

Working Paper 214

**Animal Health Care in Kenya:
The Road to Community-based
Animal Health Service Delivery**

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Acronyms

| | |
|-------------|---|
| AIC | African Inland Church |
| AGREF | Agricultural Research Foundation |
| AHA | Animal Health Assistant |
| AHITI | Animal Health Training Institute |
| AHT | Animal Health Technician |
| ASAL | Arid and Semi-Arid Lands |
| ASMP | Agriculture Sector Management Project |
| CAHW | Community Animal Health Worker |
| CLIP | Community-based Livestock Improvement Programme |
| DAH | Decentralised Animal Health |
| DAHC | Decentralised community-based animal health care |
| DVO | District Veterinary Officer |
| DVS | Department of Veterinary Services |
| EC | European Commission |
| EU | European Union |
| FARM Africa | Food and Agriculture Research Mission for Africa |
| G8 | Group of 8 (economically advanced countries) |
| GTZ | Deutsche Gesellschaft für Technische Zusammenarbeit (a government-owned corporation for international cooperation) |
| HIPC | Heavily Indebted Poor Countries |
| ILCA | International Livestock Centre for Africa |
| ILRAD | International Laboratory for Animal Diseases |
| ILRI | International Livestock Research Institute |
| ITDG | Intermediate Technology Development Group |
| ITDG/EA | ITDG East Africa |
| KALT | Kenya Association of Livestock Technicians |
| KFC | Kamujini Farmers Centre |
| KVA | Kenya Veterinary Association |
| KVAPS | Kenya Veterinary Association Privatisation Scheme |
| KVB | Kenya Veterinary Board |
| MoU | Memorandum of Understanding |
| M&E | Monitoring and Evaluation |
| NGO | Non Governmental Organisation |
| NORAD | The Norwegian Agency for Development Cooperation |
| OAU/IBAR | Organisation of African Unity/International Bureau for Animal Resources |
| ODI | Overseas Development Institute |
| PACE | Pan African Programme for the Control of Epizootics |
| PARC | Pan Africa Rinderpest Campaign |
| PARC-VAC | Participatory Community-based Animal Health and Vaccination |
| RAWOO | Raad voor het Wetenschappelijk Onderzoek in het kader van Ontwikkelingssamenwerking (Netherlands Development Assistance Research Council) |
| SNV | Schweizerischen Normen Vereinigung (Netherlands Development Organisation) |
| TRVTT | Thermostable Rinderpest Vaccine Technology Transfer |
| Tufts | Tufts University, Medford, Massachusetts, USA |
| VSF | Veterinaires san Frontieres |

Executive Summary

This Working Paper forms part of the Overseas Development Institute's Bridging Research and Policy project which is seeking to learn more about linkages between development research, policy and practice and promote evidence-based international development policy. The project includes a literature review, the development of a framework paper and three case studies. This paper presents the results of a case study on livestock service reform in Kenya.

Livestock services were among the first rural services targeted for privatisation under structural adjustment programmes, particularly in Sub-Saharan Africa. The veterinary profession however has been very slow to respond, and the increasing financial constraints effectively paralysed government services in the late 1980s and early 1990s. During this period non-governmental organisations introduced a new model of community-based livestock services. Intermediate Technology Development Group (ITDG) was one of the early pioneers in the mid 1980s, and adopted an action-research approach with a clear objective to use the results, if positive, to influence the policy environment to allow the approaches to be widely replicated. This case study explores the reasons why, despite the outstanding success of the new decentralised community-based animal health care (DAHC) approaches, it took over 15 years to convince policy-makers to develop policies and legislation to allow this to happen – which still have not been formally adopted, despite the proliferation of community-based livestock services throughout the arid and semi-arid parts of Kenya.

Traditionally, the link between research and policy has been viewed as a linear process, whereby a set of research findings is shifted from the 'research sphere' over to the 'policy sphere', and then has some impact on policy-makers' decisions. Literature on the research-policy link is now shifting away from this model towards a more dynamic and complex view that emphasises a two-way process between research and policy, shaped by multiple relations and reservoirs of knowledge. The traditional question 'How can research be transported from the research to the policy sphere?' has been replaced by a more complex set of questions – 'Why are some of the ideas that circulate in the research/policy networks picked up and acted on, while others are ignored and disappear?'. The answer seems to lie in a combination of several determining influences, which can broadly be divided into three areas:

1. The political context – political and economic structures and interests, systems of innovation, institutional pressures, cultural differences, preference for incremental versus radical change etc.
2. The credibility of the evidence – the degree it challenges received wisdom, research approaches and methodology, credibility of researcher, simplicity of message, how it is communicated etc.
3. The links between policy and research community – networks, relationships, power, competing discourses, trust, and knowledge use etc.

The ODI case studies were designed to test the hypothesis that research is more likely to contribute to evidence-based policy if:

- it fits within the political and institutional limits and pressures of policy-makers, and resonates with their ideological assumptions, or sufficient pressure is exerted to challenge those limits;
- researchers and policy-makers share particular kinds of networks and develop chains of legitimacy for particular policy areas;
- outputs are based on local involvement and credible evidence and are communicated via the most appropriate communicators, channels, style, format and timing.

To test these hypotheses ODI constructed an historical narrative leading up to the observed policy change in each case study. The next step was to explore why those policy decisions and practices took place and assess the role of research in that process.

The key events which seem to have contributed to the policy shift in Kenya are:

- a. The arrival of ITDG in 1986 with an explicit focus on developing and testing new approaches, then seeking to influence the policy environment so they can be implemented more widely. Sessional Paper No 1 (1986) 'Economic Management for Renewed Growth' set the stage for structural adjustment and privatisation of public services creating a favourable macro policy context for reform of livestock services.
- b. The first ITDG Vets Workshop in 1988, which brought together decentralised animal health (DAH) practitioners from several projects around the country, marked a significant increase in interactions between researchers/practitioners and policy-makers.
- c. Dr Wamokoya's appointment as Director of Veterinary Services in 1990, and his emphasis on veterinary professionalism and ethics, reversed an emerging interest in policy reform driven by contracting government budgets, and emerging evidence of the value of the alternative decentralised animal health care model.
- d. The establishment of bilateral DAH projects in 1992 added weight to the evidence in favour of DAH approaches, and ITDG's international DAH workshop strengthened the emerging network of practitioners and links between policy-makers and practitioners.
- e. The attendance of Dr Kajume, then Provincial Director of Veterinary Services for Eastern Province, at the 1993 Vets Workshop marked a further improvement in linkages between researchers/practitioners and policy-makers.
- f. The policy context for DAH approaches dramatically improved when Dr Kimanzi, a vet with substantial practical experience of field services in arid and semi-arid land (ASAL) areas, and a more open-minded attitude towards new approaches, took over as Director of Veterinary Services in 1994, and appointed Dr Kajume as Deputy Director.
- g. The gradual increase in the number of agencies training community animal health workers (CAHWs) from 1994 to 1997 further strengthened the evidence in favour of DAH approaches, and also contributed to:
- h. The publication of a letter by the Kenya Veterinary Board (KVB) in 1998 threatening to punish livestock owners and veterinarians involved in DAH programmes in an attempt to stop what they regarded as a dangerous approach. The letter however had the opposite effect. Far from stopping DAH programmes, it forced all stakeholders together into a policy network to try to find a solution to the problem. Supporters in the government used the crisis to launch a multi-stakeholder study (known widely as the Hübl study) which significantly increased the weight of evidence still further.
- i. A multi-stakeholder workshop in Meru in 1999 (based on ITDG's Vets Workshops) provided a clear signal from policy-makers that they were interested in finding a solution, which improved the political climate for change still further.
- j. The political climate could not have been better while Julius Kajume was acting Director of Veterinary Services in 1999, but deteriorated with the appointment of the more conservative Dr Chong in 2000.
- k. Increasing opposition to the new policies from the Kenya Veterinary Association (KVA) in 2001 both undermined the policy coalition, reducing the link between researchers/practitioners and policy-makers, and complicated and worsened the political climate.

The animal health care case study reaffirms much of the current theory of research-policy linkages. The policy process was influenced far more by the political context than by anything else, and personalities and personal relationships were at least as important as any formal relationships and structures.

The crisis caused by the KVB letter in 1998 was clearly the tipping point. Beforehand there was a long period where CAHW schemes gradually proliferated, generating powerful evidence of their value, and providing an issue around which different groups of stakeholders, supporters and antagonists could form formal and informal networks. Afterwards, there was a surprisingly long process where all stakeholders came together to develop a new policy framework.

Although some of the external NGOs promoting the approach had been influenced by emerging ideas in the development discourse, formal research seems to have contributed relatively little to the policy process in Kenya, and research reports even less so (with the exception of the Hübl study). Evidence generated by working CAHW schemes, communicated directly to visitors by livestock owners and the animal health staff directly involved in them, seems to have been much more important. Early on, this evidence contributed to the rising popularity of DAH programmes with donors and field veterinarians, and in the mid 1990s, albeit second hand, to the alarm of the KVB resulting in their publication in the national press, which brought everybody, including the KVB itself, and resulted in a new policy shift in favour of the approach.

Although it is relatively easy to understand how the process evolved and why it took so long, it is difficult to see how it could have happened much faster. A carefully managed process to try to influence Dr Wamokoya's attitudes might have helped him to see the benefits of the approach, but nobody in the research/practitioner camp had the necessary connections at that time to do that. By the time Dr Kimanzi took over, there was more evidence and in addition the support for DAH approach was on the increase. It may have been possible at that time to develop a campaign to increase contact with the veterinary department, to accelerate enthusiasm for a new policy framework. The fact that this didn't happen may be because the most prominent network, based around ITDG's Vets Workshops, had lost their policy edge, and ITDG's publications were aimed at practitioners rather than policy-makers. Ensuring the Vets Workshops continued to include senior policy-makers, rather than government vet practitioners, and a communication strategy to target tailor-made communication materials at policy-makers, may have accelerated the process considerably in the mid 1990s. It may have been possible to promote more widespread reform within the Veterinary Department, with DAH as one component, by working with the Agriculture Sector Management Project in the mid 1990s. Since the KVB letter provoked the crisis which brought all the stakeholders together, another option might have been to deliberately provoke a crisis earlier. However this would have been very risky for an NGO in Kenya.

With the benefit of hindsight, distance and the results of this study, it is possible to suggest some changes in what was done that might have accelerated the process. These include:

1. Greater effort to understand the political context – the legal and policy framework, the key actors, their attitudes and influences, and other reform processes;
2. Greater effort, earlier on, to get government staff, especially those opposed to the idea, to visit working CAHW schemes and learn about them first hand;
3. An effort to generate interest among non-veterinary staff and parliamentarians;
4. A clearer communication strategy to influence government vets and government policy;
5. More effort to get to know the key players – the Director and Deputy Directors of Veterinary Services in Nairobi – and figure out how best to influence them;
6. More effort to understand the policy process in Kenya – how do new ideas become incorporated into policy, and new legislation enacted.

It is also clear that working with local communities to develop effective and sustainable examples of new approaches is essential to prove their effectiveness and acquire the legitimacy to advocate for change. That takes time, and the early pioneers of the approach in Kenya deserve recognition for the efforts they have made over the last 17 years.

1 Introduction

This Working Paper forms part of the Overseas Development Institute's Bridging Research and Policy project which is seeking to learn more about linkages between development research, policy and practice and to develop simple tools for researchers and policy-makers to promote evidence-based international development policy. The research project includes a literature review, the development of a framework paper to guide the research and three case studies, with local partners, of specific policy changes where research may or may not have played a significant role. These policy changes are:

- **Poverty Reduction Strategies.** How, during 1999, the international discourse about the Common Development Framework became linked to the adoption of the Enhanced heavily indebted poor countries (HIPC) framework by the G8, and then translated into the process of preparing the first interim Poverty Reduction Strategy Papers. What happened in-between? Who influenced whom, on what and how? What was the specific contribution of research-based knowledge, and what conditions enabled this influence to be exercised in such a striking way?
- **Humanitarian Aid.** One of the most significant policy shifts in the international humanitarian sector in the last decade has been the move to strengthen the accountability of humanitarian agencies and to find ways of improving performance in humanitarian response. One of the key policy initiatives, representative of this shift, was the decision to launch the Sphere project in 1996, in the wake of the much-criticised international humanitarian response to the Rwanda crisis. Sphere resulted in the publication of a 'Humanitarian Charter and Minimum Standards for Disaster Response' in 2000. This case study explores the process that led up to this policy initiative. For example, how significant was the Joint Evaluation of Emergency Assistance to Rwanda? What were the other key factors that triggered the launching of Sphere? How significant was the policy context, in which humanitarian agencies were subject to harsh and public criticism?
- **Livestock Services.** Livestock services have long been regarded as an easy target for reform and privatisation, first under structural adjustment programmes in the late 1980s and early 1990s, and more recently, as part of re-orientating agricultural services under poverty reduction strategies. However, veterinarians and governments in most countries have been very reluctant to liberalise the policy framework to allow private and especially para-professional services to flourish, despite good evidence that paravets can provide an effective, cost-efficient and safe service. This research identifies the critical factors and the relevance of research in the evolving livestock service policies particularly in Eastern, and the Horn of Africa.

