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Making the Case for Rangelands to Become the Poster Child of the SDGs: How Rangelands Provide Fertile Ground for an Interconnected Approach to the Three Pillars of Sustainable Development

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The XXIV International Grassland Congress / XI International Rangeland Congress (Sustainable Use of Grassland and Rangeland Resources for Improved Livelihoods) takes place virtually from October 25 through October 29, 2021.

Proceedings edited by the National Organizing Committee of 2021 IGC/IRC Congress

Published by the Kenya Agricultural and Livestock Research Organization

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Making the Case for Rangelands to Become the Poster Child of the SDGs

How rangelands provide fertile ground for an interconnected approach to the three pillars of Sustainable Development

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Key words: SDGs; Rangelands; Social-ecological Landscapes; Living Labs; Bottom-up; Everyday Life approach; Interconnected

Abstract

The Sustainable Development Goals (SDGs) are a collection of 17 ambitious goals set by global leaders to transform the world by 2030 and create a sustainable future for all. They are founded on the three pillars of sustainable development – environmental, economic and social sustainability, or as they are more colloquially known, “people, planet and profit”. Creating a better world requires an integrated approach that simultaneously improves livelihoods and reduces inequalities whilst dramatically reducing environmental damage.

This paper argues that rangelands are an ideal arena for showcasing the SDGs because they are, by their very nature, interconnected landscapes in which "people, planet and profits" interact. To simplify: when the land degrades, the people become vulnerable and when the land thrives, the people have a greater chance of thriving. Reaching the SDGs requires innovative, localised solutions to major ecological, economic and social challenges in every habitat around the world. No better is this exemplified than on rangelands.

The economic development of pastoralist communities living on rangelands depends on sustaining high quality ecosystems (“environmental sustainability”), developing market infrastructures (“economic sustainability”), and adapting to changing social dynamics (“social sustainability”). In reality, people react with the local environment, economy and society as interconnected aspects of their lives, rather than distinct domains. So sustainable development – and rangeland management – has to follow suit.

Proposing Baringo County, Kenya as a living lab, this paper argues for more interdisciplinary and grounded research adopting an “everyday life” approach to inform policy and action towards the SDGs. It offers a local rangeland management organisation, RAE Ltd, with their attendant localised solutions as protagonist in the living lab. Their work is perfectly suited for monitoring and analysis to inform bottom-up, sustainable solutions to achieving the SDGs on the ground.

Raising the profile of rangelands in global conversations on sustainability will not only increase awareness of the rangelands themselves; it will also provide a compelling image of the interdependence of people and the planet, encouraging more grounded, interconnected approaches to sustainability.

Introduction

Inaugurated in 2015, the Sustainable Development Goals (SDGs) comprise 17 ambitious goals set by global leaders to transform the world by 2030 and create a sustainable future for all. Under the auspices of the Agenda 2030 for Sustainable Development and spearheaded by the United Nations, the SDGs offer the world a series of targets that, if reached, promise a just, inclusive and prosperous society for all whilst laying the blueprint to combat climate change (GA, UN, 2015).

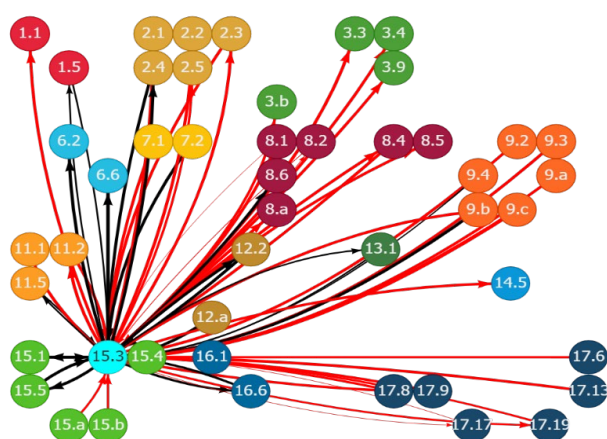


1: The Sustainable Development Goals. Source: UN

The 17 goals, 169 sub-goals and 232 indicators were all designed to interconnect. Rather than standalone goals we can “pick and choose” to work towards, they are best understood as reinforcing one another and setting a holistic target for a sustainable future. Whilst there are some inherent flaws in this model and progress in some goals does not imply progress in others (c.f. Spaiser et al, 2017; Dawes, 2020), the SDGs were designed as an “indivisible whole” of interconnected goals that are mutually reinforcing (Griggs, et al, 2017). They were founded upon the three pillars of sustainable development: economic, environmental and social sustainability – or, colloquially, “people, planet, and profit” – which came out of the Rio+20 conference as an effort to reconcile the ambitions of environmental and economic development communities.

SDGs: Interconnected Blueprint or Goals to Pick and Choose?

Interlinkages occur at the individual goal level: for example, SDG 15 “life on land” contains targets with social dimensions (e.g. equitable sharing of natural resources); environmental dimensions (e.g. combat desertification) and; economic dimensions (e.g. incentivise alternatives to poaching).



