Understanding policy processes

A review of IDS research on the environment

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IDS Knowledge, Technology and Society

1

Introduction

For a term so commonly taken for granted, 'policy' is a remarkably slippery one – it has been suggested that 'policy is rather like an elephant: you know it when you see it, but you cannot easily define it'.[2] But if putting one's finger on what constitutes policy is difficult, then assessing why particular policies take the shape they do – and working out what can be done to change them – is often an even more daunting challenge. Some have gone as far as to say that 'the whole life of policy is a chaos of purposes and accidents. It is not at all a matter of the rational implementation of so-called decisions through selected strategies.'[3]

Being a policy-maker doesn't necessarily make the task of understanding policy any easier. Indeed, the following quotes from mid-senior African policy-makers in the livestock sector are indicative of the confused and complex nature of policy:[4]

- 'I thought all I had to do was explain the science and all would change – I was wrong.'
- 'Policy says something, and implementation on the ground is something else. How do you reconcile these?'
- 'There are so many interests around policy. It's like moving a big wheel. It's a long struggle.'
- 'Enabling things to get done requires a good understanding of constraints and of the way governments work.'
- 'Where there is no policy you can actually do quite a lot… government is stopping things getting done.'
- 'I have mostly been an end-user of policy. Sometimes I have even been consulted.'

These observations relate remarkably closely to a growing body of work on policy processes, which encompasses among other things: the relationship between science, expertise and policy, political interests, public participation and network theory. Over the past ten years, researchers in the IDS Environment Group (now the Knowledge, Technology and Society team) have been engaging with these issues. The stepping-off point for this work has been an interest in how environment and development policies came to be the way they are, and how and why they change – or why they do not. In particular it has sought to address the following questions:

the key questions

- Why is it that particular views about the nature and causes of environmental 'problems' stick with such tenacity in policy debates?
- How do particular perspectives and the interests they represent find their way into policy?
- Why is there so often a gulf in analysis and aspiration between the perspectives of local land-users and those underlying and driving policy?
- How might policy processes be changed to encourage a greater inclusion of otherwise excluded voices?

This research at IDS has largely focused on agriculture, environment and natural resource themes, particularly in sub-Saharan Africa. But it has also focused on how 'global' debates play out in 'local' policy contexts, and how, in return, local activities are incorporated into global networks and encompass a cast of characters, from scientists to bureaucrats, activists, journalists and farmers.
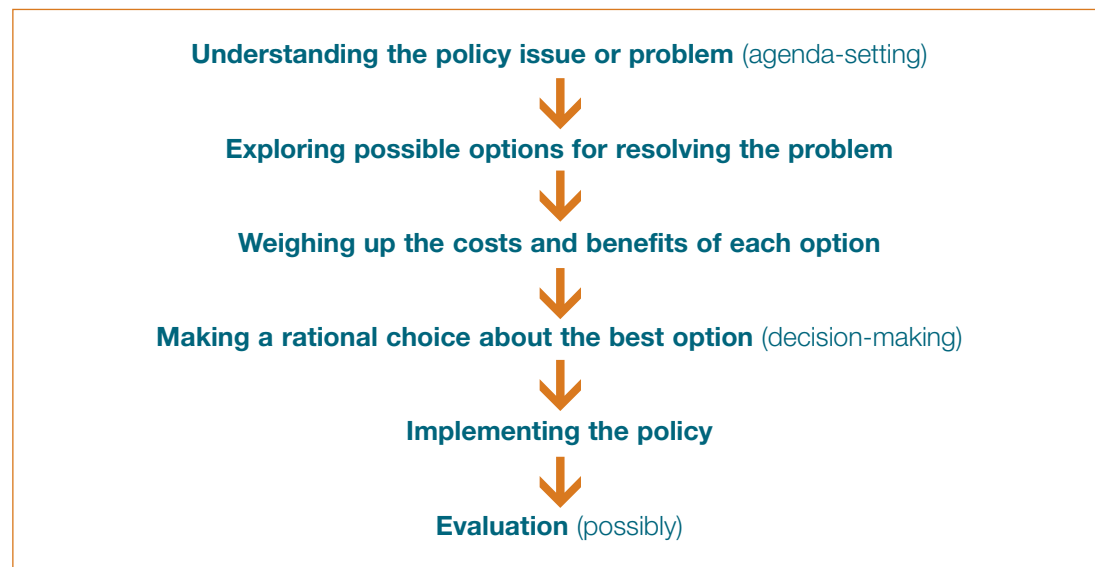
This is an area that, until recently, has not been a major focus in development studies, but it draws on a huge body of theoretical literature in political science, sociology of knowledge and science studies. While environmental policy has much in common with policies in other area – and aspects of this analysis could be applied to other fields – the environment has proved a particularly good subject for investigations into policy processes. The reasons for this, as explored below, include: the major role of science and technical issues in environmental policy debates; the fact that environmental problems are typically complex, inherently unpredictable and characterised by varying degrees of uncertainty; the fact that environmental problems operate across a range of scales, drawing in wide levels of interest; and because perceptions of both problems and solutions are value-laden and differ greatly among actors.

This work relates to – but differs in emphasis from – a burgeoning body of work on bridging research and policy in international development that aims to give researchers the tools to influence policy.[5] The starting point for IDS's work on policy processes has not been research per se, but discourses and knowledge and the politics in which they are embedded. This is a sceptical step away from the assumption that research is a neutral and objective exercise in gathering 'correct' evidence that will make a positive difference – in other words, what ought to be done and how to do it. Instead, the process of gathering evidence for policy is seen as less the result of a pure and rational quest for what is technically correct – where the task is to develop more refined tools to provide 'better' information, which leads to better policy – and more about the establishment of 'facts' within particular networks. It is the reach and influence of such networks and their stability in mainstream institutions, nationally and internationally, that is key.

2 Understanding policy the conventional view

The traditional and highly stylised model of policy-making views it as a linear process in which rational decisions are taken by those with authority and responsibility for a particular policy area. This approach views policy-making as involving a number of stages that lead to a decision:

Understanding the policy issue or problem (agenda-setting)

⬇

Exploring possible options for resolving the problem

⬇

Weighing up the costs and benefits of each option

⬇

Making a rational choice about the best option (decision-making)

⬇

Implementing the policy

⬇

Evaluation (possibly)

Within this model, policy implementation is viewed as a separate activity that begins once policy decisions have been made. And policy implementation should lead to a resolution of the original problem.

This model assumes that policy-makers approach the issues rationally, going through each logical stage of the process, and carefully considering all relevant information. If policies do not achieve what they are intended to achieve, blame is often not laid on the policy itself but on political or managerial failure in implementing it – through a lack of political will, poor management or shortage of resources, for example.

It is also assumed that there is a clear separation between fact (a rational policy approach based on evidence, science and objective knowledge) and value (seen as a separate issue, dealt with in the political process). Policy-making is purely a bureaucratic or administrative exercise. If politics enter the fray, it is around decision-making (in the realm of value); implementation is an entirely technical procedure (in the realm of facts). The role of experts is seen as critical to the process of making rational decisions, and scientific expertise is presumed to be independent and objective. The familiar refrain is that of 'evidence-based policy', or policy rooted in 'sound science'.

While many would disregard this as a caricature – which it undoubtedly is – the underlying assumptions are remarkably pervasive, and this linear model remains a prevalent mindset – particularly in development practice. However, research on policy processes shows it to be an inadequate reflection of reality.

3 What are policy processes?

Shifting the focus of analysis to a process-based view of policy means casting aside the linear, rational policy model in favour of the complex and messy processes by which policy is understood, formulated and implemented, and the range of actors involved. The policy process has the following characteristics:

- Policy-making must be understood as a political process as much as an analytical or problem-solving one. The policy-making process is by no means the purely technical, rational activity that it is often held up to be.

- Policy-making is incremental, complex and messy, a process of 'disjointed incrementalism or muddling through'. It is iterative, and often based on experimentation, learning from mistakes, and taking corrective measures. Hence, there is no single optimal policy decision or outcome.

- There are always overlapping and competing agendas; there may not be complete agreement among stakeholders over what the really important policy problem is.

- Decisions are not discrete and technical: facts and values are intertwined. Value judgements play a major role.

- Implementation involves discretion and negotiation by front-line workers (giving staff more scope for innovation than they are often credited with).

- Technical experts and policymakers 'mutually construct' policy. This is to say that scientists contribute to the framing of policy issues by defining what evidence can be produced and its policy significance. And those working in policy also frame scientific enquiry by defining areas of relevance and pertinent areas for investigation – ie jointly negotiating what questions need to be answered and what knowledge can be provided to answer them. This is sometimes referred to as co-production of science and policy.[6]

- The co-production of science and policy often acts to play down scientific uncertainties and ignorance, as scientists attempt to satisfy the demand for answers from policy-makers – recasting plural and partial debates as singular, closed and certain.

- Policy processes include some perspectives at the expense of others – and it is the perspectives of the poor and marginalised that are often excluded.

The study of policy processes therefore involves understanding the mechanics of decision-making and implementation. Just as important, it requires an understanding of more complex underlying practices of policy framing – the way boundaries are drawn around problems, how policy problems are defined, and what is included and excluded.

