



**Drylands Research
Working Paper 41**

**PROMOTING RESEARCH-POLICY
DIALOGUES:
LESSONS FROM FOUR STUDIES OF
DRYLAND DEVELOPMENT IN SUB-
SAHARAN AFRICA**

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Preface

Drylands Research Working Papers present, in preliminary form, research results of studies carried out in association with collaborating researchers and institutions.

This working paper is part of a study which aims to relate long-term environmental change, population growth and technological change, and to identify the policies and institutions which are conducive to sustainable development. The study builds upon an earlier project carried out by the Overseas Development Institute (ODI) in Machakos District, Kenya, whose preliminary results were published in a series of *ODI Working Papers* in 1990-91. This led to a book (Mary Tiffen, Michael Mortimore and Francis Gichuki, *More people, less erosion: environmental recovery in Kenya*, John Wiley, 1994), which was a synthesis and interpretation of the physical and social development path in Machakos. The book generated a set of hypotheses and policy recommendations which required testing in other African dryland environments. Using compatible methodologies, four linked studies were carried out in:

Kenya	Makueni District	
Senegal	Diourbel Region	
Niger	Maradi Department	(in association with ODI)
Nigeria	Kano Region	(in association with ODI)

For each of these study areas, there is a series of working papers and a synthesis, reviewed at country workshops. Due to the limited number of working papers on Nigeria, they are included in a combined Niger-Nigeria series.

An overall synthesis was discussed at an international workshop at London on 17 January, 2001. The proceedings of the workshop are published in *Drylands Research Working Paper 40*.

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EXECUTIVE SUMMARY

Endorsement and dissemination work (funded by DFID) was carried out in 2001-2 in four countries (Kenya, Senegal, Niger and Nigeria). The objective of this work was to initiate an engagement between research and policy processes in each country. The research findings in question arise from two projects (funded by DFID) on long-term change and farmer investments in natural resource-based livelihoods, which focussed on district-level studies (Makueni District in Kenya, Diourbel Region in Senegal, Maradi Department in Niger and the Kano region (mainly Kano and Jigawa States) in northern Nigeria). Policy lessons of wider applicability in African drylands were sought from a synthesis of research experience and participatory discussions.

The primary method used in the endorsement and dissemination work was a series of broadly participatory workshops at different levels, supported by documentation targeted to different users (scientists, policy makers, local people, development agents). The pattern varied from country to country, and in response to local constraints. The research findings question some received opinion on dryland management, and this has implications for the research-policy dialogue. This Report summarises what has been learnt from these exercises, as follows:

- Research findings should be *targeted* at specific international, national, sectoral or sub-national levels, while recognising that interactions occur between levels; and may engage in either a *bureaucratic* or *political* mode.
- Each country has a uniquely configured *policy process* for which research-policy dialogue must be tailor-made.
- *National ownership* of the research findings is a condition of effective engagement and should begin at the design stage, and influence project management.
- At the national level, *flexible interaction* with policy makers is helpful throughout the research, as they must decide whether the findings deserve a policy response. It may not be possible to engage their attention at the end, if contacts have not been built up.
- At the international level, *linking research* with in-country programmes and with major donor-driven policy initiatives (e.g., the PRSPs) and with international research organisations is desirable wherever it is likely to be relevant. It may require efforts by the commissioning agency as well as by the researchers. A book can have long term impact.
- Situating research findings in the context of *current policy concerns* at national level is important for impact, but relevance cannot be engineered.
- The endorsement of research findings at the local level is a condition for *effective participation and empowerment* in policy processes, not only for the people researched, but also for the national researchers who need the conviction to carry forward the dialogue. Other critical factors are: the use of a *familiar language*, *strong representation of local people* in discussions, *avoidance of professional stereotypes* and provision of adequate *resources*. It needs to be remembered that it is likely to create legitimate expectations for a follow-up.
- Local *pressure groups* (e.g., traders' associations) should be involved in the dialogue.
- While engineered institutional change may be unnecessary, there is a need to *institutionalise the process* to ensure its continuity.

1 INTRODUCTION

1.1 Background and aims

Drylands Research and its research partners,¹ recently completed a study of economic, social and environmental change, 1960-2000, in semi-arid districts of four Sub-Saharan countries:

Makueni, Kenya

Diourbel, Senegal

Maradi, Niger

The northern hinterland of Kano in Nigeria (mainly Kano, Jigawa and Katsina States).

