Pastoralist populations are growing due to many and diverse factors. Pastoralists are being obliged to inhabit more marginal rangelands, and some are adapting their traditional livelihoods to gain access to services and alternative livelihoods. These trends in pastoralist demography, including urbanisation, need to be part of the development agenda so that these changes and their consequences are taken account of in drylands development.

Changes in population distribution have led to the emergence and growth of urban and peri-urban areas. Population growth in the arid and semi-arid lands (ASALs) has meant an increase in urban areas with insufficient basic infrastructure, inappropriate urban planning and the appearance of slum-like settlements. Towns are being established despite environmental and social problems, and appear to be permanent. The growth rate in some of these urban areas is twice as high as in rural areas. Also observed is the significant level of immigration into the ASALs by non-pastoralists, which has influenced patterns of pastoralist settlement, and the ‘permanent’ emigration/exodus of pastoralist communities in response to disenfranchisement and the privatisation of land.

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Pastoralism and current attitudes

Pastoralism is seen negatively in most countries in the region. Efforts by governments and aid agencies to tackle the challenges faced in pastoral areas have focused primarily on relief and emergency responses. Policies have proved inappropriate and inadequate, and have generated an array of social and cultural problems. These include policies focused on ‘modernising’ the livestock sector, sedentarising pastoralists and privatising land tenure. An integrated development approach would be more effective in supporting livelihood systems and enabling pastoralists to recover and maintain their inherent resilience and self-reliance.

Pastoralists have long been regarded as a homogeneous group, with livestock economy at the core of their livelihood system. However, it should be recognised that pastoral communities face diverse processes of transformation that have wrought deep changes in their livelihood system and disrupted their traditional lifestyles. Pastoralism, to a large extent, is in transition, and this fact presents both challenges and opportunities for pastoralists and for the development community in the Horn and East Africa. Understanding these challenges and opportunities is paramount for developing appropriate policies and informing interventions. The failure to do so is resulting in impractical
solutions to the problems pastoralists face. Further delays are expected to lead to unsupportable impoverishment.

**Defining pastoralism**

Issues of definition – who is a pastoralist? – are critical in discussing pastoralist demographics and settlement patterns. Aspects of ethnicity and socio-cultural arrangements, production forms and strategies, including degree of mobility or sedentarisation, key livestock types, engagement and dependence on pastoral-related activities, especially levels of dependence on livestock for food and income, management practices, geographical location, engagement or lack of engagement with markets – all of these factors, alongside numerous others, add to the difficulty of constructing a definition that can suit all purposes.

Governments do not have a uniform approach to defining pastoralists. In Ethiopia the authorities have superimposed a ‘pastoralist’ tag over geographical areas where these groups predominate. In Kenya, ASALs districts are clearly demarcated, but are not officially labelled pastoralist. In Uganda, while the general public recognises different pastoral groups (often referred to by the derogatory term ‘bajasias’), the government has only recognised the Karamojong and the Karamojong region as pastoral. Tanzania presents a unique situation where ethnicity is avoided in pursuit of national integration.

This study supports a combined economic and cultural definition of pastoralism. Pastoralists include those who earn part of their living from livestock and livestock products. They also include those who are still connected to pastoralist culture, even if livestock does not provide their main source of income.

**When do pastoralists stop being pastoralists?**

The point at which pastoralists stop being considered as such upon moving to urban or peri-urban areas is currently a matter of intense debate. Development experts and pastoralists themselves maintain that the term ‘pastoralist’ refers to people who still have economic and cultural links with the pastoral system, even if they have left pastoral areas or have settled. Some, however, disagree. Agencies such as the United Nations World Food Programme, which carries out periodic evaluations to categorise aid recipients moving to urban areas, has set a 6-12-month ‘transition’ period after which, for purposes of food aid, the subject is no longer considered a pastoralist if he/she chooses not to return to their original livelihood. Government officials in Kenya have a narrower definition, whereby pastoralists moving to urban or peri-urban areas cease to be considered as such. They are deemed part of the urban population, to whom urban policies and not ‘pastoralist policies’ apply. In Ethiopia, it is the cultural and ethnic make-up which has prevalence. Thus, pastoralists will continue to be considered as such even if they move to towns and abandon the livestock economy altogether.