The literature review has been completed (see de Vibe et al, 2002) and a framework has been developed to guide the research (Crewe and Young, 2002). This Working Paper presents the results of the Livestock Services Case Study.

1.1 The livestock services case study

Livestock services, and in particular, clinical veterinary services, were among the first rural services targeted for privatisation under structural adjustment programmes, particularly in Sub-Saharan Africa. As clear 'private goods', and as most livestock keepers seemed to be prepared to pay for them, Finance Departments and experts regarded them as an easy target. Veterinarians in most Sub-Saharan countries, mostly employed by the government, however proved very reluctant to move into private practice. Around the same time, many NGOs, and some government departments established very successful small-scale decentralised animal health programmes, where trained livestock keepers provided clinical veterinary services, for a fee, to their neighbours (de Haan, 1991). The veterinary profession however, was very suspicious of these programmes and despite

good evidence that decentralised animal programmes provide an effective, cost-efficient, and safe service, few livestock departments were prepared to change policies to promote the expansion of these approaches. More recently, some governments in Eastern and the Horn of Africa are reconsidering the policy framework as part of re-orientating agricultural services under poverty reduction strategies, and legislation is under review with a view to legalising decentralised animal health services in Kenya (KVB, 2002b).

This case study identifies the critical factors in the evolving livestock service policies in Kenya, and the relevance of evidence of their effectiveness. The research in collaboration with the Department of Veterinary Services (DVS) and Intermediate Technology Development Group East Africa (ITDG/EA) included a workshop, a literature review, and interviews with key actors in Nairobi and at an international conference on 'Primary Animal Health Care in the 21st Century: Shaping the Rules, Policies and Institutions' held in Mombasa, Kenya in October 2002.

Section 2 of this working paper provides some of the current theory about research-policy links. Section 3 describes the research methodologies used for the livestock case study, and the key research questions. Sections 4 and 5 provide a narrative description of the evolution of animal health policies in Kenya, and the factors which contributed to it. Section 6 discusses some of the key lessons from the case study, and how they complement and add to existing theory. Section 7 re-examines the key hypotheses in the light of this case study and explores what could be done in similar contexts to accelerate the policy process.

Appendix 1 describes the research methodology and timing in more detail, Appendix 2 the Key Informants, Appendix 3 the Bibliography, and Appendix 4 the detailed research questions.

2 Some Theory¹

Traditionally, the link between research and policy has been viewed as a linear process, whereby a set of research findings is shifted from the ‘research sphere’ over to the ‘policy sphere’, and then has some impact on policy-makers’ decisions. At least three of the assumptions underpinning this traditional view are now being questioned. First, the assumption that research influences policy in a one-way process (the linear model); second, the assumption that there is a clear divide between researchers and policy-makers (the two communities model); and third, the assumption that the production of knowledge is confined to a set of specific findings (the positivistic model).

Literature on the research-policy link is now shifting away from these assumptions, towards a more dynamic and complex view that emphasises a two-way process between research and policy, shaped by multiple relations and reservoirs of knowledge (see for example Garrett and Islam, 1998; RAWOO, 2001). This shift reflects the fact that this subject area has generated greater interest in the past few years, and already a number of overviews of the research-policy linkage exist (e.g. Keeley and Scoones, 1999; Lindquist, forthcoming 2003; Neilson, 2001; Nutley, Walter and Davies, 2002; Stone, Maxwell and Keating, 2001; Sutton, 1999). However, there is still a limited number of case studies (see for example Ryan, 1999; Puchner, 2001).

Following Carol Weiss (1977), it is widely recognised that although research may not have direct influence on specific policies, the production of research may still exert a powerful indirect influence through introducing new terms and shaping the policy discourse. Weiss describes this as a process of ‘percolation’, in which research findings and concepts circulate and are gradually filtered through various policy networks. Some of the current literature on the research-policy link therefore focuses explicitly on various types of networks, such as policy streams (Kingdon, 1984), policy communities (Pross, 1986), epistemic communities (Haas, 1991), and advocacy coalitions (Sabatier and Jenkins-Smith, 1999). Another angle taken by the research-policy literature focuses on guiding researchers towards increasing the impact of their research (Coleman, 1991; Porter and Pryor-Jones, 1997; Ryan, 2002).

The traditional question could be phrased ‘How can research be transported from the research to the policy sphere?’ Now, however, the question concerns research uptake pathways: ‘Why are some of the ideas that circulate in the research/policy networks picked up and acted on, while others are ignored and disappear?’. The answer to this seems to lie in a combination of several determining influences, which can broadly be divided into three areas:

1. The political context
2. The actors and networks, and how they interact
3. The evidence, and how it is communicated

2.1 The political context

The research/policy link has effects on political decisions and actions. In turn, the research/policy link is shaped by the political context. Furthermore, the policy process and the production of research are in themselves political processes, from the initial agenda-setting exercise through to the final negotiation involved in implementation. In some cases the political strategies and power relations are obvious, and are tied to specific institutional pressures. For example, ideas may be picked up and used because those specific ideas are more likely to secure funding for a project.

¹ The text in this section is taken from de Vibe et al (2002).

Similarly, ideas circulating in the research/policy networks may be discarded by the majority of staff in an organisation if those ideas elicit disapproval from the leadership.

The political context also consists of broader macro formations – ‘discourses’ or ‘paradigms’ – that may exert a powerful influence over which ideas are noticed and which are ignored. It may be helpful to view these formations as divided into three layers (following Raymond Williams, 1973): the dominant discourse, the residual discourse, and the emerging discourse. Ideas and concepts may be picked up and used because they are compatible with the dominant policy discourse, and therefore serve to confirm and support present approaches. Other ideas may be recognised as stemming from a residual discourse, and may therefore be used because of their familiarity, or dismissed as ‘old-fashioned’. Yet other ideas may be noticed because they shape an emerging and alternative discourse, and may thus be used by those who wish to challenge dominant ideas.

Other authors might be sceptical of the idea that there is only one ‘dominant discourse’, and might be more prone to focus on the interaction between several societal structures and human relationships, or the considerable ‘room for manoeuvre’ that exists both at a micro level (for example, at different moments of the policy process) and at a macro level (for example, in the present information age).

2.2 The actors and networks

The research/policy link is played out in the interface between the surrounding (political) structure and the actors involved: networks, organisations/institutions and individuals. Actors perceive and remember circulating ideas in different ways, and choose to use, to store or to discard ideas on the basis of various criteria. One of the first theories about such criteria was the rational economic model, or cost/benefit analysis. Another early theory was behaviourism’s stimulus-response model.

Since then several other approaches have emerged, providing different explanations as to why some ideas are accepted, embraced and internalised instead of others. Although the explanations vary, many of them in some way touch on the importance of elements previously ignored or labelled ‘irrational’, such as cultural values and understandings (both of organisations and of individuals), the part played by informal and ‘non-linear’ decision-making processes, and the role of emotional dynamics such as anxiety and memory (again, both in organisations and individuals).

The response to new ideas is also determined by existing views. It may be relatively easy for networks, organisations and individuals to pay attention to research and ideas that conform to their current views and approaches. Usually, it is more difficult to respond to new alternative ideas, especially if these are in some way challenging and require some change. The change required may be divided into two types: core changes and secondary changes. Core changes affect an organisation or individual’s identity and values, and this kind of change is not likely to take place without a crisis or very strong pressure. Secondary changes affect operational procedures, practices and resource distribution, and are more likely to happen as a result of the influence of new ideas and research.

2.3 The evidence and communication

The degree of attention paid to circulating ideas is also determined by the way that those ideas are presented. There are many academic fields that provide interesting contributions in this regard, including the literature on interpersonal communication, advocacy and marketing communication, media communication and information technology, and knowledge management and research relevance. These fields have gradually shifted away from various linear theories of communication (sender – message – channel – recipient) towards more interactive models. The focus on interaction

implies that there is no longer a hierarchical and clearly defined relationship between the sender and recipient, but rather that both parties in a communication process occupy sender and receiver roles at different stages. Moreover, both parties contribute to the content and meaning of the message. In other words, the message is not fixed, but changes as it circulates between the different parties, since different actors will understand and respond to the message in different ways.

The shift in focus away from the primacy of the sender, towards the importance of the interactive response, has a lot to say for the research/policy link. Ideas may be picked up by actors precisely because the actors respond to some ideas rather than to others. Whether or not a circulating idea is able to elicit an engaged response from actors depends on a range of factors, such as the degree of actor identification with the idea, the associated meanings evoked by the idea, the reaction to the technological format of the idea, or the perceived credibility of the idea.

3 The Research Approach

It is our hypothesis that research is more likely to contribute to evidence-based policy-making that aims to reduce poverty, alleviate suffering or save lives, if:

- it fits within the political and institutional limits and pressures of the policy-makers, and resonates with their ideological assumptions, or sufficient pressure is exerted to challenge those limits;
- researchers and policy-makers share particular kinds of networks and develop chains of legitimacy for particular policy areas;
- outputs are based on local involvement and credible evidence and are communicated via the most appropriate communicators, channels, style, format and timing.

To test these hypotheses ODI constructed an historical narrative leading up to the observed policy change in each case study. This involved creating a timeline of key policy decisions and practices, along with important documents and events, and identifying key actors. The next step was to explore why those policy decisions and practices took place and assess the role of research in that process. This was done through interviews with key actors, reviewing the literature and cross-checking conflicting narratives.

The overall research question guiding the project is:

- How can policy-makers and researchers make better use of research, to contribute to more evidence-based policies that reduce poverty, alleviate suffering and save lives?

Specific questions explored in the case studies included:

- To what extent was the impact of research on policy-making shaped by political and institutional structures and ideological assumptions?
- To what extent did local involvement, the quality of research and communications strategies affect the impact that research had on policy-making in particular areas?
- To what extent did researchers and policy-makers share particular kinds of networks, common goals and chains of legitimacy for particular policy areas?

More details of the research questions are provided in Appendix 4.

In the Kenya case study, two individuals who had been involved in the decentralised animal health care story were contracted to organise a mini-workshop in Nairobi to develop the timeline and identify the key documents and actors. Jacob Wanyama, from Intermediate Technology Development Group (ITDG), has been involved in NGO-led decentralised animal health programmes in Kenya since the early 1990s. Julius Kajume, Deputy Director of Veterinary Services from the Department of Veterinary Services (DVS), has been involved from the government side since 1994.

Participants in the mini-workshop identified 27 key informants from Government, Private Sector and Non-Government Agencies, who were interviewed in Nairobi and Mombasa in mid-October 2002. A full list and brief information about each of the informants is provided in Appendix 2.

4 The Evolution of Animal Health Care in Kenya

4.1 The colonial era: private veterinary practice

During the colonial and immediately post-independence era most clinical vet services in Kenya were provided by private practitioners and 'Vet Scouts'. The private practitioners were confined in high potential areas, mainly in the so-called white settler areas. Vet Scouts were local livestock keepers who received informal training from local vet staff, were employed by the County Council and seconded to the government, and lived and provided clinical and other services in the villages. The provision of private animal health services were, and still are, mainly governed by the Veterinary Surgeons Act (Cap 366) and the Pharmacy and Poisons Act (Cap 244). The Veterinary Surgeons Act was borrowed mostly unchanged from the British Veterinary Surgeons Act. This Act broadly limits the practice of veterinary medicine and surgery to registered veterinary surgeons, and staff under their direct supervision. However there are two clauses at the end of the Act added in recognition of the fact that many of the larger commercial farmers of the time provided their own veterinary services. These clauses allow anyone to treat their own animals, or those belonging to a neighbour, provided it is not done for profit. The Pharmacy and Poisons Act limits the sale of pharmaceuticals (including veterinary pharmaceuticals) to registered Pharmacists. Veterinarians are allowed to keep limited stocks of drugs for their own use while treating animals, but they are not allowed to sell them.

4.2 The 1970s and 1970s: free services for all

Sessional Paper No 1 (1965) 'African Socialism' set the scene for a massive increase in government livestock services, to be provided for free throughout the country, and massive investment in the professionalisation of the veterinary service. Vet Scouts at village level were gradually phased out and replaced by Vets and Animal Health Technicians (AHTs), based at Divisional and Locational level respectively. The Private Practitioners went out of business. Many were expatriates and left the country. Although clinical services became more accessible in the high potential areas, they did not improve much in the arid and semi-arid areas (ASAL) because relatively fewer Vets and AHTs were posted there and, without enough Vet Scouts or any other intermediaries, they could hardly reach the ASAL nomadic herds because of the vast distances, poor terrain and poor road network.

