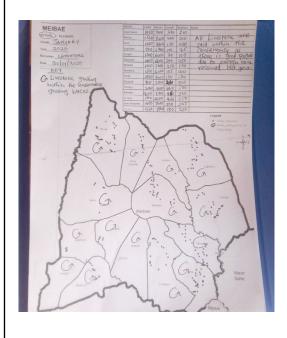
3.4.3 Meibae Conservancy, 2020 (101,624 hectares).

The 2020 Meibae maps (Figure 6) are among the better quality maps of the hundreds produced by the project and inspected by the author of this report. However, they still contain some serious weaknesses:

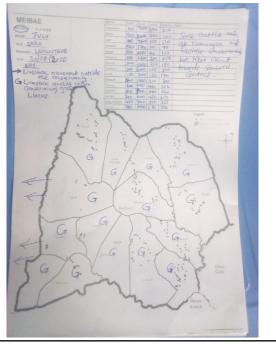
- ➤ Inadequate detail to show that any form of organised rotational grazing is being practiced, even at a large scale, let alone the daily or weekly movements that are supposed to happen in order to implement the project.
- ➤ Movement of livestock out of the conservancy (though not into it) is marked but is still not quantified, and there is no differentiation between cattle that have moved to other conservancies inside the project area, or out of the project area altogether and hence continues to lack a basis for assessing project carbon leakage.

Figure 6. Sample of the project's livestock movement maps, Meibae Conservancy, 2020 (101,624 hectares).

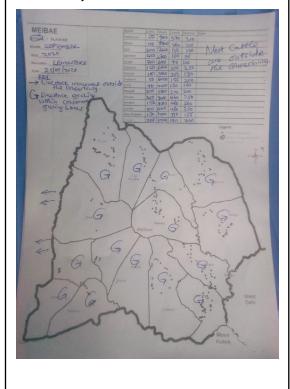
January 2020 "All livestock are within the conservancy"



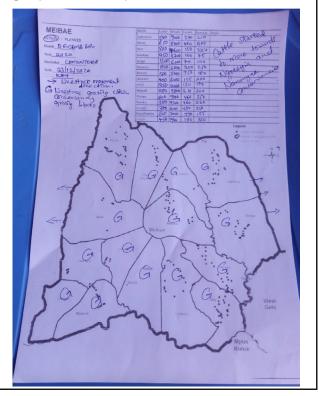
July 2020: "Some cattle are at Namunyak and Westgate conservancy, but most went towards Samburu Central" (ie, off-project)



September 2020 "Most cattle are outside the conservancy"



December 2020: "Cattle started to move towards Ngoteya and Namunyak conservancies"



3.5 Use of the maps to calculate success of project activities

The grazing maps and reports were essential as:

"monitoring of livestock numbers and movements using rangeland coordinator reports and satellite imagery is necessary to establish that Bunched Herd Planned Rotational grazing has been successfully implemented for at least a majority of cattle in the Conservancies".⁷¹

As can be seen from all the samples above, none of them contain anything like enough granularity to show that "Bunched Herd Planned Rotational grazing" has been taking place. Some of the project's more recent narrative grazing reports do provide some numerical information about the movement of cattle out of the project area (but not specifically into it). Some of the figures are very high. For example, for the II Ngwesi conservancy in April 2021, only 4% of the conservancy's cattle were reported to be in the conservancy, with 54% in other conservancies but still inside the project area, and 43% out of the project area altogether. For Melako conservancy in July 2021, nearly 9,000 cattle, shoats, camels and donkeys were reported to be inside the conservancy from outside the project area.

However, there are clearly still major, perhaps insurmountable, difficulties and errors in monitoring where cattle are moving to and from, even between the conservancies within the project. For example, in July 2021, Biliquo Bulesa conservancy reported that no less than 15,000 cattle, shoats and camels had come from Sera conservancy to graze, but for the same month Sera's own report noted no movements of animals at all to Biliquo Bulesa. Such discrepancies appear to be very numerous, and call into question the validity and veracity of the entire project monitoring system, and its auditing by third parties.

It's important to note that these maps not only raise doubts about the project's fundamental ability to conduct the necessary monitoring (including of its boundaries), but also about the verifiability of the supposed project actions which might lead to any changes in soil carbon content. As the project document notes:

"The project will yield significant removal of CO2 from the atmosphere, through improved grazing management, verified as altered grazing intensities, records of the time, timing and number of livestock grazers using different portions of the project zone, and vegetation change across 2.01 million ha."⁷² (emphasis added)

According to the first monitoring report "All field data is recorded by hand into field notebooks. Data is scanned and stored electronically and then entered into Excel or other similar spreadsheets or digitized onto GIS layers analyzed in QGIS". The 'meta-data' thereby created will, the project says, "be built so that it will be transparent how all raw data can be explicitly linked into the [emissions-related] equations that use it". But no such 'transparent data' has been made available publicly by the project proponents.

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⁷¹ VCS/CCB 2020, p130

⁷² VCS/CCB 2020, p4

Even with an entirely cooperative populace, the task of recording all the livestock and their movements would be more or less impossible. In fact, as researchers have found, pastoralists in the area have found ways of avoiding their grazing from being monitored and controlled by NRT. One such method is 'night grazing', described as "extensive", in which pastoralists might even move their cattle onto private ranches (and hence off the carbon project area)⁷³. Conservancy rangers are reported frequently to be implicated in this.

3.6 From grazing maps to soil carbon

The maps were used to supposedly demonstrate where 'project activities' were taking place, but this then had to be translated into results in terms of supposedly additional carbon being stored in the soil. To do this, the livestock movement maps were then compared with processed satellite imagery showing how vegetation coverage was changing over time (using a 'vegetation cover index', or 'NDVI') - this being the measure which then fed into a model creating the estimates of soil carbon. The ultimate purpose of this was to show that interpretation of satellite images could show where project activities had taken place (and hence additional soil carbon storage could be claimed). Some examples of this are shown in the first project monitoring report (See below, Figure 7) – with the project's grazing reports on the left, and the satellite data for vegetation change on the right in each pair.

As can be seen in the project's caption to these images, it was claimed that "Across the conservancies, livestock recordings by rangeland coordinators corresponded strongly with measurements of [change in the vegetation cover index, derived from satellite images] NDVI"⁷⁴. However, closer inspection of the originals of the livestock maps (rather than the barely intelligible small versions shown in the project monitoring report as above), actually shows enormous and important discrepancies compared to the satellite-derived vegetation maps.

73

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Pas, A and Cavanagh, C, 2022

⁷⁴ VCS/CCB 2020b, p57

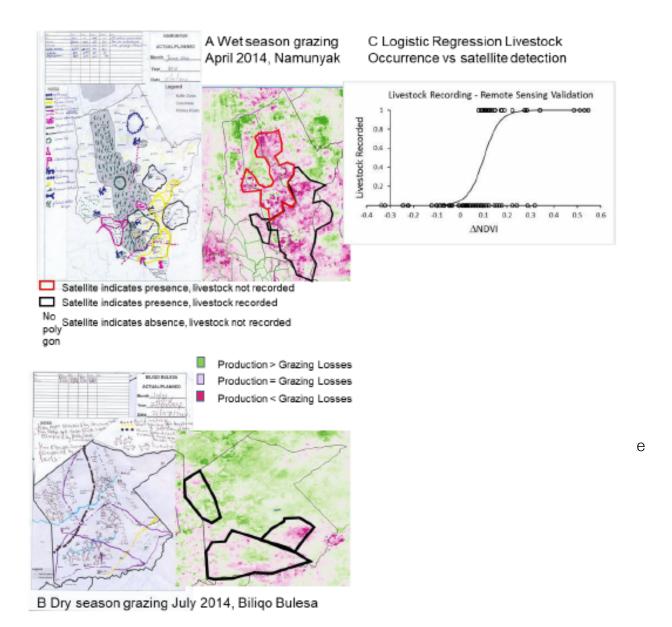
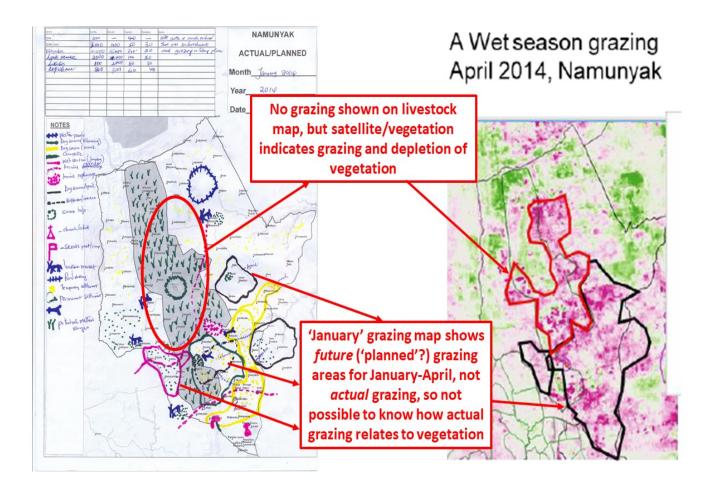


Figure 6. Example correspondence between recorded livestock use (left hand map) and the $\Delta NDVI$ measured by MODIS satellite (right hand map) for grazing in the wet season (A. Namunyak Conservancy) and in the dry season (B. Biliqo Bulesa Conservancy). Black outlined polygons indicate major areas where livestock were reported by CGCs and $\Delta NDVI$ indicated significant livestock impacts. Red outlined polygons indicate areas where no livestock were reported but $\Delta NDVI$ indicates significant impacts. Areas without polygons showed no impacts as detected by $\Delta NDVI$ and no livestock were reported. Across the conservancies, livestock recordings by rangeland coordinators corresponded strongly with measurements of $\Delta NDVI$ as indicated by C., the logistic regression of probability of livestock use $PL = 1/(1 + \exp(2.95 - 29.25*\Delta NDVI))$, R2 = 0.48, N = 116 random points, P < 0.0001.