**Pastoralist demography and prevailing schools of thought**

Population growth and environmental degradation in the ASALs are also subjects of much debate. Two schools of thought prevail: Neo-Malthusian theory, and the Boserupian Paradigm theory.

The Malthusian theory argues that population growth is at odds with the Earth’s finite resources and nature’s own ability to reproduce. It maintains that population growth has a negative impact on the environment because it is the major source of depletion. Hence, hunger, famine, increased poverty and conflict or war will result as people compete over declining resources.

The Boserupian Paradigm theory argues that population growth leads to intensification and increasing productivity. A growing population will trigger economic and technological innovation and improvement. The population–environment link is therefore a positive one. Resources will not be over-used, but will be used more efficiently, with technology playing a key role. This argument has limitations in Africa, however, as technology to develop the rangelands is seldom affordable for the poorest sectors of society, and expensive technology will be required for Africa’s drylands given their geography and climate.

Other theoretical frameworks on population–environment linkages exist, and have been used to analyse demographic trends, settlement patterns and service provision in pastoral systems. However, population control policies are not going to deliver positive results unless coupled with policies that address other factors, such as poverty.

**Availability of data**

Data on pastoral populations is poor and inconsistent. Whereas there are numerous localised studies on pastoral population demographics, there is a paucity of data on broader national and regional patterns and trends.

Accurate statistics in pastoralist communities are difficult to collect for cultural reasons. Moreover, pastoralist areas were often omitted from national censuses at official and government levels. In Kenya, until 2003, the Demography and Housing Survey did not cover Northern Kenya, where most pastoralist districts are located. In Ethiopia, the Population and Housing Census of 1994 excluded some areas of the pastoralist Afar and Somali regions. The Ethiopian Demography and Housing Survey of 2005 still excluded some areas of these regions, producing skewed data. Furthermore, how ‘pastoralist’ is defined – and as we have seen there are different ways of doing this – has a large influence on the demographics of pastoralism. As a result, statistical data gives only a snapshot of the situation in which pastoralists in the Horn and East Africa find themselves today. It provides a starting point from which to ask further questions and fill gaps in knowledge.

**Sedentarisation**

Across the region, sedentarisation is one of the prescribed, and often enforced, policy interventions in pastoral areas. However, sedentarisation is also taking place in response to a number of other internal and external pressures. For example, traditional mobility within the pastoralist system is compromised by declining access to rangeland resources. This is occurring due to a number of reasons, including the alienation of pastoral land, the conversion of wet season pasture to other land uses such as upland rice and conflict and insecurity, which have rendered some areas inaccessible. There are consequently a growing number of
landless pastoralists who own some livestock but no land, and are forced to settle.

**Population growth and the continuum from nomadism to sedentarism**

Data suggests that, in the continuum from nomadism to semi-nomadism to sedentarism, birth rates rise and death rates fall at each stage. This pattern has several policy implications for stakeholders assessing the transformation of pastoralist societies. If populations grow rapidly as pastoralists settle, development policies should accommodate such growth and respond with the provision of education, health and infrastructure.

Urbanisation influences population growth among pastoralists, especially in arid and semi-arid areas. Information gathered in the study indicates that urban populations are growing faster than rural areas. Examples in Ethiopia show that a rapid process of urbanisation is taking place in pastoralist regions, and that this process reflects a national trend. Similar trends are seen in Kenya. As this process is likely to prove irreversible, African governments have to prepare in coming years to provide services for town-dwellers on an unprecedented scale. Failure to tackle the issue will have serious implications at the social and political levels.

**Factors influencing mobility and settlement**

Pastoralist societies use a combination of herd management and camp mobilisation to move across rangelands in the most efficient way possible. Households establish a base and move during some seasons, or they move continually. Use of rangelands is organised according to the availability of resources, safe access and the season, and disruptions are caused by both natural and man-made events.