4.3 1980 to 1992: structural adjustment and covert operations

The first decentralised animal health (DAH) scheme was quietly established in 1980 by an NGO in Turkana District, an ASAL area in Northern Kenya. Dr Darlington Akabwai, a Ugandan vet, trained some of the Catechist of the Catholic Diocese of Lodwar to treat common livestock diseases as they travelled around doing their other duties. This model of animal health care delivery gradually evolved into the Adakari Vet Scout programme promoted by the EEC-funded Turkana Rehabilitation Programme in the late 1980s and the Norwegian Overseas Aid (NORAD) programme in Turkana in the early 1990s.

The first inklings of change in the livestock sub-sector emerged through a series of research papers in the Ministry of Livestock Development in 1982 and 1983, leading to a policy paper on the privatisation of veterinary services. This was warmly received by the Minister for Livestock Development, and he was perceived to be ahead of the game within government. But these plans were never implemented.

The second DAH scheme got underway in 1984, again under the Catholic Church, this time in Narok District, another ASAL area in South-Western Kenya, but collapsed when Kit Flowers, the expatriate vet who set it up, left the country.

Sessional Paper No 1 (1986) 'Economic Management for Renewed Growth' set the stage for structural adjustment within government and the gradual privatisation of public services. Serious planning for reform in the Ministry of Agriculture (which had by that time subsumed the Ministry of Livestock Development) began with the donor-funded Agriculture Sector Investment Project in the mid 1990s. But an interdepartmental committee set up to look at the implications for the Department of Veterinary Services failed to reach any concrete conclusions before quietly collapsing following the transfer of the committee chairman.

The Intermediate Technology Development Group (ITDG), a UK based NGO, arrived in Kenya in 1986 to work with the Catholic Diocese of Meru at Kamujini Farmers Centre (KFC) in the lower potential areas of Meru District. ITDG had become interested in the dramatic improvements in rural health care provision in China during the 1970s (White, 1998) and whether the 'barefoot doctor' approach could be applied in the livestock sector (Darroch, 1982). They were also influenced by World Bank proposals for new privatised livestock services in Sub-Saharan Africa (de Haan, 1985). Based on the results of some preliminary studies (ITDG, 1987) ITDG trained 17 Community Animal Health Workers (CAHWs) at Kamujini in early 1987. From the outset ITDG intended to test the approach, and if successful, to seek to influence the policy environment so that the approach could be replicated more widely. ITDG established several other CAHW schemes over the next few years with different partners in many different parts of the country including East Pokot (also in 1987) Machakos (1988), Makueni, Samburu (1989), and Turkana (1990) (see ITDG, 2000b; 2000c).

Budget restrictions began to bite in the late 1980s and the government stopped automatically employing all vets and AHTs on graduation in 1988, and froze recruitment into vacant posts. This had a disproportionate impact in the ASAL areas (commonly referred to as hardship areas) as vets and AHTs in those areas frequently requested transfers to less remote areas. The University and Technical Training Institutes carried on training veterinary staff, turning out about 50 veterinary graduates and approximately 300 AHTs each year. Although some of the vets and AHTs started working privately, and others were employed by private sector companies, NGOs and cooperatives, or moved into different professions, the gradually increasing number of unemployed vets and AHTs became a significant pressure group for change over the next few years.

Dr Julius Kajume, later to become one of the leading supporters of the CAHW approach within government, moved from a veterinary public health post in Nairobi, to become Provincial Director of Veterinary Services in Eastern Province in 1989. This brought him face to face with the difficulties of trying to provide adequate animal health services in the ASAL areas with ever-dwindling resources.

In 1988 ITDG organised the first of what was to become a series of annual workshops for vets involved in DAH projects (ITDG, 1991; 1993; 1994; 1999; 2000). The workshop, held at KFC in Meru District, was attended mainly by ITDG and their partners' staff, and included three government vets who had been involved in setting up the programmes. Gradually over the next few years, the proportion of government veterinary staff among the participants increased to nearly 50%, including some Provincial-level Veterinarians and senior researchers. Towards the end of 1999 there were indications that the Director of Veterinary Services was aware of, and interested in the CAHW approach.

In a move that caught many by surprise, Dr Wamukoya, the head of the Clinical Studies Department of the Veterinary Faculty, University of Nairobi, was appointed as Director of Veterinary Services in 1990. He brought with him an emphasis on standards of professionalism and professional ethics which were very difficult to realise in the harsh reality of declining veterinary budgets and collapsing services, especially in the ASAL areas. He was disinclined to consider options which he thought would compromise the high standards of the veterinary service, especially if they contravened the Veterinary Surgeons Act. When Jeff Mariner, an expatriate vet working with the Organisation of African Unity/International Bureau for Animal Resources Pan Africa Rinderpest Campaign (OAU/IBAR PARC), called him about a proposal he had written about training CAHWs to vaccinate cattle against Rinderpest in Northern Kenya, Dr Wamukoya said 'If I had known the proposal was about training CAHWs, I could have saved you the trouble of writing it' (Mariner, Personal Communication). Later, in 1993, while visiting a German Technical Cooperation (GTZ) project working with government departments, including the department of veterinary services in Marsabit District (an ASAL area), with the Permanent Secretary of the Ministry of Agriculture and Livestock Development, Dr Wamukoya strongly opposed the project's plans to train Contact Herders (a form of CAHWs). Fortunately for the project, and the CAHW policy story, he was overruled by the Permanent Secretary who was from an ASAL area himself and was impressed by the approach.

More CAHW schemes were quietly established by bilateral and NGOs during the early 1990s, usually working with district veterinary staff, but these schemes were largely invisible to the DVS and to the Kenya Vet Board (KVB) and Kenya Veterinary Association (KVA).

Jeff Mariner started the Thermostable Rinderpest Vaccine Technology Transfer (TRVTT) Project with OAU/IBAR in 1990. The project aimed to transfer the production of a thermostable Rinderpest vaccine, developed in the USA, to laboratories in Africa. This vaccine has a long shelf life without refrigeration, and can be distributed and used much more easily than earlier vaccines which required an efficient cold-chain. The project successfully established vaccine production facilities in Cameroon and Ethiopia (though not in Kenya), but the national veterinary departments supported by OAU/IBAR PARC continued to use the same inefficient cold-chain routes and systems.

Despite the DVS's opposition, (see above) the GTZ-funded Marsabit Integrated Development Programme started to train 'Contact Herders' with local department of veterinary services staff in 1992. Over the next few years, the approach they developed was gradually taken up by a number of other GTZ-funded projects in other parts of Kenya.

After three national Vets Workshops, ITDG organised an International Workshop in Kenya in 1992, with participants from 18 countries worldwide. Several Kenyan vets were also invited to the workshop, which included field visits to several decentralised animal health (DAH) projects in various parts of the country. The degree of international interest encouraged the Kenyan participants and the workshop allowed Jeff Mariner to get to know Darlington Akabwai and Tim Leyland, who later joined the TRVTT and subsequent PARC-VAC project and became key players in the DAH policy story in Kenya.

Still unaware of the growing number of DAH projects in his province, Dr Kajume received letters from several of his District Veterinary Officers (DVOs) in 1993 requesting permission to attend ITDG's 4th Vets Workshop in Hunters Lodge (see ITDG, 1993). Annoyed that he had not been informed himself, he asked the Director of Veterinary Services if he knew anything about it. The Director did not know anything about it and asked Dr Kajume to find out more. Dr Kajume decided to attend the workshop personally and was surprised to discover so many government staff in attendance and to hear about so many apparently successful schemes to improve animal health services in ASAL areas. Knowing from personal experience how difficult it was to provide

adequate services in these areas, he became convinced that the CAHW approach should be replicated more widely – albeit under better control from the veterinary department. By this time however, the emphasis of the early Vets Workshops as a vehicle to exert policy influence had waned, and workshops between 1994 and 1997 became more concerned with sharing experiences between DAH schemes – a sort of DAH project club – with the same participants turning up year after year (see for example ITDG, 1994). Those in the club valued them as opportunities to learn about each other’s experiences, while those outside the club knew very little about them.

4.4 1994 to 1997: the conspiracy of silence

Dr Wamukoya’s secondment to the Department came to an end in 1994 and he was succeeded by Dr Kimanzi. Dr Kimanzi, like Dr Kajume, had worked both in the Veterinary Public Health Division and as Provincial Director of Veterinary Services in Nyanza and Eastern Provinces. Dr Kajume had worked for Dr Kimanzi while both were in the Veterinary Public Health Division in the late 1980s and Dr Kimanzi brought Dr Kajume back to Nairobi towards the end of the year.

Dr Kajume became increasingly involved in CAHW schemes over the next two years, and from this time, national animal health policy-makers were fully aware of the gradually expanding number of CAHW projects. However they deliberately chose to do nothing about it, despite a gradually increasing number of requests for clarification from field-based veterinary officers who were involved in CAHW schemes. As registrar for the KVB, the Director of Veterinary Services was in a difficult position. He could not confirm that CAHW schemes were legal, and he knew that seeking to change the prevailing policies and law to make them so would encounter strong opposition from the entire veterinary profession, yet closing them down would dramatically reduce the availability of animal health services in the ASAL areas.

After many years in preparation, the KVA Privatisation Scheme was finally launched in 1994. This EC funded scheme provided soft loans to veterinarians wishing to set up in private practice. Originally conceived in 1989 it had taken nearly five years to develop because the KVA, dominated at that time by Government vets, could not find an affordable loan package attractive enough to encourage any government vets to leave the security of a government job. Meanwhile many of the unemployed vets had quietly established private practices without any loan at all.

The unemployed AHTs had a harder time however. Although they are all secondary school leavers with two or three years tertiary training in animal health care at technical institutes, the Veterinary Surgeons Act forbids them to provide veterinary services except ‘under the supervision of a veterinary surgeon’. Some had been employed by private vets or drug companies, and some had started to practise illegally, but many were still unemployed and increasingly unhappy. They had decided to establish an Association to represent their interests in the early 1990s, but had encountered strong opposition in the Department of Veterinary Services, and the Kenya Association of Livestock Technicians (KALT) was only finally registered in 1995 after they had threatened to march to State House to express their grievance to the Head of State. The Minister also promised to change the law to allow them to establish private animal health services in their own right (see Kimanzi, 1997).

Shortly after ITDG’s international DAH workshop (in 1992), Darlington Akabwai joined the Tufts/TRVTT project and started testing CAHW schemes to deliver Rinderpest vaccination programmes in Uganda and Ethiopia. In 1995, Tim Leyland also joined Tufts and the TRVTT project and working through Operation Lifeline Sudan tested the approach in South Sudan. The approach was very successful, achieving much higher coverage rates for a fraction of the cost of the other more traditional government vaccination programmes, convincing OAU/IBAR to adopt it as the key principle for the PARC-VAC project.

During 1996, in an attempt to convince the Kenyan government to adopt the CAHW approach to Rinderpest vaccination, the TRVTT project organised a visit for Kenyan vets to South Sudan to see the CAHW programme for themselves. The Kenyans were impressed by the results, but were reluctant to accept that an approach which seemed to work in neighbouring but war-torn Sudan could be appropriate in Kenya. So TRVTT then took them to Afar in Ethiopia to see a similar approach, but in a country with an effective veterinary department and indeed they became more interested.

By this time there were a large number of CAHW schemes throughout the ASAL areas of Kenya, meeting annually at the ITDG Vets Workshops, and some donors were also training CAHWs in medium potential areas. The FARM Africa Goat Project, a collaborative project, established at the request of the Kenya government, had started to develop a programme with the department of veterinary services in Meru District, incorporating both private veterinarians and CAHWs. In 1996 Dr Kajume became the main contact point for DAH programmes within the Department of Veterinary Services and was frequently consulted on policy issues.

The number of CAHW schemes continued to increase during 1997, but the Director of Veterinary Services chose to turn a blind eye. OAU/IBAR started negotiating with the DVS to start vaccination programmes using CAHWs in Northern Kenya, meanwhile running training of trainers workshops for NGO staff involved in training CAHWs in South Sudan and Northern Kenya. The NGOs started talking once more about lobbying for policy change and legal reform to promote DAH schemes, and were joined by KALT who were becoming increasingly militant since there was still no sign of the necessary reforms to allow them to practise. Then, ironically, just when there seemed to be a real opportunity to promote change, ITDG's animal health programme ran out of funds after the 7th Vets Workshop in Marsabit. The Kenya Vet Board and Kenya Veterinary Association had only gradually become aware of the CAHW movement, but became increasingly alarmed during the year they learned more about them. They regarded them generally as a threat to veterinary professionalism, but were particularly concerned to discover that some schemes were operating in medium-potential parts of the country, where some private vets were trying to establish private practices, and that many of the schemes had been established by expatriate vets working in Kenya without registering with the Board. Their concern finally boiled over at a FARM Africa workshop in Embu in December 1997.