In essence, research into policy processes asks how problems and policy solutions come to be defined, by whom, and with what effects?

6 The French poststructuralist philosopher Foucault tells of how redundant leprosy hospitals were used to incarcerate and study people who in such circumstances became 'mad'. In much the same way Guinean forest reserves, established for their supposed influence on regional climate, became the focus of taxonomic lists and economic inventories. In turn, these and new 'biodiversity' lists have become icons deployed to justify the continued existence of forest reserves in an era of biodiversity conservation (Fairhead and Leach 2003; see below). In this way, science and policy are 'co-produced'.

4

Concepts and approaches

Extensive reviews of literature on the policy process reveal three broad approaches to understanding policy-making. One emphasises political economy and the interactions of state and civil society, and different interest groups. Another examines the histories and practices linked to shifting discourses, and how these shape and guide policy problems and courses of action. The third gives primacy to the roles and agency (or capacity to make a difference) of individual actors.[7] The innovation of Keeley and Scoones' work was an attempt to integrate these different but overlapping perspectives, rooted in different schools and disciplines – to explore how actors make and shape policy narratives and interests while being constrained by them at the same time. This is the heart of the policy process and policy change.[8]

Their research, and subsequent IDS Environment Group work on policy processes, developed and elaborated a simple framework linking these three interconnected themes:

• knowledge and discourse (what is the 'policy narrative'? How is it framed through science, research etc.?);

• actors and networks (who is involved and how they are connected?); and

• politics and interests (what are the underlying power dynamics?).
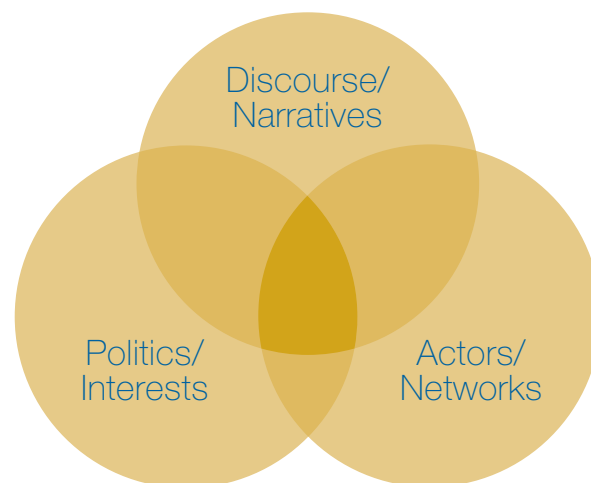
To a greater or lesser extent, understanding policy processes therefore comes as a result of looking at all three together – at the intersection of the three overlapping perspectives. Thus, to understand why policies take particular shapes, it is necessary to understand not only the scientific framing of issues – the narratives that tell the policy stories – but also the way policy positions become embedded in networks (of actors, funding, professional and other relationships, and particular institutions and organisations), and the enabling or constraining power dynamics. However, this framework is perhaps best envisaged as a menu – a selection of prompts to ask useful questions of policy – rather than an all-encompassing conceptual map.

7 Keeley (2003); see Keeley and Scoones (1999; 2003)
8 Keeley (2003)

Understanding these three influences on policy enables us to start to answer the question: why are some of the ideas that circulate in research/policy networks picked up and acted on, while others are ignored and disappear? This is a more complex question than the standard question: how can knowledge be transported from the research to the policy sphere?

Similarly, a shift in focus from policy analysis to policy process analysis implies a different response to 'bad' policy. The technical approach would be to explain why it is misguided and suggest how it might be improved. However, if there is something intrinsic to the policy process that means policies invariably take a particular shape, then technical policy analysis may have limited utility, and what may be needed is a more wide-ranging examination of policy-making itself.

Policy narratives

Stories about policy change all have a beginning, a middle and an end. They describe events, or define the world in certain ways, and so shape policy decisions. These 'policy narratives' provide both a diagnosis and a set of measures and interventions. They define a problem, explain how it comes about, and show what needs to be done to avert disaster or bring about a happy ending: in other words, what is wrong and how it must be put right. They often gain validity despite (or even because of) the fact that they frequently simplify complex issues and processes. This simplification is seductive in that it sidesteps fuzziness and suggests a programme of action. This is what makes simple narratives appealing to politicians or managers – sweeping people along. Some narratives tend to gain more authority, persisting at the expense of others, and hence have more bearing on policy decisions – but these will often be contested by alternative policy narratives that frame problems and solutions in different ways.

With respect to environmental policy in developing countries, a particularly common, influential and persistent narrative underpins many policies aimed at addressing environmental crises (the 'tragedy of the commons', desertification, soil erosion, biodiversity loss etc.). The storyline goes: because people are poor they don't know how to look after the environment and natural resources around them, or can't afford the luxury of doing so. The poor will exert a disastrous impact on precarious environments, exacerbated by relentless population growth. This line of thinking has provided the rationale for an array of colonial and post-colonial state policies that 'protect' environments from people and avert the dire predictions associated with the narrative. Yet, in the process, it dispossesses communities of their resources (eg by denying farming in wetlands or evicting people from protected areas).

Policy narratives can stick with great tenacity, despite contrary perspectives and practices. Why?

• Most obviously, they suit certain political interests.

• Such messages are easily communicated, make for good sound-bite political marketing, and fit well with large-scale bureaucratic organisations' demands for clarity and measurable manageability. They also fit well with the practices of mass-media and education, which perpetuate particular narratives and embed them in wider society and popular culture.

• The storylines and metaphors are so taken for granted that they limit thinking about particular areas – this becomes the way things are thought about over time. Narratives reduce the 'room for manoeuvre' or 'policy space' of policy-makers – that is, their ability to think about alternatives or different approaches (below).

• The narratives become embedded in particular institutional structures, bureaucracies or actor network groups.

• Narratives become normalised – part of people's everyday practices, and so perpetuated and reinforced through them – from bureaucratic routines to common understandings of landscape features. For example, the very existence of a 'protected landscape' or a soil conservation terrace implies surrounding degradation.

Actors and networks

Networks, coalitions and alliances of actors (individuals or institutions) with a shared vision – similar belief systems, codes of conduct and established patterns of behaviour – are important in spreading and maintaining narratives through chains of persuasion and influence such as journals, conferences, education or informal introductions. Through these networks 'norms of good and bad practice are reinforced, research agendas are set, and orthodoxies or conventional wisdoms are reiterated and, very often, dissenting opinions or unconventional views are suppressed'.

In the BSE case on the facing page, MAFF, together with politically well-connected farmers and the food industry, formed a strong, core actor network. They built a strategic alliance with certain 'on-side' scientists, while 'dissident experts who publicly articulated their interpretations … were discounted, disparaged or ridiculed' (van Zwanenberg and Millstone, 2003).

In any given policy domain, actor networks are not exclusively confined to state institutions; they link up parts of the bureaucracy and government with the private sector, donors and actors in civil society – such as journalists, researchers and non-governmental organisations (NGOs). Thus the existence of actor networks can make for pluralist policy-making involving a range of different stakeholders or actors.

Processes of negotiating and bargaining between competing interest groups are central to policy-making. Policies rise and fall in prominence as a result of the changing effectiveness of different networks of actors in the debate. Networks can gradually change narratives as well as reinforcing them – as they bring people together who exchange ideas and strategise.

Actor networks occur across different scales and national borders. Networks and connections link global and local sites – particularly in settings where national science capacity is weak or under-confident.

Narratives in action: BSE (Bovine Spongiform Encephalitis) in the UK

The importance of narratives was well illustrated during the UK's BSE crisis in the 1990s. A number of narratives interacted, and together they suppressed debate, making the crisis worse. The responsible ministry in the UK government, MAFF (Ministry of Agriculture, Fisheries and Food), had the dual tasks of promoting the commercial interests of the farming and food industries, and at the same time ensuring food safety and consumer protection. But a core economic and political agenda dominated: that of keeping the market stable and maintaining UK beef sales domestically and internationally, thereby shoring up the economic viability of the food industry. This was underpinned by a reassuring technocratic narrative that the knowledge and science surrounding BSE/CJD was undoubted and not clouded by uncertainty, that science was the sole determining factor in policy-making, and that the priority concern of the authorities (MAFF) was public health rather than commercial interest. This last was a misrepresentation. MAFF argued that the risk to public health was zero or negligible, and policy was robust, science-based and consumer-oriented.

However, being locked into this narrative made MAFF unable to revise its views. It could not cope with new evidence that undermined the reassuring narrative. So it became deaf, and was unable to learn until things became 'catastrophically bad'. Challenging advice was removed from reports, and scientific investigations that had the possibility of provoking controversy were scrapped. 'Low-cost steps… were avoided, partly to avoid damaging the competitiveness of the meat trade, but also to sustain the illusion of zero risk.'

When the UK government finally acknowledged the dangers of BSE to human health in 1996, MAFF appeared to have been intentionally misleading the public. This had a disastrous effect on public trust in government and science.

