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Understanding common perceptions of the drylands

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Key words: dryland myths; perceptions; online survey, ASALs

Abstract

Drylands occupy over 40% of the earth's surface and are home to more than 2 billion people. Drylands are key to the food and nutritional security of the planet and vital to the economies and livelihoods of dryland inhabitants. Yet, drylands are commonly perceived as unproductive, economically inefficient and marginal lands where small-scale farmers and pastoralists practice environmentally degrading activities. Driven by inadequate understanding and misconceptions of the drylands, policy-makers devise inappropriate policies and interventions. The BRECcIA project developed an online Drylands Perceptions Survey to understand the perceptions of researchers, practitioners and policy makers working in the drylands of Kenya, Malawi and Ghana. This paper presents results from a pilot of 40 responses and is part of a wider ongoing study. Results show that many respondents subscribe to a number of common drylands statements or assumptions, although other statements are challenged and respondents disagree with the assumptions. In another set of cases, respondents had mixed views and a more nuanced picture emerged that is context dependent. Through the BRECcIA project, the survey findings are being used to shape the development of new and revised dryland training courses with a more critical policy and research focus for policy-makers, practitioners, researchers and students in Kenya.

Introduction

Drylands occupy over 40% of the earth's surface and are home to more than 2 billion people. Drylands are key to the food and nutritional security of the whole planet and support livestock production and crop cultivation vital to the economies and livelihoods of dryland inhabitants. Yet, there is inadequate understanding and misrepresentation of dryland systems. Drylands are commonly perceived as unproductive, economically inefficient and marginal lands. Global and national policy narratives present drylands as fragile areas where small scale farmers and pastoralists practice environmentally degrading land use activities, for example, through overstocking and overgrazing the land.

Many of these commonly held beliefs about the drylands are so pervasive they have almost become 'truisms' – assumptions so entrenched and fundamental that they are rarely if ever subject to critical scrutiny. In most cases, these beliefs are not grounded in a dispassionate examination of the empirical evidence, yet they are frequently encountered in development programming documents and they continue to influence policy frameworks and initiatives both directly and at a distance (Farvar 2003; Krätli 2013; Odhiambo 2013; Shanahan 2013)

Beliefs such as these have many different sources, both formal and informal. People are exposed to recurrent tropes of the drylands (and the people who live in them) throughout their education, through cultural stereotypes and media portrayals. Certain misunderstandings and partial framings of the drylands are even the basis of some academic and professional disciplines. These beliefs are often woven together into motivating stories, or Policy Narratives (Roe 1994) that are used to justify policy choices and specific interventions which are ill-suited to the drylands or the people that live in them. Not only do these stories enable inappropriate and harmful development that increases vulnerability and decreases food and water security, they also crowd out other perspectives and alternative approaches to resilient development based upon realities, understandings and knowledge.

The BRECcIA (Building Research Capacity for Sustainable Water and Food Security in Drylands of Sub Saharan Africa) project is challenging these common dryland stereotypes by devising tailor made trainings that critically examine these conceptual framings, providing better understanding the drylands and promoting policy responses that exploit their highly variable and dynamic conditions. BRECcIA is made up of a community and network of dryland researchers and stakeholders, and aims to strengthen research capacity and capability in Ghana, Kenya and Malawi to carry out impactful research that leads to positive policy change for sustainable water and food security.

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To understand the current perceptions of a range of actors who work in the drylands, the BRECcIA project developed an online Drylands Perceptions Survey. The survey is targeted at researchers, practitioners and policy makers, working in the drylands of Kenya, Malawi and Ghana. The aim of the survey is to understand how those who are involved in dryland's research, policy or practice, view the drylands and if / how their background and experience affect their perceptions. This paper presents results from an initial pilot of the survey. The 40 responses consist predominately of researchers and academics working in institutions in Kenya, Ghana, Malawi and UK, as part of the BRECcIA project.

Methods and Study Site

BRECcIA team members developed an online survey in SurveyMonkey. The pilot survey was sent out through email to all BRECcIA team members in partner institutions across sub-Saharan Africa and UK. In the next phase of research currently underway, University partners in Ghana, Malawi and Kenya will send the survey to relevant departments working on dryland issues. The survey will also be sent to BRECcIA's network of dryland stakeholders in Ghana, Malawi and Kenya.

The survey consists of 26 statements drawn from a pool of dryland narratives or assumptions that are commonly encountered in development and policy circles. Current policies in each country and global programming documents were reviewed to provide evidence for these statements. Respondents are asked to rate each statement on a 5-point Likert scale ranging from 'Strongly disagree' through 'Neither agree nor disagree' to 'Strongly agree'. For each statement, respondents are also invited to add an open-ended response to explain the reasons for their rating. Lastly, respondents are asked to provide background information including: profession; years of experience; country of origin; gender; and educational background. These demographic questions will be used to assess whether respondents' background attributes shape their perception of the drylands, and are being used as part of the wider study.