4.5 1998 to 2000: the tipping point

After more than a year's work with local veterinary staff, FARM Africa had finally found a workable model for the animal health component of their goat project. Their plan involved establishing private vets with loans from the Kenya Veterinary Association Privatisation Scheme (KVAPS), working with Animal Health Assistants (AHAs), who would support self-employed CAHWs at village level, to provide the necessary service to farmers. This proved too much for a representative of the KVB who had been invited to the inaugural workshop in Embu, who angrily warned the Kenyan project vet that what he was proposing was illegal and that he would be struck off the veterinary register if he proceeded.

Shortly afterwards, in January 1998, the KVB put a full-page advertisement in the national newspapers pointing out that it was illegal to train community animal health workers and that any Vets doing so risked being struck off the veterinary register. This alarmed everyone working on DAH schemes. ITDG and others decided that the best defence would be to try to get all parties together to discuss the issues and find a solution. But ITDG had no money and had to look for resources from other organisations. OAU/IBAR, still waiting for approval for their proposed CAHW programme in Northern Kenya, was also keen to find a solution. They and The Netherlands

Development Agency (SNV) offered to fund the workshop, provided it was supported by all stakeholders. ITDG then formed a committee of a few individuals, including Dr Kajume to develop the workshop. In view of the sensitivity of the workshop theme, ('Practice, Policy and the Law in the Delivery of Animal Health Services particularly in Arid and Semi Arid Lands (ASALs)'), Dr Kajume advised ITDG to include representatives of all key parties in the planning committee.

The Vet Board letter also unblocked a study of livestock services in ASAL areas that had been proposed some months earlier by the European Union Rural Development Adviser. Dr Kimanzi, initially hesitant to give clearance, was eventually convinced of the value of the proposed study, and on his part Dr Kajume, seeing an opportunity to broaden the debate, recommended that the study should go ahead, but with two Kenyan team members rather than the one originally proposed. Dr Kajume, Professor Gathuma from the Faculty of Veterinary Medicine, and Dr Hübl, an expatriate consultant, undertook the study between February and May (Hübl, 1998). The study included stakeholder workshops in each region, and culminated in a major workshop to discuss the findings in Nairobi in May 1998. The workshop was well attended by all livestock service stakeholders, and highly influential in changing official attitudes towards CAHWs. The issue was out of the closet and open for debate.

At around the same time, the DVS finally signed a Memorandum of Understanding (MoU) allowing PARC-VAC to establish a pilot scheme using CAHWs in Turkana and West Pokot. An international workshop on DAH, focusing on delivery of animal health services in Eastern Africa, held in Arusha in December added further impetus. In planning for this workshop, each of the three East African countries (Uganda, Tanzania and Kenya) had a coordinator – Dr Kajume was the country coordinator for Kenya. It was well attended by participants from Kenya, who were impressed by the degree of interest being shown by other countries, by the evidence of the effectiveness of CAHW schemes presented by delegates, and the endorsement of the approach by OAU/IBAR – an increasingly important donor for livestock services in Kenya.

The 8th ITDG Vets Workshop, renamed a DAH Workshop, was held in Meru in May 1999, following several months planning by a committee including representatives of all the main stakeholders (ITDG, 1999). The programme included key presentations from all of the stakeholders, and covered the right spectrum of participants. The workshop endorsed the CAHW approach and established multi-stakeholder working groups to develop guidelines and standards for CAHWs in Kenya, and recommended a review of the legislation and policy. After much negotiation, ITDG obtained funding for a further three-years work, with explicit outputs relating to policy reform. The MoU between DVS and PARC-VAC was expanded to include SNV and VSF (Belgium) as implementing agencies and to cover more divisions in Turkana and West Pokot (DVS, 2000a). Dr Kimanzi retired in September, and Dr Kajume took over as Acting Director of Veterinary Services for six months until April 2000, during which period he initiated the policy and legal review processes.

4.6 2000 to 2002: rocks ahead

Unfortunately for the DAH policy story, Dr Kajume did not get the Director of Veterinary Services post. Instead it went to Dr Chong, a more traditional veterinarian who has spent most of his veterinary career in the veterinary laboratory services division. Nevertheless, he supported the process of policy and legal review, focusing on the entire scope of veterinary services and culminating in a series of five multi-stakeholder workshops to gather views and recommendations, between September and November 1999. During this time, many new NGOs became involved in training CAHWs as part of short-term relief programmes in ASAL areas following the 1999–2000 drought. With only short-term funding, some of these programmes were implemented too quickly,

neglecting the essential and time-consuming, community-awareness and education elements of successful programmes. Many collapsed as soon as the agency withdrew, attracting criticism from veterinary professionals and providing evidence of the dangers of the approach for its opponents.

Changes in the executive committee further undermined support in the KVA and the Annual KVA Conference in April 2000 in Mombasa, narrowly sidestepped a motion proposing to lobby to ban CAHWs (KVA, 2000). The motion did not go through but gave a clear signal that there was significant resistance to DAH approach within KVA. Surprisingly, there was no discussion at all about CAHWs at the following KVA Annual General Meeting in April 2001. The KVB and DVS finally approved the minimum standards and guidelines for CAHWs in early 2001 (KVB, 2002a), and since then these guidelines have been tested in the field. In the meantime, the animal health policy review process was being carried out, and at the OAU/IBAR 50th Anniversary Party in November 2001, the Minister of Agriculture promised to push the new policy through Cabinet if it could be completed by February 2002.

The new animal health policy document was duly completed in early 2002 (MoA&RD, 2002) and a draft submitted to the Permanent Secretary, Ministry of Agriculture and Rural Development for further scrutiny. Some unfortunate drafting in the new Veterinary Practitioners Bill which defined CAHWs as 'Veterinary Surgeons' provoked a very strong reaction at the Annual KVA Meeting in Kakamega, where delegates strongly opposed any further moves to legalise CAHWs and proposed to petition for an injunction (KVA, 2002a; 2002b). Recent information indicates that KVA has already petitioned DVS to withdraw the document to allow inclusion of their input. It seems that it may be a while yet before CAHWs are finally legalised in Kenya.

5 The Critical Factors

5.1 The policy context: politics and institutions

Political, social and economic structures and interests

- The political system in Kenya is inherently conservative and very slow to change.
- Government investment policy favours the high potential areas. More than 75% of Kenya's livestock are in the ASAL areas, but are served by fewer than 10% of livestock service staff. The ASAL areas are considered a hardship post and few vet staff want to work there.
- There has always been reluctance in Kenya to address the complexity of different policies for different parts of the country, despite the enormous social, economic and political difference between the high potential areas and the ASAL areas. Whereas the Veterinary Surgeons Act and Pharmacy and Poisons Act may be sensible in high potential areas, they make little sense in the ASAL areas where there are few vets, few roads, few shops and vast distances between settlements and the nomadic herds.
- Traditionally, the DVS has been the source of policy directions. The DVS gives policy directions in the form of circulars to the Veterinary field staff, who disseminate them to livestock farmers and the public in general. There have been various attempts to develop livestock development and animal health policies and strategies in the past, but with little success.
- The Department of Veterinary Services and its Director have gradually been demoted following transfer of livestock production functions from the department mandate. In the 1960s the Director of Veterinary Services, although only the head of the Veterinary Department, held the same rank as the Permanent Secretary. The Department enjoyed a high profile in terms of budgetary provisions and good performance but this has changed over the years and is no longer the case. The Director of Veterinary Services is currently at a lower grade than his counterparts in the Ministry of Health and Department of Agriculture and Livestock Production.
- The Director of Veterinary Services used to manage all government livestock services, which included both Veterinary Services and Livestock Production. Livestock Production has been absorbed into the Department of Agriculture and Livestock Production, leaving the Department of Veterinary Services as a separate department in the Ministry of Agriculture and Rural Development. The Director of Veterinary Services now has no control over Livestock Production or Livestock Extension activities.
- There is a very strong focus on professionalism in the Veterinary Department and Veterinary Profession as a whole in Kenya. This is thought to date from the colonial era, and the adoption of both the Veterinary Surgeons Act, and attitudes towards the veterinary profession from the UK. Veterinary Departments in other East African countries have envied Kenya's Veterinary Department because it has always been relatively well resourced. Dr Wamukoya (Director of Veterinary Services from 1990 to 1994) was particularly pro-professionalism and professional ethics. He came to the department from the Department of Clinical Studies in the Veterinary Faculty of the University of Nairobi, and his field experience in government veterinary services was limited.
- The inexorable reduction of Veterinary Department budgets between the mid 1980s and mid 1990s left very little room for manoeuvre. The inability of the Department to implement an orderly organisational reform programme meant the Director had to try to share ever-dwindling resources across a largely unchanged organisation. Most of the cuts were made in the operational budgets, so by the late 1980s Vets in the field had virtually no resources for travel or equipment, and unless they could find some running costs from elsewhere, they could do little field work. This factor made them more willing than they might have otherwise been to

collaborate with NGOs and Bilateral Projects wanting to implement CAHW programmes, even though everyone knew that they were, strictly speaking, illegal.

- The personal attitudes of successive Directors of Veterinary Services had a major influence on their willingness to consider new options. Dr Wellington Ngulo (1987–1990) was relatively open minded, but the CAHW ‘experiment’ in Kenya had not developed a critical mass of evidence and experience, nor contacts at a sufficiently senior level in government to seek to influence him before he left the department. Dr Wamukoya, (1990–1994) was openly opposed to any innovation which he felt threatened the professionalism of veterinary services (see above and the Jeff Mariner and Marsabit visit stories). Dr Kimanzi (1994–1999), had worked in Veterinary Public Health and in the field, and was much more open to new ideas. He was acutely aware that addressing the CAHW issue would not be well received by a large section of the profession, and quite deliberately chose to ignore requests for clarification from District Veterinary Officers involved in CAHW programmes in the early 1990s. However he was quick to seize the opportunity provided by the Vet Board advertisement in the newspaper in early 1998, to allow policy debate without interfering or committing himself. Julius Kajume (acting District Veterinary Officer from October 1999 to March 2000) was extremely supportive of the CAHW approach, and there may have been an opportunity to approve new policy and legislation at that time, had it been ready then. Unfortunately in April 2002 he had to hand over to the new permanent Director of Veterinary Services, Dr Chong, who had spent most of his career in the veterinary laboratory service, and had limited field experience.
- Sessional Paper No 1 (1986) ‘Economic Management for Renewed Growth’ set the scene in Kenya for structural adjustment, streamlining of government and privatisation. Although the Livestock Ministry had considered some of these issues in a series of research and policy papers in the early 1980s (initiated by David Leonard, an expatriate adviser), they were never implemented. However, attempts at structural reforms were pursued later in the 1990s under the agricultural investment sector programme (ASMP II) but with limited success.
- There was pressure for the privatisation of veterinary services from the World Bank and the EC in the mid 1980s (de Haan, 1985), which finally resulted in a project – the Kenya Veterinary Association Privatisation Scheme, which started in 1994. The scheme provided soft loans to vets to help them set up in practice. Originally conceived as a mechanism to encourage vets to leave government service, the planning was left to the KVA which was, at that time, dominated by government vets. The packages they came up with, which included money to purchase vehicles, rent premises and provide income guarantees, were unaffordable. The much more modest package which was finally agreed, although on the best credit terms available anywhere in Kenya, and with an interest discount for vets who paid on time, was not good enough to encourage many vets to leave government. It did however attract many vets who had not been employed by the government since the cessation of automatic recruitment in 1988. The scheme has become one of the most important functions of the KVA and has done much to raise awareness of the need to establish private practices, especially in the high potential areas.
- Unemployed Vets and Animal Health Technicians are very reluctant to see CAHWs licensed to practice, and applied pressure on the Department of Veterinary Services through personal contacts and through the KVA to block their acceptance.
- The Kenya Association of Livestock Technicians (KALT) was formed by Animal Health Technicians, trained (and still being trained) by the government, who stopped automatically employing them on graduation in 1988. Many remain unemployed and the Veterinary Surgeons Act prohibits them from practising except ‘under the direct supervision of a veterinary surgeon’, so they cannot set up their own businesses legally. Despite regular promises by the Director of Veterinary Services and the Minister of Agriculture and Livestock Development at successive graduation ceremonies that this problem would be resolved, nothing had happened by the early 1990s, and the Animal Health Technicians decided to register an Association to help them lobby for change. This move was resisted by the Department of Veterinary Services for several years,

until an increasingly militant KALT threatened to march to State House in 1995 to take their grievance to the head of state. The Minister then finally allowed them to register the association and promised, again, to resolve the problem. When the problem still had not been resolved by 1997, KALT decided to join the growing NGO lobby for reform, even though they were quite aware that the NGO lobby about CAHWs, would not, in the long run, be in their interest.