Figure 7: Claimed 'strong correspondence' between the project's livestock maps, and satellite analysis of the state of vegetation

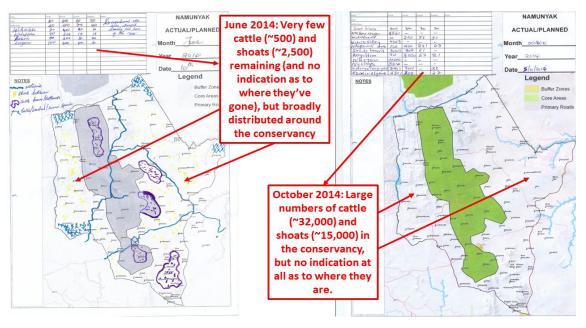
In the first pair of maps (Figure 8 below), for example, it is clear from the right-hand map that there is a large discrepancy (the area outlined in red) between the area which the satellite-derived vegetation index indicates is being grazed, but the livestock map says had no animals on it. The January livestock map on the left appears to show grazing areas up to April (hence not actual, past, grazing patterns), but analysis of the next three months' worth of grazing maps from this conservancy shows that livestock were, for the most part, not actually recorded in these areas.

Figure 8; Comparison of grazing maps and satellite-derived vegetation change maps for Namanyuk conservancy, January/ April 2014



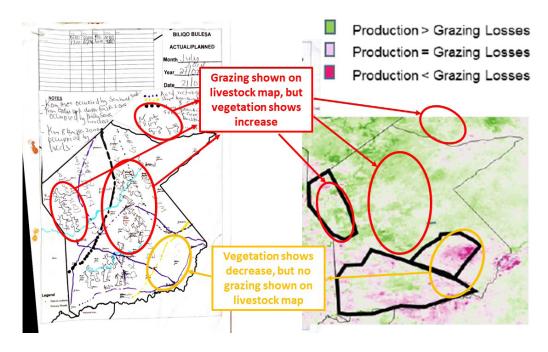
Grazing maps for later in the same year show extremely different reported grazing patterns – or nothing at all, as can be seen from Figure 9 below, that could be correlated with vegetation change maps. In June (dry season), there were far fewer animals present, but they were widely distributed around the Conservancy (note also that there is no indication on the map as to where the ~9,000 cattle and ~40,000 shoats that were in the conservancy in January, but not present in June, had gone – thus underlining the point that these maps are worthless as a tool for monitoring project leakage). All the maps from September to December of 2014, such as the October map below, show very large numbers of livestock on the conservancy (~32,000 cattle, for example) but gives no indication as to where they were grazing.

Figure 9; Grazing maps for Namanyuk, June and October 2014, showing absence of data to correlate with vegetation change maps



In the second pair of maps, concerning Biliqo Bulesa conservancy, major discrepancies are also evident. As can be seen from Figure 10 below, the project's grazing map broadly indicates large numbers of livestock grazing (including reportedly nearly 100,000 shoats) but most of the recorded grazing areas show an increase in vegetation on the right hand map. Conversely, the area shown on the vegetation change map with the most intense decrease in vegetation is not recorded on the grazing map as being under grazing.

Figure 10; Comparison of grazing maps and satellite-derived vegetation change maps for Biliqo Bulesa conservancy, July 2014



In other words, on the basis of the examples the project itself gives, there are very strong reasons to question whether the grazing reports being generated by the project could be correlated with the vegetation change maps derived from satellite images. They raise doubts that the remote vegetation index monitoring, which the project's soil carbon calculations rely on, was capable of detecting where 'project activities' were taking place, i.e.the 'planned rotational grazing' on which the project's additionality rests. Indeed, if the livestock movement maps in any way represent the actuality of where cattle were at any time, then it is not clear that the satellite vegetation monitoring was capable of reliably and accurately detecting any form of grazing. If, on the other hand, the livestock movement maps were inaccurate (and the satellite images correct in showing where grazing was taking place), then clearly a major foundation of the project is faulty, as the project does not and cannot really know where livestock were at any given time, and thus could hardly be said to be implementing 'planned rotational grazing'.

3.7 Vegetation in decline - or a faulty monitoring system?

Yet another series of maps included in the project's first monitoring report (see Figure 10 below) purports to show "Evidence of successful project implementation (green and white areas) for 2014-2016 in the project zone" Yet these maps very clearly show the 'red' area, where vegetation production was less than the 'grazing', over a much larger portion of the project area in the project's first few years. This seems to indicate that, if the project were actually implementing the planned rotational grazing across the project area – as is claimed and is the basis of the project's claimed additionality and carbon credit generation – and there is a correlation between the vegetation index and 'planned rotational grazing' (as is also claimed), then the project was actually making the condition of the vegetation worse.

However, this is 'explained' through yet another contortion. The monitoring report goes on to present an estimate of how much of each conservancy was deemed to be experiencing unsuccessful grazing (and thus, by implication, how much of the conservancy was under planned grazing, i.e, implementing the project)⁷⁶. Consistent with maps in Figure 10, the report shows that around two-thirds of the conservancies had more 'unsuccessful grazing' in 2016 compared to 2014 or 2015. In some conservancies, the situation had worsened dramatically: in Il Ngwesi, for example, none of the conservancy was deemed to be 'unsuccessfully grazed' (i.e.failed to iplement the project activities) in 2015, but in 2016, nearly 96% of it was. In Leparua conservancy, over the same period, the area deemed to be 'unsuccessfully grazed' increased from 1.5% to around 55%.

However, these estimates were done simply on the basis that any area shown in the satellite images with negative vegetation productivity was deemed to be due to 'unplanned' grazing, (and thus any areas with greater vegetation was due to planned grazing). However, this assessment completely lacks any reference to reports of where planned or unplanned grazing was actually occurring because, as seen above, none of the livestock maps or grazing reports contain this information.

⁷⁵ VCS/CCB 2020b, p60

⁷⁶ VCS/CCB 2020b, p61



MONITORING REPORT: CCB Version 3, VCS Version 3

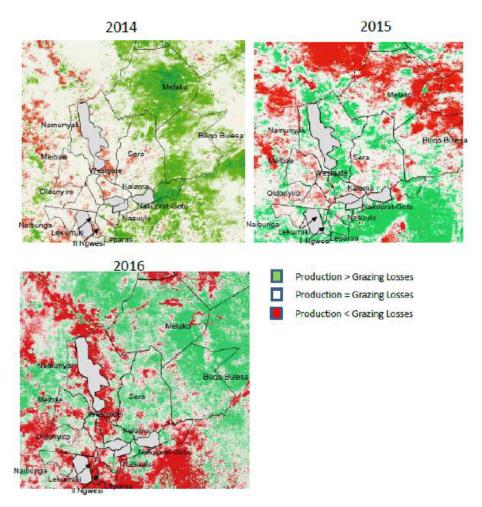


Figure 9. Evidence of successful project implementation (green and white areas) for 2014-2016 in the project zone

Figure 10: Maps from project monitoring report showing change in vegetation condition, 2014-201677

In fact NRT's 'State of the conservancies' report for 2021 report indicates that the vegetation in many areas is getting worse, not better - see Figure 11. This shows that, for the period 2012 to 2020 (i.e, almost exactly matching the offset project start date), across 11 conservancies (including eight of the thirteen conservancies included in the offset project), rangeland vegetation quality was declining across 57.6% of all areas, and only improving in 29.5% For the conservancies included in the offset project, the decline was occurring across 48.5% of areas, thus reportedly somewhat lower compared to the overall rate of decline, though the low number of 'non-project' conservancies included in the report (only two) means that this comparison is probably not reliable. The key point is that, some eight years into the project, a key indicator shows that rangeland vegetation health is in fact declining across nearly half the area of the eight conservancies included in the offset project.

⁷⁷ VCS/CCB 2020b, p60

⁷⁸ NRT, 2021 p109

Long-term Rangeland Health Indicator Trends per Conservancy Management Zones (Veg-CoMMs Data 2012-2020)

	% Bare (Ground Co	over	% Gaps B	etween Pla	nts	% Perenni	al Grass Co	ver	% Plant Ba	ase Cover	
Conservancy	Core	Buffer	Settlement	Core	Buffer	Settlement	Core	Buffer	Settlemen	Core	Buffer	Settlement
Lekurruki	\rightarrow	\uparrow	1	\leftrightarrow	\leftrightarrow	1	\rightarrow	\rightarrow	\rightarrow	\rightarrow	\downarrow	\leftrightarrow
II ngwesi	\downarrow	\downarrow	\rightarrow	\rightarrow	\rightarrow	1	\rightarrow	\rightarrow	\rightarrow	\rightarrow	1	\leftrightarrow
Biliqo Bulesa		\rightarrow	\rightarrow		\rightarrow	\downarrow		1	\rightarrow		\rightarrow	↑
Mpus Kutuk	\downarrow	\downarrow	1	\leftrightarrow	\rightarrow	\rightarrow	\rightarrow	\rightarrow	1	\leftrightarrow	1	→
Melako	\rightarrow		\rightarrow	1		\rightarrow	\rightarrow		\rightarrow	\rightarrow		\rightarrow
Meibae	1	\downarrow	\leftrightarrow	\rightarrow	\rightarrow	1	\rightarrow	1	\rightarrow	\rightarrow	\rightarrow	\leftrightarrow
Naibunga	\rightarrow	\uparrow	\rightarrow	\leftrightarrow	\rightarrow	\rightarrow	1	1	1	\uparrow	1	↑
Namunyak	\rightarrow	\downarrow	\rightarrow	\rightarrow	\rightarrow	\rightarrow	1	1	\rightarrow	\rightarrow	\rightarrow	\rightarrow
Sera	\rightarrow	\uparrow	\rightarrow	\rightarrow	个	\downarrow	\rightarrow	\rightarrow	\rightarrow		\rightarrow	↑
Kalama	个	\uparrow		\downarrow	\rightarrow	1	个	1	\rightarrow		1	\rightarrow
Westgate	1	\downarrow	1	\downarrow	\rightarrow	\downarrow	\downarrow	1	\downarrow	\rightarrow	\downarrow	\downarrow

For directional change and color codes, green = improvement in rangeland health; Red = decline in rangeland health and Yellow = stable. Trends are interpreted based on the slope coefficients of linear regression model. Slope values less than or equal to -0.2 were interpreted as decreasing ↓, those above -0.2 and less than or equal to 0.2 as stable ↔ and above 0.2 increasing ↑. Nasuulu, Nakuprat-Gotu, Leparua, Shurr, Jaldesa, Songa Conservancies have started monitoring the health of rangelands. Biliqo Bulesa does not have a Core Area, Melako does not have a Buffer zone; Meibae does not have a Core or Buffer Zone.

