

Development for the World's Mobile Pastoralists: Understanding, Challenges and Responses

Professor John Morton
Natural Resources Institute
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Inaugural Professorial Lecture

**DEVELOPMENT FOR THE WORLD'S
MOBILE PASTORALISTS: UNDERSTANDING,
CHALLENGES AND RESPONSES**

by

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Biography

John Morton studied Social Anthropology at Cambridge, and moved to the University of Hull in 1981 to carry out research for a PhD, involving around fifteen months fieldwork in remote communities in north-eastern Sudan, and eventually resulting in a thesis entitled “Descent, Reciprocity and Inequality among the Northern Beja”. He applied some of the knowledge gained as a relief worker and development consultant, firstly in Sudan then later in Burundi, Nepal and Pakistan, where he lived for three years. During this time he worked for several major non-government organisations (NGOs), Unicef, UNHCR and other organisations.

In 1993 John joined NRI, where he has worked ever since, serving as Head of the Social Development Group, Associate Research Director, and Professor of Development Anthropology. During this time he has carried out many assignments on pastoralism, especially in Ethiopia and Kenya, also in Uganda, Mongolia and India, including consultancy and advisory work on drought impact and drought management, research on pastoralist parliamentary groups, and reviews for major NGOs such as Oxfam GB. In recent years he carried out a scoping study for the UK Department for International Development on their role in pastoral development, subsequently developed into a series of publicly available information notes. He has also carried out research and consultancy assignments on other aspects of livestock development, on the dissemination of livestock research, on national-level drought management, on irrigation and many other topics. He has contributed to various websites intended for development workers, including Tsetse.org and the Livestock-Environment Toolbox, and is a Consultant Scientific Editor of the journal Tropical Animal Health and Production.

Since 2004 John has been associated with the Intergovernmental Panel on Climate Change. He worked as a Lead Author for the Fourth Assessment Report, writing on climate change impacts on smallholders and subsistence farmers, and he is now starting work as a Co-ordinating Lead Author on rural areas for the Fifth Assessment Report, due to appear in 2014.

John has also been a trustee of the Pastoral and Environmental Network in the Horn of Africa since 1999, including two years as the chair of trustees. He lives locally in North Kent with his family.

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Introduction

I wish to speak about a category of people who are a source of constant fascination for those of us in more settled cultures and more comfortable lifestyles, but also people who suffer under heavy burdens of poverty, vulnerability and exclusion. Giving this category of people a name is not straightforward. The most-used term in English is 'nomad', but some of those who deal professionally with them have tried to move away from this. Not only is it now frequently inaccurate, as many 'nomads' have settled but continue to identify with their former livelihood, but it also directs attention to their mobility, as if they were defined by some obscure psycho-social wanderlust. What is more important is that pastoralists generally live in deserts, drylands or mountainous areas, where livestock-rearing is the most viable form of agriculture. Livestock-rearing in these conditions involves some pattern of movement with the herds: long-distance and regular with the seasons, or short-distance and opportunistic: involving the whole family or just some of the men. Because it is in terms of livestock-rearing that we choose to define these people as a group (and even that is complicated as we shall see) we have taken to using the term 'pastoralists' derived from the Latin for 'shepherd'. But this relatively new piece of professional jargon is not yet widely accepted by the lay public, and still risks confusion with other uses of 'pastoral' and 'pastoralism': the idealisation of the shepherd in Western literature and art, the idea of 'pastoral care' in religion and education. In order not to mystify my audience completely, I have chosen to call these people 'mobile pastoralists' in my title, but 'pastoralists' henceforth. In any case, we will have to see all definitions as provisional and shifting, and neither should we forget that pastoralists will have their own definitions of themselves.

On an autobiographical note, I first encountered pastoralists, rather fleetingly, in the town of Kassala, while backpacking in the Sudan in 1980: specifically, men of the Hadendowa tribe of the Beja ethnic group come into town for the market, who more or less consented to be photographed.

Two years later I was granted a scholarship by the University of Hull, at that point the leading centre for the social anthropology of the Northern Sudan¹, to carry out a PhD on the social organisation of another Beja tribe, the Bisharin of the Red Sea Coast and the northern Red Sea Hills, and spent a year living among them in a number of villages and trading posts. Mine was not the classic anthropological fieldwork experience of living in a family; in a conservative Muslim society that was



¹My teachers included Ian Cunnison, author of *Baggara Arabs: power and the lineage in a Sudanese nomad tribe* (1966) and Talal Asad, author of *Kababish Arabs: power, authority, and consent in a nomadic tribe* (1970).

not possible for a young unmarried non-Muslim male, so I could never move with the herds or join the remoter encampments of rush-matting tents. Instead my time was spent living in a primary health post, the guest-houses of various influential men, and even shops. Nor did I find it easy to move beyond my imperfect Arabic to learn the Beja language. The Beja found it easier to believe that I was interested in studying their language than their society or culture or way of life, which they almost seemed to regard as logical implications of their religion and their harsh environment, and not something worthy of much reflection. But paradoxically, they were unwilling to speak that language much with me, preferring the more formal register of Arabic, even though they spoke it as haltingly as, sometimes even more haltingly than, me. So if I am honest (and who knows how many anthropologists are honest when they reminisce about the joys of immersion in a foreign culture) it was not the easiest or most productive of times spent 'in the field', but it was still a time of extraordinary experiences, the satisfaction of learning, and good comradeship.