1: The interlinkages between SDG 15.3 and all other goals for action taken in Tanzania. A line in black represents a positive link and a line in red represents a negative link. Source: <https://sdginterlinkages.iges.jp/visualisationtool.html>

Interlinkages also occur across goals. There may be a goal dedicated specifically to restoring degraded rangelands (SDG 15.3: “By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world”); but, this goal alone is not enough to sustainably develop rangeland landscapes. And never was it supposed to be. Achieving sustainable development in all its dimensions on rangelands arguably requires reaching all the goals, with the possible exception of 9, 11 and 14 (Lucatello & Huber-Sannwald, 2019). Without, for instance, striving to end poverty (SDG 1), reduce inequalities (SDG 10) and combat climate change (SDG 13), efforts to restore rangelands will fall short of their target because they will not contribute to inclusive, prosperous societies and a thriving planet.

Practically speaking, though, it is not always easy to work with such an interconnected approach. All too often, political agendas and personal preferences get in the way, leading organisations and government bodies to pick and choose individual goals to champion – often the one that matches most closely to their mandate (Chancel & Voituriez, 2015). This makes it harder for practitioners and researchers to use the SDGs as an interconnected tool because their hand is being forced by directives to choose one single goal. Accordingly, a clear visual of their interconnectedness is needed to keep the indivisibility of the goals at the front of peoples' minds.

Rangelands: Interconnected Landscapes

The world is a complex place and it is not always easy to visualise how the broad-sweeping, abstract SDGs should play out in real life, let alone interact. How do we know that conservation efforts don't exclude local communities from natural resources? Or pasture restoration won't lead to inter-ethnic conflict? Or more economic opportunities for women won't negatively affect childcare?

For the world to get behind the SDGs and really push for interconnected change, we need a clear image of how people, profits and the planet are intertwined. This paper argues that rangelands provide an ideal focal point. Rangelands are inherently interconnected environments in which

“people, planet and profits” are inextricably linked; to understand any aspect of a rangeland environment, you need to take an interconnected approach to understand how all the moving parts fit together. The people who live on rangelands, their economic systems and the environment are inextricably linked and any changes in one will have a domino effect on the others: an ecological change can lead to major disruptions to social dynamics, and vice versa. In East Africa, where communal grazing is commonplace, desertification forces herders onto the pastures of neighbouring communities and can lead to inter-ethnic conflict over resources (Anderson & Bollig, 2016). Concurrently, the shift from a livestock to a cash economy has led to sedentarisation among many pastoralists and the subsequent demarcation of land for monocultures like maize, in turn accelerating biodiversity loss and pasture degradation (Reid et al, 2004). In short: people affect the environment, and the environment affects people.



2: Herders taking cattle to market. People, planet and profit interdependent on rangelands. Source: Pixabay



3: Multinational agencies from United Nations shape rangelands with the policies, projects and programmes. Source: filmaid

In fact, the interconnections go even deeper than this: to claim that changes in one domain impact another (e.g. the environment changes society) does not capture the genuine interconnectedness of rangelands (or any social-ecological landscape for that matter). Every change in a rangeland has environmental, economic, and social *dimensions* that converge to make an all-encompassing change in the entire social-ecological landscape. Desertification, for instance, cannot be considered a purely environmental issue; rather, it is the result of environmental (e.g. global warming), social (e.g. overpopulation) and economic (e.g. land clearing for agriculture) factors. Equally, the consequences of a change like desertification are environmental (e.g. biodiversity loss), social (e.g. ethnic conflict) and economic (e.g. loss of income).

What's more, rangelands present us with a powerful visual of the interconnectedness of the local, the national and the global. Pastoralists constantly interact with the local landscape on the rangelands, but not in an isolated bubble, disconnected from the outside world. Rangelands are the epicentre of multiple vertical interactions at

varying scales (Robinson et al, 2017). For instance, Kenya’s rural pastoral communities and the rangeland upon which they live are shaped by changes in market structures (e.g. they sell produce to markets in Nairobi), (inter)national legislation (e.g. the Community Land Act dictating who can graze where) and global consumer patterns (e.g. overconsumption in the Global North contributing to global warming).

Rather than a passive natural environment that needs protecting or restoring, rangelands are inherently active, interconnected landscapes in which people, the environment and the economy all continually interact. A flourishing rangeland is one where all three dimensions interact harmoniously; where just, inclusive societies are able to become economically prosperous without damaging the environment.

Reaching the Goals from the Bottom

Achieving the SDGs for rangeland communities means respecting their interconnectedness: sustaining high quality ecosystems (“environmental sustainability”), developing equitable market infrastructures (“economic sustainability”) and encouraging inclusive, cohesive communities (“social sustainability”). Every rangeland is unique yet shares a common interconnectedness: they all have their own challenges and opportunities determined by the interplay of their specific social, economic and ecological dimensions. So attaining prosperous, healthy and just rangelands requires unique solutions born out of the landscape and adapted to meet the specific needs of the local community. This necessarily calls for bottom-up development efforts that work within the existing parameters of the social-ecological landscape in question and draw on local knowledge. And this calls for “localising” the SDGs, or “making the aspirations of the SDGs become real to communities, households and individuals, particularly to those who are at risk of falling behind” (Steiner, 2017). Rather than imposing standardised, top-down solutions, collective global efforts ought to prioritise finding, funding and supporting sustainable, localised solutions on the ground.