Figure 11. NRT data from 2021 shows that, eight years into the carbon project, 'rangeland health' continues to decline in many areas⁷⁹.

3.8 Validating the unknown?

All of the maps shown above (and many more which are of much poorer quality) were available to Aster Global and Verra at the time the project was both validated and then verified. They indicate very strongly that the project could not properly monitor its boundaries, let alone control them. ⁸⁰ They strongly contradict the project's claim that leakage of livestock out of the project area was 'negligible'. They strongly suggest that the project was not complying with the methodology requirement to be able to control its boundaries, even if the appearance of being able to monitor them improved slightly in recent years. They strongly suggest that the evidence necessary to demonstrate that 'Bunched Herd Planned Rotational grazing' was actually taking place was largely lacking. They raise many questions about whether the grazing/vegetation-index/soil carbon linkages in the modelling used to calculate soil carbon rest on valid assumptions and the claimed correlations.

However, rather than recognise that the project was fundamentally flawed and non-compliant with the methodology, the verification merely tabled a 'Forward Action Request' for the project to improve the grazing records.⁸¹ A further 'Forward Action Request' was that "future verifiers examine whether the project continues to meet this [controlled boundaries] applicability condition... Future verifiers are encouraged to check for the presence of animal incursions and to evaluate their potential as a significant source of emissions to be included in emission reduction estimates" ⁸².

⁷⁹ NRT, 2021b

⁸⁰ VCS/CCB 2020b, p49

⁸¹ VCS/CCB 2020d, p48

⁸² VCS/CCB 2020d, p11

In other words, even though it had not been possible for the project to demonstrate that it complied with one of the most basic eligibility conditions to be a VCS carbon offset project, it was nevertheless both validated and verified, and the eligibility question was simply delayed to some future time and for a later verifier to deal with. Verra should clearly not have allowed the project to be validated in the first place, and then verified, but such is the laxity of the validation and verification process, that this was not acted on.

In summary, whilst the project claimed that its additionality would flow from overcoming the problem of 'continuous unplanned grazing', there is little evidence that this was actually happening and, if it was, whether it was actually having any positive effect. The monitoring systems the additionality argument relied on were demonstrably inadequate for the purpose. There further seem to be major questions over the use of satellite derived vegetation index data to interpret where (or if) the claimed rotational grazing was actually occurring. Insofar as they show anything reliably, the livestock maps seem to indicate that, in the larger part, overall grazing patterns were following seasonal patterns, largely irrespective of either conservancy boundaries or the carbon project area. All of these challenge whether the project could claim to provide any additionality, or then measure what, if any, impacts it was having on soil carbon.

4. The project baseline

Another key issue with offset projects is the way that the project baselines are calculated. Nature-based offset projects rely on a projection into the future of what would have happened to the land or ecosystem had the project not happened. This projection of some scenario into the future is called a 'baseline' – an estimate of what would have happened to the carbon stored in the project area had the project not happened.

In the case of the NKCP, the baseline was taken to be an estimate of the carbon content of the soil if "continuous grazing, whereby animals repeatedly graze the same site in small groups" were to continue. This is depicted on the left in Figure 12 below from the project document.

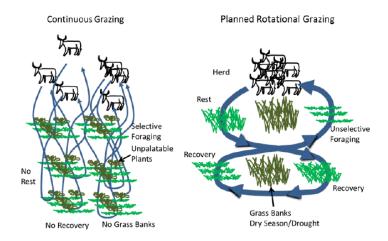


Figure 3. Influence of current baseline "continuous" grazing system in which loose herds repeatedly graze the same ground, resulting in selective foraging, continuous animal impacts and no rest or recovery of forage. In contrast, the proposed project activity of planned rotational (PR) grazing employs herds with the same number of livestock that visit the same ground only once per season, providing impacts that encourage seed germination but allowing rest and recovery of forage.

Figure 12: Illustration from the project document explaining the baseline (left) and project scenario (right) 83

The project, it was claimed, would result in the situation in the right in the same illustration, which would allow for more vegetation, and hence more carbon to be stored in the soil. Broadly speaking, the carbon credits generated by the project would be the difference each year between the carbon stored in the soil under the new 'planned rotational grazing' system, minus what would have been stored in the soil in the old 'continuous grazing' regime.

Measurement of carbon stored in the soil across the project area would therefore be essential for the project to know first how much there is under the existing grazing regime, and then how much with the project activities taking place.

83 VCS/CCB 2020, p20

In fact, the putative soil carbon content before and during the project was not measured directly, but relied on an indirect 'proxy' measure; the density of vegetation cover of the land. This was then converted to an estimate of soil carbon using an algorithm. Vegetation cover can be monitored using satellite data, whereas the much more direct actual measurement of soil carbon would require access to many sample points all over the vast project area and then transportation of them and expensive testing of them in laboratories. Satellite images processed to create a 'vegetation cover index' are readily available, and free – but they then require converting into estimates of soil carbon using a further and highly complicated modelling process.

Hence, to generate a baseline, the project would need to show what had been happening to soil carbon in the area without the project. The project thus assessed "remotely-sensed estimates" of the vegetation cover for the twelve years before the project started, 2000-2012⁸⁴. The project presented the results of this vegetation cover index analyses for several of the conservancies, as below in Figure 13 (the lower the vegetation index, 'NDVI', the less the amount of vegetation present).

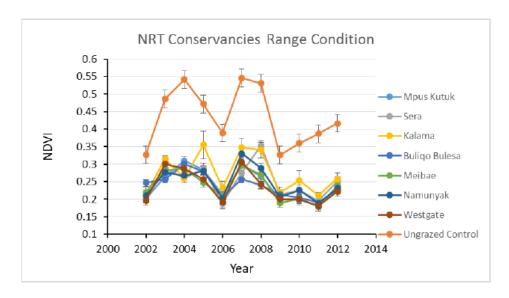


Figure 13: Chart from project document purporting to show decline in vegetation quality⁸⁵

The project claims that these satellite images show that vegetation in these conservancies

"declined significantly on average during the ten years prior to the project start date in December 2012. Consequently the satellite images strongly suggest that vegetation conditions throughout virtually all of the project area have been degraded over the previous 12 years".

However, this does not visually appear to be the case at all, and indeed the same section in the project document itself more accurately notes that the twelve years of results show "no significant trend"⁸⁶. It is clear that there is anyway very large annual variation in vegetation – even in the 'control areas' where there was no grazing at all – due simply to the highly variable annual rainfall.

84	VCS/CCB	2020.	p63

⁸⁵ VCS/CCB 2020, p64

⁸⁶ VCS/CCB 2020, p64

The project also presented two graphs showing vegetation cover between areas in two conservancies either undergoing "chronically intense continuous grazing" or "protection". There appears mostly to be only very slight differences between the two⁸⁷. The project nevertheless claimed that "These results in combination indicate the chronic degradation of forage production in the project area over the past 12 or more years"⁸⁸

In other words, the project claimed that vegetation was declining due to 'unplanned' over-grazing, but the evidence supplied does not appear to support this. In fact, in the chart shown in Figure 12 above, the vegetation cover was higher for most conservancies in 2012 (still before the project started) than it was in 2002. No account is taken in the project's assumptions that any trend or change in vegetation might be due not to 'overgrazing', but to exogenous factors, especially climate change.

The second part of this 'remote and modelled' assessment of soil carbon requires conversion of the data for vegetation cover to an estimated figure for soil carbon content. This involves use of another mathematical model, called 'SNAP'. This was devised by the original project proponent, Soils for the Future's Mark Ritchie, in the Serengeti National Park in Tanzania (hence the name 'SNAP'), with the purpose of showing how soil carbon responds to grazing regimes. As the model was developed for a very different type of grazing regime (500 kilometers to the southwest), it had to be 'recalibrated', in a technically very complicated process, to account for the different conditions, such as type of soil, type of vegetation, rainfall, grazing intensity etc. that actually apply in the project area. This was done using soil samples taken at some 200 locations throughout the project area.

These were the only samples of soil from the project area which could have shown the actual carbon content. The results of this sampling is not available. Further actual soil sampling showing whether the expected increases in soil carbon were happening would only take place "After crediting periods long enough to detect changes in SOC at sampling stations, e.g. 5-7 years" By this time, of course, at least one, and possibly two, crediting periods would have been completed and verified, thus resulting in millions of carbon credits being issued entirely on the basis of an unproven mathematical model developed by the project proponent.

One of the notable features of the end result of this complex process is the extraordinarily high levels of 'uncertainty' generated by the SNAP model. According to the project document, this possible error was between 26% and 38% of the total carbon soil level⁹⁰. The uncertainty in the model likely contributed to the extraordinarily imprecise estimation the overall carbon benefit of the project of "0.6 to 1.1 tonnes CO2e per hectare each year" – i.e, an uncertainty of nearly 100%⁹¹.

At no point does the project state what the baseline is, in terms of the actual quantities of carbon stored in the soils of the project area. This means it is not possible to independently verify the project's claims through empirical evidence nor to assess, for example, what kind of actual changes are being made in different locations, the variation between sites, or what overall rate of change (if any) is being made.