Source: Van Zwanenburg, P. and Millstone, E. (2003) 'BSE: A paradigm of policy failure', The Political Quarterly, 74(1): 27-37

Politics and interests

Perhaps it seems obvious that policy is inherently political and contested. But the conventional view of policy, in which fact and value are separated, denies this. Politics shape policy processes in several important ways:

a The political context is moulded by the interests of particular regime authorities to remain in power. Competition also exists between groups in society, based on their differing interests with regard to allocation of resources, for example, or social concerns.

b The policy process is influenced by a range of interest groups that exert power and authority over policy-making. These influences affect each stage of the process, from agenda setting, to the identification of alternatives, weighing up the options, choosing the most favourable and implementing it. The vested interests of various actors in policy – government agents, officials of donor organisations, and independent 'experts' – might be served by the perpetuation of certain narratives.

c Policy is set out as objective, neutral, value-free, and is often termed in legal or scientific language, which emphasises its rationality. In this way, the political nature of the policy is hidden by the use of technical language, which emphasises rationality and objectivity. But the technical is always in some way political.

d Bureaucrats are not simply neutral executors of policy; they have their own personal and political agendas to negotiate. Bureaucratic politics, such as battles within ministries for control over policy arenas, are relevant.

Where do we draw the boundary between political and technical or administrative issues? Environmental policy is often framed purely as a matter of good technical practice. But as the examples below show, repeatedly framing the issue in this way obscures more political and power-laden controversial issues, such as those of resource access, control and equity.

To return to the BSE example above, the government of the time portrayed policy as being purely technically driven. with consumer protection and food safety as priority. They made repeated claims that their policy was rooted in sound science. Yet, as we have seen, the policy was aimed at maintaining British beef sales domestically and abroad. Consumer protection and public health were subordinated to an economic and political agenda. Ministers were reluctant to intervene, for fear that regulation would undermine confidence in exports.

Thus policy-makers made important policy decisions prior to soliciting expert advice, then sought to obtain a spuriously scientific endorsement for those decisions. Recommendations which were represented as based on objective science were in fact tempered by political pressure. In other words, there was a strong vested interest in playing down uncertainty and portraying risk as zero or negligible (even deliberate concealment and denial: private veterinarians were intentionally kept ignorant). The supposedly sound science-driven policy masked the political agenda (van Zwanenberg and Millstone 2003).

Policy spaces

The concept of 'policy space' relates to the extent to which a policy-maker is restricted in decision-making by forces such as the opinions of a dominant actor network or narrative. If there are strong pressures to adopt a particular strategy, a decision-maker may not have much room to consider a wider set of options. On the other hand, there may be times when an individual has a substantial amount of leverage over the process, and is able to assert his or her own preferences and significantly mould the way policy choices are considered.

The politics/interests frame allows a view behind policy consensus, making apparent networks and trajectories. If the agendas behind that consensus are so disparate that they cannot be held together, they will not last. A genuinely negotiated consensus will have better prospects. In coming to a consensus it is seldom possible to please all parties and perspectives and there are inevitably trade-offs and disagreements.

Understanding policy processes through an examination of knowledge/narratives, actors/networks and politics/interests can help with identifying policy spaces. For example, the articulation of alternative narratives is possible where there is a weakness in the articulation of the dominant narrative. This in turn requires the identification of spaces within networks (spaces to join the network, or key actors who can be enrolled into an alternative network).

A deeper examination of strategies for changing and influencing policy can be achieved by looking at 'policy space'. Depending on the policy issue, there may be important interactions between such spaces – from the very local, to the regional, national and global.

5 Our research

These conceptual insights into the nature of the policy process have informed a large range of empirical work by the IDS Environment Group across a range of sectors. In diverse geographical settings the group has taken a critical perspective on environmental policies and the received wisdoms and scientific knowledge that frame and define them. This work has asked:

• How do policies get created, and by whom?

• How do particular views and perspectives become entrenched in policy?

• What key circumstances, contexts, personal influences or networks have been influential?

• How do ideas about what makes a 'good' policy evolve and change?

• How are boundaries drawn around problems and policy storylines elaborated?

• What is the role of science and expertise?

• Whose voices and views are taken into account in the policy process, and whose are excluded?

• How, when and with what influences do policies change?

The following case studies illustrate a selection of this work that ranges in scale from investigations of global-level standards, to donor policy, to national policies, to micro project policies.

5

.1

Environmental governance in Ethiopia

Ethiopia's problems of food shortage and environmental degradation are well documented. We know less about the arena in which competing agricultural, natural resources and environmental strategies are put forward. Who are the protagonists, and how do they fight their corners?[9]

Long-term research on environmental policy processes casts light on how policies surrounding Ethiopian agriculture, natural resources and the environment are established. It reveals a complex environment in which policy debates are not resolved as a result of rational choices, but are often fudged as conflicts rage among ever-shifting networks of scientists, donors, ideologues and bureaucrats. The research looks at the types of knowledge about natural resources from which policy conflicts emerge, how particular positions get established in (and others excluded from) the policy debate, and how, once established, such positions are challenged and transformed.

Narratives

Since the 1960s, seemingly regardless of the regime in power, two dominant Malthusian narratives have influenced the debate over agriculture and natural resources in Ethiopia. Each has been associated with particular events, linked to particular scientific studies and supported by different interest groups, government ministries or donors, and each has offered opportune policy space linked to the ongoing perceived threat of famine.

Green revolution

Growing populations and declining per capita food production will result in major food gaps that must be filled by boosting aggregate food-grain production. Off-the-shelf modern 'green revolution' technologies should be extended to the farming population – particularly packages that link supply of external inputs (new seed varieties and fertiliser) to credit programmes. Resistance to change is due to traditional agricultural practices, inappropriate tenure and lack of commercial outlook. A radical transformation of farming systems is required.

Environmental rehabilitation

With growing populations, resource depletion is accelerating. With continued environmental degradation (deforestation, overgrazing, biodiversity loss and particularly soil erosion), agricultural production will decline, food deficits will increase and poverty and starvation will result. Natural resource projects via mass mobilisation (woodlots, hillside closures, terracing etc.) are necessary to prevent calamity.

Ethiopia today, like its past regimes, tends to authoritarianism, hierarchy, centralised rule and lack of transparency. However, despite a bureaucratic political mindset antithetical to bottom-up policies, debate goes on. More recently, alternative types of policy process – participatory and inclusive – have begun to emerge, informed by a new narrative.

Participatory natural resource management

Technical solutions to food shortage or environmental degradation have not worked. Instead, solutions must draw on indigenous knowledge and practices, and integrate agricultural production with conservation, minimising external input. Local consultation and village-level planning should replace top-down solutions.

Actor networks

Actor networks – encompassing scientists, administrators, NGO personnel, government officials, rural people and politicians – have taken advantage of different degrees of policy space in order to establish and uphold different discourses about agriculture and natural resources management in Ethiopia.

Green revolution

This narrative has been put forward by a technical scientific elite in research stations and laboratories, and supported by economists in the agricultural sector and the World Bank. Since 1993 the high-profile Sasakwawa Global 2000 programme has been spectacularly influential in pushing this line to a government with a strong commitment to food self-sufficiency. This has drawn together a strong and effective actor network including: a former US president, a Nobel laureate, the president of the country, the World Bank, key multinational commercial firms from the agri-business sector, and a range of highly respected scientists. In less than five years the SG 2000 'package' programme has become an inviolable policy priority for the government, growing from a pilot project into a national programme targeting millions of farmers.

Environmental rehabilitation

The 1980s saw the emergence of a strong and influential actor network involving natural scientists, sections of the government, a range of international NGOs (post 1984 famine), and (since 1994) an environmental protection agency, forwarding a narrative underpinned by key research studies. A huge (but ultimately unsuccessful) World Food Programme food-for work scheme to build bunds and plant seedlings chimed with the SG 2000 programme.

Participatory natural resource management

There is a less obvious network extolling this narrative, which encompasses coalitions of NGOs, training and capacity building projects funded by donors, and collaborative links to international research activities. Enrolment of actors into the network has occurred via workshops, field days and demonstrations or exposure visits.

9 Sources: Keeley and Scoones (2003); www.id21.org

Politics/interests

The green revolution fertiliser focus clearly suits a constellation of political and economic interests. The SG 2000 programme also continues a long-established technocratic tradition and policy style embedded in Ethiopian agricultural research and extension institutions, and therefore was easily incorporated within the existing bureaucratic and administrative machinery. The big, high-profile technical project replicated – both practically and symbolically – prestige development projects of the past. This is a politically and technically driven solution requiring firm central direction – with little consultation or room for reflection.

The environmental degradation narrative has also been embedded in political dynamics. In the 1980s, terraces and bunding were both a symbol and a practical manifestation of the presence and authority of the state in rural areas – closely bound up with concurrent 'villagisation' and resettlement policies. Narratives of crisis have been used as a justification for removing resource control from local users. Conversely, for Western donors who found it politically difficult to provide food aid to a Marxist government, linking relief to addressing environmental crisis provided a politically acceptable solution.