Perhaps oddly, for a group labelled as 'nomadic', what sprang out at me as an outside observer was their fierce attachment to land, or more specifically the idea of land. Land along the wadis, even though it yielded little more than acacia trees, was seen as divided between local lineages, and even, within the lineage, between individual men. In practice this 'ownership' made little difference – if a man observed the norms, asked the landowner for permission, and was perhaps prepared to make a token payment of a shoulder of mutton, he could graze his flocks, and shake the nutritious acacia foliage down from the trees for them. But ownership was an expression, the expression, of the pattern of descent in the male line that structured the whole of society. And land had a resonance beyond the local: in the urban politics of Port Sudan, an Arabic-speaking city built on Beja land in colonial times, it was a Beja tactic in arguing with the Arab élites to brandish a handful of dirt under the encroacher's nose as if to say, "Is this yours?".

In the Red Sea Hills, the system was not so much a set of rules as a looser ethos, where all had to acknowledge the claims of landowners, but landowners equally felt obliged to share their resources with others (Morton 1989). Within this ethos, some families moved each year hundreds of miles, between the Red Sea coast and the Atbai Desert, while others pursued short opportunistic movements when they heard news of rain (Morton 1988a), and a surprising number remained sedentary, combining herding with petty trade or government employment (Morton 1990).

These were not 'subsistence' pastoralists – very few societies have ever performed the complex and difficult feat of living entirely off their herds, and certainly not the Beja. Instead they sold their herds – trekking camels to the great markets of Southern Egypt, a time-honoured trade that existed in a curious legal limbo, having been declared by the Sudanese parliament as neither legal nor illegal, and smuggling their sheep and goats across the Red Sea to Saudi Arabia, a trade that was clearly illegal and deeply secretive, but nevertheless flourishing. With the proceeds of this, and of the employment they could find in the small towns or in Port Sudan, they bought their staple food, sorghum, from the Sudanese grain belt hundreds of miles to the south.

In 1985 I returned to Port Sudan and the Red Sea Hills as a relief worker in the great drought and famine that afflicted Sudan and neighbouring countries, gaining an understanding of pastoralists' vulnerability to drought (Morton 1993), and then worked as a consultant anthropologist both once more with the Beja and with another group of pastoralists further south, the Lahawin. The Lahawin (Morton 1988b) were experiencing the loss of their key dry-season pastures along the River Atbara to farmers from other ethnic groups, and even more catastrophically the loss of their wet-season pastures to huge mechanised farms run with more concern for financial subsidies than for environmental sustainability.

These experiences confirmed for me what I still believe are the most important issues in the analysis of pastoral societies, and the most pressing problems in pastoral development: land, markets, governance, the constant need for careful analysis and in-depth knowledge, and recognition of the diversity of pastoral societies. Since I returned to the study of pastoralism and pastoral development in the late 1990s these have continued to be intellectual guidelines and topics of abiding interest.

Pastoralists and their vulnerability

Setting autobiography aside, I return to the questions of defining pastoralists, estimating their numbers, and recognising the nature of their poverty and vulnerability.

A simple definition of pastoralists is that they are people who depend on livestock or the sale of livestock products for most of their income and consumption, whose livestock is mainly grazed on communally-managed or open-access pastures, and who show at least some tendency, as households or individuals, to move seasonally with livestock².

Even this definition must remain fuzzy enough to include:

- The many people who have dropped out of pastoralism because they have lost their livestock, to drought, disease or conflict, but identify with pastoralism as a culture and a way of life, and aspire to return to it³;

² This draws on more formal definitions by Toulmin (1983), Swift (1988) and others

³ As Paul Baxter (1994) says, pastoralism is not just an occupation but a vocation, even for many who are prevented from following it

- Members of cultures where livestock is less important than cropping for household income and consumption, but which still put great emphasis on livestock-raising and livestock ownership. The Nuer and the Dinka of Southern Sudan (Evans-Pritchard 1940, Lienhardt 1961) are examples of such cultures that have been described in classic works of social anthropology.⁴

The difficulties of defining pastoralists are one part of the difficulties of estimating their numbers; whether or not a household depends on livestock is not an easy question to ask in a large-scale census or survey (Randall 2006). Figures may be drastically altered by the boundaries drawn between pastoralists and those who combine extensive livestock production with cropping. Even more important are the intrinsic difficulties of collecting data on remote and mobile populations and the indifference of many governments to even making a serious attempt at this.

Not surprisingly then, the estimates for pastoral populations, in individual countries and world wide, are hard to find and frequently contradictory. But worldwide figures of between 100 million and 200 million people are increasingly used by international agencies.⁵

Pastoralists are found across the developing world, and in some industrialised countries.⁶ Some of the largest populations are found in the Horn of Africa: around eight million people each in Ethiopia and Sudan, and six million each in Somalia and Kenya. But pastoralists, of different sorts and in very different ecological and political environments, are also found in significant numbers in the countries of the Sahel, the Middle East, South and Central Asia, China, Mongolia and elsewhere. Though much of this lecture focuses on the pastoralists of the Horn of Africa, the very different experiences and predicaments of pastoralists elsewhere should not be forgotten.