87	VCS/CCB 2020, p	65

⁸⁸ VCS/CCB 2020, p66

⁸⁹ VCS/CCB 2020b, p40

⁹⁰ VCS/CCB 2020, p103

⁹¹ VCS/CCB 2020b, p3

Even a separate 2014 report to USAID by Ritchie on the final results of sampling across the conservancies and testing of the SNAP model (evidently preparatory Work for the carbon project) failed to provide anything other than very outline data on actual soil carbon levels, and none for specific locations⁹². However, this 2014 paper broadly indicated that the average soil organic content in the predominant sandy soils under what was described as "continuous, unrestricted grazing" around settlements was about 5 tons per hectare less than in the conservancy's 'buffer' or 'core' areas where grazing was much restricted. It estimated on this basis the potential to store an additional 0.3-0.5 ton of carbon per hectare per year with reduced grazing. This was between four and six times as much as a previous study of soil carbon sequestration potential had indicated for improved land management in arid and semi-arid regions in Kenya⁹³. The assessment of the way in which soil carbon was being calculated caused significant problems during the project's validation⁹⁴.

The baseline for the project thus rests on an assumption about a declining trend in soil carbon in the project area which does not seem to be borne out by the evidence available. Empirical data for the actual levels of soil carbon is not available. Then, rather than actually measuring whether the project's actions have the claimed effects, the calculation of carbon savings is based entirely on a model of how soil carbon changes in relation to vegetation cover, and this also relies on a model of how vegetation cover correlates to changes in grazing patterns. There is significant scope for error at each stage of this process.

The figures available for actual soil carbon levels in the area suggest that, if the project had the effect that it claimed, then it would result in more or less doubling soil carbon content in 20 years. These changes should be clearly and empirically apparent after nearly ten years of project operation. These could be independently assessed if the results of the original sampling were published, and repeat sampling from the same sample sites undertaken and also published.

92 Ritchie, M, 2014b

93 Batjes, N H, 2004

94 VCS/CCB 2020b, pp104-133

5. Leakage

Leakage is another aspect of 'nature-based' offset calculations with large potential for overestimating allegedly avoided emissions or additional carbon storage. Each offset project must monitor the extent to which it may rather than definitively preventing some emissions from happening, simply cause emissions to move elsewhere (and thus results in no net benefit for the climate). An example of this would be where a project puts an area of forest off-limits to logging companies, but the logging companies simply go elsewhere to fell timber. In this case, the net climatic effect of the project is nil, and the project should not be able to issue any carbon credits.

In the case of this project, leakage would mostly be due to livestock moving out of the project area to graze, meaning that while the vegetation/soil carbon would notionally remain proportionately more intact in the project area, the same amount of vegetation elsewhere was being consumed and thus not adding to the soil carbon store there. The project did foresee and record significant carbon leakage, of up to nearly 30% in the early years of the project⁹⁵. The calculation of this leakage from the project is "based on a reduction in net [carbon] removals **proportional to the total livestock-days spent off the project area**" (emphasis added). As the project explains;

"Conservancy grazing coordinators also monitor when herders from a Conservancy move their livestock off project area and record the number of days a number of livestock over which this occurs. These data are used to determine leakage." ⁹⁷

However, as can be seen from the grazing report maps presented in Section 3.4 above, there is no real means for the project to know how many livestock days are spent off the project area, and therefore there is no way of calculating leakage with any degree of accuracy. The project document states that communities inside the project area may "choose to move livestock onto range used by N[on] P[articipating] C[onservancie]s...Project protocols request such excursions to be legal and justified through compensation (leases or rents) to NPCs.⁹⁸" However, it admits that "Such negotiations thus far have been mostly informal (no legal documents or paper trail)"⁹⁹. In other words, apart from the grazing reports, there are no additional documentary checks available on whether grazing has 'leaked' out of the project area, and if so, how much. For reasons which are not explained, animals up to two kilometres outside the project area are deemed still to be in the project area and to not count as leakage.¹⁰⁰

The project validation team evidently had serious difficulties in understanding how leakage was calculated. They questioned exactly how movement of cattle across the project boundary could be monitored, to which the project replied that data for leakage "were obtained from monthly reports by grazing coordinators. These reports mapped and reported numbers and locations of livestock on each Conservancy for each month of the year"¹⁰¹.

95	VCS/CCB 2020b, p63
96	VCS/CCB 2020, p106
97	VCS/CCB 2020b, p10
98	VCS/CCB 2020, p50
99	VCS/CCB 2020, p50
100	VCS/CCB 2020c, p51
101	VCS/CCB 2020d, pp123

As evidenced by the maps in Section 3.4, this is factually incorrect. The validators duly noted that:

"The description of how project boundary monitoring and reporting will be carried out is incomplete, and none of it is included in the P[roject] D[ocument]. No information was provided here on how [off project grazing] counts are made..."102.

The project simply replied that the details of the monitoring were set out in the part of the project document where they claim to have met the 'applicability conditions' for such a project, though this is not in fact the case¹⁰³. The project also claimed that the usual monitoring practice for rangers was set out in a document called the Wildlife-Conservancy Management Monitoring System, or 'Wildlife CoMMS Guide'¹⁰⁴. The 'Wildlife CoMMS Guide' has been inspected and found to contain not a single reference to the monitoring of livestock movements (and is wholly concerned, as the title suggests, with the monitoring of wildlife). Hence the project's reply provided no additional information to the validators' and failed to answer their queries.

Nevertheless, the validators accepted the project's response, concluding, without any additional information, that "people are aware of conservancy and project boundaries, and notice when there are incursions and livestock thefts. Grazing plans are designed to keep livestock in the project area. Herders and scouts are aware of the borders. Numbers and locations of animals are reported" The validation team accepted the project's claim that "there is no incentive to leaving the project area" – even though this is patently not correct, as other statements by the project itself reveal. They accepted, incorrectly, that the project's means of "monitoring borders appears in the Wildlife CoMMS Guide" The issue of monitoring and controlling of project borders was thus 'closed' as an issue.

However, the question of how the purported data on movement of cattle across the project's borders was then translated into a figure for carbon leakage proved even more problematic. The validators pointed out that the method of calculation leakage used by the project was unclear, and asked for clarification. The project responded by supplying an Excel spreadsheet (not publicly available) purporting to show the calculations. The validators noted that no field reports (to correlate with the 'meta-data' in the spreadsheet) had been provided. The project failed to provide any such reports, and the validators noted of the supplied Excel file that it included "incorrect values", used inadmissible equations, included "livestock counts and other values" that were different from an earlier version of the same document, and had used 2014 data for the apparently missing data for 2013.¹⁰⁷

These problems remained unresolved. This meant that the validators had been unable to assure themselves on exactly how the leakage was being calculated – a crucial issue, because in due course this would be important in determining whether, or how many, carbon credits could be claimed by the project. This, as well as any of the issues above concerning additionality and baselines etc, should have been sufficient for the validation to be rejected but, despite this, it was still approved.

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102 VCS/CCB 2020d, p123
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¹⁰³ VCS/CCB 2020d, pp123

¹⁰⁴ King, J, 2013

¹⁰⁵ VCS/CCB 2020d, pp123

¹⁰⁶ VCS/CCB 2020d, pp123

¹⁰⁷ VCS/CCB 2020d, pp124-126

For calculation of the leakage, the project methodology required that the specific number of 'cowdays' spent out of the project area was necessary to know. When it came to the first monitoring report and its verification (issued in October 2020), the verifiers noted that the number of days which cattle had spent off-project had not been reported¹⁰⁸. This was then retrospectively filled by NRT, which stated that "For the four years of the current monitoring period (2013 – 2016), the proportion of project livestock-days spent off-project was 1.9%, 18.0%, 27.2%, and 10.5% respectively"¹⁰⁹. Given the inaccuracy and vagueness of the project's (monthly) livestock movement reports as shown in Section 3.4, it is not at all obvious how this could have been calculated, even in theory.

¹⁰⁸ VCS/CCB 2020d, p52

¹⁰⁹ VCS/CCB 2020b, p61

6. (Non-) permanence

Impermanence is the problem that, whilst allegedly preventing emissions or storing additional carbon for a short while, there may be a likelihood that carbon will not stay there, out of the atmosphere, for sufficiently long to make much or any difference to climate change. Offset projects are typically thus required to demonstrate permanence.

Setting aside all the other fundamental problems, the potential lack of permanence of the project is also a serious issue. This problem is common to all so-called nature-based projects, where carbon is stored in living organisms for a few days to a few hundred years, whereas the fossil carbon it is supposed to be compensating for could stay in the atmosphere for several thousand years.

The impermanence of land-based offsetting is worsening due to the effects of climate change itself. Global warming is making many ecosystems lose carbon, and become more prone to catastrophic loss through fire¹¹⁰.

Due to climate change, the mean annual temperature in Kenya is projected to increase by between 0.8-1.5°C by the 2030s and 1.6°C-2.7°C by 2060¹¹¹¹. According to Kenya's National Climate Adaptation Plan, almost all of northern Kenya, including the project area, will be at 'very high' risk of climate-related impacts¹¹². These changes could represent real risks to the carbon stored both in the biomass and soils of the project area. Even the project's case for additionality acknowledged the problem in a roundabout way, noting "declining forage and water resources appear to be driving a decline of wildlife across Kenya³¹¹³. Of course, the same is true for livestock herds, though to have admitted so would have undermined the permanence case for the project. A study of climate-induced conflicts in the area (specifically Samburu County, comprising a significant part of the western half of the project area), found that decreasing and unpredictable rainfall was causing migration routes both southwards and northwards to lengthen into adjacent counties¹¹⁴. The problem of 'leakage' – movement of cattle out of the project area – thus seems destined to become more problematic as time progresses.

See for example, Crusius, J, 2020.