Policy spaces

In a political climate dominated by a government staking its credibility on achieving food security, little space has been available for views on agricultural extension outside these dominant narratives. However, certain key events have provided opportunities for challenging dominant positions – allowing new policy spaces to open up and new actor networks to be formed. For example, the overthrow of the Derg regime and arrival of a new government; growing awareness of successful participatory NGO projects; the organisation of national and regional meetings on participatory approaches; and an increased emphasis on participation in development literature. The dominant policy position is not always implemented without a problem – there have been numerous cases of foot-dragging and resistance by farmers, and circumvention of the strict proscriptions by front-line extension workers.

Importantly, this research also highlights increasingly apparent regional differences in the way actor networks are formed and policy space created in Ethiopia. Regional context increasingly matters – in some cases offering more room for manoeuvre and the opportunity to reinterpret and transform policies for the local context. In other cases, by contrast, political and bureaucratic constraints appear to limit such opportunities, resulting in less flexibility and fewer attempts at local adaptation of centrally derived policies.

Tigray, for example, has a long tradition of state organisation. Senior officials have been exposed to experiences elsewhere, and there are close connections between regional political actors and the ruling party – with a tradition of people's participation forged in the liberation war. In this context, a local actor network has been built around a collaborative research project on integrated, conservation-farming approaches.

This emergent network has a degree of policy space and momentum, and participatory approaches to natural resource management have found an audience.In other words, rural voices are heard – albeit under well-defined parameters.

In the Southern Region, by contrast, the regional council and government bureaucracy are made up of representatives of a wide range of ethnic groupings from across a diverse region. The structure lacks political confidence, resources and administrative capacity. A top-down orthodoxy prevails, marked by a lack of involvement and disenchantment with the state, and little room for participatory approaches.

Policies can be seen to be embedded in local settings – in the political histories of different regions, in the cultures of regional bureaucracies and administrations, in the histories of educational advantage and disadvantage, and rooted in the ideologies and practices of governance and participation.

When actor networks are tightly formed and impenetrable, no amount of rational argument will budge a policy from its pedestal. None the less, this Ethiopian study suggests to external actors and policy-makers that the funding of successful NGO participatory projects, together with the imaginative creation of networks around these activities, can create new policy spaces and help reshape official thinking. Furthermore, it suggests that they should seize the opportunities presented by decentralisation to promote effective and appropriate local interventions.

Biodiversity policy
in Guinea

What effect has the globalisation of science and policy around forests and biodiversity had on the lives of land-users in the forests of West Africa? How has international biodiversity policy influenced national moves towards greater local authority and resource control? How does the international scientific and policy world intersect with national scientific and policy debates and their local constituencies? These were the questions posed by Melissa Leach and Jame Fairhead in Guinea.[10]

Policy narratives

The perspectives and values that frame international scientific and policy debates strongly shape national and local science and policy practices. As Guinea has signed the Convention on Biodiversity – and as biodiversity has become important to international scientific and policy debates – so it has become important to research policy in Guinea, through daily work in the National Environment Department, the Forest and Wildlife Department, and the many donor-funded programmes.

The global biodiversity conservation narrative holds that biodiversity is threatened; therefore there is a need to expand the worldwide network of protected areas and to allocate resources efficiently via priority-setting exercises – with a focus on specific eco-regions or 'hotspots'. Thus locations are examined and prioritised in respect to their global significance for habitat or species conservation and sustainability.

In West Africa a second powerful narrative informing policy is that of forest loss – which is blamed largely on local cultivation, resulting in attempts to protect forests from the people who inhabit them, and related to issues of local climatic change.

Alongside and ostensibly bound up with these narratives is one focusing on decentralisation and participation as a route to improved natural resource management. Participation has become central to forestry and biodiversity planning among governments, donor agencies and NGOs alike, in national consultations as much as local projects.

Yet even narratives of participation pay little heed to a further narrative which emerges from local forest users' own experiences, and from supportive historical research and certain forms of non-equilibrial ecological science. In this, practices of landscape use have interacted with climatic changes to afforest old savannas and enrich forest biodiversity.

Actor networks

Historically, Guinean conservation policy owes much to the legacy of French colonial scientists. In particular, a very tight network of botanists in Francophone Africa were responsible for the establishment of longstanding and influential views concerning the relationship between forests and climate.

Today Guinean conservation policy is increasingly rooted in global and regional conventions and regimes, and the science that supports these is increasingly internationalised. This results in part from funding flows, and dependence on international donors for forestry and biodiversity projects, sectoral budget support, and research. At the same time, the growing involvement of international NGOs, large international research programmes and NGO-donor coalitions adds to the intensity and mass of international scientific networks that enrol Guinean and ex-patriate researchers as members, and weave policy narratives into the Guinean context at national workshops etc.

Within Guinea the national biodiversity alliance brings together the University of Conakry, donors and civil associations, including entrepreneurial NGOs quick to mobilise biodiversity funds.

The Forest Directorate is heavily dependent on supplementary funding and infrastructure from donor-funded projects. This, and green conditions imposed on Guinea by IFIs, means large parts of its activity are inflected by donor concerns. All three universities are altering their structures to respond to 'environmental' questions, and to the international funding they are attracting. The only PhD programme in the country is in environmental studies – not agriculture, geography, history, politics, mining or economics, as one might expect. Thus the grid of donor-funded projects linked into internationalised perspectives on environment and development is shaping ways in which research on the environment is carried out in Guinea.

Politics/interests

Rather than consider the centralising and decentralising forces in science and policy processes as contradictory, it is evident that the latter can extend the former's influence. Essentially the framing of biodiversity science and the institutional/funding imperatives linked to international biodiversity debates have promoted practices which reproduce western, colonial distinctions between nature and culture. Where villagers' perspectives have been incorporated, this has been only partial, with 'good' and 'bad' practices in African social life being adjudicated by scientific enquiry based on alien values. This compromises attempts at 'participatory' conservation – which frequently means an invitation to comply with pre-set objectives within frames of debate, which obscure the experiences, perspectives, and political and material interests of poorer forest users. This, in practice, means the suppression by global science of the experiences, perspectives and political and material interests of poorer forest users (who perceive biodiversity as part of lived-in landscapes). Thus, despite the ostensible processes of decentralisation and participation, local considerations are being reinterpreted within globalised frames.

Policy spaces

How then can poorer forest users genuinely shape forestry and conservation agendas, in an increasingly globalised world of science and policy? This would mean strengthening participation not just in policy but also in science. Here there is a role for participatory research strategies and deliberative procedures in which poorer forest users help to set agendas and questions. To be effective, however, such procedures need to be opened up to a diversity of potential solutions, to take alternative framings into account, and to pay particular attention to the inclusion of those social groups that conventional, globalised thinking excludes.

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Where there is no available platform or coalition for expression, contestation of policy ranges from calculated acceptance of and acquiescence to elements of science and policy in exchange for other benefits, to everyday forms of resistance and sometimes more violent conflict. But public contestation can and should proceed outside 'participatory' procedures.

This research advocates a broader strategy for opening Guinean biodiversity policy to silenced voices: including promoting those aspects of political and legal culture that enable critique; building scientific confidence and skills among citizens (making space for people's own science, knowledge and interests to shape and inform policy debates); and use of the media to express and publicise dissent.

Biotechnology policy in China

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.3

China's experience with agricultural biotechnology has been dramatic. Since the 1980s it has initiated serious policy measures and ambitious biotechnology research programs. One of the first countries to commercialise GM crops, it is now the fourth largest country in term of sown area of GM crops – after the USA, Argentina and Canada. James Keeley's research has examined how and why China has so vigorously pursued this biotech path, looking in particular at the role of scientific policy networks in promoting a biotechnology discourse. This reflects policy makers' perceptions of the role of biotechnology within society and the economy, and the balance of power between various stakeholders and actors in the policy process. The analysis of agricultural biotechnology in modern China casts light on several important dynamics, and tells us something new about change and continuity in policy processes, in a country that is metamorphosing rapidly.[15]

Policy narratives

This narrative – of the life-sciences applied to agriculture – has a particular appeal in China because it kills several birds with one stone. It speaks to the longstanding problem of food security, it is potentially a very important niche to occupy in the global knowledge economy, and it appeals to a particularly Chinese commitment to modernisation and faith in the power of science and technology to affect this transformation.

The government sees agricultural biotechnology as a tool to help the nation improve its food security, raise agricultural productivity, increase farmer's incomes, foster sustainable agricultural development, and create competitive positions in international agricultural markets (another green revolution narrative). In contrast to the rest of the world, biotechnologies in China have overwhelmingly been developed by the public sector, in the context of policy narratives and priority-setting exercises that are clearly linked in some sense to the provision of public goods such as economic development, food security and poverty reduction. This, it is argued, means more of an emphasis on techniques and traits not stressed by global life-science corporations because of their low returns or weak proprietary rights. For example, it puts more focus on insecticide resistance, disease, drought and salinity tolerance, as opposed to proprietary herbicide tolerance.

Actor networks

Biotechnology has been effectively promoted by a well-connected science-policy-business network. A tight-knit, relatively small group of scientists plays multiple roles in relation to technology development, business, policy and regulation.

The close networks between these scientists, funders, regulators and bureaucrats in ministries with links to multinational corporations has been particularly significant. Notably, individuals have secured access to policy-making because of biotechnology's endorsement by political leaders.