The Department for International Development funded an exercise to gain endorsement of the results from the relevant constituencies, so that, if endorsed, they can enter informed debate. In view of current interest in the research-policy interface, the aims of this paper are:

- To outline the essential findings of the four country studies and the policy recommendations derived from them
- To show that these recommendations link with policy at different levels (international, national, sectoral and sub-national)
- To outline the steps so far taken in gaining endorsement, and promoting research-policy dialogue
- To draw out the lessons learnt on promoting research-policy dialogue, in the country context and at the different levels

The most challenging level at which to promote research-policy dialogue is the national. Our experience is that this level requires strong ownership, by a national research team that also participated in drawing up the findings and recommendations. In-country research leaders have their own contacts and knowledge of policy processes, and are best qualified to take the dialogue forward. The format of this dialogue depends on the nature of the recommendations and their level of relevance, the channels available and the other priorities occupying public attention. In Senegal, for example, our team's activities coincided with major internal policy debates and conflicts (see below).

1.2 Levels for research policy dialogue

It is important to target the recommendations arising from research to the appropriate level. The level will also determine modes of research-policy dialogue.

(1) **International:** Research findings that interface with the policies of aid agencies (bilateral or multilateral), their research divisions, or with international research institutions (such as the CGIAR) which have their own, often influential, links with donors.

¹ The partners were individuals based at the University of Nairobi (Kenya); a consortium of researchers and consultants working with the Institut Sénégalais de Recherches Agricoles (ISRA) and the Centre de Suivi Ecologique (CSE), a group from the Université Abdou Moumouni, Niamey, and from the Institut National de la Recherche Agronomique du Niger (INRAN) and a group from Ahmadu Bello University, and the Institute for Agricultural Research, both in Zaria, Nigeria.

Another DFID research programme (NRSP) conceives this as the outermost ring in a concentric system of communication domains. Dialogue may be conducted through workshops, books, articles, etc. There may be little direct participation of beneficiaries, either governments or communities. However, there is a link to national policy through the pressures which aid agencies can apply to governments, which rely heavily on them for their capital and even recurrent budgets. Nationals know this, which can make them suspicious of a research output which they see as largely donor-steered².

(2) **National:** Findings which affect national macro-economic management and the broad thrusts of policy and resource allocation.

Dialogue here means participating either in state-sponsored processes such as sector-wide approaches or PRSPs (*bureaucratic mode*), or obtaining leverage on decisions by representative bodies (*political mode*). The latter loops back to the sub-national level, (4) below, where elected representatives have their power base. A bureaucratic rather than a political mode seems more familiar to researchers and aid agency personnel, but is essentially non-participatory. It may ignore many actors in internal policy debates, who include politicians, technocrats in the civil service and national academics, pressure groups representing various interests, and in some countries, the media. These have varying degrees of contact between themselves. On the evidence presented by persons interviewed in an assessment of the impact of research dissemination via the id21 web-based network³, research information flows through five channels (Coe *et al.* 2002) p.4):

- Insider influence, such as policy units
- Academic, via the undergraduates trained for government service
- Networking organisations in the public domain (described as a long-term route to generating discussion and debate on new thinking)
- Community organisations acting as catalysts for change at grassroots level
- Media, public opinion and action.

(3) **Sectoral** (i.e. the concern of a particular ministry).

Here the most important policy makers at national level may be out of touch with on-going change at local level. Their officials at district level are driven by the resources and directives issued centrally. They may or may not interact effectively with farmers or traders, or even with the village authorities who have a direct knowledge of local agendas, for lack of resources to make contact and in some cases, language barriers. They can, however, be assumed to have a good grasp of technological issues, and to be open to new technical findings where they have access to these.

(4) **Sub-national level:** This category covers a wide range. For our purposes it includes elected local authorities with various degrees of independent funding and power, from the State in Nigeria, to the District and its equivalent in the other countries, to

² ... “interviewees were wary of an additional influence international donor organisations may have over indigenous research, through their role as shapers of dominant development paradigms and therefore definers of research programmes and foci” (Coe, Luetchford, & Kingham 2002) p.3).