- Successive Directors of Veterinary Services have faced a dilemma since the mid 1980s because of two conflicting forces within the department. On the one hand, a large number of Nairobi-based staff and those working in high potential areas have been opposed the CAHW approach, since they feel it undermines the veterinary profession, but on the other hand, field-based staff in the ASAL areas support it, and are often actually working with NGOs and other agencies to establish and support CAHW schemes.
- The KVA has been vocal in opposition to legalising CAHWs. Initially dominated by Nairobi-based government vets, the Association has expanded rapidly and has set up branches, especially in high-potential areas where many vets are establishing private practices. The Central Region Branch, dominated by both private practitioners and government vets, is especially vocal.
- NGOs have been seeking to influence the government in favour of CAHW schemes since the mid 1980s. The focus initially was on convincing field-staff to help establish pilot projects, and later on identifying and developing individual supporters in Provincial and National levels and Research Institutes. It was not until late 1997 that serious thought was given to how to lobby the Department more effectively. Then, in early 1998 matters were brought to a head by the KVB letter in the national press.
- DFID, the EU and OAU/IBAR started to put pressure on the government to support CAHW schemes in the mid 1990s. The EU and DFID supported some of the early CAHW schemes being developed by ITDG in Kenya from the late 1980s, and the EU, as the major donor in the KVAPS, became more directly involved in veterinary service policy issues in the early 1990s. OAU/IBAR had achieved great success with CAHW schemes eradicating Rinderpest in South Sudan and Ethiopia in the early 1990s, and wanted to use the same techniques to eradicate the remaining endemic areas in Northern Kenya. Following a failed attempt to interest the DVS in a CAHW scheme in 1992, they started trying again in 1996.

Key actors

- Most of the NGOs involved in early CAHW projects did little research beyond the minimum necessary to set up their projects, and minimal monitoring and evaluation.
- ITDG, however, with an explicit focus on developing, testing and then disseminating new technologies, undertook substantial base-line studies before starting work. The studies aimed to describe the current situation, collect some base-line data for subsequent evaluation, and generate evidence to convince others to adopt the approaches.
- Bilateral and multilateral donor-funded projects also commissioned and undertook research, mainly for project design and Monitoring and Evaluation (M&E).
- The GTZ project in Marsabit explicitly collected information on impact, including serological surveys, to provide convincing data of the effectiveness of the approach and to protect the District Veterinary Officer (DVO) who was (correctly) nervous of the legality of the approach. The DVO sent this data to the Provincial Director of Veterinary Services, and it was also presented in various national and international workshops and seminars.
- The OAU/IBAR Thermostable Rinderpest Vaccination Technology Transfer (TRVTT) project undertook traditional (serological) and participatory epidemiological research on Rinderpest and other diseases before, during and after implementing CAHW vaccination programmes, as well

as data about the delivery of the vaccination programme itself. This information influenced OAU/IBAR, which until that time had been using more traditional approaches to support and develop the CAHW approach. This subsequently became the Participatory and Community-based Vaccination Project (PARC-VAC).

- The PARC-VAC project also collected substantial amounts of data to measure the effectiveness of the approach and to influence governments in the region to adopt the CAHW approach.
- Various research studies were undertaken during the 1980s and 1990s by researchers from the University of Nairobi and elsewhere, but these were largely driven by the academic community, and the results rarely percolated widely outside.
- The first study of livestock services in the ASAL areas with substantial government ownership was commissioned in 1998 and became widely known as the Hübl study. The initial proposal for the study was developed by the EC Rural Development Adviser in 1997, who proposed a two-person team of one expatriate and one Kenyan. The Department of Veterinary Services initially showed little interest in the study but eventually gave clearance and also agreed to participate. The Department however proposed that the government involvement should be increased to two team members, one from the DVS (Dr Kajume) and one from the University (Professor Gathuma). The proposal from the DVS was accepted and the study got underway in February 1998, and as well as field visits to investigate the situation on the ground in the ASAL areas, it included a series of stakeholder workshops in different parts of the country to gather as many views as possible (Hübl, 1998).
- A multi-stakeholder committee was established following the ITDG DAH workshop in Meru in 1999 to follow-up the policy issues, legal matters and training curricula concerning DAH and CAHWs in more depth. This committee included representatives from government, the KVA, the KVB, NGOs and donors.

Assumptions and attitudes

- Vets everywhere object to the concept of non-vets providing even relatively simple veterinary services. Most believe that they are the only people sufficiently well qualified to treat animals. Most countries have legislation preventing non-vets treating animals (usually in something similar to the Veterinary Surgeons Act) and possessing ethical drugs (in something like a Pharmacy and Poisons Act). Kenyan vets seem to hold this view particularly strongly.
- In addition, Vets trying to establish private practices in Kenya perceive CAHWs (and AHTs) as competitors, who, through lower prices, might take some of their business. There is a remarkable blindness to the possibility that a private vet working with AHTs and CAHWs could cover a much larger area; make a lot of money from medicine sales; and to the fact that CAHWs at village level could provide an extremely effective disease early warning system. These concepts are now being discussed, but few vets are convinced.
- Supporting CAHW schemes would be a fundamental policy shift in Kenya and would require the complete overhaul of animal health policy and changes to relevant laws.
- Most of the early CAHW schemes were established by NGOs, sometimes working with the local government veterinary officer and sometimes not. Most government vets at field level were keen to work with NGO programmes because they provided some additional much-needed resources at a time when they had very limited operational budgets from the government. Some projects managed to persuade the government to second veterinary staff to help establish CAHW schemes, but the exact nature of the project was usually not explicit. By 1992, the Director of Veterinary Services was aware of, and completely opposed to the CAHW concept (see the Jeff Mariner story), but probably not aware of how many were already operating in Kenya. Gradually, with the increasing involvement of bilateral and multilateral agencies, the government became more aware of them. Julius Kajume, then Provincial Director of Veterinary

Services for Eastern Province first heard about CAHWs when he attended ITDG's 4th Annual Vets Workshop in 1993. He quickly became convinced of their value, and maintained close contact with two former government vets who had joined ITDG's CAHW Programme. When he returned to the headquarters in Nairobi as Deputy Director of Veterinary Service (Administration and Management Support) in early 1995, he became the key contact point for CAHW schemes in the Veterinary Department, as well as one of the approach's strongest advocates.

- While support for the CAHW concept grew slowly in the Department of Veterinary Services, the Kenya Veterinary Board, driven mainly by the professional and ethical concerns described above, became increasingly concerned, until they published an advertisement in the national press in January 1998 threatening to de-register any vets who trained CAHWs. Later on however, after the Hübl study report meeting in Nairobi in May 1998, the KVB joined a multidisciplinary committee to prepare for ITDG's 1999 DAH workshop, and following the workshop took a lead role in the working group to review the policy and legislation relevant to Animal Health Services.
- The KVA, on the other hand, still opposes the CAHW concept. Initially strong supporters of the KVB position and their 1998 advertisement, KVA representatives were subsequently persuaded to join a multidisciplinary planning committee for the 1999 DAH workshop. They attended the meeting and subsequently joined a working group to develop new policies and legislation. In 1999 the entire KVA Executive Committee changed (the KVA elects its leadership annually), but for the sake of continuity they decided to keep the same representative (a member of the previous executive committee) on the working group. Gradually however the new committee, strongly influenced by vets in Central Region Branch of KVA who opposed the CAHW concept, became annoyed that they were being represented in the working group by an ex-committee member, and in the Annual KVA meeting in late 2000, came close to passing a motion banning CAHWs from practicing (KVA, 2000). Their opposition hardened still further at the 2002 Annual Conference in Kakamega, where they unanimously demanded that the Government withdraw the proposed Veterinary Practitioners Bill (and instead strengthen the existing Veterinary Surgeons Act) and that the KVB should withdraw its support for the new curriculum on training CAHWs (KVA, 2002a; 2002b). Understandably, the KVA's argument is that KVB has no mandate to produce any such curriculum under the provisions of the Veterinary Surgeons Act, under which the KVB was established.

5.2 Evidence: credibility and communication

The researchers

- ITDG and other early promoters of the CAHW approach in Kenya were informed and motivated by a range of new ideas about rural development from different disciplines. The development discourse in the early 1980s was influenced by an increasing recognition of the value of indigenous knowledge and indigenous systems, especially in pastoral areas (Toulmin, 1986). The rural health revolution in China, based on barefoot doctors (as described in White, 1998), stimulated much debate about the potential value of para-professional services in other sectors. World Bank studies describing the collapse of livestock service provision in Sub-Saharan Africa (de Haan, 1985) spawned a number of experiments in more decentralised services based on privatised service providers, which showed promise (de Haan, 1991).
- On the ground however, most NGO projects only collected the information they needed to establish and manage their projects, although most also incorporated simple M&E systems, allowing them to monitor how many animals had been vaccinated or treated, and for what diseases. Most of this research was done with project beneficiaries using participatory methods.

- Working with its partners, and using participatory techniques, ITDG collected: socio-economic data (disaggregated by wealth and agro-ecological zone); information about livestock production and pre-existing animal health services; and information about traditional healers and ethno-veterinary knowledge. ITDG also monitored their programmes closely, both for internal project management, and to gather evidence with which to convince others of the effectiveness of the approach. ITDG specifically collected information which might allay the usual veterinary fears over such schemes: the danger of misdiagnosis; incorrect and/or over-use of drugs; and overcharging. Much of this information was made available to other organisations implementing CAHW projects in Kenya and elsewhere through publications, seminars, workshops and conferences, but little was directed specifically at the Department of Veterinary Services at policy level in Nairobi. However, there were continuous attempts at inviting the Director of Veterinary Services to attend the ITDG-EA Annual Vets Workshops.
- Bilateral and multilateral donor-funded projects also undertook research for project planning and had substantial monitoring and evaluation systems. Some employed consultants to undertake traditional studies; others used participatory approaches with local communities. GTZ commissioned Kabete Vet School to undertake a serological survey in its project areas to assess the effectiveness of the 'Contact Herders' programme.
- The Hübl study in 1998 was undertaken by a team including one expatriate and two Kenyans, one from the Department of Veterinary Services, the other from the Faculty of Veterinary Medicine, University of Nairobi. They visited several ASAL areas to interview government and NGO staff, other service providers and the livestock owners themselves. The study included multi-stakeholder workshops in different regions to verify and discuss the results. The final report was presented and discussed at a multi-stakeholder workshop in Nairobi.
- Some information from local, national and international workshops has also contributed to the policy debate in Kenya. Most of this information was collected by projects involved in CAHW schemes in different parts of Kenya and other countries.
- Much of the detailed information needed to draft the new Veterinary Services Policy was gathered by the working group through multi-stakeholder workshops in different parts of the country (DVS, 2000b).
- Over the last 10 years ITDG, OAU/IBAR and others have organised field visits and study tours to project sites around Kenya and elsewhere to allow people to learn about them at first hand.

Credibility

- Practical field experience in ASAL areas is often quoted as a precondition for understanding the CAHW approach. People who have worked there and know how difficult it is to provide services in such environments usually support the approach the first time they hear about it.
- Others who have visited CAHW schemes claim that they were convinced by the evidence of their own eyes, the evidence presented by veterinary staff involved in the schemes and the enthusiastic support of the schemes by livestock owners.
- Reports from government vets in the field were also highly valued by Government staff, but few field-based vets submitted reports which explicitly described CAHW programmes until the mid 1990s.
- NGO/donor studies were valued by NGOs and donors but considered suspect by government staff because they were perceived to be biased.
- The evidence and recommendations of the Hübl study were highly regarded by everyone. The Department of Veterinary Services trusted it because there were two well-regarded Kenyans on the team, and the donors respected the expatriate team leader Dr Hübl. The approach they used, including discussions with a very wide range of stakeholders at workshops throughout the country, also contributed to a high degree of credibility.

Specific evidence for specific audiences

- ITDG's emphasis for information dissemination in the 1980s, including project reports, training materials and booklets based on project experience, focused on providing the information needed by others to implement the approach. Once there were a number of projects up and running, ITDG organised annual Vets Workshops as a forum to share experiences. Workshop reports from the early 1990s, however, already emphasise the need to attract a wider range of participants, including policy-makers (ITDG, 1991).
- Some epidemiological data was produced by OAU/IBAR for scientific meetings.
- Although ITDG recognised the need to target policy-makers in the early 1990s, they continued to produce substantial 'how to do it books' rather than materials designed for policy-makers (e.g. ITDG, 2000b; 2000c).
- Throughout the evolution of the approach, all players emphasised the effectiveness of taking people to see CAHW schemes in action, regardless of their position and role.
- Since the 1998 KVB advertisement in the national press, there has been a great emphasis on multi-stakeholder committees, working groups and workshops as the main tools to gather and share information and to formulate the new policies and legislation.