One ecologist quoted in the research laughed at the idea that policy processes were in any sense rational or technical, claiming that everything came down to processes of networking to get ideas across and secure certain interests: '*Caozu* [operating] – this is policy-making; policy-making is like a business.'

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Politics/interests

Food security has long been a central Chinese policy priority in terms of both availability and stability of supply. The experience of famine is within living memory for many, and one of the key achievements and planks on which the legitimacy of the Chinese Communist Party rests is the claim to have largely solved the overwhelming and chronic food insecurity of pre-liberation China. Agriculture continues to be based on the so-called three nongs: '*Nongye, nongchan, nongmin*' (agricultural industry, agricultural production and farmers), a key policy slogan, and a focus of state media interest. Technology is at the centre of the 'advancement of agriculture'. An interest in biotechnology also builds on strong traditions of agricultural research in China.

For many within China, it is essential that the country does not slow down on the commitment to biotechnology made by the late leader Deng Xiaoping. For many Chinese analysts it is critical that China is able to control GM technology itself and not find itself in a position of relying on the US and multinational corporations, either for the technology or for the seeds that are generated by it. This nationalism is not wholly defensive, however. Biotechnology is also seen as one area in which China can, with focus and commitment, develop a world-class industry; biotech applications and techniques could do for the Chinese what automobiles and semiconductors did first for Japan and then the newly industrialising countries. Now the double helix has replaced the atom as the symbol of China's modernisation drive.

Policy spaces

While agricultural productivity and crop improvement are undoubtedly important concerns, they are only one aspect of the debate about agricultural production and its relationship to food security and rural livelihoods. An important set of prior assumptions underlies a policy commitment to biotechnology – and in China it currently appears that a wide-ranging debate about these problem-solution framings has not been had publicly. Scientists critical of very strong public policy commitments to biotech appear to feel that they only have a remit to engage in the particulars of specific biosafety debates, rather than address wider questions about the need for biotechnology.

The rural poor and farmers themselves have largely not had the chance to define their problems and deliberate over different solutions. Just as not all farmers regard GM cotton as an unqualified success, so there are likely to be many perspectives on the role of technology in this aspect of rural development. The challenge for policymakers is to find ways to handle this complexity and open up official policy discourses to a greater range of voices and perspectives.

The Chinese experience does show that, under some circumstances, a state-led research and development model can challenge the major biotechnology multinationals – potentially developing technology that is more relevant to a greater range of farmers, with less emphasis on expensive products whose profits are primarily captured by corporations, and regimes in which farmers' rights to save seeds are restricted. Questions still need to be asked, however. A rapidly developing technological capacity may not always allow sufficient opportunities for consideration of risks, or what forms of development are most appropriate for poor farmers. Consumers, farmers and civil society remain poorly represented in decision-making processes.

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Environmental policy
in the Ghana PRSP

As part of a broader cross-country comparative study, recent research at IDS has examined the processes associated with the incorporation of environmental issues into the Poverty Reduction Strategy Paper (PRSP) in Ghana. This study found that environmental issues are fundamentally intertwined with conflicts over land rights, as well as questions of land management and appropriate land use. Yet PRSP documents project an illusion of natural resources that require better management and enhanced legislation to ensure that poor people benefit, while overlooking these highly political struggles over environmental control and rights to resources. In practice, natural resource management for poverty reduction is being undermined by powerful, political and elite interests.[11]

Policy narratives

Conventional environmental narratives that have been mainstreamed in the Ghana Poverty Reduction Strategy (GPRS) emphasise technical modernisation, economic growth through intensification, and the need for environmental audits and technical impact assessments. The emphasis is on land as equity and the necessity for reform of the land tenure system. Central to all these narratives is the importance of economic growth and market-led change; the emphasis on technical ways of understanding and controlling the environment; and a view of the environment largely limited to natural factors, with little acknowledgement that natural resources are inseparable from and encumbered by social, political and economic factors. Such an understanding of the environment tends to be apolitical and narrow. It does not explore who has rights to or control over land, and it ignores political struggles over how the environment might be defined.

Alternative narratives, which are not included in the GPRS, focus on the power of the extractive industries and the potential dangers associated with economic reform, on the importance of recognising the multiple forms of land use that sustain rural livelihoods, on the necessity for a process of deliberation on trade-offs, control and access, and on local people's rights to land rather than on land as a source of equity. These alternative narratives are concerned with the politics of access and control and with the ways in which the state has regulated access to resources. Alternative narratives broaden the scope, allow understandings of the environment and deliberation about how, and on what terms, local people can participate. In other words, these narratives provide a means of questioning the apolitical technical understanding of environment as contained within the GPRS, making possible policy decisions that address fundamental and intractable problems which militate against poverty-reduction programmes.

Actor networks

Policy-makers in various government departments (and most donors interviewed for this research) form a cohesive actor network that subscribes to the conventional narratives included in the GPRS. At the core of this network lies a web of powerful political connections and vested interests between the Ministry of Lands and Forestry and influential people on the one hand, and on the other the mining lobby, well represented by the Chamber of Mines and the Ministry of Mines.

Representatives from environmental NGOs, traditional leaders and journalists tend to belong to a loose network subscribing to the alternative narratives.

Politics/interests

The PRSP's emphasis on a narrow, technical view of environmental issues presents the answer as increased technological development – through increased land intensification and rural industrialisation, or through external investment and economic growth. This reflects the influence of powerful interests, particularly in the gold-mining and timber sectors, which stand to benefit from the promotion of extractive industries. While the GPRS addresses deforestation as an environmental issue and mining as a means of increasing foreign revenue, it retains the overall 'structure' of the system and keeps political and powerful interests compartmentalised. Elites continue to benefit from the status quo.

It is the intersection of these economic interests with state structures (via the granting of timber concessions to reward political loyalty, for example) that leads to the definition of some activities as illegal while encouraging others. Donors, however, are reluctant to become involved in the underlying political issues that are associated with land use and control.

Policy spaces

Ostensibly the GPRS was a participatory process, with everyone – government ministers, religious leaders, NGOs, poor village residents, the media, women's groups, trade unions – given opportunities to contribute to its production. Yet the nature of their participation varied considerably, from initial consultative workshops in which people were informed about the GPRS rather than asked for their input, to full-scale participation in the inner circle of the GPRS drafting team. Even within government, those ministries with access to funding, access to international consultancies and technical expertise, as well as strong relationships with donors and perceived importance, were in a better position to shape the process. The rhetoric of participation has allowed the PRSP to gloss over the reasons why certain people are poor and why environmental areas are being degraded. This neglect of basic political and economic fundamentals and the failure to deal with inequality undermines both economic development and poverty reduction initiatives.

What has been lacking but is needed is a deliberative process that enables policy actors and civil society to critically examine conventional policy discourses and subject them to internal scrutiny. Ultimately, new types of participation may have to be considered. These may include methods that legally enforce citizens' rights to engage in PRSPs and to express their concerns, coupled with the formalisation of governments' responsibilities to address these concerns.

If the Ghana PRSP were to take this on board, the exploration of environmental issues might look substantially different. Rather than exploring what the environmental problems are (primarily in relation to poor people but not defined by them), such an exercise would explore different definitions of environmental problems. Instead of addressing pro-poor environmental management through poor people's behaviour, or seeking to find a win-win approach between two powerful extractive industries, such an approach would mediate between vested interests — seeking to find ways to work together and benefit mutually from the protection of natural resources.

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Livestock disease and trade in Africa

After some years in the wilderness, the African livestock sector is back at the forefront of debates for developing agriculture. This is driven by the emergence of a persuasive narrative – advanced by a powerful and well-connected actor network – concerning the necessity of animal disease eradication to boost trade with external markets by meeting strict export standards. Ongoing research at IDS is exploring the economic, political and scientific agendas at play, and the often unacknowledged tensions and trade-offs inherent in a pro-poor livestock policy for Africa.[12]

Policy narratives

The core policy narrative holds that Africa can and should capitalise on its enormous wealth in livestock and huge untapped market potential – export-led growth in the sector will inevitably lead to poverty reduction. The predicted 'livestock revolution' will result in growing global demand for livestock products, particularly in Asia and the Middle East, and expansion of exports to Europe and North America – Africa should gain access to these markets. Exploiting Africa's comparative advantage, boosting export-based livestock production is an important route out of poverty.

However, a major impediment to this potential trade is the presence of a number of cross-border animal diseases in Africa. Trading in lucrative export markets means meeting the international animal health standards set according to importing country requirements, and the Sanitary and Phytosanitary (SPS) agreement of the World Trade Organisation (WTO), overseen by the World Animal Health Organisation (OIE). To this end it is necessary for African livestock-producing countries to fulfil an increasingly stringent array of veterinary requirements, including: the establishment of disease-free zones (or complete disease freedom at a national level), according to inspections by the OIE and based on 'sound science'; an emphasis on technologically sophisticated and reliable surveillance and monitoring systems for such trans-boundary animal diseases; and a restructuring of veterinary service provision to meet eradication and control objectives.