⁴ Such societies and livelihoods are sometimes described as 'agro-pastoralist', in my view a rather vague and confusing term (Devendra *et al.* 2005)

⁵ See www.iucn.org/wisp/index.html; also personal communication from Antonio Rota of the International Fund for Agricultural Development.

⁶ See the first issue of the new journal *Pastoralism*, on 'Mobile Pastoralism in the Industrial World'.

There are even greater uncertainties about estimating numbers of livestock belonging to or managed by pastoralists (the difficulties of counting livestock themselves being added to the difficulties above). But pastoralists undoubtedly account for herds that are very large in absolute terms and very significant at the level of their countries' economies. For example in Ethiopia, which itself has one of the largest livestock populations in Africa, pastoralist-owned livestock account for 28 per cent of the cattle population of the country, 26 per cent of the sheep, 66 per cent of the goats and almost 100 per cent of the camels.⁷ Proportions for some other countries, such as Sudan, are probably even higher.

As this last fact suggests, the question of pastoralist *poverty* is a complex one. There is a tendency for researchers and practitioners working with pastoralists to take as an article of faith that they are a uniquely poor and/or vulnerable group: it is harder to find research or data that bears this out, let alone allows comparison with other groups such as the urban poor, landless agricultural labourers, artisanal fisherfolk, or mainstream farming populations. This is partly for similar practical reasons as those that make population estimates so hard to derive, but it also involves the distinction between *poverty* and *vulnerability*.

Some pastoralist households at any point in time may be very visibly non-poor in terms of assets or income: owning large herds of livestock and living off the direct or indirect proceeds. There are huge differentials within pastoral communities, where rich and poor pastoralists may live side by side, between communities in the same country, and between countries.

But equally important is the issue of vulnerability. Pastoralists in most parts of the world can be considered highly vulnerable to:

- Disasters, pre-eminently drought but also flood, snow disasters and large-scale outbreaks of animal disease
- Livelihood shocks related to government policies, such as the intermittent closure of meat markets in the Gulf countries to East African livestock exports
- Armed conflicts within and between countries
- Individual risks such as non-epizootic animal disease, predators, poor management decisions and sheer bad luck.

All around the world, but particularly in Africa, such vulnerability can all too easily reduce large numbers of pastoralists to destitution, and sometimes cause a large-scale exodus from pastoralism (often only to low-grade urban employment or long-term relief dependency). Evidence of this vulnerability is found in a long record, since the 1970s, of catastrophic droughts causing mass mortality of livestock. After the drought of 2003, nearly 60 percent of Afar pastoralists in Ethiopia fell below a 'poverty line' based on conservative estimates of the number of livestock a household needs for survival (Negussie *et al.* 2005). Pastoralists, especially in the Horn of Africa, continue to be victims of recurrent droughts, and large-scale international food-aid continues to be necessary in response to those droughts.

Pastoralists are not just poor and vulnerable, they are also *marginalised*. Pastoralists generally live geographically distant from national capitals and regions where economic activity is concentrated. In most African countries (Somalia excepted) pastoralists belong to ethnic minorities and not to the politically, economically and culturally dominant ethnic groups. Many major pastoralist groups (Somalis, Afar, Borana, Tuareg,

⁷Yemane cited in Lautze *et al.* (2003).

Fulani) spread across national boundaries, which further renders pastoralists marginal and politically vulnerable in the political cultures of nation states. A survey for the Minority Rights Group (Markakis 2004), refers to the pastoral zones as 'languishing in the margins of the state and society... and ignored by the emerging African political class'.

Understanding pastoralism

My lecture has the sub-title 'Understanding, Challenges and Responses'. By this I wish to underline:

- The fact that since the late 1980s the ways in which researchers and development workers understand pastoralists, their livelihoods and their environments, has hugely improved
- That this new collective understanding faces many challenges, old and new, and cannot be the basis for complacency, either in analysis or in action
- That there are positive and concrete responses to these challenges that researchers, development agencies, developing country governments and pastoralists themselves can adopt.

To start with understanding: colonial governments and their independent successors tended to dislike and distrust pastoralists, fearing their mobility, tendency to disregard national borders, resistance to taxation, real or supposed propensity to armed insurrection, and general lack of 'civilisation'. Research all too frequently provided intellectual justifications for governmental distrust: economists dwelt on pastoralists' supposedly irrational reluctance to sell their animals and thus contribute to national economic growth, drawing on concepts such as 'perverse supply response'. Environmental scientists dwelt on pastoralists' supposed responsibility for environmental degradation, summed up in the problematic ideas of 'carrying capacity', 'overgrazing' and 'desertification' (Swift 1996). The ecologist Garrett Hardin (1968) promoted the idea of the 'Tragedy of the Commons' by which property held in common would be *logically and necessarily* degraded: he used an abstract description of a common grazing system more or less as a parable, but it became widely assumed that this was a useful model for the real ecological consequences of traditional pastoralism.