Patterns of population distribution have been changing in Kenya since the 1980s, leading to the formation of urban and peri-urban areas. Factors influencing these changes include conflict, raiding risk, the geographical distribution of resources, the emergence of settlements, the increased in-migration of non-pastoralists into pastoralist areas and the appropriation of land by non-pastoralists, and aid and development activities.

Due to the combined effects of the above factors, the less hospitable areas of the rangelands are chosen for permanent settlement. The more fertile areas are often rendered insecure by constant raiding and are consequently less accessible to government officials, who provide security and basic infrastructure. This results in a paradox: the harshest parts of the rangelands are over-used and urbanised, while the most fertile areas with the best grazing and rainfall are under-used and eventually lost. Inappropriate land use and management of the rangelands are over-used and urbanised, while the most fertile areas with the best grazing and rainfall are under-used and eventually lost. Inappropriate land use and management of the rangelands will only increase the vulnerability of pastoral communities and lead to further missed opportunities to realise the potential of the rangelands.

**Service provision and access to services**

Official statistics show that the ASALs receive the fewest services in Africa. Service provision is also often used as a political tool to influence pastoralist communities.

In recent times, basic services have typically been provided by emergency and relief aid agencies, which came into pastoralist regions in times of seasonal crisis. While most aid was meant to be temporary and short-term, it became permanent as a result of a lack of clear exit strategies, often linked to an incomplete understanding of pastoral livelihoods. Meanwhile, governments and other actors failed adequately to address the underlying causes that perpetuated the situation and stalled recovery. This has led to the phenomenon of ‘aid dependency’, whereby pastoralist households depend on the provision of food and emergency aid to survive.

However, governments in Africa have recently shown a desire to incorporate pastoralists into the mainstream, especially in countries with significant pastoralist populations. Redrawing development policies, drafting new policies focused on pastoralists and implementing programmes and projects on the ground to remedy the lack of attention and investment in the ASALs are some of the tools used to realise this. Participation, accountability and transparency in negotiations for service provision are of paramount importance. Pastoralist groups, and especially their leaders, are increasingly aware of their role in the development of their communities through growing exposure and political involvement. However, on the ground access to the political system is unequal within and between groups, and different strategies are required to help pastoralists engage in the political arena.

Despite positive developments, governments, NGOs and pastoral communities must embark on a concerted and coordinated effort to achieve significant changes in the situation of pastoralists in the region. The pace at which the transformation of pastoralism is occurring today threatens to outstrip existing efforts.

**The future of pastoralism: a synthesis**

The debate over the future of pastoralism is dominated by two theses. The first assumes that the population growth/livestock decrease ratio has permanently disrupted the normal functioning of pastoral livelihoods, spelling the demise of pastoralism. The second extols the flexibility and adaptive capacity of pastoralists, which will enable them to appropriately adapt to changing circumstances.

‘Too many people, too few livestock’

The major elements of this proposition are that people/livestock ratios have declined in pastoralist households to a level below what is ‘viable’ for sustainable livestock production. This is associated with increasing constraints on mobility linked to rangeland degradation, where population density is higher. Continuing asset loss also results when responses only address humanitarian needs at the expense of sustainable livelihoods.

Moreover, the real prices of livestock products have not increased (and are unlikely to do so in the future, despite growing demand) to compensate for the lower numbers of animals per household. With such small and decreasing herd sizes, sales remain focused on immediate cash needs rather than on ‘commercial’ off-take. Pastoral economies remain poor, with limited circulation of cash,
and so have little opportunity for growth through diversification or expansion to other income-generating activities. Pastoral land also continues to be appropriated for cropping and agricultural activities.

The implications of this scenario are that it is necessary to acknowledge the abandonment of livestock production as a primary income generator and the emigration from pastoral areas of a substantial proportion of pastoralists.

Adaptive livelihood responses

The proponents of this thesis contest the theory of a ‘viable’ people/livestock ratio, because most of the empirical data supporting this theory originates in studies on relatively closed pastoral systems, where opportunities for trade, exchange and adding value to livestock production were limited.