³ Their interviews were in Uganda, South Africa and India.

intermediate and village level authorities. State governments in Nigeria are very different in powers and revenues to County Councils in Kenya. However, it also includes interest groups with varying degrees of formality, varying languages (national or international) and who may or may not interact with international pressure groups and aid-giving NGOs on the one hand, or their own media and sectoral ministries on the other. Examples in our study include the formal organisations of producer groups in Senegal, religious brotherhoods, Muslim in West Africa and Christian in Kenya, trader organisations in Nigeria, etc.

While we distinguish four levels, there are linkages between them, important in the current preoccupation in development practice with decentralisation, participation, and empowerment. National differences in this regard are noted in Section 4.

2 THE RESEARCH

2.1 Objectives and methods

Two different departments of DFID funded the Niger and Nigeria, and Senegal and Kenya, studies⁴. Although not identical, they converged on the following common objectives:

- to obtain a better understanding of the responses of smallholders in semi-arid environments to environmental, economic and demographic change over the past 40 years;
- to derive policy lessons for enabling measures that will enhance their ability to invest and to develop their natural resources and their livelihoods in future; and
- to validate or refine the ‘Machakos hypothesis’, which can be summarised in the statement that under the right conditions there may be positive linkages between rural population growth, agricultural intensification and the improvement of livelihoods.⁵

The main work in each district was carried out by in-country scientists, each constructing a Profile of long-term change in a thematic area, and using methodologies appropriate to the subject, co-ordinated by a national research leader. At inception workshops, the conceptual framework, research hypotheses and methods were agreed. At a mid-term, district level workshop, preliminary findings were discussed with administrators, community leaders and farmers, and at a national workshop, with interested researchers and policy makers. Drylands Research staff participated in all of these. This was followed by collaborative writing of a country synthesis by the country co-ordinators and Drylands Research. The Profiles and Syntheses were published as *Drylands Research Working Papers*, 1-40, and summaries published on the web at www.drylandsresearch.org.uk. A preliminary synthesis of findings and policy

⁴ The Senegal and Kenya studies were funded by the Natural Resources Policy Research Initiative of DFID, and the Niger and Nigeria studies were funded by its Economic and Social Committee on Research, with a contribution from the Leventis Foundation.

⁵ The ‘Machakos hypothesis’ was based on research in Kenya, published in Mary Tiffen, Michael Mortimore and Francis Gichuki (1994), *More people, less erosion: environmental recovery in Kenya*, John Wiley, Chichester.

implications was discussed at an international workshop of researchers and donor representatives, held in London in January 2001, which, thanks to additional DFID funding, was also attended by country co-ordinators.

Because of the importance of the policy objective, we chose to work in both francophone and anglophone countries, which have different policy traditions. As we found, they also have different institutions, research traditions, interests and sources of information, leading to the prevalence of different paradigms. A positive or neutral view of the population-environment relationship was particularly challenging to existing preconceptions in the francophone countries. This affected the dissemination strategy at the international level, since the research-policy dialogue should reach beyond the funding donor and country, to include multilateral and several relevant bilateral aid agencies, and to take account of scientific understanding in those countries having educational, cultural and policy links with these four African countries. DFID, for example, does not work directly in francophone countries, nor has their policy elite come to the UK for education⁶. These countries are nevertheless relevant to the UK because of the proportion of British multilateral aid going to francophone countries.

2.2 Findings

Key policy-relevant findings were presented at the London Workshop. Further detail may be found in the *Working Papers* (WP) listed in the Annex. The main thrust of the recommendations is listed first:

Capabilities to invest are present, but require an enabling policy environment to develop fully (WP40)

Capabilities to adapt to change and to respond to new opportunities were proven in all districts, despite their erratic rainfall and risky semi-arid environment. Therefore, removing constraints should be a policy priority. Improving access to markets is a widely felt need from the most densely populated of our districts to the least, whether the obstacles are infrastructural or institutional. Given declining real price trends in some areas, for farmers to obtain better livelihoods, markets must become more efficient in passing benefits to producers. Other demand side priorities are: stabilising market prices; improving information systems; cutting out inefficiencies in producer to market linkages; making market institutions work efficiently. Removing these demand side barriers is more urgent for policy makers than increasing productivity, which lies more in the hands of private actors.