¹¹¹ Republic of Kenya, 2016

¹¹² Republic of Kenya, 2016

¹¹³ VCS/CCB 2020, p66

¹¹⁴ Jaoko, J. and Kaoga, J., 2016

7. Rights to carbon, and benefits from the project

7.1 Consent, consultation and information provision

The evidence that prior and informed consent for the project was obtained from the relevant communities – or even the conservancy management regimes – is ambiguous. There are also questions about whether the legal right to trade the carbon was properly obtained before such trading began. The project document of 2020 noted that;

"The carbon project...has been communicated **much more recently** due to high uncertainty in the carbon market and a reluctance to raise hopes about potential revenues" (emphasis added).

It further stated that;

"the Conservancies began on 15 May 2015 a solicitation of participation and public comment period, with announcement and information about the project distributed by NRT grazing coordinators and other staff in the form of pamphlets". 116

It should be noted that May 2015 is two and a half years after the project started. The project also stated that "stakeholders" would be informed through a "soon-to-be posted announcement on the NRT website (http://nrtkenya.org) plus the front pages of each Conservancy linked to a blog site (http://nrtcarbonproject.wordpress.com) where the announcement also exists and anyone can post comments anonymously about it" This latter website is still open and, as of February 2023, is completely devoid of content (see Figure 14 below).



Hello world!

⊙ May 26, 2015 by texritchi

This is your very first post. Click the Edit link to modify or delete it, or start a new post. If you like, use this post to tell readers why you started this blog and what you plan to do with it.

Figure 14: Hello world! The NRT carbon project's consultation website is entirely empty¹¹⁸.

115	VCS/CCB.	2020	n36 VCS	/CCB	20200	n189
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¹¹⁶ VCS/CCB, 2020, p36

¹¹⁷ VCS/CCB, 2020, p36

Site created by 'textritchie', but is otherwise anonymous. https://nrtcarbonproject.wordpress.com/

The project document then goes on to say that "These announcements were followed by community meetings in September and October 2016, open to all members in each Conservancy, in each of the 13 participating Conservancies" This round of announcements and meetings took place almost at the very end of the first four-year verification and crediting period. Side-stepping the issue of whether the communications and meetings provided consent for the carbon project or indeed addressed the specifics of it, the project noted that

"In the meetings, community grazing committee chairmen communicated how grazing plans had been implemented or not in the past and reviewed past compliance with grazing plans, identified barriers to compliance, and communicated expected benefits of project activities as rotational or migratory grazing. The response of communities, especially after September 2016 meetings and workshops were improved efforts to make, write, and implement grazing plans within Conservancies. This provides evidence that community members understood the benefits of project activities and approved intensified efforts to conduct grazing plans." 120

The validation of the project accepted that pamphlets had been submitted to the communities, but also noted that:

"at the time of the site visit the local language summaries of the P[roject] D[document] and P[roject] I[mplementation] R[eport] did not appear to have been distributed. When discussed with the project proponent they stated that the documents would be distributed after the site visit, and photographic evidence would be provided that all communities were reached¹²¹.

In September 2015, the validators then requested the project to "Please provide evidence (i.e. date stamped georeferenced photos) that the PD and PIR ha have been posted and made available to all communities" 122. Following receipt from the project of pictures purporting to show this, the validators then recorded that:

"Photographs of what appear to be monitoring report summaries in ten conservancies were provided. Dates ranged widely, and it appears the date of the file is not necessarily the date the picture was taken, as shown by a time stamp on the photo from the Nakuprat Conservancy, which appears to have been taken in January of 2010. No georeferenced information was included in any of the files." ¹²³

The validators do not comment on the fact that evidence for three of the thirteen participating conservancies was not provided at all, nor who exactly within the conservancies was pictured receiving the documents, or whether this in any way represented proper consultation or even provision of information to the wider community, nor whether the photographs demonstrated that the documents were being provided in a local language so as to be intelligible to local people. However, evidently still unconvinced by the photographs, the validators then asked the project again to "Please provide georeferenced photos and provide the dates they were taken" 124.

119	VCS/CCB, 2020, p36
120	VCS/CCB, 2020, p36
121	VCS/CCB 2020c, p189
122	VCS/CCB 2020c, p189
123	VCS/CCB 2020c, p190
124	VCS/CCB 2020c, p190

Three years later, the project replied in September 2018 that:

"Due to delays in completing the validation, the project has been re-posted for public comment in the project zone (February 15- March 15, 2019) at both Conservancy HQ's and at public announcement kiosks in major towns and villages. Photos with time stamps and associated GPS are available to the VVB" 125

This still does not confirm that the right documents had been provided in the right languages to the right people and whether any of what purportedly and eventually had been done represented a meaningful form of information provision, let alone consultation. Nevertheless, the validators accepted that "Photos with date stamps were provided to satisfy this request of multiple locations where the public comment announcement was posted. The item is addressed" 126.

Clearly, with information having been provided, at best, only late into the project and possibly not in a form even then suitable for the recipients, it is impossible to conclude that Free Prior and Informed Consent had been granted to the project proponents at the start of the project by the area's indigenous communities.

As evidence of consultation having been carried out, the project referred to a social survey in which:

"As part of baseline social data gathering, community elders, women and young herders (morani) were asked a series of questions in focus groups in three Conservancies, and over 1000 households were interviewed in a household survey of four Conservancies in October 2014" 127.

The validators pointed out that this does not explain "why these individuals are legitimate representatives and does not discuss how the adequate levels of information sharing with the groups take place". In September 2015 they asked for an explanation of how these individuals were selected and to "Please describe the information flow in the project and how the lower level community members receive and provide information" 128.

Again, the project took three years to reply, by providing information about how the 'focus groups' had been selected. Again, this does not actually explain how consultation was undertaken (rather than a 'social survey' to obtain project baseline data) but the validators nevertheless concluded that:

"the project has been able to demonstrate that consultations and participatory processes have been undertaken directly with communities and information sharing with the members of the groups have occurred. The item is addressed." ¹²⁹

As with the issues of additionality, baselines and leakage, the clear evidence of non-compliance in terms of information provision and consultation should have been sufficient for Verra to reject the validation carried out by Aster Global.

125	VCS/CCB 2020c, p190
126	VCS/CCB 2020c, p190
127	VCS/CCB 2020c, p195
128	VCS/CCB 2020c, p195
129	VCS/CCB 2020d, p196

It is worth repeating that this finally 'validated' evidence of information provision and consultation being undertaken by the project came nearly six years after the project had started and nearly two years after the first four-year period of carbon crediting had already been completed. As the next section explores, formal agreements to transfer the rights to NRT to trade the carbon came even later.

On April 21st, 2020 – two weeks after the validation of the carbon project, but some six months before the first verification - a group of Samburu and Borana Elders took the unusual step of jointly calling for international donors to cease providing funding to, and "totally disassociate" themselves from, NRT over serious violation of human rights¹³⁰.

7.2 Rights to the carbon

The project document states that "Rights to benefit from soil conservation as a component of wildlife conservation are conferred by the right to register lands as Conservancies by the Kenya Wildlife Conservation and Management Act of 2013 and by the recently signed Community Lands Bill of 2016"¹³¹. In fact the former Act contains no reference to soil, even in its definitions of what constitutes 'ecosystems', 'wildlife conservation areas' etc¹³². The latter law only refers to soil in relation to the prevention of erosion¹³³. Neither law refers to carbon, carbon projects or the generation of income from the sale of offsets.

In the validation, the validators requested NRT to:

"Please clarify how NRT is granted ownership through the Kenya Community Land Act of 2016, demonstrating that the Project Proponent has the unconditional, undisputed and unencumbered ability to claim that the project will or did generate or cause the project's climate, community and biodiversity benefits Nowhere in the final 2020 project document does NRT actually state that it has this right". 134

The project replied that "some communities [seven in number] ... exist as or have applied for registration as Group Ranches" a status which confers rights to hold assets (which, the project claims, could include soil carbon). The remainder (six) are "located on Trust lands, which confer rights to grazing **and by inference** (emphasis added) resources that promote grazing (such as water, soil carbon) under customary law conferred by Section VIII item 59 of the Kenya Trust Land Act of 2010"135.

For the first group, the repealed Land (Group Representatives) Act provided for land ownership under group ranch system governed and managed by incorporated group representatives. This system ceased to exist upon the promulgation of the Constitution of Kenya, 2010, which only recognized public land, private land, and community land. The Community Land Act of 2016 repealed the Land (Group Representatives) Act and offered provisions guiding the transition to community land.

130 AHUH, 2020	130	Anon,	2020
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¹³¹ VCS/CCB 2020, p49

¹³² Republic of Kenya, 2013

¹³³ Republic of Kenya, 2016b

¹³⁴ VCS/CCB 2020d, p158

¹³⁵ VCS, 2020, p54

In regards to conservancies that had already acquired Group Ranch status, Section 47 (3) of the Community Land Act requires land held by Group Representatives not to be sold, leased, or converted to private land before it has been registered under the Community Land Act. The first-ever registration of community land in Kenya was the II Ngwesi and Mosul communities, and Sereolipi communities in Samburu County by transitioning their land from Group Ranch status, these being the only two to achieve this outcome up until 2021.

For the second group, the legal basis of soil carbon ownership is merely inferred from the legal right to graze. In fact, the Community Land Act 2016, which repealed the Trust Land Act of 2010, places clear obligations on anyone seeking to utilize or invest in lands deemed to be covered by the Act, regardless of whether they had been registered or not (so far, no Trust lands within the project area have been registered ¹³⁶). Section 38 of the Act provides that regulation of community land use and the management of community land shall be subject to national and county government laws and policies relating to the exploitation of minerals and natural resources among others – but there is no substantive law in Kenya, either at the County or national level, enacted to provide a mechanism for or regulate carbon credit generation or trading. Section 36 of the Act requires that any agreement relating to an investment in community land shall be made after a free, open consultative process and shall contain provisions on the following aspects: (a) an environmental, social, cultural and economic impact assessment; (b) stakeholder consultations and involvement of the community; (c) continuous monitoring and evaluation of the impact of the investment to the community.