However, alternative routes to ensuring safe trade are emerging from Africa, including 'commodity-based trade' and associated certification systems. These are based on different scientific arguments and competencies (food and commodity safety rather than disease freedom). Advocates argue that – because different commodities (such as live animals, tinned and processed meat and dairy products) pose very different risks when it comes to the spread of human and animal pathogens – the standards set and risk-mitigation strategies required should be commodity-dependent. Rather than requiring country or zonal freedom from diseases, a commodity-based approach would require sanitary guarantees for a set of import conditions on a specific product. Such an approach, it is argued, would improve access to international markets for all countries, and especially those in the developing world. They may also be more appropriate to African conditions.

A further narrative – which puts a different perspective on disease control and eradication – is that there is growing local and regional demand for meat and other livestock products from increasingly well-off (but not very well off) urban consumers within Africa (and potentially outside). This demand is not for high-value front-end cuts; instead urban African consumers demand lower-value brisket meat usually on the bone, as well as offal and all parts of goats and sheep. A different type of animal is required for local trade, supported by a different marketing system, a level of regulation that guarantees basic food safety, and a veterinary service that prevents the outbreak of seriously damaging chronic diseases (including zoonoses), while still allowing the persistence of low-level, low-cost endemism. Food safety regulations for local trade and markets therefore need to be geared to local needs and conditions – not the precautions of an external market.

Actor networks

The dominant 'safe trade' narrative is rooted in a strong science and policy international network, supported by well-funded and well-connected international institutions and commercial interests, and has deep historical connections. The network includes FAO, the World Bank, IFPRI and ILRI (from the CGIAR), the OIE and African regional organisations. In countries across Africa, high-ranking national government officials have aligned with this perspective, and the network has been reinforced by the availability of new funding for major new disease surveillance programmes such as the PRINT programme for SADC, as well as research and development efforts.

Commodity-based trade is being advanced as a policy alternative by a small network of scientists and veterinarians based at the African Union, with increasing support from African chief veterinary officers. It is an as yet incipient network that has made good use of key presentations and publications to advance its arguments.

The network extolling local trade as a policy option is a less obvious one, and is perhaps best characterised as a range of separate regional networks with some links to international NGOs and research networks.

Politics/interests

The dominant narrative reflects a particular set of interests and assumptions dominated by a united scientific clique that has swayed national debates across Africa about appropriate measures for disease control, often swamping alternative views and perspectives. SPS standards, marketing systems, product certification and so on are issues around which the competencies of ministries of agriculture and departments of veterinary services remain limited. Indeed, the debates are being so dominated by international trade and standards bodies that there has been little opportunity for matching local realities with emerging requirements.

12 **Source:** Scoones and Wolmer (2006).

Those making the case for alternative approaches to African livestock marketing suggest, for example, that it may not always make sense to pursue a disease eradication policy at all costs in order to aim for often highly uncertain export trade markets. Instead, the investments (which are often considerable and distorting of research, delivery and marketing systems) may best be directed to other priorities. Yet all too often the safe trade in livestock narrative – despite a rhetorical commitment to poverty reduction, sustainable livelihoods and pro-poor policy – ignores such tensions and trade-offs. This debate is actually about politics, territory and control, and is being conducted by professional vets, by the OIE (and FAO), and by certain exporter-importer alliances with major vested interests in one interpretation of 'sound science'.

Policy spaces

The recent success of the commodity-based trade concept in gaining some purchase demonstrates that political negotiation needs to be combined with solid scientific understandings of the pros and cons of different alternatives. Policy space has been, and can be, opened by building alliances and negotiating for change in international forums, and by improving the access to and skills of African representatives in standard-setting bodies.

However, any attempt to develop a genuinely pro-poor livestock marketing policy for Africa would need to open up the discussion and focus on the trade-offs experienced by diverse stakeholders, including those who are supposed to benefit from new trade regimes, rather than 'closing down' around expert-led or OIE-driven versions of risk assessment and standards.

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5 .6 Water scarcity and dams in Gujarat, India

The technical and popular understandings of water scarcity that inform policy in India tend to be simplistic. The lack of water supply has been attributed to natural forces, rather than human-induced land and water use and socio-political elements. Real causes of scarcity can be obscured, leading to inappropriate policies. Lyla Mehta's work critically examines the narrative of water scarcity in Kutch, a semi-arid to arid region in western India which is designated to benefit from the Sardar Sarovar project, a controversial multi-purpose irrigation and hydroelectric project under construction on the Narmada river.[13]

Policy narratives

Despite the fact that scrutiny of Kutch's rainfall data over a span of 60 years indicates no evidence to suggest precipitation rates have changed, the dominant narrative is one of dwindling rainfall and increasing droughts, resulting in water scarcity. The telling and retelling of this narrative has 'manufactured' local, regional and national images of water scarcity, which have become naturalised and depoliticised. The obvious solution to water scarcity in Kutch, so the dominant narrative goes, is the Sardar Sarovar Project, which would provide a ready supply of extra-basin water. Indeed, there is apparently no alternative.

However, an opposing narrative holds that, although the volume of rainfall might not have changed – especially when viewed longitudinally – devegetation from unchecked logging and changes in soil moisture due to overexploitation of groundwater have led to real and tangible problems for the people of rural Kutch. Thus, the growing water crisis is largely human-induced, not 'natural'. The story of 'dwindling rainfall' obscures the fact that, due to bad water-management practices and inappropriate state policies, water has been misused, and legislation is constantly circumvented.

More locally appropriate solutions would include local rainwater harvesting and measures to treat the catchment area – such as bunding, restoration of vegetative cover, checking soil erosion, wasteland development, replenishment of groundwater resources, and measures taken upstream to check reservoir siltation. Institutional reform is also required, including greater inter-agency co-operation, and the introduction of a demand-driven approach that doesn't tax the poor, but curbs the wasteful consumption of water by industry and rich irrigators.

Actor networks

The actors behind the dominant narrative comprise a powerful coalition of politicians, business constituencies and large farm irrigators, who have the support of a sympathetic mass media as well as the NGOs and academic institutions that have close political or economic ties to government. The widespread cultural consensus around water scarcity and its solution is played out in political promises and school curricula. This coalition also gains support from powerful global players seeking to promote large dams. These include the World Bank, which is rekindling its interest in large-scale infrastructure, and mainstream water resource associations such as the International Commission on Large Dams (ICOLD).

13 Source: Mehta (2005)

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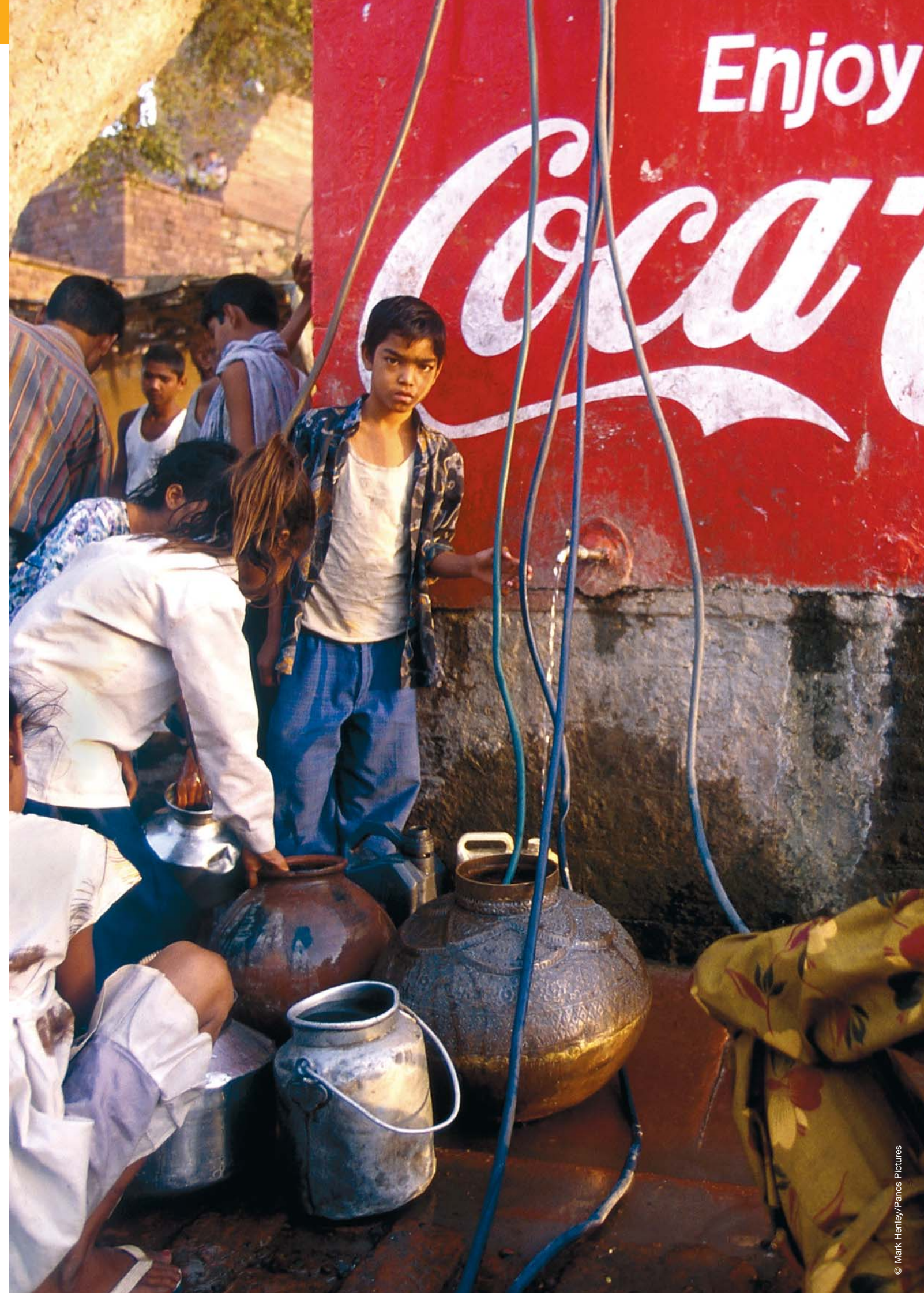
The actor network behind the alternative narrative ranges from small NGOs promoting rainwater-harvesting schemes in Gujarat to coalitions of alternative-minded engineers, social scientists, journalists and academics, to India's most famous protest movement, the Narmada Bachao Andolan (the Save the Narmada movement). This network is locally rooted, but still connected to a global activist network of NGOs and academics.

