Esther's life story within a dryland biography: Assessing system viability in Central Pokot, Kenya

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People living in drylands are highly dependent on available ecosystem services. Whilst ranking as amongst the earliest settled, geographically largest, biologically least productive and demographically fastest growing biomes on earth (MEA 2005), land-users have long since developed a wide repertoire of skills to engage with highly variable, unpredictable and extreme environmental conditions (Huber-Sannwald et al. 2012). However, local residents continue to remain marginalised – not only by distance, topography, cultural and linguistic barriers or access to resources, but also institutionally, in that they are often not party to the policy decisions affecting their livelihoods (Whitfield and Reed 2012). Compounding this multidimensional marginalisation is the tendency among external stakeholders to simplify the relationship between land-users and environmental health, where for example blame for land degradation is often apportioned to the local users (Forsyth 2003).

Scholars now consider drylands as coupled social-ecological systems in which human activities and environmental dynamics are deeply entwined (Whitfield et al. 2011). Yet, despite these considerations, the rationales and aspirations of resident populations still remain widely neglected in research. In response to this shortcoming, scholars increasingly recognise the value of research approaches that allow "people to explore problems in their own words" (Reynolds 2007, 850; cf. Stringer and Reed 2007). A serious deliberation of these multiple voices can potentially inform the rather detached concepts that are used to describe system dynamics. As a move in this direction, our suggestion is to establish what we call 'dryland biographies'. These biographies are a result of the individual and institutionalised practices or voices that shape and are shaped by changing ecological, cultural, political and economic realities.¹ One promising but rarely used entry point to examine such biographies is through life stories, since it is in the narration of the individual life that people make "the implicit explicit, the hidden seen, the unformed formed, and the confusing clear" (Atkinson 1998: 7).

This article represents our first attempt in exploring life stories by bringing the subtle details of one such story into dialogue with a broader scholarly concept, namely that of 'system viability' (Mistry et al. 2010; Berardi et al. 2013). The concept provides a generalised framework through which one can evaluate a system's ability to survive, stay healthy, and prosper.

The Life Story as a Research Method

There are two classical approaches to life stories, one foregrounding 'life' and the other 'story' (Peacock and Holland 1993, 369-370). In the life-focused approach, these narratives are considered as a window to decipher some objective facts. Whilst in the story-focused approach, they are taken as a tool to grasp the subjective experiences of the narrator. When considered as extreme polar opposites, the former takes the story as a mirror of reality, whereas the latter takes the narration as reality (Peacock and Holland 1993, 371). Of course, both approaches matter because life stories, as communicative acts, are not merely representational forms, but they are employed by people to employ themselves in space and time (Moore 2008, 215). What makes the telling of life stories attractive to people all over the world is that they allow them to condense complex situations into more easily understandable chains of events. What knits a story together, then, are causal explanations that reflect how such events are or should be connected, as well as, how ulterior events are envisaged to unfold (González 2006, 839-841). In summary, through life stories people give spatial and temporal meanings to events and relationships, whilst simultaneously outlining normative frameworks for doing.

The life story presented in this article was gathered in January 2015 during a preliminary field study in Central Pokot, north-western Kenya. This pre-study serves as a basis for the establishment of a bilateral postdoctoral project on land degradation. A long-term acquaintanceship with Esther² (the narrator) was re-es-

¹ We adopted the term 'biography' from the field of border studies (Megoran 2012).

² Name changed to maintain our informant's anonymity.



PHOTO 1: Charcoal producers during a focus group discussion © *C. Bergmann, Jan. 2015*



PHOTO 2: Charcoal on sale along the Pokot-Turkana Highway © P. Roden, Jan. 2015

tablished by Roden during a focus group discussion with members of a charcoal producing community (see Photo 1). It was then that we decided to conduct a second more intimate meeting with six participants, who had proven to be extremely knowledgeable on the region, and who had led eventful lives. The meeting was held in the Swahili and Pokot languages, the first of which is spoken by Roden. Three research assistants provided on the fly Pokot translations into English whilst also taking notes. The life stories were audio-recorded and transcribed with the participation of our assistants.

The Pokot Drylands

Central Pokot is chosen as an area that typifies much of the livelihood possibilities and constraints faced by communities in rural African dryland contexts. Locals engage in a wide diversity of land-use practices, ranging from mixed arable farming in the moister hills and in the hill marginal zone where rivers are utilised for irrigation, to flood plain agriculture and sedentary pastoralism in the semi-arid lowlands.

Livelihoods in this area have long been designated as insecure (Dietz 1987); suffering from periodic drought and famine, most recently in 2009, which have been compounded by long-standing inter-ethnic conflicts (Opiyo et al. 2012) and increased population pressures. Such insecurities have contributed to diversified and dynamic livelihood strategies. These changes in strategies have various environmental effects, especially in locations where natural resources and ecosystem services are more contested. In the following, we present the life story of Esther, an internally displaced woman who has no secure access to land, primarily engages in the illegal production of charcoal, and belongs to a community that is frequently ill-treated by government officials (see Photo 2)

A Charcoal Producer in Pokot: The Case of Esther

Esther, a single mother in her early forties, narrates how she became a *pelii makaa* (charcoal producer):

"In the time when Mzee Jomo Kenyatta passed away and Rais Daniel Arap Moi³ became the new president, I was a little girl living in the Masol Plains. My family were pastoralists, herding cattle and goats, and migrating with the seasons. In those years we suffered a large loss of livestock as the droughts came and the grasses dried. My parents lost everything and decided to move to Amolem, where they heard that some *mzungus* (Europeans) were setting up an irrigation project that was to support pastoralists from the Pokot and Turkana tribes hit by the drought. The *mzungus* parcelled out land of around two acres per family, and channelled water from the Wei-Wei River to these plots. With water we were able to plant a lot of different crops, like; sesame, maize, sorghum, groundnuts, and green grams – life was good. My family bought some goats, and because the pasture was *ngilet* (salty) the goats were able to bear triplets. Many people lived there, maybe 200 hundred families, we had schools, *hotelis*, a church and a health dispensary.