Section 6 (6) of the Community Land Act provides that any transaction in relation to unregistered community land within the county shall be in accordance with the provisions of this Act and any other applicable law. Section 36(2) provides that an agreement relating to investment in community land shall only be made between the investor and the community and that no agreement between an investor and the community shall be valid unless it is approved by two-thirds of adult members at a community assembly meeting called to consider the offer and at which a quorum of two-thirds of the adult members of that community is represented.

There is no evidence that the relevant assessments were undertaken in compliance with the law, nor that there was a process of consultation as required, nor that two-thirds of community members approved NRT's proposed investment of carbon funds, nor that the necessary licenses were obtained from the respective County Governments.

In other words, the legal basis for NRT's carbon project, especially on Trust lands - around half the project area, including all the conservancies in Isiolo County, and about half those in Laikipia – is far from clear. Sidestepping these serious uncertainties, the project's validators accepted that the legislation referred to by the project "establish[es] right of use in support of activities which in turn support the carbon project" 137.

Crucially, subsequent to the validation and verification of the first period of the carbon project – but before the commencement of the second period of verification – the Indigenous communities filed at the Isiolo High Court challenging the legality of NRT's very role in stablishing community conservancies and its actions of delineating and annexing community lands for private wildlife conservation without seeking the free prior informed consent of community members¹³⁸.

¹³⁶ Pas, A and Cavanagh, C, 2022

¹³⁷ VCS/CCB 2020d, p158

Isiolo ELC Constitutional Petition No. 006 Of 2021, Abdirahman Osman & 164 Others (Suing on their own behalf and on behalf of residents of Merti Sub-County, Chari ward and Cherab ward in Isiolo County) VS NOTHERN RANGELAND TRUST & 8 OTHERS.

This case, having been delayed by various legal blocking tactics, is still in process, with the next hearing due in May 2023.

Assuming NRT even had the right to establish the conservancies or implement the project as it has done, as the project proponent and main beneficiary it would need the formal agreement of each of the Conservancies (assuming they did indeed have a legal right to the soil carbon) to enter into agreements to sell the 'emissions reductions' being generated by their respective lands. Nowhere in the project document does NRT state unequivocally that it has acquired such a right from the conservancies.

In response to the validator's question above on clarification of the legal basis of NRT's ownership of the carbon, the project stated that "Conservancies are legal entities (certified trusts recognized by the Kenya Revenue Service) **that can sign contracts to benefit from conservation** [emphasis added] over geographically delineated areas.." The critical question as to whether the conservancies had actually signed such contracts with NRT as the project proponent appears not to have been asked by the validators. However, the issue arose in the context of how NRT would guarantee the permanence of the carbon project outcomes. NRT had claimed that this guarantee came through unspecified 'conservation easements' 140. The validator requested copies of these, and asked the project to note that "the easements will need to include language requiring continuation of the management practices that protect carbon stocks over the length of the project crediting period" 141.

The response, as recorded by the validators was not in the form of 'easements', but "Letters of Intent" to participate in the project, evidently dated around February or March 2017¹⁴². The validators were ultimately unable to determine whether the Letters of Intent or the applicable laws constituted a legally binding commitment by the conservancies to protect carbon stocks over the length of the project crediting period, and this query was never closed. The validators noted in September 2018 that:

"Scanned copies of signed form letters from each of the 14 conservancy chairmen were provided to the auditors. The letters are in English, and they say that the conservancies understand what the project is about and why it was being done, including mention of expected revenues. It further states they are aware of commitments required and understand both consequences and potential benefits. Item closed." ¹⁴³

It is important to note that even these Letters of Intent for the conservancies to allegedly participate in the project did not appear until more than four years after the project had started. Moreover, this still did not address the fundamental question (which the validators had apparently still not asked) as to whether the conservancies had actually contracted with NRT for it to trade the emissions reductions which they were allegedly generating and supposedly owned.

139	VCS/CCB 2020d, p158
140	VCS/CCB 2020d, p159
141	VCS/CCB 2020d, p159
142	In full, "Letters of Intent to participate in the project (response recevied [sic] from
	Mark 2017-04-21 "090_SFTF_VCS_Round1Findings_draft_20170210 SFF responses (Autosaved).xlsx")
143	VCS/CCB 2020d, p191

Survival International has obtained a copy of a contract which was evidently finally agreed between NRT and the conservancies. It is dated 24th June 2021. Excerpts of it are shown below in Figure 14. Under one clause of the agreement, it is stated that:

"By preliminary Agreements duly entered into in 2017, each of the Participating Conservancies authorized NRT to sell the rights to claim the soil carbon accruals and associated removals of carbon dioxide from the atmosphere that result from the conduct of the Project Activities (as further defined below, the "Verified Emissions Reductions", or "VERs"...)¹⁴⁴

In other words, even some form of putative 'preliminary agreement' (which has not been seen, but is likely the 'Letter of Intent' referred to above) had not been reached between the parties until after the entire first crediting period, and four years after the project start. The formal legal agreement between the conservancies and NRT was only put in place eight-and-a-half years after the project started.

The agreement states that:

"The Parties agree that the inability to demonstrate and warrant clear, undisputed rights of ownership of the VERs for the purposes of the Project and this Agreement will create uncertainty and lower the price at which the VERS will be sold, thereby undermining the social and community benefits intended to accrue to the Participating Conservancies from the Project. In exercise of their rights to free prior and informed consent (FPIC) and in consideration of the monetary and other benefits to be gained from the project, the Participating Conservancies hereby assign the rights to the ownership of the Project VERs to NRT and authorize NRT to issue any warrants or representations relating to its clear unencumbered assigned rights of ownership of the VERs..."

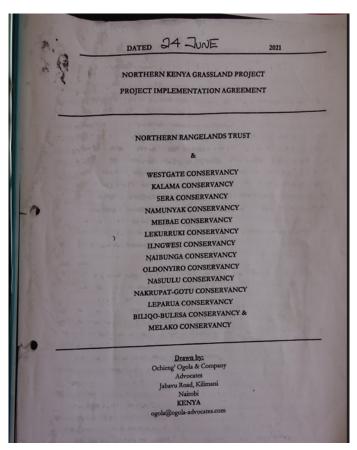
By the time this agreement was signed, 3.7 million credits had already been verified and, according to the Verra registry, more than half a million of them already sold, including 30,000 to Netflix¹⁴⁶. It is not known to what extent the full boards and the wider communities within each conservancy were informed or consulted about the content of this legal agreement, or authorized each conservancy chair to sign it on their behalf.

53

¹⁴⁴ Ochieng Ogola and & Co, 2021

¹⁴⁵ Ochieng Ogola and & Co, 2021

¹⁴⁶ Verra, undated



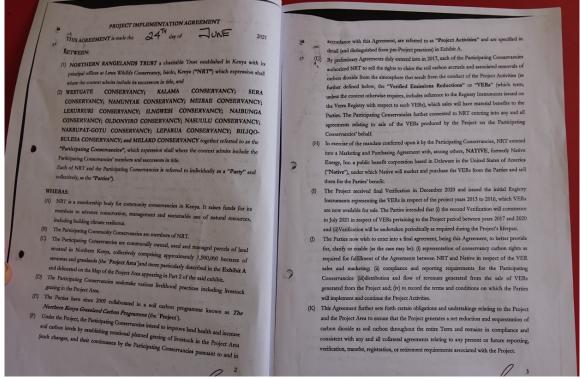


Figure 15; the legal project agreement between NRT and the Conservancies

The verification assessment of the project's first accounting period, completed in November 2020, simply repeated the same assertions made about rights to property and, by inference, soil carbon, as conferred under the general legislation. Again, however, it failed to question whether there was a valid and legally binding agreement between the holders of those putative rights (the conservancies) and the project proponent, NRT.

Taken together, these doubts about, first, the legal basis for the project and, second, the basis on which NRT was trading carbon to which it had no clear legal right, paint a shocking picture of mismanagement, negligence of basic operating principles, and woeful absence of the necessary due diligence by both the validator/verifier (Aster Global Environmental Solutions, Inc), and Verra.

7.3 Distribution of benefits

It is important to recall that, as stated in the project document, the 'new' rotational grazing practices upon which the whole project rested "would not occur without significant carbon revenues to motivate change in herder behaviour" 147. In reality, however, very little of the carbon revenues would actually find their way to the community conservancies, and none of it to individual herders or their families.

According to the project document, up to 30% of gross project revenue goes straight to a Vermont-based company called Native Energy for 'marketing' of the VERs¹⁴⁸. The document explains that "To facilitate market transactions, Native Energy will be the listed agent for the project and will disperse revenues as agreed by all the project proponents." ¹⁴⁹ An unspecified percentage in consultancy fees goes to Soils for the Future, which originated the project and the VCS methodology under which it was developed. The remainder of gross revenues goes to NRT;

"Of these NRT will retain 40% to meet project costs, such as for education, conflict resolution, grazing coordinators, and social monitoring, and 60% (30% of gross revenues) will be distributed to communities through the NRT Pooled Conservancy Fund" ¹⁵⁰.

The project document states that "Communities will distribute revenues according to community decisions, as influenced by community members during community meetings"¹⁵¹ and that "Payments to communities through NRT will also be used to fund health care and bursaries that provide benefits to the poorest community members, such as paying school fees"¹⁵². This proves to be somewhat inaccurate/incomplete. During early 2022, Chairs of the participating conservancies were finally notified of how the distribution of the carbon funds would work: the portion of the funding distributable to the community conservancies (NOT "the communities"), i.e, the 30% of the total revenues, would in principle be split equally amongst the conservancies, hence each would receive 1/13th of 30%, or around 2.3% of the total. This would, however, be further split, with 20% of that deliverable to each conservancy reportedly being restricted to be spent on 'grazing management'.