Politics/interests

The large-scale, state-directed, capital-intensive irrigation schemes resulting from projects like the SSP coincide with the interests of business, the engineering industry, the bureaucracy, and the 'development' and political elites. Clearly, the business and political interests in Gujarat's rich agro-industrial belt are being prioritised over those of the poor in drought-prone areas. Indeed, Kutch itself is not going to benefit significantly from the project. In fact, whatever little Narmada water reaches Kutch will largely serve the interests of the business community and rich farmers rather than the water-needy.

Policy spaces

Any policy spaces for those interested in solutions appropriate to local needs and conditions appear foreclosed by a dominant narrative that marginalises the real requirements of the water-needy, and the ongoing misuse and abuse of limited water resources

While narratives such as dwindling rainfall and increasing drought certainly need to be discredited, it would be foolish merely to produce new counter-narratives of water scarcity in Kutch, or to deny the problem all together. Devegetation, dwindling groundwater aquifers, soil salinity and the general undermining of local strategies to cope with scarcity result in the rural poor feeling the impact of drought more severely. These are 'real' manifestations of the biophysical problem of water scarcity, quite different to narratives of scarcity of a 'manufactured' nature, which have not resulted in the creation of solutions appropriate to local needs and conditions. A distinction between the 'real' and 'manufactured' aspects of water scarcity is vital to gain understanding of environmental change at the local level, and to open up policy space for these appropriate solutions.

Implications for policy and practice

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Policy is clearly very far from being a purely technical issue, one that may be reliably informed by objective evidence or science. Policy conflicts are not resolved as a result of simple technical and rational choices between different alternatives. Policy-making remains in the realm of politics and people, and of knowledge and power. The rise and fall of different policy emphases depends upon the ability of underpinning narratives to galvanise ideas and people around positions. Policy is built on the successful (or otherwise) enrolment of actors – scientists, donors, politicians, NGO staff, farmers and others – and the creation of networks that are able to make use of the policy space emerging from particular contexts, circumstances and timings.

These case studies have shown how certain themes seem to reoccur in environmental policy processes in developing countries:

• Narratives of crisis have been used as a justification for removing resource control from local users and giving it to national or international authorities (as illustrated by the environmental rehabilitation measures in Ethiopia or the biodiversity conservation measures in Guinea).

• These interventions have been predicated on science, framed in particular ways by certain groups of experts, in the context of a particular political economy of agriculture or natural resource management (such as the framing of policies concerning safe trade in livestock or large-scale dam initiatives).

• This science is embedded in the cultures and practices of research and extension organisations, and reinforced more recently by donor involvement (and the dependence of national research institutions on external funding and expertise, as in the Guinea biodiversity research networks).

• The interests, embedded assumptions and prior commitments of the powerful groups – those in the bureaucracy and those with commercial priorities – play important roles in policy options (as seen particularly in the case of the Ghana PRSP and the Sardar Sarovar dam project).

These case studies and the analytical tools employed are clearly of academic interest – but so what? What are the broader implications of seeing policy through this sort of lens? The final section of this paper reflects on this experience and poses three questions. How does an understanding of policy processes help those involved in making and shaping policy work more effectively? How might citizens – particularly those whose perspectives often remain unheard – be included in the policy process? And what practical techniques might be used to influence policy change?

Understanding policy processes: the benefits for policy-makers

Critical reflection on the policy process is a luxury few policy-makers have the time to enjoy. As we have seen, policy-makers find tidy, closed stories and certainties easier to deal with than messy, plural and partial scenarios with multiple and contested perspectives. Yet, despite or perhaps because of this, an understanding of the nuances of policy process can potentially

provide valuable insights for policy-makers. The reactions of the African livestock sector policy-makers to training programmes on understanding policy processes, cited at the beginning of this paper, are insightful:

- 'The policy process is dynamic, and understanding the present requires examination of what has been done in the past. Policy should be live; it should have room to adapt to new situations, because the environment is dynamic and a policy should be able to accommodate change.'

- 'Before the [first] workshop I thought policies were made by politicians. Now I realise there are so many policy spaces… Policy is a dynamic process with many actors.'

- 'I came with an open mind. But previously I thought I was not within the policy-making system, that policy issues were not my concern. I appreciate now that I am a potential "space" in the policy system.'

- 'I used to get very frustrated when I couldn't get things going – but now I realise that the process is not easy. If not successful at first, then this is just part of the process.'

- 'Previously I thought it was just a matter of writing, but now I realise there is more to it than that… Policy change can only come about where there are policy spaces.'

An understanding of how policies come to be and take the shape they do is of great utility to a policy-maker seeking to take an agenda forwards, and might lead to different questions being asked. To gain this understanding, one must unravel the relationships between scientific inputs and political interests, get a feel for the 'geography' of actor networks behind policy, constantly question the assumptions embedded in policy narratives, and identify alternative, obscured narratives.

Broadly speaking, an analysis of policy processes can be a key part of successful development. Policy processes are all-pervasive. Issues of policy-making – from the broad framing of strategies to local-level implementation – permeate development activities from headquarters to country offices to government bureaucracies to field-level projects. The differing concepts, approaches, methods and tools discussed in this paper may be useful in a wide range of settings – way beyond the cases highlighted above. A number of examples are given below.

- **Capacity building for policy-makers:** Many people in policy positions do not have the skills or insight to tackle complex policy issues. They may have been trained in different, less relevant areas, and are expected to learn how to 'do policy' on the job. This paper has examined some of the key principles that may prove useful for anyone setting up a PRS process, dealing with budget support, designing a new strategy or negotiating a trade agreement. In training programmes, we have found that policymakers respond positively and enthusiastically to this way of thinking. For some, clarity in the confusion has emerged at last, and a framework for critical analysis has been offered. Much effort is invested in capacity-building around the technical aspects of policy, but less about the processes of policy-making. This imbalance, as this paper argues, needs to be reversed.

- **Linking research to policy:** To make research relevant to policy is an oft-heard request. The Institute of Development Studies' work shows how complex and non-linear research-policy links are. It is not a simple matter of seeking easy bridges for passing on evidence, as some assume; what is required is a much more astute assessment of the politics of knowledge-making and its use in different contexts. Researchers and research managers or commissioners need to ask a set of questions. Which policy networks have reach and influence? How can 'facts' be established within these networks? And how can a research process be designed to influence change, recognising that research 'findings' and information dissemination are only one part of the picture? The principles presented in this paper can provide a useful structure for discussion on how to proceed in the planning and implementation of a research programme – from a small project to a large consortium.

- **Priority-setting for research and innovation systems:** The task of choosing the best bets for development investment is always tricky. Most priority-setting approaches use tests of efficiency and potential economic impact – but often with little assessment of the likely outcomes of new innovations. An understanding of the political and institutional context for innovation processes is critical – and this requires the sort of insights introduced in this paper. The key questions include, for example: which lines of research are relevant to different political interests? How are poor people being represented in these discussions? What narratives and political interests inform 'technical' research agendas? What are the likely obstacles – and how might these be averted by building alternative networks and alliances? Asking such questions at the outset of any research may help better investments to be made, with greater real returns in the long term.

- **Setting standards:** Regulatory standards such as food safety and biosafety, both public and private, are increasingly dominating developing country trade, particularly in agricultural commodities. Intensely political processes exist around standard-setting – ones that most developing countries have little purchase on. A better understanding of these processes offers a greater chance of influencing outcomes in favour of developing countries and poverty reduction. Again, the principles presented in this paper may help in such discussions. Questions surrounding the role of science in framing standards, the basis of risk statements made in the name of 'sound science', and the winners and losers of the current standard-setting practices, are critical in understanding the trade-offs, and uncovering whether there are alternative perspectives currently obscured. Such insights may be invaluable in developing negotiating stances, and providing the basis for engagement in standards and trade discussions.[15]

- **Economic/sector reform management (eg SWAPS, SAPs, PRSPs):** As in the Ghana case study above, the assumption that a limited standard-framing and consultation process will capture the diversity of issues in sector or economic reform is deeply flawed. Too often processes are constructed that exclude certain perspectives, reflect particular sectional interests, or frame the issue in a way that prevents the exploration of alternatives. Policy process analysis may be a useful complement to the now-ritual participatory consultations required as part of donor conditions. Creating space for civil society actors and others to raise these issues, facilitated by the type of framework and questions introduced in this paper, may be important in encouraging more effective and inclusive change processes.