In Amolem, we used to live peacefully with the Turkana⁴, and we used to speak each other's language. I still speak Turkana. But one day, a Turkana man killed a Pokot, and revenge was taken. After that people began fighting like in the past, and we all had to run away. My family left without any of their belongings and run towards Marich Pass. The journey was difficult because the whole area was very thick bush and we often had to move along dry riverbeds. There was a lot of dangerous wildlife, especially buffalo; we had to hide up trees and in gullies. We were welcomed when we arrived in Marich, because a Pokot is a Pokot. Many people moved towards Marich, and slowly the wildlife was pushed away. My family settled at the foothills of the mountains, and planted and traded in maize from the highlands of Sekerr. We were poor but we could still make a life. One day we went to Amolem, but everything was taken, even the roofs and the irrigation pipes, only the walls were left standing. At that time we never made *makaa*.

Our people started to make *makaa* around fifteen years ago when they saw a Turkana man called Kalokal who lived alone, making and selling it. At that time, for one bag of *makaa* you could buy 24 *goro goro* of maize (~48 kg). This was good. But today, I only get 5 *goro goro* of maize for one bag of *makaa*. When I sell to a charcoal broker I can get 400 Ksh⁵, and when I sell to an individual I get 500 Ksh. The first time I could sell one bag in four days, but now it can take up to four weeks. Sometimes I sell nothing in one month and even the bag begins to rot. If I cannot sell enough to eat, then some other *pelii makaa* share their income with me. At times when they fail to sell, then I can also help them. We are nine *pelii*

³ Moi became the second president of Kenya in 1978.

⁴ The Turkana are neighbours to the north of Pokot.

⁵ Ksh – Kenyan Shilling.

makaa selling from the same place and we look after each other. Making makaa is hard, but if I sell enough I can buy goats. I give my goats to herders who graze them far from here, and I can get two kids per year from each goat. I sell the goats to pay for my children to go to school.

Without irrigation it is hard to live from planting maize, and even the few goats I own can die immediately during a drought. Drought is always a problem in this area but we have very good trees for making makaa, especially ses (Acicia tortilis), panyerit (Acacia melifera), and pelel (Acacia refisciens). Ses and panyerit are also good for livestock, especially in the dry season. In the past we would only use dead trees for making makaa, but now there are so many people that sometimes we have to cut down some trees. All along the road, up to Turkana, people sell makaa. The government does not like us to cut trees, and sometimes they come at night and take all our bags of makaa, but we cannot complain."

Bringing a Life Story into Dialogue with the System Viability Framework

In our envisaged research project we aim at realising a multi-perspective understanding of land degradation with a case study in Central Pokot. The study combines remote sensing approaches with investigations of stakeholder environmental knowledge and their rationales of action. A key objective is to analyse (mis-) matches that exist between multiple perspectives with a view to identify socially accepted ways to mitigate and remediate land degradation. Within our overall project design life stories shall contribute to a local contextualisation of system viability. For us, this does not entail a domestication of local voices within an already tailored model. Rather it will allow us to, on the one hand, show the limitations of, and critically enrich, such a generalized framework. On the other hand it will reveal commonalities and enable comparisons between the experiences and lessons of individual lifetimes. Within the framework of system viability, which was originally developed for a research project in Guyana, the health and prosperity of any socio-ecological system results from the interplay of six interrelated strategies (Mistry et al. 2010). These include:

- 1. **existence** the ability to procure resources for basic survival
- 2. **coexistence** the ability to engage with other interdependent systems
- 3. **ideal performance** the ability to optimise resource utilisation
- 4. **flexibility** the ability to diversify
- 5. **adaptability** the ability to adjust practices to gradual environmental change
- 6. **resistance** the ability to effectively deal with short-term variability

Esther's life story shows that some of these strategies have been highly important to her. Overall, three inherent tensions figure prominently i.e. between strategies of existence and coexistence, strategies of resistance and adaptability, and strategies of flexibility and ideal performance. Her family left Amolem owing to a failure of coexistence at an inter-ethnic level, and Marich offered a stable environment from which they could access resources for securing a livelihood. Within a short period of time, they were able to engage in a mutually beneficial way with other systems such as those in the arable highlands of Sekerr. Charcoal production was initially taken up as a resistance strategy to cope with a temporary shock in their environment, namely drought. With more people engaged in this livelihood practice, it becomes increasingly difficult to envisage charcoal production as a long-term adaptation. However, ever since Esther entered the charcoal business, flexibility has become a key strategy for her, for example through the reinvestment of profit in livestock. Yet, her performance may not be ideal in the longer term within an environment of scarce and contested resources.

In our project, we intend to further test and develop the system viability framework such as to adapt it as a suitable tool for furthering a locally contextualised understanding of land degradation. The dryland biography of Pokot is well suited for such an endeavour because it is characterised by a variety of social-ecological systems that are typical of many rural African drylands. With this in mind, we hope that our research will have broader academic relevance and policy implications.

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