Social anthropologists, who had carried out careful fieldwork-based studies of pastoral societies for decades, provided a different sort of understanding 'from within', but the influence of social anthropology on development policy was minimal.

The result was policies which sought to settle pastoralists, to parcel up their rangelands into ranches, or worse to allow land to be expropriated and given over to crop farming in defiance of good environmental stewardship. Providing health or education services to pastoralists, or even roads and livestock marketing facilities, was seen as not cost-effective, or too difficult, and neglected.

During the late 1980s and 1990s, new ideas about pastoralism came together, and spread from research into mainstream development practice.⁸ These ideas cross-fertilised from different sources, including social anthropology and the general trend

⁸ Key references include Behnke, Scoones and Kerven (1993) on rangeland science, and Scoones (1995) on social scientific and development programming implications. As research ideas, these were developed mainly with reference to dryland Africa, but they are to some degree applicable to pastoralism in semi-arid areas and other ecosystems elsewhere.

in development towards the participation of development's beneficiaries, taking seriously their own priorities, ways of working and knowledge of their environments, and promoting new ways of making these heard.



These formed the background to new ideas in the ecological study of rangelands. Much of the power of the new understanding came from the readiness of researchers from different disciplines to work together and invest in understanding each others' disciplines.

To summarise the most important of these ideas:

- Rangeland ecosystems in the arid and semi-arid tropics, where rainfall is highly variable between years and between neighbouring locations, behave in ways fundamentally different from those assumed by orthodox range ecology. To simplify, plants rapidly recover when rain comes, and using concepts such as 'overgrazing' and 'carrying capacity' is far from straightforward.⁹
- Traditional pastoralism in these areas is a very rational and efficient system of production: technical innovations (or technical fixes) such as re-seeding, enclosures, rotational grazing, improvements in husbandry and breed improvement (with some exception for veterinary innovations) are likely to prove blind alleys.
- Following from the above, what pastoralism and pastoralists most need are enabling *policies*.
- In particular, collective management of range resources, and pastoral mobility are rational: ideas of the 'tragedy of the commons' and of the superiority of sedentary agriculture over nomadism are inapplicable, and both subdivision of land rights in rangelands and encroachment on them by outside interests should be resisted

⁹ Specifically, African dryland ecological systems are subject to extremely variable rainfall, are thus driven more by rainfall than by animal population pressure, and are thus fundamentally different from systems characterised by low average rainfall but low variability of rainfall as in the USA and Australia – they are 'non-equilibrium' rather than 'equilibrium' systems. Non-equilibrium systems are fundamentally resilient in that rangeland plants rapidly recover when rain comes.

- Pastoralists are, and have long been, systematically involved in trade in livestock and livestock products, and in most cases depend on this trade for cash with which to buy cereals: but they trade in ways that fit with other production and livelihood objectives, such as family consumption of milk and herd maintenance during drought.
- A specific institutional innovation of value to pastoralism is that of community-based animal health systems, which can deliver animal health more widely and more effectively than either governmental or private systems based on the use of qualified vets.

These and broadly similar ideas spread from research and the practice of non-governmental organisations (NGOs) into the mainstream policy and programmes of major donors such as the UK Department for International Development, the World Bank, the European Commission and the US Agency for International Development, as shown by donor publications and publications by senior donor staff.¹⁰

Old and new challenges

Some hoped that the new understanding of pastoralism and the adoption of new approaches by NGOs and donors, from the early 1990s on, would create a climate for widespread and significant improvement in pastoralist livelihoods around the world. But taking stock in 2010, pastoralism, particularly in East Africa and in the Sahel, seems still to face many of the old challenges, with new challenges added, and new questions about its sustainability. There is once more a mood of questioning the viability of pastoralism.

Continued drought, food-aid dependency and conflict

The most striking evidence that pastoral development has not succeeded is the recurrent collapse of pastoralist livelihoods brought about by drought and other climate disasters, particularly but not solely in East Africa. Droughts appear to be becoming more frequent and more severe, but pastoralists also appear to be becoming more vulnerable to shortfalls in rain. This leads not only to the need for food-aid during droughts but also to the long-term destitution of some pastoralists who seemingly become dependent long-term on food aid or on irregular opportunities for casual labour.

Alongside drought is the threat of conflict. Conflict in pastoral areas has been growing in intensity since the late 1970s. In East Africa pastoralists have been caught up in complex conflicts that incorporate aspects of civil war, large-scale criminality, and patterns of traditional raiding, the whole fuelled by the greater availability of firearms. In Darfur, Sudan and neighbouring regions of Chad, pastoralists have featured heavily among the belligerents in recent conflicts. In the Sahel there have been armed insurgencies of pastoralists against national governments. Elsewhere pastoralists have been caught up in wider conflicts. Drought and conflict interconnect: drought and collapsing livelihoods fuel conflict, but conflict puts valuable rangelands, livestock, markets and other resources beyond the reach of pastoralists.