147	VCS/CCB	2020,	р9

¹⁴⁸ VCS/CCB 2020, p144

¹⁴⁹ VCS/CCB 2020, p33

¹⁵⁰ VCS/CCB 2020, p144

¹⁵¹ VCS/CCB 2020, p144

¹⁵² VCS/CCB 2020, p4

It is not clear exactly what the latter category includes, but possibly mostly employment of the collective herd-keepers who the project intends will replace families' control of their herds. Conservancies were told that the amount available for these two activities would be KSH 3.6 million, (~US\$30,000) per conservancy. For the remaining 60% of what in principle was distributable to each conservancy (i.e, around 1.8% of the total), the conservancies would have to submit bids to the common fund (seemingly now known as the 'Community Livelihood Fund'.

The project document does explain that "Based on Conservancy standing with NRT, which is based on financial management and past goal achievement, NRT awards funds to communities..." The term 'standing with NRT' is of course vague and could allow a lot of room for discretion in which of the conservancies it pays, when and for what. The June 2021 contract between NRT and the conservancies potentially allows even more discretion on the part of NRT. It states:

"3.4 Conditions to Benefit Sharing Arrangements

Participating Conservancies shall not be entitled to a share of the benefits accruing from the sale of VERs and NRT shall not be obliged to pay any sums under this Agreement, or any portion thereof, unless and until:

- (a) Participating Conservancies have each provided to NRT all the information and documentation specified in Exhibit B within the prescribed time;
- **(b)** Participating Conservancies have each fully performed **all obligations then required to have been performed by it**."¹⁵⁴ (emphasis added)

The nature of the "obligations" potentially required to have been performed by the conservancies is not specified. The agreement states in an annex on Revenue Share Arrangements that:

"For the avoidance of doubt, NRT Shall not make any profit from the project. NRT will only facilitate the Project and will only recover costs associated with such facilitation". 155

It is not clear what would constitute the "costs associated" with its 'facilitation' of the project. As NRT does not publish properly audited annual accounts¹⁵⁶, this could be hard for other parties (including the conservancies) to determine. According to the agreement;

"NRT will receive gross profit after the...costs of sales have been removed. Gross profit will be channeled through a Special Purpose Vehicle (SPV) for transparency and accountability which is then subject to any NRT fixed costs associated with project implementation, and in years 1 and 2, the repayment of upfront project set-up costs that NRT has incurred to date." ¹⁵⁷

Up until September 2022, no evidence could be found that this 'special purpose vehicle for transparency and accountability' had been launched. Similarly, the governance, rules and functioning of the 'Pooled Conservancy Fund' (or the 'Community Livelihood Fund'?) are very opaque.

153	VCS/CCB 2020,	p143
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¹⁵⁴ Ochieng Ogola and & Co, 2021

¹⁵⁵ Ochieng Ogola and & Co, 2021

Despite having never published any of its own accounts, and having highly opaque finances, NRT says that "Financial mismanagement by Conservancies is not tolerated" see VCS/CCB 2020, p143.

¹⁵⁷ Ochieng Ogola and & Co, 2021

Although NRT frequently refers to the Fund(s) (as do the many official donor agencies which have contributed to it), little has been published about who makes the decisions as to which conservancies or projects receive funding, why or how. According to NRT's website, the Community Livelihoods Fund:

"is open to any NRT member conservancy to apply for, with proposals that reflect community priorities and have been approved by conservancy boards. Priority is given to projects that link livelihood impacts to wildlife conservation, build long-term climate resilience, peace and sustainable enterprise, build capacity and empowerment of women and youth, and that leverage funding from Government and other partners for multiyear projects." ¹⁵⁸

Many informants in the project area who met in April 2022 believe the Community Livelihoods Fund is often used as a tool for NRT to maintain control over the conservancies, and to ensure that NRT's own priorities for projects prevails. The requirement for 'approval by conservancy boards' alone means that NRT could have a strong influence even over what is submitted for funding because, as noted in the following section, NRT has, according to many informants, a very strong influence or outright determining role over who becomes a member of these Boards. It can be seen that some of the criteria that might be applied, such as benefiting wildlife, and leveraging extra funding from public sources, might well be of lower significance to actual communities. Importantly, there is no mechanism foreseen whereby benefits are directly distributed to communities, let alone families or individuals. Because of this, the stated need to provide carbon funding to motivate change in herder behaviour might simply not materialize.

Setting aside all the other fundamental problems with the carbon project, the system for distributing benefits from it seems unjust and unjustified. Rather than serving to address the persistent problem of lack of conservancy financial self-sufficiency¹⁵⁹, the carbon project – which rest entirely on putative emissions reductions generated at the conservancy level - could actually further entrench the conservancies' reliance on NRT, and the latter's control.

7.4 The Livestock to Market program - a failing attempt to turn pastoralists into ranchers?

The project document states that:

"the goal of the project is for communities to achieve greater sustainability in animal numbers and to begin to sell excess animals in the NRT livestock-to-market program rather than accumulate more animals in poorer condition that stress forage and provide little cash value." ¹⁶⁰

¹⁵⁸ NRT, undated

See for example, Robinson, L.W, et al., 2021

¹⁶⁰ VCS/CCB 2020, p58

The project explains that under this 'livestock-to-market program', "cattle from pastoralists are bought with donor capital and private ranches with abundant forage finish these cattle to market readiness and then sell them, usually at cost"¹⁶¹. So the idea of this programme, which was supported by The Nature Conservancy with a \$7 million low-interest loan to NRT¹⁶², was that herders would be able to convert their cattle into cash more readily. The project claimed that "Improved rangelands and rotational grazing practices that indirectly result from project activities will lead to expansion of other sources of revenue, such as livestock sales to individual herders on the NRT livestock to market program". ¹⁶³

Though the project has always been careful not to state that its intention was to reduce cattle numbers, clearly the intention was to facilitate the removal of "excess" animals. In fact, the herders frequently sell cattle in the open markets, and there have reportedly been problems of 'price gouging', whereby middlemen buy cattle when herds (and their owners) are stressed due, for example, to drought or other hardship.

However, several traditional leaders and other informants spoken to say that price gouging is precisely what the Livestock to Market programme has engaged in. They claim that the project only offered to buy cattle (with deals being done by live animal weight) during droughts, when the animals were thinnest and their owners most in need of cash. Figures of as little as KSH 30,000-KSH 40,000 per animal (approx. USD 250-USD 330) were cited, around half the price they would normally expect to receive. The cattle were sent to the lusher private ranches/conservancies such as OI Pejeta where they are fattened up, slaughtered and sold on the international commodity markets for, it was claimed, six or seven times what had been paid to the original owners.

Informants said that herders now refused to trade with the programme. As an informant in one conservancy noted to researchers in 2020:

"NRT Livestock marketing originally began and we thought that we did not have to walk with our animals for long distances to far away markets. But with time, NRT is not helping much. Like now, we have been waiting for several months for them to come and buy our livestock. When they come, they use the kilo and the price per kilo is so low. We make losses, but if one is in a desperate situation with a pressing and urgent need for money, there is no choice." ¹⁶⁴

¹⁶¹ VCS/CCB 2020, p68

¹⁶² VCS/CCB 2020, p33

¹⁶³ VCS/CCB 2020, p33

¹⁶⁴ Robinson, L.W, et al., 2021, p.50



Workers process meat at a beef slaughter house at OI-Pejeta Conservancy in Laikipia County. [File, Standard]

Figure 16: Inside Fauna and Flora International's Ol Pejeta conservancy¹⁶⁵

The OI Pejeta conservancy (which is not part of the NRT carbon project) is described by its owners, the UK conservation organisation Fauna and Flora International, as "the largest black rhino sanctuary in East Africa", but it is also a substantial cattle ranching, breeding, slaughtering and meat-trading operation¹⁶⁶. The conservancy says that "Our prime quality beef is sold in Nairobi's top butcheries and restaurants, while our genetics are in high demand from farmers around the world." ¹⁶⁷

Some of our own informants stated that the Livestock to Market initiative had ceased to operate. Certainly, according to NRT's own reports, the operation shrunk significantly in 2021, to around a fifth or sixth of its former size¹⁶⁸. In terms of achieving "greater sustainability in animal numbers", and providing additional or more reliable cash income to herders, the Livestock to Market operation appears to have been of limited value.

7.5 Destroying Indigenous culture, supplanting traditional leadership

NRT, and the carbon project specifically, consistently proclaim how their activities are rooted in local control and democratic processes. It is claimed that:

"The NRT Board is accountable to an overarching Council of Elders, which is comprised of the elected chairpersons of all the 39 member conservancies across northern Kenya, with a diversity of ethnic groups, community structures, and livelihoods." ¹⁶⁹

¹⁶⁶ Ol Pejeta Conservancy, 2022

¹⁶⁷ Ol Pejeta Conservancy, 2019

¹⁶⁸ NRT, 2021b, p84

¹⁶⁹ EcoAdvisors, 2020

At the level of each conservancy, NRT states that:

"member conservancies are managed by democratically elected boards and staffed by local people, often mixing ethnic groups that have historically fought with one another. Well-governed conservancies provide an institutional framework for conflict resolution, build community support and ensure effective security, grazing and other livelihood programmes." ¹⁷⁰

However, several informants told the authors of this report that NRT was often very closely involved in the 'election' of the conservancy Boards (see Box). Under NRT rules, the entire Board of each committee is re-elected every year, meaning there is limited chance for any community members to gain deep knowledge or expertise of the matters in hand. We were told that NRT officials effectively nominated candidates at conservancy Board elections, letting it be known who would be favoured, and who not. Many of the conservancy members were non-literate, meaning their ability to participate meaningfully in decision-making could be severely limited. These processes mean that over-inquisitive or challenging Board members could rapidly be removed. Several examples of where this had happened in the recent past were cited by informants. The promise of discretionary cash to communities, as described above in Section 7.3, could be used to discourage dissent or exercise of properly autonomous governance.