Impact of the evidence

- Evidence of the value of CAHW schemes was largely ignored by policy-makers in Kenya until 1998. Initially this was because they were invisible, but from 1994 the Director of Veterinary Services, although aware of the approach, deliberately chose not to engage in what he knew would involve enormous policy reforms which would not be popular with many of his colleagues and peers.
- Organisations and individuals who attended the ITDG Vets Workshops shared a wide range of project-related information and publications through the late 1980s and early 1990s, but little information about the policy issues.
- OAU/IBAR raised the policy stakes considerably when they tried to obtain permission to train CAHWs for the PARC-VAC project in Northern Kenya. As an intergovernmental organisation they could not work without a clear agreement with the government at national level. Their attempts to get a Memorandum of Understanding in 1997 helped to bring the policy issues into the open.
- The lack of institutional memory and continuity in the KVA, caused by their annual replacement of the Executive Committee, and lack of clear policies, has been a major problem. While apparently supporting the process of policy and legal review during 1999 and 2000, there are a few KVA members in Central Region Branch, who have spent many years building up their private practice, who have always opposed it, fearing that the CAHWs might take away some of their business. They, and a small clique who are also strongly opposed but for hidden reasons, managed to turn the KVA against the process at the Annual General Meetings in 2002 (KVA, 2002a; 2002b). The current Chairperson however moderated his position in the final months of 2002, because he looked back through the files and discovered that the KVA has in fact been substantially involved in the discussions over the last few years. However, he is facing stiff opposition from some executive committee members.
- Policy-makers in Kenya seem to have been most convinced of the value of the CAHW approach by seeing them in action in the field. Once convinced, multi-stakeholder workshops have proved to be a very effective mechanism for deepening understanding and developing new policy ideas.

5.3 Links: influence and legitimacy

Roles and relationships

- NGOs and especially Catholic Diocese, provided the first entry point for the international NGOs who established many of the first CAHW projects in Kenya.
- International NGOs and bilateral donors developed close working relationships with local veterinary staff to obtain the local approval to set up the projects. Later, many NGOs, bilateral and multilateral projects employed vets and other animal health staff directly.
- Although ITDG had attracted some individual supporters and collaborators from national-level veterinary and research departments by the late 1980s, it was not until Dr Kajume attended the 4th Vets Workshop in 1993 that there was significant contact between the action-research community (those involved in establishing DAH projects) and the policy community (the Department of Veterinary Services).
- The ITDG Annual Vets Workshops grew between 1989 and 1997 into a ‘club’ of organisations involved in CAHW work. Those in the club came to the workshops and shared much useful experience, whereas those outside knew very little about them. Although early workshop reports stress the need to expand membership to include national-level policy-makers, this did not happen to a significant degree until the 8th workshop in 1999, after the KVB letter was published.
- The Kenya Association of Livestock Technicians was registered in 1995 and became aware of the CAHW concept soon after. When the promised legal reform that would allow them to practise more freely failed to materialise, they joined forces with the NGOs to lobby for policy and legal reform – even though they knew that the different interests of CAHWs and AHTs might become a problem later on.
- SNV and GTZ both became involved in CAHW projects with the government in the mid 1990s. Their involvement helped to bring the CAHW concept into the open and the government started to address the policy issues.
- DFID and EC advisers played a significant role in raising the policy debate in the mid and late 1990s. The EC proposed and funded the influential Hübl study in early 1998.
- OAU/IBAR first engaged with the policy debate in the early 1992, with a proposal under the TRVTT project to test a new CAHW approach to Rinderpest vaccination in Northern Kenya. The Director of Veterinary services was not interested and TRVTT developed the approach in Ethiopia, Uganda and South Sudan instead. OAU/IBAR tried to convince the Kenyans again in 1996 under the PARC-VAC project and took Kenyan vets to see the field projects in South Sudan and Ethiopia. Eventually, in 1997, they obtained an MoU to implement a pilot scheme in Northern Kenya. The TRVTT and PARC-VAC projects taught OAU/IBAR that changing attitudes among government staff was key to the success of CAHW approaches, and that if they were to be sustainable in the longer term, animal health policies and legislation would need to be changed in many countries. OAU/IBAR seized the opportunity presented by the KVB letter in the national press in early 1998 to push for policy and legislative review in Kenya – and saw the ITDG Vets Workshops as a suitable forum.

Key individuals and organisations

- ITDG started some of the earliest CAHW projects in Kenya, and unlike others, had an explicit focus on developing the approach, ‘proving the case’, then influencing the policy environment and other actors to promote its wider replication. ITDG’s annual Vets Workshops became the main forum for government and non-government agency dialogue about the approach in the late 1980s and early 1990s. An international workshop organised by ITDG in 1992 both raised the

profile of the approach in Kenya and brought together several individuals who would become influential in the process later on through OAU/IBAR. In the mid 1990s, ITDG put more effort into scaling-up the CAHWs approach in Kenya and the Eastern African Region, through helping other organisations to establish CAHWs projects and sharing experiences in the Vets Workshops. This helped to build-up the critical mass of organisational and individual support to the approach. In 1995, ITDG established a Decentralised Animal Health Support Unit, which was headed by one of the two ITDG vets. The KVB letter in the national press galvanised ITDG into organising another Vets Workshop to bring together the main actors and decide what to do. However, at that time, ITDG had no budget to run further workshops and had to look for resources elsewhere. OAU/IBAR offered to fund the workshop (along with SNV) but insisted that it should include all the stakeholders, including the Department of Veterinary Services, the KVA, the KVB, the Vet School and the donors. By that time, ITDG had also developed a close relationship with Dr Kajume, Deputy Director of Veterinary Services in Nairobi through the Vets Workshops and because he had contacts with the two ITDG vets (one of whom had worked with him while he was Eastern Provincial Director of Veterinary Services). He advised ITDG to establish a committee including representatives of all stakeholders to develop the workshop 'so that they could fight their battles before the workshop' (Kajume, Personal Communication). The workshop finally took place in May 1999 and was a great success. All parties agreed that CAHW schemes offered great potential to improve livestock services in ASAL areas, and established a multi-stakeholder working group to develop guidelines and standards for training of CAHWs in Kenya, and follow-up recommendations for the legislative and policy framework.

- Dr Julius Kajume graduated as a vet in 1976 and has worked in the Department of Veterinary Services ever since, initially in the veterinary Public Health division at Athi River Slaughter House, then in Mombasa, then at the Uplands Meat Factory. He completed an MSc in Veterinary Public Health at Edinburgh University in 1980, then returned to various posts in Veterinary Public Health, in and outside Nairobi, working closely with Dr Kimanzi (later to become Director of Veterinary Services) before being posted as Provincial Director of Veterinary Services in Eastern Province in 1989. While there he became involved in various CAHW initiatives including the early ITDG Vets Workshops in Hunters Lodge and Isiolo. He returned to headquarters at Kabete in early 1995 as the Deputy Director of Veterinary Services under Dr Kimanzi, who trusted him and gave him a relatively free hand to handle policy responsibilities, including CAHW issues. Dr Kajume was highly influential in events following the publication of the KVB letter in January 1998, including the Hübl study. He also made relevant presentations at various forums, including workshops and seminars. After Dr Kimanzi retired in September 1999, Julius was acting Director of Veterinary Services until April 2000.
- The EU first proposed what became known as the Hübl study in 1997, but the Department of Veterinary Services saw this as yet another expatriate donor initiative and was not very interested. After the publication of the KVB letter however, Dr Kajume saw the study as an opportunity for the Department of Veterinary Services to be seen as responding to the issues, and taking some control. He suggested to Dr Kimanzi that the study should go ahead, but with two Kenyans on the team, one from the Department, the other from the University. The study took place between March and May 1998, and largely because it was seen as a Department-led study, it convinced others in the Department, the KVB and the KVA, of the need to look seriously at the CAHW approach (see Hübl, 1998).
- The OAU/IBAR Pan African Rinderpest Project has been supporting the Department of Veterinary Services' Rinderpest vaccination programme since 1990s. Until the mid 1990s the programme used a vaccine which required refrigeration and a traditional approach to vaccination campaigns. OAU/IBAR's TRVTT project developed a new approach using a thermostable vaccine delivered by CAHWs during the early 1990s. The project had tried unsuccessfully to interest the Department of Veterinary Services in a pilot project using the

approach in Northern Kenya in 1992, but had achieved very good results in neighbouring Ethiopia, Uganda and South Sudan, leading to the development of the Participatory and Community-Based Vaccination (PARC-VAC) Project in 1996. It took OAU/IBAR a year to convince the DVS in Kenya to try the approach in Kenya – during which time the CAHW issue came to a head, culminating in the KVB letter in January 1998. Since then, OAU/IBAR has been a major player in the policy and legal reform process by funding and encouraging many of the multi-stakeholder preparatory and drafting processes.

Legitimacy

- Some of the most influential evidence seems to have been the enthusiasm of communities for the CAHW approach, both to participate in them, and to talk about them with visitors. ITDG and other NGOs organised many field visits for vets and others to visit project sites and meet the vets and livestock owners involved in them.
- The Hübl study was highly regarded by all because it was perceived as a Department of Veterinary Services study; included highly regarded researchers from the Department, the University and an internationally respected expatriate consultant; gathered evidence from a very wide range of stakeholders; and discussed the results and recommendations in a open forum to which all stakeholders were invited.
- Subsequent workshops and working groups have been influential because great care was taken to ensure that all the key stakeholders were involved at all stages: developing the approach, undertaking the work, discussing the results and agreeing the final recommendations.

6 Discussion

The research framework and approach described the integrated framework and some of the theory behind it. The Kenya case study seems to fit both well.

6.1 Politics and institutions

Political systems in Kenya are intrinsically conservative and slow to change. Animal health policy in Kenya in the 1980s was largely controlled by the Director of Veterinary Services and a small group of close advisers, whose attitudes towards animal health services were based largely on European models which they had tried to emulate throughout the country. Field veterinarians very quickly discovered that this was not possible under the financial constraints of the early 1990s, and many started working with NGOs and bilateral agencies to implement community-based animal health care programmes. But it took many years for policy-makers in Nairobi to accept the need for change, possibly because the Director of Veterinary Services between 1990 and 1994, who had been seconded into the position from the University, brought with him very traditional views and was strongly opposed to anything which appeared to undermine professional standards and ethics. Williams (1973) would explain the prevalent, rather traditional, attitudes towards animal health services among veterinarians in Kenya as the ‘dominant’ view; the new Director’s emphasis on professional standards and ethics as ‘residual’; and the new ideas among NGOs, bilateral donors and some government staff in the field supporting the new DAH approaches as the ‘emergent’ view. Since the emergent view presents itself as an alternative to the prevailing dominant view, it poses a threat to several powerful people and institutions, and is likely to face considerable opposition before it eventually (if ever) replaces the dominant view. Chambers (1993) provides a similar perspective when he describes the professions as inherently stable and conservative, with strong in-built barriers to change.

Meanwhile, vets in the field, or ‘Street-level Bureaucrats’ (Lipsky, 1980) finding themselves with virtually no operational budgets, adopted the community animal health care approaches being promoted by NGOs and bilateral agencies as the only way they could continue to provide any services at all.

The interplay between external pressures for change, financial reality at field level, and structural adjustment policies at central level, and professional attitudes, pragmatic at field level and idealistic at central level, created a climate in which, although the new approaches could develop in the field, they were unlikely to be accepted in the centre, at least until a more open-minded Director of Veterinary Services took over in 1994.

By that time the policy context was much more complex. There were more players involved – NGOs, bilateral and multilateral agencies were promoting community-based animal health care services, many field veterinarians were already involved in them, the KVB and KVA being distinct bodies, independent of government, were increasingly representing the views of private veterinarians. The policy process had become the sort of complex, highly politicised process described by Sutton (1999) and Keeley and Scoones (1999), with increasingly polarised views developing in the different camps, and no mechanism for dialogue and resolution.

The publication of the letter in the national press by the Kenya Vet Board threatening to de-register any vets involved in community animal health care programmes brought matters to a crisis in early 1998, forcing the NGO community, bilateral donors and government to get together to find a

solution. It is very difficult now to find out exactly what provoked the Kenya Vet Board to publish the letter. There are several competing narratives which are described in section 4.