Pastoral vulnerability is not only evidenced by dramatic scenes of destitution.

¹⁰ Such as NOPA (1992), Pratt *et al.* (1997), World Bank (2001), Bruce and Mearns (2002), de Haan *et al.* (1997) and the series of briefing papers published by the African Union's Inter-African Bureau of Animal Resources through the DFID-funded CAPE project



Image credit: Andy Catley

Elsewhere in the world pastoralists are involved in slow processes of settlement and incorporation into agricultural economies, not on their own terms and often with negative results on their livelihoods and dignity.

Thinking about population

Interpreting this continued vulnerability has led some researchers to a renewed questioning of the sustainability of pastoralism. In particular there has been a renewed interest in human population growth in pastoral areas. The claim has been made¹¹ that there is in principle a level of livestock holding per person that can be regarded as a subsistence threshold for pastoralists; and that the rangelands that remain, following various forms of encroachment on them, cannot support the livestock population for the growing human population at this subsistence threshold. As a result, in many areas there are too few animals to support pastoralists above the subsistence threshold, and in other areas livestock are distributed inequitably, in both cases causing widespread and structural poverty, and posing serious questions about the future of pastoralism. Such claims have generated forceful counterarguments, but also served to highlight the needs, identified by 'optimists' and 'pessimists' alike, for investing in livelihood diversification and pastoral education.

The persistence of unfavourable policy

The importance of supportive policy – on land tenure, on markets, on mobility, on conflict – has long been recognized by researchers, donors and NGOs. But developing country governments have appeared remarkably resistant to adopting such policies. In particular, land policies have been counterproductive. Pastoral rangelands continue to be encroached upon, by commercial agriculture particularly in riverine areas, by parks and protected areas, and increasingly by mineral exploration. While there are exceptions, the importance of the collective management and flexibility that are features of traditional tenure fails to be recognised in law. Some governments persist with the rhetoric of settling pastoralists.

¹¹ Stephen Sandford (2006), see also the responses

There has also been a failure to invest in the public infrastructure needed to encourage marketing of livestock, and at an international level, a failure to evolve international trade regulations to facilitate trade from pastoral areas. Some governments have failed to manage armed conflicts within their borders, have come dangerously close to making pastoralists scapegoats in the 'war on terror', or worse have incited pastoralists to become involved in conflicts within and across borders.

In debates on the sustainability of pastoralism, these failures of policy have been highlighted at least as much as demographic, environmental or climatic factors. The question must now be asked: why do governments persist in poor policy? The answers must be found in the way pastoralists are represented (or not) in the processes by which policies are made and implemented, in other words in governance and in human rights.

A new vulnerability: climate change

The droughts and other climate disasters of recent years are increasingly seen as manifestations of global climate change, and increased awareness of future climate change now has become a major feature of development discussions about pastoralism. It has become so in two ways:

- It is projected that climate change in much of the tropics will be manifested in increased frequency and severity of drought and that pastoralists will more and more become victims of this, calling into question the fundamental sustainability of pastoralism as a livelihood.
- Some researchers assert that pastoralism itself, like other forms of livestock production, is an emitter of greenhouse gases (particularly methane) and in a way disproportionate to its economic value.

Projecting future climates for regions where pastoralists live is fraught with uncertainty. Regional projections in the literature (for example the Fourth Assessment Report of the IPCC) are usually for long timescales (e.g. 2080–2099) and for large regions that include both pastoral and sedentary farming areas. In one major case, that of the Sahel, regional projections are still divided between those for a wetter Sahel and those for a dryer Sahel. More localised projections are increasingly becoming available: the pastoral areas of northern Kenya are likely to experience decreased rainfall in the medium-term (Osbahe and Viner 2006), but longer or more intense rainy seasons in the longer term (Nassef *et al.* 2009) and arid and semi-arid grazing systems in East Africa are seen as highly vulnerable to a combination of climate change and socio-economic factors (Thornton *et al.* 2006). More generally, there is an assumption that pastoral areas face an increased risk of drought events, due to increased variability of rainfall but also higher temperatures, even if mean rainfall is predicted to rise.

These still evolving projections of future climate in pastoral areas have led to a polarised discussion of impacts on pastoralists. Two quotations bear this out:

- "They have long lived on the margins, a way of life that was manageable as long as the rains were regular. But with relentless drought the margins are coming close to being impossible" (Fergal Keane, BBC, 17.11.06)
- "In this more dynamic climatic environment, the flexibility and mobility afforded by pastoralism may increasingly provide a means of providing security where other more sedentary models fail" (Nick Brooks, discussion paper for IUCN-WISP e-conference, 2007)

There is a view, presented by NGOs and others, (Nori and Davies 2007, Nassef *et al.* 2009) that pastoralists are by their nature adapters, and if left to themselves will adapt, quite possibly more successfully than dryland crop-farmers. Rather than fear for

them under climate change, it is preferable to create for them the space, through more enabling policies, to adapt.

On the one hand there is a fear which has been publicised in the mass media, that pastoralist livelihoods, especially in East Africa, are fast becoming unsustainable, more dramatically and more rapidly than other forms of rural livelihood: pastoralists are in danger of becoming ‘the first climate refugees’.