Interview with members of the Borana Council of Elders, Northern Kenya, April 2022

"The Board of BB conservancy is all selected by NRT and they are mostly uneducated people. With the grazing committees, they have created a parallel structure to the traditional elders.

"We have traditional ways of grazing. We have patterns of grazing according to the dry season and rain season. That is why our land has good vegetation. Even the wildlife wants to stay here because of the good vegetation. We have our elders who have meetings about grazing: this time we graze here, that time we graze there. The Borana have the best animals in East Africa because of how we graze. We are pastoralists, the land is free, we are nomadic, we can go where we need. As for our traditional law (Gada system), we share pasture and water with wildlife, we can't break the law. We leave water for wildlife after our cattle drinks. NRT broke this system by creating a parallel Gada committee (called grazing committee)."

Hinting at other problems with the governance structure of the conservancies, a 'Senior staff member of NRT' is reported as saying to researchers in 2020 that:

"The conservancy – it is true it opens windows for elites. But NRT have not complete control over this. It is the community that decides who are their leaders. So we have a mix of leaders – we have the elites as well as the elders who are less privileged in terms of this formal education. Of course, having formal elites makes things simpler but it is also having its flip side." ¹⁷¹

171 Robinson, L.W, et al., 2021, p 108

¹⁷⁰ NRT, undated e.

Cited in the same study, a 'Key informant' from Sera Conservancy states:

"We have a few of our sons here who have college education even university education, but they are not actively involved in the conservancy, they are side-lined. My concern is how will NRT allow us to take independent steps with shoes on without controlling us?" -172

The Councils of Elders for two of the largest Indigenous peoples in the project area – the Samburu and Borana – have told the authors of this report that they have no formal role in the conservancies or their Boards, indeed have very little to do with NRT at all. The legitimacy and independence of the conservancy Boards in turn raises questions about the contracts signed between each conservancy and NRT for transfer of carbon ownership to the latter. Certainly very few people in the conservancies visited seemed to have any idea of the content of the carbon project contracts, including the Councils of Elders.

At the level of the carbon project, NRT's description of how project implementation proceeds is revealing:

- "1. Determination of grazing plans through initial interactive meetings between NRT personnel, Conservancy grazing coordinators, and Conservancy managers, followed by meetings between community members and Conservancy grazing coordinators and other leaders. Community meetings make full attempts to encourage attendance by women and ethnic minorities within Conservancies.
- 2. Individual herders, under the guidance and supervision of Conservancy grazing coordinators, move their herds among different grazing blocks within Conservancies, and during dry seasons among different areas of other participating Conservancies.
- 3. The number of livestock from particular conservancies present in different grazing blocks and in different areas of other participating conservancies is monitored by project-employed grazing coordinators. These coordinators supply monthly reports of locations and numbers to NRT and other professionals involved in the current project.
- 4. Conservancy grazing coordinators also monitor when herders from a Conservancy move their livestock off project area and record the number of days a number of livestock over which this occurs. These data are used to determine leakage."¹⁷³

Notably absent from this is any reference to traditional authorities, such as elders, or the customary regulation/decision-making such as the Borana's Gada system and the Samburu's mpaka. The regulation of grazing is, it is claimed, very much determined through the Conservancy grazing coordinators and committees, and thus ultimately to the conservancy boards.

...

¹⁷² Robinson, L W, et al., 2021, p 44

¹⁷³ VCS/CCB 2020b, p10

7.6 Grievance mechanisms and procedures

Under the VCS overall standard prevailing at the time of project validation (Version 3.7), no grievance mechanism was required in verified offset projects, though the current 2022 version does require this, stating:

"The project proponent shall develop a grievance redress procedure to address disputes with local stakeholders that may arise during project planning and implementation, including with regard to benefit sharing. The procedure shall include processes for receiving, hearing, responding and attempting to resolve grievances within a reasonable time period, taking into account culturally-appropriate conflict resolution methods". 174

The NKCP did not at the time of validation have a grievance mechanism of this kind, and still does not. The issue was raised in the validation assessment, but the only mechanism which then appeared in the project document was an NRT employees grievance mechanism¹⁷⁵.

¹⁷⁴ Verra, 2022

¹⁷⁵ VCS/CCB 2020d, p191 p200, VCS/CCB 2020, p40

8. Conclusions

Many conclusions can be drawn from the foregoing analysis:

- The project's case for additionality is not convincing, and indeed stems largely from a
 perverse process in which the project is claimed to be additional primarily because it is
 difficult to implement, and runs against local culture and practice.
- Similarly, the baseline appears to rely on undemonstrated assumptions rather than empirical evidence.
- There appears to have been significant non-compliance with the methodology under which
 the project was developed and approved, especially in terms of controlling the boundaries
 and being able to monitor and control leakage.
- The demonstration that the project has actually implemented the planned grazing regime which underpins the supposed additional soil carbon storage is highly implausible.
- The modelling of the relationship between the satellite sensing of vegetation change, grazing regime and soil carbon is highly questionable.
- Taking all the above together, the claim that the project results in real, credible and permanent additional storage of carbon is not plausible.
- The project's demonstration that communities in the project area were properly informed let alone consulted before the project was implemented, or indeed even before it was well advanced, generating and selling carbon credits, is highly unconvincing.
- The legal basis for the project is unclear, and there appears to have been no legal agreement in place between the conservancies and NRT until long after the project had started and even after carbon credits had already been sold.
- The distribution of benefits appears to be inequitable, and the control of funds resulting from the sale of carbon credits will deepen NRT's paternalistic control over the individual conservancies.
- There is ample evidence that, whilst NRT in general is broadly benefiting some wildlife within the area, it and the 'planned grazing' putatively occurring under the carbon project are not generally or significantly improving the condition of the land. To the contrary the vegetation appears to continue to deteriorate in large parts of the project area.
- There are plausible concerns that, whilst NRT claims to have improved security in the
 conservancies, the intensification of militarisation necessary for stricter controls of livestock
 movement, and made possible through increased (carbon-derived) funding of rangers will
 result in greater leakage of weapons into the communities and increasing armed conflict.

- Key issues, such as that of leakage, failure to comply with the applicable methodologies, unclear technical methodologies, and unclear legal basis for the project, were often identified in the validation and verification, but not addressed or reflected adequately in the validation/ verification conclusions. Multiple issues are cited in the validation and verification reports of auditors which should have precluded the project from being validated or then verified.
- The governance of the project raises questions about respect for the Indigenous/traditional leadership institutions and roles. The implementation of the project, particularly in the 'planned grazing' seems to inherently involve side-lining of traditional leadership.

Most troubling, the project relies on an approach to controlling grazing that is fundamentally at odds with traditional dryland pastoralism. As the previously referred to 2021 study for USAID noted:

"Research on dryland pastoral systems around the world has shown how mobility—sometimes according to regular seasonal patterns, sometimes more opportunistic and adaptive, often across long distances—is a sensible adaptation to the great variability in rainfall and forage resources". 176

Yet the carbon project can discourage or even destroy this long-distance migration because it requires that cattle stay within the project area, which does correlate with the areas where herders might migrate their cattle, especially in periods of drought and hardship. As the same report notes, "there is an ongoing hardening of borders and fragmentation of the rangeland landscape, and on the whole, current CBNRM approaches contribute to this"¹⁷⁷. NRT is amongst the most effective at this 'hardening of borders', and will likely become more so through the influx of carbon money, and the increased funding of rangers, and possibly stock-proof fencing. The project has attempted to supplant traditional management of the lands with an externally imposed, centralized framework of control, which is ultimately backed with armed force. Having signed over the rights to the carbon emissions, the conservancies have largely lost the right to determine how the funds are used.

The project claims that "Companies that invest in the Northern Kenya Rangelands Carbon Project can help meet their carbon neutral and climate positive targets while fulfilling shareholder and customer demands for meaningful and quantifiable results and impact in ways that are transparent and accountable." The reality is that the project is far from transparent and accountable, does not demonstrate any meaningful quantifiable results, and cannot guarantee climate neutrality or progress towards climate positive targets. NRT itself admitted that the project was a "Beta test" of the grasslands carbon methodology¹⁷⁹. It should now conclude that, in many key respects, it is not succeeding, and probably cannot succeed in terms of a verified carbon project.

¹⁷⁶ Robinson, L.W, et al., 2021, p120

¹⁷⁷ Robinson, L.W., et al., 2021, p.xiv

¹⁷⁸ NRT, undated b.

¹⁷⁹ NRT, undated, b.

9. Acronyms used in the text

CBNRM Community Based Natural Resource Management

CCBS Climate, Community and Biodiversity Standard

FAR Forward Action Request

GHG Greenhouse gas

NKCP Northern Kenya Grassland Carbon Project

NRT Northern Rangelands Trust

SFTF Soils for the Future

tCO2e Tons of carbon dioxide equivalent

TNC The Nature Conservancy

USAID United States Aid for International Development

VCS Verified Carbon Standard

VCU Verified Carbon Unit

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Photo Credit

Inside cover- Samburu woman, Northern Kenya. One of her family members was killed when grazing his animals near an NRT conservancy, allegedly at the hands of NRT park rangers © Fiore Longo/Survival International

Selling carbon credits from Protected Areas will be a disaster for people and the climate. It unites all the human rights abuses caused by fortress conservation, with all the environmental problems linked to greenwashing.

It kills people. The most common model of conservation is "fortress conservation", and relies on the exclusion of Indigenous and local people from their land.

It kills the environment, and can actually worsen climate change: the majority of Nature-based schemes to offset carbon emission are just greenwashing scams.

It kills justice. Big conservation NGOs which gain from these carbon credit projects are partnering with the most polluting companies in the world, who use these offsets to avoid having to reduce their emissions.

For more information, please visit:

www.survivalinternational.org/campaigns/BloodCarbon



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