“Bottom-up” means starting with an ethnographic understanding of the local context and working upwards to build policies and agendas that are flexible enough to apply to the unique circumstances of each given environment. Adopting an ethnographic approach provides in-depth understanding of the interconnections needed to underpin the construction, implementation and monitoring of any external development initiatives. If harnessed effectively, scientific evidence has the potential to guide policy and development projects and evaluate their impact. However, “expert” scientific knowledge alone is not enough. The effective implementation of localised solutions requires the local knowledge of the community and local organisations (Balvanera et al., 2017). They are the people who have the answer to fundamental questions such as:

- What challenges do the local community face?
- What solutions have been tried before?
- How might new solutions/policies be interpreted on the ground?

These questions can only be answered by listening to local voices. External development agencies should understand their own role as buttressing locally constructed solutions and delineating new development pathways by addressing barriers (both locally and globally) that prevent local landscapes from achieving holistic sustainable development.

The Role of Research

The research community have an important role to play in linking the SDGs with the real world. Beyond the important work already being done to analyse the SDGs at the macro-level (c.f. Spaiser et al, 2017, see figure 2), research is needed that maps the unique challenges faced by the world’s innumerable social-ecological systems. Understanding how localised solutions are embedded in the interconnectedness of the social, ecological and economic dimensions requires more grounded research and an interdisciplinary approach; putting the specific rangeland in question at the centre of the research and mapping how all three dimensions interact at varying scales to shape lifestyles, livelihoods and land.

This calls for an “everyday approach” to research that explores how all the different dimensions unfold in the daily lives and practices of local communities (Brace & Geoghegan, 2011). Such an approach draws on local knowledge and unpacks the nexus of culture, everyday practices, the economy, multiscale governance and the environment out of which challenges and solutions have arisen. Research of this manner allows a vivid picture of the rangelands to be built and better places the global development community to understand the mechanics of localised solutions, allowing them to make informed decisions. It allows them feed into pre-existing solutions and ensure they continue to contribute to cohesive, just and environmentally friendly – in a word, sustainable – change.

Rangelands provide ideal grounds for “living labs” in which the implementation of solutions can be analysed in real-time. Localised solutions can be observed as they unfold to analyse how they shape the social-ecological landscape and create synergies and trade-offs between the SDGs (Zhou, 2020). Baringo County, Kenya is an ideal candidate for a living lab to showcase the interconnectedness of the SDGs and guide policy. At the heart of Baringo’s rangeland restoration and management lies a social enterprise called RAE Ltd, which has reclaimed over 2400 hectares of pasture (Meyerhoff et al, 2020). For the past 39 years, they have been working closely with local pastoral communities to rehabilitate arid land and co-manage mixed grasslands comprised of drought-resistant indigenous grasses. Fundamental to their approach is adaptation to changes in the local social-ecological landscape and “following the people” (Meyerhoff-Roberts, 2020). Their history of localised solutions and adaptation provide prime “laboratory conditions” that can be monitored going forward. Their adaptive approach has the potential to be analysed to produce scientifically informed guidance for policy intervention and to galvanise informed action among the global development community to upscale successful local action.



4: Pastoral women collecting grass seed on RAE-managed pastures. Source: IofC

Conclusion

The inherent interconnectedness of the SDGs matches fairly well with the interconnectedness of the planet and offers a tangible tool to navigate complexity. However, when they are interpreted as a top-down construction designed to fit numerous development arenas, they are intrinsically vague and abstract; too easy to misinterpret or be read as a menu of individual goals from which governments can “pick and choose”. To live up to their potential and foster holistic, inclusive change, it is imperative that the SDGs encourage grounded decision-making (and research) that appreciates the unique nature of every social-ecological landscape.

A clear visual of the goals in the real world goes a long way to keeping them grounded, taking them out of the abstract domain of development discourse and anchoring them in the challenges and complexities of real people. Rangelands offer an ideal candidate for such a real world image. The indisputable interdependence of people and the environment provides fertile ground for showcasing the interconnectedness of the SDGs whilst simultaneously raising the profile of rangelands in global conversations on sustainable development.

Acknowledgements

I would like to express thanks to Elizabeth Meyerhoff, Peter DeGroot, Håkan Jönsson and Kristofer Hansson for comments on earlier versions on this paper. I would also like to thank my colleagues at Lund University’s Agenda 2030 Graduate School for their dedication to critical dialogue on topics of global importance. Finally, I would like to thank the people of Baringo for their continued hospitality and inspiration.

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