Such projections and judgements may be used, in good faith or otherwise, by governments and by donors, to justify withdrawal of support to pastoralism, the forced settlement of pastoralists, and turning over of rangelands to other uses. Climate change is a justification for increased attention to pastoral development, but this awareness is double-edged. It can focus too much attention on the potential catastrophes facing pastoral areas, while much of what will stop pastoralists adapting to climate change are the same problems of policy and governance that have blocked pastoral development up till now.

These four overlapping sources of pessimism about pastoralism combine with other issues that have never gone away: the continuing failure of governments to provide models of education suitable to pastoralists; and the ongoing difficulties of even thinking about what the empowerment of women would look like in pastoral societies. The overall result seems to be that more and more people within donor organisations (not to mention governments) are posing the big questions about pastoralism: is it viable? Should we continue to support it? Might supporting for pastoralism soon become a perverse incentive to cling to an unsustainable and even demeaning livelihood?

Going forward

How then can pastoralist poverty, vulnerability and marginalisation be overcome? There are many initiatives underway, by pastoralists themselves, governments and outside organisations, new ways of thinking about pastoralism as well as new ways of acting for it. But I would like here to highlight six, some of them well established, others more speculative, and all overlapping and interacting with the others, as the different aspects of pastoral livelihoods do.

Rights, governance and voice

In large measure, pastoralists are poor and vulnerable because of poor policy and poor implementation. This is in spite of considerable work, inspired by the new understandings of pastoralism discussed above, to identify appropriate policies. These are failures of *governance* and they are closely linked to pastoralists’ poor representation in policy-making and government, and failures to recognise pastoralists’ rights. The development community has responded with projects and programmes variously phrased in terms of ‘governance’, ‘rights’, ‘voice’ and other terminologies. Work in these areas is still scattered and fragmentary, implemented more by NGOs than in donor-funded programmes.

This work should be strengthened and scaled-up to provide practical support to processes (at the level of communities, national political systems, or many levels in between) by which pastoralists can participate more effectively in governance and better realise their rights, and by identifying and disseminating good practice. There will be no ‘magic bullet’: the better representation of pastoralists in their own governance may involve NGOs, traditional authorities, decentralised local government, producers’ associations, parliaments or many other structures depending on the circumstances and the political system (Morton *et al.* 2007, Morton 2007).

A key part of this agenda will be formed around land tenure. Governments and pastoralists themselves should be helped to strengthen and give legal status to pastoralists' rights to manage their rangelands, collectively and in ways that facilitate pastoral migration and sustainable use of rangeland resources. In many cases, these management systems will be close to those that pastoralists have traditionally used. In other cases, strengthening such traditions may no longer be practical, and new hybrid institutions will have to be created. Pastoralists should be protected from encroachment on rangelands by outside interests, such as farming, mining or tourism, and from ill-considered programmes of subdivision of rangelands. Any alienation of pastoral land should be subject to proper legal process.

Governance links to conflict prevention; exclusion from normal political processes, and erosion of access to natural resources, are key contributors to some of the conflicts in which pastoralists are involved, though most such conflicts are very complex in their causes. Development donors should assist the strengthening of conflict management processes, and the dissemination of good practice on conflict management, while also funding work on the underlying causes of conflict.

Improving risk reduction and relief-development linkages¹²

The recurrence of drought has raised fundamental debates on whether pastoralism is a viable and sustainable livelihood. These debates are discussed elsewhere in this lecture, but however we interpret the long-term causes of vulnerability to drought, improved risk reduction and relief-development linkages must be part of the solution.

Since the late 1980s donors, national governments and NGOs have sought to develop and mainstream approaches to drought and other disasters in pastoral systems that go beyond food relief:

- Early warning systems that can inform governments and donors of risks faced by populations. Typically these involve regular collection of defined and easily collectable indicators, of both grazing availability and livelihoods, to assign at-risk populations to stages of 'alert', 'alarm' and 'emergency'.
- Linked to these, systems of decentralised drought contingency planning, where indicators of alarm and emergency can trigger appropriate and timely local responses, preferably by local government.
- Interventions for drought and the onset of drought that specifically support livestock-based livelihoods. These include emergency feed distribution and emergency animal health measures, and most notably forms of emergency purchase of livestock, sometimes called 'destocking'.
- A realisation that the task of reducing risk *ex ante*, or helping pastoralists become more resilient to drought involves many of the components of general good practice in pastoral development – developing livestock markets, defending communal land tenure and ensuring good governance and respect for pastoralist rights.

¹² Some key references for this section include Swift (2000), ODI (2006), Morton (2006), ALive (2007) and the websites of the Livestock Emergency Guidelines Standards www.livestock-emergency.net/Home_Page.html and the PARIMA programme http://aem.cornell.edu/special_programs/AFSNRM/Parima/.

There have been several significant examples of large-scale development projects working with these approaches, as well as new initiatives in research, dissemination of good practice, policy formulation and building capacity.

