outpacing their ability to cope, significant support will allow novation and learning needed Overall, making climate adapnity-based approaches, backed for other development issues: ion of active, capable citizens

LIVING ON THE EDGE: AFRICA'S PASTORALISTS

Foreign visitors to the Kenyan capital of Nairobi are used to seeing, amid the traffic jams and smog, the distinctively tall, red-cloaked forms of Maasai herdsmen on a visit to the city. The Maasai are the most internationally recognisable of the world's 100–200m pastoralists – mobile livestock herders living in arid and semi-arid areas that constitute some of the harshest and remotest places on earth.[109]

In such hostile conditions, it is hardly surprising that pastoralists are subject to higher levels of risk and vulnerability than people living in areas where farming is a viable option. Rain is scarce, infrastructure is almost unknown (or at best dilapidated), and guns abound due to poor security. Nevertheless, there is a considerable body of evidence that pastoral livelihoods are in fact well-designed risk management and adaptation strategies.[110] Several studies have even found that economically, pastoralism compares favourably with commercial ranching.[111]

Pastoralists are not only an important and sizeable group in themselves, but their livelihood epitomises the links between poverty, risk, and vulnerability. Pastoralists are experts at risk management, showing extraordinary resilience, but all too often their efforts are undermined by the prejudice and incomprehension of governments and society at large. Pastoralists are also at the sharp end of climate change, and could provide valuable lessons in how to cope with a dryer, hotter planet.

Pastoralism in the arid and semi-arid regions of Africa evolved in response to long-term climate change. When the Sahara entered a period of prolonged desiccation some 7,000 years ago, mobile livestock herding – pastoralism – enabled people to adapt to an increasingly arid and unpredictable environment.[112] 'Shocks' such as drought are not rare events but part of the natural order, and the reason why pastoral communities live the way that they do.

Pastoralists have highly effective coping strategies to make them resilient to such risks. They integrate livestock husbandry with other activities such as farming and the extraction of minerals, dry-land timber, and forest products such as honey and gum. They co-exist with the wild animals so vital to tourism, and provide important 'environmental services' such as protecting dry-land forests and water catchments and maintaining wildlife dispersal zones outside of national parks.[113] In the Shinyanga region of Tanzania, Sukuma agro-pastoralists who own more than 2m cattle in the region have, with support, reforested an estimated 250,000 hectares of once degraded land.[114]

Mobility is at the core of pastoral life, and is crucial to managing risk in arsh and unpredictable environments. By moving their cattle, goats, and ieep and negotiating the sharing and maintenance of scarce pasture and ater, communities survive off large areas of rangeland that lack permanent ater sources. However, while pastoralists have shown their durability, they emain socially and politically marginalised and have experienced increasing isruption, vulnerability, and suffering in recent years. Despite the increasing equency of drought, the gravity of the current situation for pastoralist ommunities stems more from years of neglect and misunderstanding by entral governments than from the unpredictability of rainfall.

Government action in pastoral areas has often been hostile, overtly or therwise, guided by a paradigm of rangeland management imported from he very different environmental conditions of North America. Officials and experts' believed that pastoralism was irrational and outdated, that land hould be individually, not communally owned, that pastoralists should be ettled, and that 'development' would follow. They saw pastoralism as envi-onmentally damaging, backward, and unproductive.

Like Australia's Aborigines, or Canada's Inuit, pastoralists were subject to leliberate attempts to undermine their lifestyle and culture. According to a ecent Human Rights Watch report, the Government of Uganda continues o flout the rights of pastoral communities through 'unlawful killings, orture and ill-treatment, arbitrary detention, and theft and destruction of roperty'.[115]

PASTORALISTS AS CITIZENS

Making up a small proportion of the national population in any given country, and living in remote areas, pastoralists often lack the power and space to organise themselves effectively. Pastoral voices are not heard; local associations are often weak and frequently are co-opted by powerful elites. However, there are encouraging signs that the tides of political and public opinion are turning. Over the past 15 years the pace of policy reform in West Africa has been considerable. The governments of Burkina Faso, Guinea, Mali, Mauritania and Niger have all passed specific pastoral laws to protect pastoral land and to facilitate livestock mobility both within countries and across international borders. The Pastoral Charter of Mali devotes a whole chapter to the right of pastoral communities to move with their animals both within and between countries. In eastern Africa too there is some progress. The Poverty Reduction Strategies of Ethiopia, Kenya, Uganda and Tanzania all recognise pastoralism as a livelihood system deserving of support.[116]

An example from Senegal in 2005 illustrates some of the important fault-lines in debates over pastoralism and shows what can be achieved through mobilisation. The country's President Wade announced on radio that he

was going to sell off 3,000 hectares of the 'Doli ranch' for peanut production. This area was a key dry-season grazing area and drought refuge which, although called a ranch, was actually under the control of resident livestock herders. Following failed meetings between the prime minister and livestock producers, the president issued a decree in November 2003 transferring ownership of 44,000 hectares of the area.