Results

Here we present results of the pilot of 40 responses from mostly academics and researchers working on dryland issues. Table 1 shows a sample of 10 statements and the mix of responses to each statement. More respondents agreed or strongly agreed with the statements, compared to fewer disagreeing or strongly disagreeing. This indicates that the majority of respondents subscribed to these dryland assumptions or narratives.

<u>Table 1: Sample of 10 dryland statements and responses across the 40 respondents</u>

Statement	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Dryland environments are the most affected by land degradation	6	3	7	8	16
There is a scarcity of natural resources in the drylands	8	9	10	7	6
Climate change is causing greater scarcity of resources resulting in increasing competition, which can lead to conflict.	2	3	6	12	17
The natural environment in the drylands, especially low and variable rainfall, is a major constraint for food production (livestock and crops)	3	7	4	12	14
Production strategies used by small-scale dryland farmers are inefficient and degrade the environment	5	5	12	12	6
Pastoralism is a livestock system characteristic of ecosystems that are not used for growing crops	5	6	5	15	9
Drylands are water scarce areas. To improve livestock productivity, more water points need to be established in the rangelands	6	5	7	9	13
Large scale irrigation is necessary in the drylands for more secure crop and fodder production	15	2	10	7	9
Sedentarising pastoralists is essential for improving their health and living conditions	10	7	10	7	6
Modern livestock keeping systems like ranching are more productive and efficient, and contribute more to the economy than pastoralism	8	5	7	16	4

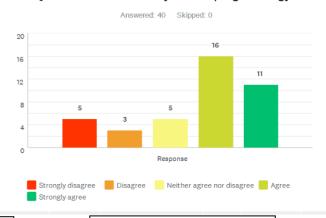
As illustrated in the graphs below, in certain statements there was <u>relative consensus</u> where the majority of respondents either strongly agreed/agreed or strongly disagreed/disagreed. There were also a few statements where respondents had <u>opposing views</u>, with a range of responses and no overall trend. Some quotes are presented to illustrate and contextualise the responses.

Relative consensus - Agree

Q1 Dryland environments are fragile ecosystems

Answered: 40 Skipped: 0 20 16 13 12 8 6 3 3 3 Weither agree nor disagree Agree Strongly disagree Strongly agree

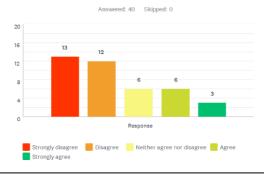
Q12 LIvestock mobility is a coping strategy



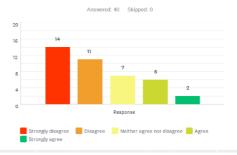
'The reason why they are fragile is that any small change in climate conditions has very pronounced impacts' 'Because they have to keep on looking for pasture and water'

Relative consensus - Disagree

Q5 The drylands are marginal areas of low economic value



'The drylands have great economic value if properly managed coupled with development of necessary infrastructure' Q10 Because pastoralists have no land, they move about wherever they like with their animals



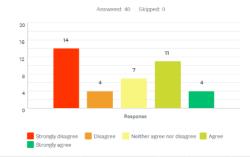
'The land is owned communally because of seasonal nature of resources that makes mobility the best strategy to use natural resources'

Opposing views

Q19 Women do not own livestock and have no power of decision-making over assets



'Depends on the context. Although women may be less likely to own large livestock, they may still have a say in how assets are used' Q25 The only way to save the rangelands from overgrazing and degradation is to introduce titling and control carrying capacity



'Titling in many pastoral areas has resulted in increased overgrazing and degradation'

Discussion and Conclusion

Results from the pilot study reveal that many common dryland assumptions or myths are still widely held among researchers working in the drylands. However, in a number of statements, most respondents disagreed with the statement, revealing that some of the assumptions are now being challenged. Also of interest is that there are opposing views to some statements, and the qualitative perspectives reveal how statements are context dependent and require a more nuanced examination of the evidence upon which they are based. The next stage of the research will elucidate how perceptions are influenced by respondent attributes such as profession, years of experience, and country of origin, from a wider range of dryland researchers, practitioners and policy-makers.

The survey provides justification for the development of courses that challenge the common rhetoric and stereotypical views frequently associated with the drylands. The survey findings are currently being integrated into the development of BRECcIA devised trainings with a more critical policy and research focus for policy-makers, practitioners, researchers and students in Kenya.

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