Pastoralists will continue to fall victim to disasters, for a complex of reasons that will involve pre-existing vulnerability, poor policy and climate change. To respond to this, there is a need for work on a number of fronts:

- Large-scale, institutionalised safety net programmes, tailored to pastoralist livelihoods, as an alternative to emergency relief.
- Improved co-ordination within donors' own operations between humanitarian and development programmes. This should include; improved co-ordination during transitions from humanitarian operations to rehabilitation and country programming; mechanisms for creating greater awareness among humanitarian staff of the specific requirements and difficulties of working with pastoralists; and mainstreaming of risk-reduction and 'drought-proofing' approaches in development programmes.
- Support to the improvement and better management of early warning information.
- Support to the piloting of disaster insurance for pastoralists.
- Development and promotion of emergency interventions specific to pastoralism, with accompanying training programmes.¹³

Education

Education is an essential means in the long term for allowing diversification of livelihoods, a means for empowering pastoralists, both children and today's adults, to have a say in the policies and institutions which affect them, and more fundamentally, of course, a human right. Education is also a need commonly and articulately expressed by pastoralists themselves. But there is extensive evidence that education participation rates among pastoralists are lower than national averages that in some countries pastoralists account for significant proportions of out-of-school children, and that educational parity between girls and boys in some pastoralist communities is low by national standards.

The most obvious problems are that pastoral communities are dispersed and mobile, creating difficulties in providing education by conventional means. Fears have also been expressed that conventional education may detract from children learning from their families the complex skills and unwritten knowledge they need to look after livestock, and that education based on the assumptions and idioms of mainstream settled cultures can culturally alienate children with negative messages about pastoralism.

Until recently, research and discussion on increasing pastoralists' access to education continued apace, based around the benefits of mobile schools (or teachers) and boarding schools, but gave an impression of taking place in isolation from discussions of general pastoral development, livelihoods and natural resource issues. There was little sense of building a body of innovative but feasible practice. A new initiative in Kenya on 'Education for Nomads', listening to pastoralists' own views and bring distance learning into the mix, is now redressing this.¹⁴

¹³ As in the Livestock Emergency Guidelines Standards (LEGS), see previous footnote.

¹⁴ See www.iied.org/climate-change/key-issues/drylands/education-for-nomads.



Given both universal rights to education and the specific role of education in facilitating long-term livelihood diversification by pastoralists, development donors must continue to contribute to the education of out-of-school pastoralist children where this is an issue, and to adult literacy for pastoralists. This can be done through support to such initiatives within broader aid to the education sector, and piloting and dissemination of new approaches. Work in education should include both primary and secondary education. There are strong possibilities for synergy between adult literacy work and a governance and rights agenda.

Entry into world markets

Interventions to increase pastoralist access to markets for livestock and livestock products have a long pedigree, but in recent years the emphasis has shifted from provision of public good infrastructure such as trek routes and abattoirs towards a concern with policy issues, particularly those of veterinary standards and certification and their role as barriers to trade. Much of the impetus for this has come from the intermittent bans of livestock from East Africa by the Gulf States on questionable veterinary grounds.

Accompanying this have been shifts in research and analysis towards more nuanced and evidence-based analyses of old questions such as when and why pastoralists respond or not to market opportunities (McPeak and Little eds. 2006), and the role of livestock traders.

Taking such work a stage further, there is now the beginnings of a public discussion, supported by the UK Department for International Development (DFID 2007), on a fundamental shift in the international architecture of certification of livestock exports, away from concern with disease status towards certification of commodities (Thomson *et al.* 2004). To give a simple example, the risks of transmission of foot-and-mouth

disease through chilled, deboned meat are negligible, so those wishing to export that commodity should not be penalised because their government has not eradicated foot-and-mouth, in their country or region. Such a shift, if well-managed, would be very beneficial to African countries, including those with large pastoral livestock herds, not just in accessing regional markets such as those in the Gulf, but also in accessing European markets currently closed to them because of foot-and-mouth concerns.

Progress on overcoming the basic market entry barriers may open new opportunities of achieving higher returns from specialist livestock products in high-value markets, such as organic beef and lamb, and known brands of high-quality leather. Speculatively, meat from pastoral areas can be labelled and actively marketed as a product that does not compete with human food needs (because cropping is infeasible in those areas); is likely to be free of pesticide and antibiotic residues; and is associated with poverty reduction.

Livelihood diversification

As discussed above, both pessimists and optimists see the diversification of livelihoods as central to pastoral development, but this realisation does not yet seem to have been matched by either significant advances in research on how pastoralists have diversified to date and continue to do so, or an accumulation of good practice in efforts to stimulate diversification. For many pastoralists, diversification still effectively means low-income, low-status jobs such as employment as night-watchmen, or unsustainable exploitation of their own environment through selling fuelwood wood or charcoal.