Whatever the cause, the letter brought about the kind of crisis necessary to allow a new problem-solving paradigm to emerge. Kuhn (1970) explains that new paradigms often run in parallel with existing paradigms until the old paradigm is no longer able to provide solutions to the continuous stream of problems. When enough ‘insoluble’ problems stack up, a sense of crisis sets in, and people are then willing to turn to alternative or new paradigms that offer to provide new solutions. If the new paradigm is able to deal with the problems, it will gradually come to be accepted.

The case in Kenya shows that this sense of crisis can set in at different times for different groups in the policy and implementation process. Street-level bureaucrats are often forced to deal with new problems before high-level policy-makers, and therefore go through the process of crisis and adoption of a new paradigm earlier. The coexistence of different problem-solving paradigms that can be seen in the different level of policy-making and implementation in Kenya seems to have contributed to the delayed official policy change and also to the sense of confusion.

6.2 Evidence and legitimacy

Most of the NGOs involved in community-based animal health care programmes in Kenya did not set out to research how to improve animal health care, they simply applied a generic and relatively well known international model (based on the Chinese barefoot doctor model) using highly participatory approaches. They were very successful, and farmers and local veterinarians became enthusiastic supporters very quickly. The visible evidence, on the ground and as described by farmers and local veterinary personnel, had high legitimacy and was extremely convincing for visitors. Watzlawick (1978) contends that some of the most effective communication in unintentional, tacit communication, between two individuals who happen to be in the same place at the same time, can have an enormous impact.

ITDG generated more technical information, specifically to engage with policy-makers, then circulated it through workshops and seminars which few policy-makers attended, and packaged it in handbooks and guidelines for practitioners, rather than policy briefs for policy-makers. The choice of the term ‘Community Animal Health Worker’ may have made the task of explaining the approach more difficult than it need have been. Using the term ‘Community-based Vet Scout’ might have been easier for veterinary professionals to accept, since Vet Scouts had been an essential component of early veterinary services in Kenya.

Bilateral and multilateral donor-funded projects generated yet more scientific data, partly to provide evidence to protect the government vets working with them, which they presented in scientific meetings in Kenya and in neighbouring countries. All of these contributed to the general debate, but mainly among practitioners already engaged in community-based animal health care projects, and although different sorts of information materials were developed for different audiences, there is little sign of the sort of coordinated policy advocacy campaign increasingly recognised as essential to influence policy-makers (e.g. Chapman and Fisher, 1999), and much of the early NGO-based evidence was discounted by the Veterinary Profession in Kenya as biased.

The Hübl study in 1998 was the first research to be taken seriously, and was frequently quoted as being highly influential by informants from all sides. The study was launched immediately after the Kenya Vet Board letter in early 1998 and was implemented by a team of three – one expatriate and two national veterinarians. The process was highly participatory, with multi-stakeholder workshops at regional and national level.

Although not really research, the ITDG Vets Workshops, and regional and international workshops on community animal health care, mainly organised by NGOs, were also regarded as influential, particularly the 1992 ITDG workshop which brought participants from many other countries to Kenya, and the VetAid 1997 workshop in Tanzania, which was attended by many Kenyan vets.

Various forms of information were clearly important in the animal health care story in Kenya, but it is difficult to estimate which was the most effective and for whom. McPherson (1994) stresses the need to find mechanisms to quantify the value of information as an asset which can reduce uncertainty and risk, and in improving coordination and efficiency.

6.3 Links: influence and legitimacy

Policy networks are widely recognised as important instruments for establishing and promoting discourses and policy reform (Keeley and Scoones, 1999). Various forms of policy networks have been described in the literature and the key distinguishing feature seems to be the position of their members in relation to the policy-making process (Crewe, 2002).

Networks clearly played an important role in the decentralised animal health care story. The ITDG annual Vets Workshops, which started in 1988 as a mechanism to share ideas between the emerging DAH projects and government staff, became a well-established network during the early 1990s. Although there was a clear objective early on to engage with government policy-makers, by the mid 1990s it seems to have become a ‘club’ of like-minded practitioners sharing expertise about project implementation, sometimes called an ‘issue network’, rather than a policy community or advocacy coalition, engaging with and seeking to influence government policy. By 1997 it had more or less run out of funds and steam. A campaign by the NGOs to stimulate discussion of the principles and practice within the DVS at that time could have generated support within the Department much earlier.

By that time, some other major players including AU/IBAR and SNV had started implementing CAH programmes in Kenya, and had already negotiated official agreements with government. They helped to fund and organise the influential Vets Workshop (renamed DAH Workshop) in Meru in 1999, which established the more inclusive, policy-orientated network, the DAH working group.

Chapman and Fisher (1999) stress that legitimacy is a vital component of advocacy campaigns, and this can often only be achieved through a long involvement with grassroots organisations. The recently defunct ITDG Vets Workshops therefore provided a useful vehicle for the 1999 Meru Workshop because it was well established and well regarded. The workshops were often held in the field so that participants could visit DAH projects and learn about them directly from the communities and animal health staff involved in them.

6.4 Opportunities for change

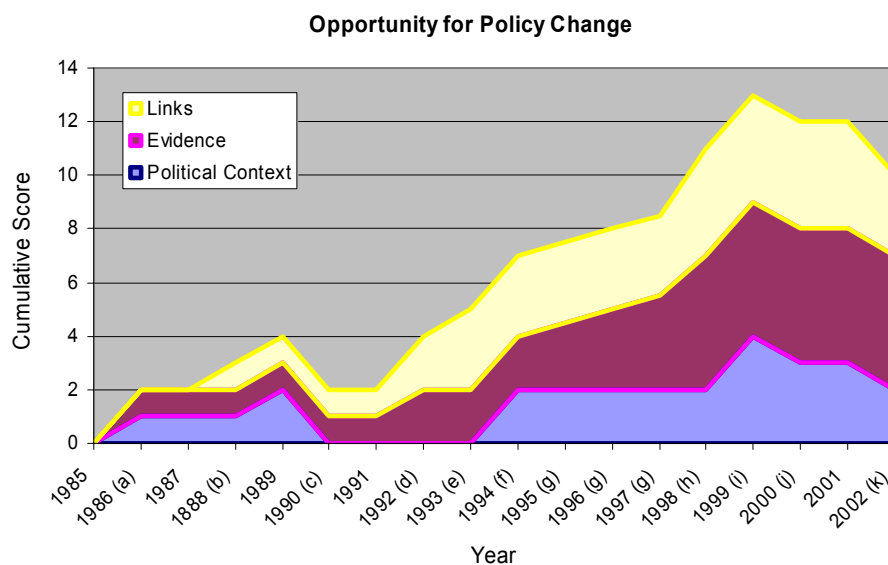
Section 4 provides a detailed narrative of events leading to the development of new policies for decentralised animal health care in Kenya. Although all were important, some events indicate clear changes in the political context, quality of evidence or relationship between policy-makers and DAH researchers/practitioners:

- a. The arrival of ITDG in 1986 with an explicit focus on developing and testing new approaches, then seeking to influence the policy environment so they can be implemented more widely. A major part of ITDG’s work was to gather the evidence to make the case for DAH approaches. Sessional Paper No 1 (1986) ‘Economic Management for Renewed Growth’ set the stage for

structural adjustment within government and the privatisation of public services created a favourable macro policy context for the reform of livestock services.

- b. The first ITDG Vets Workshop in 1988 marked a significant increase in interaction between researchers/practitioners and policy-makers.
- c. Dr Wamokoya's appointment in 1990, and his emphasis on veterinary professionalism and ethics, reversed an emerging interest in policy reform driven by contracting government budgets, and emerging evidence of the value of the alternative decentralised animal health care model.
- d. The establishment of bilateral DAH projects in 1992 added weight to the evidence in favour of DAH approaches, and ITDG's international DAH workshop strengthened the emerging network of practitioners and links between policy-makers and practitioners.
- e. Dr Kajume's attendance of the 1993 Vets Workshop marked further improvement in linkages between researchers/practitioners and policy-makers.
- f. Dr Kimanzi's appointment as Director of Veterinary Services in 1994 and the return of Dr Kajume to Nairobi dramatically improved the policy context for DAH approaches.
- g. The gradual increase in number of agencies in training CAHWs between 1994 and 1997 further strengthened the evidence in favour of DAH approaches, and also contributed to the publication of the letter by the KVB in 1998.
- h. The publication of the letter by the KVB in 1998 brought all stakeholders together into a policy network to try to find a solution to the problem, and the Hübl study increased the weight of evidence still further.
- i. The Meru workshop in 1999, which provided a clear signal from policy-makers that they were interested in finding a solution, improved the policy context still further.
- j. The policy context could not have been better while Julius Kajume was acting director of veterinary services in late 1999 and early 2000, but decreased significantly with the appointment of the more conservative Dr Chong.
- k. Increasing opposition to the new policies from the KVA both undermined the policy coalition reducing the link between researchers/practitioners and policy-makers, and complicated and worsened the policy context.

These changes can be plotted cumulatively on a graph to show visually how the overall context for policy change varied over time (see figure below).



The figure shows a gradual improvement in the overall context for policy change up to the end of 1989, shortly after the launch of the ITDG Vets Workshops, but this worsened dramatically in 1990 under Dr Wamokoya's emphasis on professionalism. Although the weight of evidence and links between researchers/practitioners and policy-makers improved gradually over the following few years, the political context didn't improve until Dr Kimanzi took over in 1994. Thereafter, his turning of a blind eye to the development of DAH services in the field allowed a gradual increase in evidence and links, but the political context did not really improve until after the KVB letter in 1998. The opportunity for policy change peaked in late 1999 when the multi-stakeholder working group had developed new policy papers and while Dr Kajume was acting Director of veterinary services. Since then, the appointment of Dr Chong and opposition by the KVA has once again reduced the opportunity for policy change.

As of October 2002, new draft policy documents and legislation for veterinary services and pharmacies which would legalise community-based animal health workers, had been prepared, and were 'in the system', but nobody quite knew where, or what would happen next. With presidential and parliamentary elections looming, it may be some time before the policies are finally in place.

7 Conclusion

The animal health care case study reaffirms much of the current theory of research-policy linkages. The policy process was influenced far more by the political context than by anything else, and personalities and personal relationships, both in the research/practitioner and policy communities were at least as important as any formal relationships and structures.

The crisis caused by the KVB letter in 1998 was clearly the tipping point. Beforehand, there was a long period where CAHW schemes gradually proliferated, generating powerful evidence of their value, and providing an issue around which different groups of stakeholders, supporters and antagonists could form formal and informal networks. Afterwards, there was a surprisingly long process where all stakeholders came together to develop a new policy framework.

Over the last year or so, the process has reached a stalemate. The documents are somewhere in the system, but nobody knows quite where, or even what the process is now to get them adopted and the necessary legislation changed. It seems that many senior officers in the Kenyan government system do not have a clear understanding of how policies and legislation are developed and enacted.

Although ITDG and other early promoters in Kenya were clearly influenced by new ideas about the value of indigenous systems, para-professional services and the need to privatise some government services, emerging in the development discourse, formal research seems to have contributed relatively little to the policy process in Kenya, and research reports even less so (with the exception of the Hübl study). Evidence generated by working CAHW schemes, communicated directly to visitors by livestock owners and the animal health staff directly involved in them seems to have been much more important. Early on, this evidence contributed to the rising popularity of DAH programmes with donors and field veterinarians, and in the mid 1990s, albeit second hand, to the alarm of the KVB resulting in their publication in the national press, which brought everybody together and resulted in the new policy framework legitimising the approach – the exact opposite of what the KVB had hoped.

Although it is relatively easy to understand how the process evolved and why it took so long, it is difficult to see how it could have happened much faster. A carefully managed process to try to influence Dr Wamokoya's attitudes might have helped him to see the benefits of the approach, but nobody in the research/practitioner camp had the necessary connections to do that at that time. By the time Dr Kimanzi took over, there was more evidence and Dr Kajume was already on-board and supporting the idea. It may have been possible at that time to develop a campaign to increase contact with the veterinary department, to accelerate enthusiasm for a new policy framework. The fact that this did not happen may be because the most prominent network, based around ITDG's Vets Workshops, had lost their policy edge, and ITDG's publications were aimed at practitioners rather than policy-makers. Ensuring the Vets Workshops continued to include senior policy-makers, rather than government vet practitioners, and a communication strategy to target tailor-made communication materials at policy-makers, may have accelerated the process considerably in the mid 1990s. It may have been possible to promote more widespread reform within the Veterinary Department, with DAH as one component, by working with the Agriculture Sector Management Project in the mid 1990s. Since the KVB letter provoked the crisis which brought all the stakeholders together, another option might have been to deliberately provoke a crisis earlier. This however would have been very risky for an NGO in Kenya.

