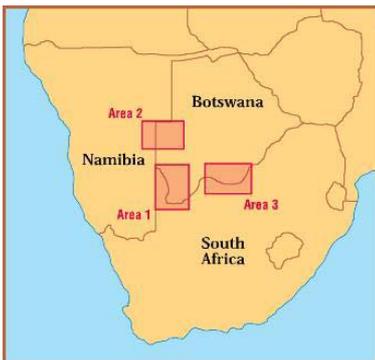


Managing Risk in Southern African Drylands

Key points

- Drought is endemic and should be considered a norm rather than an unexpected event
- Understanding people's responses to risk is essential if the full impact of policies on rural livelihoods and their sustainability is to be achieved
- Dryland people are resourceful and can adapt flexibly to policy and environmental changes to secure livelihoods



Research areas:

1 Arid southwest:

- a) Mier, South Africa
- b) SW Kgalagadi, Botswana

2. Semiarid northwest:

- a) Ghanzi Dist, Botswana
- b) Omaheke, Namibia

3. Dry sub-humid southeast:

- a) NW Province South Africa
- b) Barolong, Botswana

No. 8

PANRUSA Briefing Notes

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Managing risk, in whatever form (social, environmental, economic, political) requires people to have flexibility, and the capability to cope with variability and uncertainty in their lives. This briefing explores the key facilitating and inhibiting factors governing livelihoods across the region and the flexible adaptations people make to cope with environmental and policy change.

Types of risk

Poor people are often the most vulnerable in society because they are the most exposed to a wide array of risks and have the least resilience to withstand the impacts of these risks. Low incomes mean they are less able to save and accumulate assets (e.g. finance, livestock, investment in education etc). This in turn restricts their ability to deal with a crisis or shock. The risks identified as most likely to occur in the study areas are:

- Environmental variability and change (e.g. seasonal droughts, or climate change such as long term reductions in rainfall, floods). Identified as one of the main risks in all study areas. Explored here and in more depth in BN8A-C.
- Policy change (e.g. transition from colonialism to independence; shifts in policy emphasis, changes in policy implementation). Explored briefly here and in BN10.
- Changes in household socio-economic status (e.g. loss of income/job by main wage earner; death of household member and therefore contribution of labour or finances to household etc). Explored briefly here and in BN11.

Environmental change - coping with drought

Drought is endemic to all the study areas and should be considered a norm rather than an exceptional event. The onset of drought, whether over one or more seasons, brings a set of circumstances that individuals, households, communities and governments must address in terms of both short and long term livelihood sustainability and security.

For the livestock owners, the most common flexible adaptation to drought in the region was movement of livestock to alternative areas of water and grazing. This took on different forms depending on the types of land use. In the **arid southwest**, the drought of the 1960s saw the formation of a Farming Association (FA). Boreholes were drilled by the government for drought relief, and were managed by the FA. This provided farmers, with both small and large herds of sheep, goats and cattle, valuable access to alternative resources at critical times which is still used today. In the **semiarid northwest**, in the past, drought was the catalyst for

movement to new areas of range. With increasing people and livestock numbers over this century such movements have become more difficult, requiring complex negotiations with other land users and at times formal contracts allowing use of water and grazing for fixed periods. Government strategies (e.g. purchasing of farms for emergency grazing) and subsidies have also been important developments over the two decades. In **area 2a**, movements are less common and the purchase of subsidised feed has been more important. For those with ranches, the utilisation of dual grazing rights in the communal land has been vital in sustaining farming livelihoods during drought, but at what extra costs to those living in the communal areas, excluded from the private ranches?

In the mixed farming systems of the **dry sub-humid southeast** farmers reported particularly bad harvests over the last decade as both environmental and policy changes have combined to provide an inhibiting set of factors which have influenced their livelihood decision-making. In both study areas (3a&b) medium and larger scale farmers have taken out agricultural loans for the purchase of diesel, seeds and machinery repairs. However, failed harvests mean they have been unable to repay loans, further reducing their ability to invest in their farming activities. Strategies such as winter ploughing or multiple cropping regimes are designed to offset risks associated with drought. Increasingly farmers are unable to put these strategies into practice due to inhibiting economic, social and policy factors.

Long term changes in the environment and climate are difficult to pinpoint, yet important to recognise. Short surveys do not always pick up the impact of wider changes in the global climate. Predicted changes (such as extension of the length of dry seasons, changes in levels of interannual rainfall variability, reduction in soil moisture, greater incidence of precipitation extremes) are therefore important to consider.

Policy change - coping with intervention

Poor people can sometimes be marginalised by the unintentional negative impact of policies or interventions. However dryland people are resourceful and can adapt flexibly to changes in policy as well as the environment. In area 3b farmers are diversifying the types of crops produced, as well as overall livelihood strategies, in response to the changing emphasis of Botswana's agricultural policy from food self-sufficiency to food-security. This has perhaps led to the polarisation of large and small farmers who have had to respond differently to cope with these changing circumstances. In area 1b the impact of the Financial Assistance Programme is having a varied impact and altering, at least short term, the marketing of small stock in the region (see BN9B).

Social change - dynamic households

In all areas people reported the risks to livelihood sustainability and therefore household food security associated with changes in household composition. These were primarily associated with loss of income from the main wage earners/labourers from, death, loss of job, ill health, imprisonment etc. To offset these risks other household members would be relied upon to provide income to both core and extended family members. In areas 1b and 2a, the opportunities provided by the labour-based drought relief programme provide valuable income to poorer households during drought times. However, these programmes are often the main form of waged work in settlements and thus when they cease (i.e. after 'drought recovery') many households experience increased levels of poverty.

Outcomes

- **Risks are multi dimensional and affect aspects of different people's lives in different and sometimes unexpected ways**
- **Changes in drought mitigation policies have important consequences for people's drought-coping strategies in communal areas**
- **Vulnerability and responses to variability differ markedly according to the levels of poverty experienced by different social groups, and may depend on the interactions between the event and the risk-coping strategies employed**
- **It is not variability *per se* that is the main problem: it is the risks that the variability induces, and people's vulnerability to the effects of these risks.**

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