Also not considered is the adaptive capacity of pastoralists and the wider economic interdependencies in the drylands. Contemporary livelihoods in pastoral areas are more diversified and more integrated with the cash economy than ever before, with most households having access to a range of food and income sources that are not derived from livestock. In this context, notions of ‘viability’ and ‘carrying capacity’ would be inappropriate.

Livelihood responses in times of stress are complex and wide-ranging, and can be narrowed down to four kinds. The first is ‘hanging on’ to systems of largely subsistence pastoral production. The second is ‘stepping up’ to a more commercial livestock production system, where profits can be made. This option is however open to few as it requires significant support from stakeholders to add value to the system through tax, market and export regulations. The third response, favoured by most pastoralists, is ‘branching out’. In this scenario, livestock rearing is supplemented by a variety of other livelihood activities, often with poor and inconsistent economic returns. The fourth and final option is ‘moving away’ out of pastoralist systems for altogether different livelihoods.

The proponents of this thesis emphasise that the key policy imperatives should be linking local growth to market opportunities, expanding livelihood portfolios in ways that encourage local growth and promoting access to new livelihoods other than those based around livestock-keeping, while recognising that pastoral identity and links with pastoral origins will remain strong. All in all, stakeholders need to recognise and work with the responses pastoralists currently adopt to respond to the stresses and shocks that their livelihoods face.

To summarise, both hypotheses have relevant arguments against the backdrop of present policy and practice that influence the accelerating rural urbanisation and higher growth rates in the adapting populations. However, what external actors appear to have overlooked is that, for the poor, traditional coping involves a dependency on better-off kin in the community, who have always carried a responsibility that obliges them to share and allocate resources in times of stress. If and when this fails, and an external short-term crisis response engages, the responsibility appears to shift to the state or relief organisations (which are seen as extremely well-off and therefore holding even greater responsibility). Within pastoralist norms, this then signals a new form of dependency where the relationship lacks any expectation of future reciprocation. This can only be corrected by revitalising functional economies through longer-term policies and investment that address the underlying causes of the problems. The building of new relationships is needed, not ‘quick fixes’ hoping to enable recovery, which will simply perpetuate a history of neglect.

Conclusions and recommendations

Pastoralist populations are growing, with some distinct and characteristic demographic features. Settlements are increasing and growing, fuelled by actions and policies which do not appreciate the rationale of pastoralism. There is a co-opting, rather than integration, of pastoralist resources (notably land within semi-arid areas) into the cash and market economy, and a diversification of livelihoods within the ASALs. Service provision and infrastructure development is inadequate and often politically motivated or driven by other external agendas.

In light of these changing patterns and trends, appropriate and sustainable development in the ASALs can occur if:

- East African nations take into consideration issues concerning demographic trends, settlement patterns and service provision in development interventions. Pastoralist demography is vital to describe the ways in which pastoralist livelihoods are changing, and the consequences of that change.
- Reliable data is generated to define key demographic parameters, and is mainstreamed at the level of policy-making. Data capture and analysis must also reflect the realities of pastoralist life (as opposed to utilising only standard measures that are better suited to sedentary populations), and able to respond to the needs of the whole pastoralist continuum. Demographic data for pastoralist areas is currently incomplete and unreliable.
- The Total Economic Valuation (TEV) approach is used given the critical link between pastoralist demographics, settlement and service provision patterns and the investment that is needed to support core pastoral livelihoods and livelihood diversification. The TEV approach will also highlight market failures that need to be redressed, and opportunities that should be harnessed.
- Investments are made in infrastructure and the provision of basic services, and poverty alleviation policies are put in place focusing on economic diversification strategies. Pastoral areas receive the fewest services in Africa.
- Decentralisation, participatory political decision-making, recognition of the cultural and economic value of pastoralism and recognition of the citizenship of pastoralists (through inclusion in censuses and the extension of official documents) is promoted.
- Traditional pastoral movement and settlement patterns are documented and analysed. These patterns must be understood, and the reasons behind adverse changes and trends identified. This is important to effectively mitigate the negative consequences of creeping urbanisation in the rangelands.
- Diversification is supported within the pastoralist system. The economic activities that pastoralists currently practice should be analysed and catalogued to identify gaps, and new opportunities should be identified.