With the benefit of hindsight, distance and the results of this study, it is possible to suggest some changes in what was done, that might have accelerated the process:

1. More effort by ITDG to understand the policy context for DAH programmes – the legal and policy framework, the key actors, their attitudes and influences, and reform processes and programmes (e.g. the Agriculture Sector Management Project (ASMP)).
2. More effort earlier on to get government staff, especially those opposed to the idea, to visit working CAHW schemes and learn first hand about the conditions in pastoral areas, how effective the schemes were, and how they could compliment the government system.
3. More effort early on to generate interest among non-veterinary government staff and Members of Parliament at local level, convincing them of the value of the approach for poverty alleviation in their District.
4. Once there were a number of schemes up and running, a clearer communication strategy to influence government vets and government policy could have been put in place. This could have included ensuring that policy-makers attended the Vets Workshops, helping the government vets that were already involved in working schemes to communicate with policy-makers, producing information materials designed for policy-makers rather than practitioners.
5. A deliberate strategy to get to know the key players – the Director and Deputy Directors of Veterinary Services in Nairobi – and work out how best to influence them. This might have included overseas visits, collaborative work (helping government vets to prepare and present papers at international conferences proved very successful in the DFID DELIVERI project), and mobilising non-veterinary civil servants (those convinced of the approach through point three above) to apply pressure on the veterinary department.
6. More effort to understand the policy process – how do new ideas become incorporated into policy, and new legislation enacted.
7. Accelerating the process of preparing the new policy papers so that they could have been approved while Dr Kimanzi was the Director and Dr Kajume his deputy, or while the latter was acting Director of Veterinary Services.

However, it is also clear from this case study, that taking the time to develop strong relationships with local communities, and working with them to develop effective and sustainable community-based services, is essential to prove the effectiveness of an approach, and acquire the fundamental legitimacy to advocate for change. That takes time, and the early pioneers of the approach in Kenya, The Catholic Diocese of Lodwar, ITDG and its partners, and early members of the Vets Workshop network deserve recognition for the enormous effort they have made over the last 17 years.

Appendix 1 Research Methodology and Timing

| Activity | Timing |
|--|----------------------------|
| 1. Identification of individuals/organisations in Kenya to undertake preliminary research. | August 2002 |
| 2. A workshop of key informants to develop a timeline of critical events leading up to the preparation of the legislation legalising paravets in Kenya last year, identify people for interview, and identify key documents. | September 2002 |
| 3. Literature review – production of short summaries of any significant documents, including reports by ITDG and other organisations, meeting notes, government documents etc. | September/ October 2002 |
| 4. Interviews with key players. | October 2002 |
| 5. Preparation of draft ‘key events’ and ‘critical factors’ documents. | October 2002 |
| 6. Discussion of ‘key events’ and ‘critical factors’ documents with key informants and incorporation of feedback. | November 2002 |
| 7. Preparation of Working Paper and circulation for comments. | December 2002 |

Appendix 2 Key Informants

Dr Darlington Akabwai – A Ugandan vet who set up one of the first NGO DAH projects in Kenya in Turkana in 1980. He then expanded the approach while working on the EEC Funded Turkana Rehabilitation programme from 1982 to 1987, and with NORAD between 1988 and 1990. Between 1991 and 1996 he worked in Uganda and Ethiopia with Tufts University and in Sudan with Operation Lifeline Sudan. In 1996 he joined the OAU/IBAR PARC-VAC, then the PACE projects.

Dr Rachael Asike – A research vet in diagnostics for 20 years, in the International Laboratory for Animal Diseases (ILRAD) and then International Livestock Research Institute (ILRI). She left ILRI in 1998 to set up a livestock consultancy in Nairobi. She has been involved in several reviews of CAHW programmes, especially in Northern Kenya.

Francis Chabari – A graduate range officer who worked at the International Livestock Centre for Africa (ILCA) as a researcher between 1977 and 1989, when he joined the GTZ-funded Marsabit Integrated Development Programme and became involved in contact herder training programmes. Since the programme finished in 2000 he has worked for NGOs involved in relief and development in the arid lands – currently as the Emergency Coordinator at Cordaid.

Sam Chema – Currently Managing Director of the Agricultural Research Foundation (AGREF) – Sam Chema was Deputy Director of Laboratory Research and Diagnostics in the Department of Livestock Services until 1987. He then joined the Kenya Agricultural Research Institute until he retired and became a private consultant in the livestock sector.

Dr Chong – Director of Veterinary Services. He has spent his whole professional life in the Department, in the Laboratory Research and Diagnostics Division.

Dr Tom Dolan (Analabs) – Has been a vet in practice in Ireland, but in Kenya since the 1970s, first as a researcher in ILRAD, then as Deputy Director of ILRI. He was on the KVAPS Steering Committee from 1994 to 2001, and now does livestock consultancy and runs the first private veterinary and food testing laboratory in Nairobi.

Dr Dulu – A Kenyan vet who worked for the Department of Veterinary Services as a District Veterinary Officer in Narok, Kericho and Tana River before moving to Nairobi to manage the Kenya Veterinary Fund. While in Tana River he helped to establish a CAHW programme with a Dutch Reformed Church missionary working with the African Inland Church.

Dr Risto Heinonen – In Kenya for five years as a veterinary epidemiologist on the PARC-VAC and Pan African Programme for the Control of Epizootics projects in AU/IBAR.

Dr Boniface Kaberia – A vet who worked in the Veterinary Department in Meru before being seconded to the FARM Africa Meru Goat Project in 1996, where he has been involved in establishing private veterinarians and CAHWs to provide livestock services.

Professor Dr Kagiko – Dean of the Faculty of Veterinary Medicine, where he has been in the faculty since graduating in 1975. Currently a member of KVA and member of KVB (due to his position). Vice-Chairman of Community-based Livestock Improvement Programme (CLIP).

Dr John Kanisio – A Sudanese vet, who worked with the Sudan Veterinary Service in Khartoum for several years before joining VSF (Belgium) and becoming involved in CAHW programmes in Southern Sudan.

Dr Julius Kajume – A vet who graduated in 1976 and has worked in the Department of Veterinary Services ever since. Initially in the Public Health Division at Athi River Slaughter House, then Mombasa, Coast Province, then Uplands, he completed an MSc in Veterinary Public Health at Edinburgh University in 1980. He returned to various posts in Public Health in and outside Nairobi before being posted as Provincial Director of Veterinary Services in Eastern Province in 1990. Whilst there he became involved in various CAHW initiatives including early ITDG DAH workshops in Hunters Lodge and Isiolo. He returned to Nairobi in January 1995 as Deputy Director of Veterinary Services (Administration and Management Support), a position that carried heavy responsibilities including policy-matters. After Dr Kimanzi retired in September 1999, Julius took over but in an acting capacity until April 2000. Julius had a good working relationship with Dr Kimanzi throughout his professional career.

Dr Judy Kimaru (KVAPS Manager) – A vet with management training and has also worked as an administrator with WFP in South Sudan.

Alice Kureiya (SNV) – Team Leader of the Turkana cluster of projects in SNV. Previously with the GTZ project in Marsabit. Alice is not a vet but has coordinated CAHW programmes in Kenya and South Sudan.

Dr Tim Leyland – A British vet who worked on DAH projects in Afghanistan and Mozambique before going to Kenya to run the Operation Lifeline Sudan livestock programme in the mid 1990s. After joining the OAR/IBAR PARC-VAC project in 1996, he became involved in training CAHWs in Northern Kenya, and increasingly involved in the CAHW policy debate.

Dr Susan Mbugua – A Kenyan vet who has a private practice in Nairobi. She has been on the Kenya Vet Board for many years and is currently President. She is also an active member of the Kenya Veterinary Association.

Dr Solomon Munywa – A vet who has been a lecturer in the Faculty of Veterinary Medicine, Clinical Services Department, and a member of the KVA and KVB (when he threatened to de-register Dr Kabira) before joining OAU/IBAR on the Pastoral Livelihoods Project.

Dr Joyce Njoro – A vet who worked as a trainer at the Animal Health Training Institute (AHITI) in Kabete before joining ITDG as a trainer in the Decentralised Animal Health Support Unit in late 1999. Now Executive Director of the Community-based Livestock Improvement Programme (CLIP).

F.O. Okwiri – Trained in Agricultural Economics and Business Management, he was the KVAPS manager from 1994 to 2000, then worked for American Breeders International. He was also involved in an economic study of livestock services in the ASAL areas (with Dr Kajume) and is now a Programme Adviser with UNDP, looking at Employment and Sustainable Livelihoods in ASAL areas.

Owino – A graduate from AHITI who works as an animal health assistant in the Department of Veterinary Services at the Ngong Divisional Veterinary Office in Kajiado District. He is currently Chairman of the Kenya Association of Livestock Technicians (KALT).

Dr Harry Oyas – Currently working as the Emergency Programme Officer on the PACE project in the DVS, Dr Oyas has also worked in the field as Divisional Veterinary Officer in Mandera, and District Veterinary Officer in Central and Nyanza Provinces.

Piers Simpkin – Piers has been in Kenya since early 1980s. He undertook PhD on Camel Production with the FARM Africa project, which he subsequently joined as a technical adviser. He then joined Operation Lifeline Sudan (and later FAO) and managed CAHW projects there.

Dr Gabriel Turasha – A vet who tried unsuccessfully to establish a private veterinary practice in Narok District (a pastoral area). He then joined VSF (Germany) where he has been involved in community animal health care projects, mainly in South Sudan.

Dr Charles Wanjigi – A vet in the field, involved in DAH programmes in Ukambani and Wajir until 1996, then seconded to the Arid Lands Management Project in the Office of the President, based in Nairobi.

Dr Jacob Wanyama – A vet who worked with the Department of Livestock Services in Isiolo before joining ITDG in 1992. Initially focusing on Ethnoveterinary Research in Samburu District, he has become increasingly involved in ITDG's work with DAHWs over the last few years, and is now based in Jakarta.

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Appendix 4 The Research Questions

Overall research question

How can policy-makers and researchers make better use of research to contribute to more evidence-based policies that reduce poverty, alleviate suffering and save lives?

The policy context: politics and institutions

To what extent is the impact of research on policy-making shaped by political and institutional structures and ideological assumptions?

1. How did the global, national and community-level political, social and economic structures and interests affect the room for manoeuvre of male and female decision-makers in particular policy areas?

Any political, social or economic factors which might have influenced the key decision makers. These might include:

- financial interests of international banks in relation to debt cancellation
- socio-economic interests of vets in blocking the liberalisation of regulations

2. Impact of local political interests of warring factions on food distribution. How did assumptions influence policy-making, to what extent were decisions routine, incremental, fundamental or emergent, and who supported or resisted change?

Information about:

- existing knowledge and values and the various actors
- the old and new ideas underlying decisions
- how much new policies might change the status quo
- who supported and resisted the changes and how

3. How did applied and academic research influence the development of policy when being put into practice?

How were the policies were developed, adapted or distorted as they were put into practice by, for example, getting information about actions taken, and research used, by project partners, ‘street level bureaucrats’, and communities.

Evidence: credibility and communication

To what extent did local involvement, the quality of research, and communications strategies affect the impact that research had on policy-making in particular areas?

1. How was information gathered and by whom?

Who did the research – beneficiaries, NGO practitioners, activists, academics, consultants, government researchers; was it academic/applied and before/during/after/not part of a ‘project’ with non-research aims.

2. What was perceived as credible evidence by different actors and why?

Information about what parts of the knowledge produced was valued, by whom, and how did they assess research quality.

3. Did researchers segment their audience and if so, how, and did this affect impact on policy?

Information about whether information was tailored for particular policy-makers (according to organisation, gender, discipline, policy area, etc.) and what impact it had.

4. How and why was information ignored, reinterpreted and distorted and by whom?

Information about what happened to research findings within policy communities, e.g. snowballs, whispers, trickles etc.

5. Did the communicator, channel, format, style or timing of the communication play a role in influencing policy-makers?

How were the research findings communicated, at what stages, and by whom, and assess what worked, what failed, when and why.

Links: influence and legitimacy

To what extent is research used more effectively in policy processes if researchers and policy-makers share particular kinds of networks, common goals and chains of legitimacy for particular policy areas?

1. What roles were played by which kind of groups and male/female individuals and what were the links between them?

Information about the relationships and networks between actors. They might include: epistemic communities, global public policy networks, issue groups, advocacy coalitions and citizen action groups etc.

2. Which women or men had significant influence over the policy?

Who were regarded as experts in the particular policy area? Who were the effective and ineffective policy entrepreneurs, connectors, mavens and salesmen? Were there any differences in impact according to gender, nationality, race and/or class?

3. How did women and men researchers and advocates establish legitimacy; did it make any difference to the policy outcomes?

What were the chains of legitimacy between various stakeholders (e.g. whether southern partners controlled monitoring of action research, or degree to which informants were consulted about policy recommendations), and assess the influence of these chains on the quality of policy decisions.