15 See Brock and McGee (2004)

• Negotiating responses to controversy, scandals and crises (eg avian flu, SARS, HIV/AIDS, climate change etc.): These are themes characterised by varying degrees of scientific uncertainty and risk, where the politicised and contested nature of scientific knowledge and the 'co-production' of science and policy have been particularly evident. How have policy agendas been framed, and by whom? Drawing on which science-policy networks? Are plural and partial debates being recast as closed and certain? Which perspectives are marginalised or excluded? What trade-offs and disagreements lie behind 'consensus'?

Inclusive policy?

A key question driving the IDS research on policy processes is: how can the locals bite back? How can poor people genuinely shape policy agendas in an increasingly globalised world of science and policy? Environmental policy issues in particular are characterised by a growing number of actors, a plurality of perspectives and, in some cases, the increasingly contested nature of the 'environmental problems' themselves. In these contexts, the importance of building trust around decision processes is critical – and often a 'participatory' approach is the standard solution.

However, an understanding of policy processes complicates and compromises those calls for policy change that are based on the assumption that participation will enable local knowledge to challenge global perspectives. A large number of events, employing a variety of techniques, have attempted to increase public participation in policy – particularly in relation to controversial scientific and technological issues. These include citizen's juries, consensus conferences, deliberative panels and multi-criteria mapping, on which there is a mushrooming amount of literature. But as a long history of reflection on participatory processes reveals (particularly in this context the experience of the Ghana PRSP), invited participation is often on the hosts' terms, and familiar patterns of dominance and exclusion are replicated.

An attention to process raises a number of questions: what kind of participation, and for whom? Who convenes the process? Who defines the agenda and questions, and shapes the terms of the debate? And how are multiple forms of expertise accommodated? Clearly, long-established and bureaucratically embedded styles of non-participatory decision-making will not change with one-off events; and where the stakes are high and positions entrenched, opportunities for open forms of communication are constrained.[16]

But participatory strategies and deliberative procedures that build on firm understandings of policy processes have been successful in reconfiguring relations of knowledge, expertise and policy-making, by building new coalitions and shifting the framing of debates.[17]

In practice, the inclusion of the social groups that conventional, globalised thinking excludes from policy debates might require longer-term societal changes. Broader empowering measures, such as affirming those aspects of political and legal culture that enable critique, and building citizen-based scientific confidence and skills, make space for people's own knowledge and interests to shape and inform policy debates.[18]

This is all well and good – but what about practical day-to-day strategies or tactics for policy engagement? It is to this that the final section of this paper turns.

Effecting policy change

Policies often have a certain inertia: particular ideas and practices stick, despite concerted challenges to the basic concepts and ways of working. As the case studies have shown, if actor networks are tightly formed and impenetrable, and contexts and circumstances are not conducive to change, no amount of rational argument will shift a dominant policy narrative. However, things do change once distinct and well-guarded policy positions begin to fall apart, and other arguments become incorporated, softening the stance and, through this process, enlarging the associated actor network. But by what strategies can this be catalysed? How would one set about creating new policy spaces and new opportunities for challenging existing policy and opening debate? Here we explore some of the means by which this might be possible.

1. Telling persuasive stories[19]

Clearly there is often a need to challenge entrenched policy stories and their underlying assumptions. But it is not enough simply to critique the status quo and the conventional wisdoms of the mainstream. In order to effect change, alternative storylines must be offered – developing pragmatic, clear and simple policy stories that challenge dominant policy positions, suggesting, in turn, alternative policies and institutional structures.

The simple storylines developed for these alternative positions can be supported in a variety of ways. Personal stories often provide support for the wider policy advocacy positions, providing particular experiences that others in similar positions can relate to. In presenting a new (and sometimes a challenging and far-reaching) position to a new audience – whether in a meeting, a one-on-one discussion, on a website or on TV or radio – having a personalised story to tell can make all the difference. In the same way, videos and other visual media can bring an argument to life. A simple story, with clear implications for how things need to change, is also ideal material for briefings with officials or presentations in key forums. Such positions, in turn, can be supported, elaborated and legitimated by more formal publications, whether books or journal articles, where different, more technical audiences are in mind.

As with all stories, language is crucially important. Certain words or phrases will ring bells with certain audiences and fall flat with others. Policy buzzwords have a huge impact – whether it is on poverty reduction, sustainable livelihoods, peace and security, or the whole language associated with MDGs and PRSPs.

2. Building networks and encouraging champions of change

It is one thing to come up with a convincing, snappy story, but convincing others that this is the idea to back – especially if it means abandoning other ideas, backed by powerful players – is a more challenging task. This means understanding where the power lies – knowing which

16 Holmes and Scoones (2000)
17 For more on these themes see Leach, Scoones and Wynne (2005)
18 Leach, Scoones and Wynne (2005)

19 This section draws on Wolmer and Scoones (2005)

actors and institutions are important, both governmental and non-governmental – understanding the jostling of positions and interests at the global, national and local levels, and tracing the connections between them. With this knowledge it is much easier to target the right people in the right places at the right time.

Building and linking networks is a key part of policy change – particularly linking very local networks to broader coalitions operating at national, continental and international levels. New ideas gain purchase when there is strong backing or where obstacles (in the shape of existing networks) are circumvented. Without support and advocacy, even brilliant new ideas may sink without trace.

3. Learning by seeing

As one of the African livestock sector policy-makers quoted above put it: 'We've seen government policy change, but it is slow. Seeing things on the ground helps change policy.' The 'seeing is believing' method is a powerful technique to change policy. At its most basic, getting senior professionals out to the field to interact with remote communities – sometimes for the first time – gives them direct experience of the conditions in these regions. Field days, demonstrations and exposure visits are time-honoured means of enrolling actors into networks and getting senior officials on side. This was clearly demonstrated in the Ethiopian work cited above, where Tigrayan officials' exposure to participatory resource management programmes elsewhere was a major factor in its regional acceptance.

4. Opportunism and flexibility

While the best-laid plans often go wrong, sometimes new, wholly unexpected, opportunities arise, and sometimes spontaneous, seemingly unconnected actions or groups come together. Opportunism and serendipity are thus key aspects of any strategy. They are difficult to fit into fixed, formal plans or log-frames – administrators often are fearful of such apparent randomness, and donors are often reluctant to play along. Alongside long-planned and well-prepared events and processes, effective leveraging of policy change demands an aptitude for seizing particular policy moments or windows of opportunity as they arise, to get policy messages on the agenda and to open up the argument for policy reform.

This list could go on – but a flavour of the multiplicity of practical engagement strategies used to influence policy change was again provided by the African livestock sector policy makers mentioned. They reflected on these strategies in relation to different types of policy space (see facing page).

Conclusion

While certainly non-linear, the policy process is not simply chaotic and governed by chance and accident. An analysis of the policy process highlights the complex interplay of narratives underpinning the policy, the actor networks promoting or resisting it, and the political interests driving the process and opening up potential strategies and tactics. An understanding of the politics, bureaucracy, power and interests behind policies gives a sense of how their formulation and implementation are constantly open to interpretation and manoeuvre.

Policies, then, are not operational manuals; they should not define activities on the ground, but lay out principles. They should allow latitude for interpretation, adaptation and negotiation in order to ensure their success. And rather than delivering 'evidence' for policy in a linear way, iterative dialogues between research and policy should be encouraged.

Conceptual spaces
(where new ideas are introduced into the debate, and circulated through various media)
- Publish papers on proposed policy in scientific journals
- Quote other important, influential people
- Influence consultants 'after hours'
- Learn the 'official language' and use it

Bureaucratic spaces
(formal policymaking spaces within the government bureaucracy/legal system, led by government civil servants with selected input from external experts)
- Lobby peers and key players
- Select an internal champion
- Get the boss to relay new ideas and to get praise for it

Invited spaces
(e.g. consultations on policy led by government agencies, involving selective participation of stakeholders)
- Gatecrash other people's meetings and hijack agenda
- Influence/write opening speech
- Show videos in workshop to introduce stakeholders' opinions
- Get official blessing – write the speech

Popular spaces
(e.g. protests, demonstrations led by social movements, putting pressure on formal policy-making)
- Join change agent/direct action movements and actively get involved
- Petition
- Participate in membership organisations, eg farmers' groups
- Use the media: radio, TV, posters

Practical spaces
(providing opportunities for 'witnessing' by policymakers)
- Pilot project
- Case studies
- Study tours

Resources

www.ids.ac.uk/ids/KNOTS

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Understanding policy processes

A review of IDS research on the environment