Pastoralist groups responded by organising what turned out to be a very effective media campaign. They warned people living in the capital Dakar that, if the government went ahead, they would boycott all livestock markets. They also criticised the underlying rationale behind the land transfer (namely that pastoral production was outmoded and inefficient) and official attitudes towards the livestock production sector in general. The government subsequently withdrew its plans, providing pastoralists with a victory in what has become known as *'l'affaire du ranche de Doli'*.[117]

While specific campaigns will not necessarily change attitudes toward pastoralism, they illustrate the power of collective action. In East Africa, the UN Office for the Co-ordination of Humanitarian Affairs has been working to develop pastoralists' voice in Ethiopia and elsewhere. Gatherings have been organised for pastoralist representatives from across the globe to provide a space for them to share their experiences and ideas, and to engage with government and donor representatives on their own terms.

At community level, local associations help to reduce vulnerability by providing vitally important veterinary drugs and managing and improving scarce water resources. As they have gained recognition, the associations have engaged with government, advocating for better services and budgets and a greater role in conflict management. In West Africa, membership-based pastoral associations, including AREN and the sub-regional network Bilitaal, have many thousands of subscribing members, combining representative legitimacy with political clout and a degree of economic autonomy.

FORWARD-LOOKING TRADITIONALISTS

Pastoralism, with its strong emphasis on family and clan loyalties, and on common, rather than individual, ownership of land and forests, throws down a profound challenge to many of the assumptions that underlie 'modern' governance. Whether such visions can co-exist is a test of the ability of governments and societies to recognise and encourage pluralism, rather than uniformity.

Despite widespread stereotypes that pastoralists are static and backward, pastoralists themselves recognise the need to change and adapt. As they are experienced opportunists, used to exploiting every millimetre of rainfall, their adaptability should come as no surprise. In 2007, pastoralist leaders from across Africa wrote: 'The outside world is changing rapidly, altering

production methods and exchange systems, affecting the very fabric of all societies. Bearing this in mind and the fact that pastoralists are fully capable of adjustment, we are not concerned with protecting pastoralists from these changes. This would be impossible in any case. Our concern lies with the strengthening of the pastoralists' ability to adapt as well as with the broadening of their choices and opportunities.'[118]

A positive future would see those pastoralists who are active in mobile livestock production being able to combine the best of past traditions with modern technologies, such as solar-powered radios for education or satellite phones to check on market prices or outbreaks of disease.[119] Many households might also have a settled base where children would live for part of their schooling and where elderly family members would stay.

Pastoralists could be among the best placed people to adapt to climate change, since they have been adapting to climate variability for millennia.[120] In the end, though, the ability to call on the support and resources of government is likely to be fundamental to their ability to cope. Many former pastoralists may end up in towns and cities, enabling families to reduce their vulnerability by diversifying their livelihoods: the point is that such migration would be a positive choice, rather than a desperate flight from drought, hunger, and violence.

This vision cannot be achieved without real changes in the relationship between pastoralists and their governments. The reasons why pastoralism is in crisis lie in the action and responses of duty-bearers, not flaws in the livelihood itself which, like any production system, needs to be understood and nurtured. To achieve genuine human security, pastoralists need the right and capacity to decide their own destinies, as well as governments that support them when times are hard.

VIOLENCE AND CONFLICT

> Humanity will not enjoy security without development, it will not enjoy development without security, and it will not enjoy either without respect for human rights.
>
> (Former UN Secretary-General Kofi Annan)[121]

> The gunmen have taken people's land, their houses, their sons, and forced their daughters to marry them. This is the nation's blood.
>
> (Woman, Mazar-e-Sharif, Afghanistan)[122]

Half a dozen black vultures darken the sky in Ursula's drawing of her ol house in the Colombian countryside. 'That's maize, an apple tree – we ha all sorts of fruit', she explains. 'That's a garden. That's a *golero*, a bird that eat the dead. There were lots of *goleros* where we lived.' A toothy nine-year-olc she wears red stud earrings, an array of cheap plastic bangles, and traces c varnish on her nails. Her dark Indian features grow solemn as she explain why she had to leave her farm.

'We saw everything when they shot my papa. Everything. They made u go outside when they got there at 6am. When my mother tried to go back i they said, "Get out or we'll shoot you". My brother tried to escape and the shot him, then my Dad went crazy and attacked them with a machete an they shot him too.

'My mother only cried a month or two after they buried him. She was pre nant with my little sister. She said she was going to come out all sick, but sh was fat and big. She's five now and she's nearly as big as me! Lots of mothe in my *barrio* lose their babies.'

Ursula thinks it was the guerrillas who killed her father, but she is not sur In Colombia, death could come at the hands of the army, the police, dru gangs, paramilitary death squads, common criminals, guerrilla fighters, c street gangs. Colombia's murder rate is one of the highest in the world, near seven times that of the USA.[123]

The threat of violence is commonplace for people living in poverty. In the homes, women often face the threat of violence at the hands of husbanc and fathers, which is often condoned by society; violence against childre is even more widely accepted. The notion that children are individuals wit rights, enshrined in international law since 1989 under the UN Conventio