One significant hypothesis mentioned in research is that diversification away from pastoralism is most likely to involve the poorest pastoralists, 'pushed' into low-income, unskilled occupations by destitution, and the wealthiest pastoralists, who are 'pulled' by



alternative ways of investing wealth earned through livestock.¹⁵ 'Middle pastoralists' are more likely to concentrate on herding and avoid either strategy. The truth of such a hypothesis is likely to be locally specific – for example it appears not to be true for the Afar of Ethiopia, where the likelihood of a household having a non-pastoral income source declines linearly with herd size.¹⁶ In any case, the current poverty of pastoralists in the Horn suggests that the absolute numbers of poor pastoralists 'pushed' into diversification are considerably greater than those of wealthier pastoralists pulled into it. There remains an urgent need for research on several aspects of diversification and related topics such as pastoral-small town linkages and remittances, with the overall aim of finding ways to identify diversification opportunities that allow sustainable and dignified livelihoods. Although education will be the most important long-term route to diversification, there is a need to identify other more immediate strategies for promoting forms of livelihood diversification among pastoralists that are poverty-reducing and environmentally sustainable. There is a need for research on the range of ways in which pastoralists already diversify, and the reasons they do so. As successful diversification will often involve migration, there is a need for research on how remittances and other resource-flows to home communities are maintained, and can be facilitated by better institutions and policies. Research should be accompanied by piloting of promising interventions, and dissemination of best practice.

Climate change

I wrote above of the double-edged nature of emphasising the threat to pastoralists from climate change. Both the seriousness of the climate threat to pastoralists, and their capacity to adapt if allowed to do so, need to be recognised.

What we need now is to have local climate projections for specific pastoral areas more easily available (these must take proper account of their levels of uncertainty), as well as:

- To think about a wider range of climate impacts on pastoralists
- To work on ways to use this knowledge so that pastoralists can themselves adapt to climate change.¹⁷

Climate impacts (Anderson *et al.* 2009) will be of various sorts and at various scales, through effects on graze and browse availability, patterns of animal diseases, and possibly heat stress on the animals themselves (though this is less likely with indigenous breeds). The analysis must include both the impacts of changing mean temperature and rainfall, and the impacts of extreme events - not only droughts, but also the risk of floods and cold-waves must be factored in. As well as these direct impacts, there may also be indirect impacts of climate change, for example in higher prices of purchased cereals, or reduced availability of crop residues from neighbouring farmers. There may also be impacts on pastoralists of others' attempts to adapt to or mitigate climate change: fears have been expressed of encroachment on rangelands for cultivation of biofuels, especially jatropha, as a mitigation measure.

¹⁵ See Little *et al.* (2001), Homewood *et al.* (2006), Radeny *et al.* (2006)

¹⁶ See Negussie *et al.* 2005.

¹⁷ There is an (almost) separate debate on the extent to which pastoralists *contribute* to global climate change and what we can do about it, which I will not enter into here, but see Neely *et al.* 2009.

All these impacts will be felt in the context of other trends and shifts, demographic, economic and political, many of them disadvantageous to pastoralists: rising populations, encroachment on rangelands, political marginalisation, continued conflict. These trends drastically limit pastoralists' ability to adapt to climate change.

What will be important will be to work in specific pastoral areas, using local climate projections to map the various risks and concomitant ways to reduce vulnerability. Pastoralists, and the various agencies concerned with pastoral development, need to have climate risks presented clearly to them, and be involved in discussing the implications and the responses. Then we will be able to see more clearly whether the wealth of existing adaptations to a harsh climate will be adequate, or whether pastoralists will need to be assisted from outside to adapt further.

Conclusions

I hope in this lecture I have managed to communicate some of my own fascination for the pastoralist way of life, and my satisfaction that my own discipline of social anthropology has been so important in understanding it. I hope also I have communicated my deeply-held beliefs that pastoralists need to be understood, to be allowed to follow their livelihoods, and to be helped from outside when necessary.

Nothing here means that I believe that pastoralism is, or should be, static and unchanging. On the contrary, pastoralists have constantly shown their ability and willingness to adapt to new opportunities. Pastoralists, in East Africa, whose lives have previously revolved around cattle, have started to adopt and breed camels as a more drought-resistant alternative. Pastoralists have adapted to new markets, as when the Sahel countries responded to the devaluation of their currency by increasing animal exports to the West African coast. Pastoralists have adapted to new political systems, as shown by the resilience of Mongolian pastoralists as they lived through feudalism and communism and developed a new system of household-based herding. They have adapted to new technologies, using cars and lorries to move themselves, water, fodder and even livestock to new pastures, and now we see them adopting mobile phones in large numbers. There is no crystal ball available to see how pastoralism will develop around the world, though we know that even in the industrialised countries, a small number of livestock-keepers remain mobile with their herds as they move with the seasons, and that in many places they graze their animals on common pastures.

There are many parts of this world too dry, too cold or too mountainous for conventional static livestock-rearing, let alone for producing crops. Even if the numbers of people involved become much smaller, some forms of mobile pastoralism will remain relevant to the task of using these areas for the common good. The threat of climate change complicates the evolution of pastoralism, but it is not a reason to call time on it.

What is important is that pastoralists themselves are given a say in how their way of life changes, and a real and unforced choice in whether they remain in that way of life. To help them in this, we need clarity in our debates, a sympathetic understanding of pastoralism as it is lived and experienced, and a commitment to empower pastoralists to take charge of their own destinies.

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