Population increase and urbanisation (WPs 10, 13, 22, 23, 24, 34, 39)

Owing to long-term population growth and agricultural expansion, the land frontier had already closed by 1960 in Diourbel and Kano, while until the 1970s or even later, farmers in Makueni and Maradi could disperse to vacant, though less attractive, land. Increasing urbanisation in all four countries led to:

- an increasing market for foods those semi-arid areas can produce, *if currency management and national subsidy policies allow*. For example, in Nigeria, there was a huge increase in the demand for local food, which farmers have met; whereas in Senegal, policy favoured the import of rice and cooking oils;

⁶ If they have non francophone higher degrees, these are more likely to be obtained in the USA or Scandinavia than in the UK.

- an increasing alternative market for rural labour on either a seasonal or permanent basis.

Non-farm income has always been important to livelihoods in semi-arid areas with a short growing season, but it has increased in importance in West Africa especially due to migratory urban (rather than local) activities. In all countries, many young people have moved permanently to towns, but retain links with their rural families. Relevant policies are those which facilitate more remunerative non-farm opportunities, for example by equipping small towns with the water and electricity needed for workshops, and ensuring school curricula is relevant to informal and self-employment.

Thus, the changing urban-rural balance interacts with national macro-economic policies and with sectoral policies in several non-agricultural fields.

Primary production (WPs 7, 8, 11, 16, 18, 23, 32, 34, 35, 39)

The West African statistics do not show increases in value of output per ha comparable to those achieved in Machakos up to 1987, but nevertheless provide grounds for cautious optimism about smallholders' capacity to sustain farm production. Notable features are the maintenance of millet yields per unit of rainfall in Senegal (while falling per capita and stagnating per ha), the maintenance of average millet output per capita in Maradi, with declining rainfall, and variable yields, and the rising importance of livestock in Maradi and Diourbel. Such trends should affect policies on agricultural extension and veterinary policy, and the attitudes taken to the knowledge and adaptability of farmers. Farmers have transformed their output in response to market signals, for example:

- Diourbel – from dependence for cash on groundnuts in 1960 to more livestock and non-farm work by 1999;
- Maradi – from groundnuts in 1960 to cowpeas and tiger nuts (in response to Nigerian demand) by the 1990s;
- Kano – from maize as a minor to a major crop in the 1980s (in sub-humid areas), and from groundnuts to cowpeas (in semi-arid areas).

Such responses reinforce the importance of policies that affect market signals (tariffs, taxation, state monopolies, exchange rates, inflation), and, additionally, policy on infrastructure that gives access to, or information on, markets (roads, telephones). Sudden changes can cause dislocation, such as those caused by the devaluation of the CFA franc in 1994 (whose general effects were positive), the removal of subsidies in Nigeria after 1986, or the inflationary burst that Kenya experienced in 1993, which affected both farmers and managers of community assets such as water facilities.

Intensification and soil fertility management (WPs 4, 6, 15, 21, 28, 30, 36)

The four study areas have reached different levels in a transition to more intensive farming, which is driven by land scarcity and increasing market values, but constrained by rainfall. As population densities increased, there was:

- an advance of the cultivated fraction, until the limit was reached;
- an increase in labour use per ha, and in West Africa, increased use of labour saving technologies such as animal-drawn implements and carts.

- An increased integration of livestock with crop production, including recycling nutrients through manuring.

The policy implication at the macro-economic national level is that labour for intensification competes with other work options. Policy should take account of the opportunity costs of farm (and of livestock tending) labour, particularly where governments have for a long time controlled the price of an important crop, or have affected all prices by their import tariffs, or exchange rate policies.

Soil fertility indicators do not show overall decline, but a clear division between sustainable regimes on infields (where integrated or 'agro-ecological' practices are applied) and outfields (where the decline of fallowing and the high cost of inorganic fertilisers have created a crisis). This should affect agricultural extension aims and attitudes, and also raises issues in regard to fertiliser distribution and subsidies.

Securing access to land (WPs 1, 19, 29)

Customary tenure systems adapted both to the scarcity of unclaimed resources and to the subdivision of claimed resources, leading to more security and investment, but also to more individualisation, competition and inequality. State nationalisation of land has always been controversial, and has sometimes failed to take full account of local interests. If a tension is created between formal and informal tenure (statutory and customary), investment security may be adversely affected.

Changing nature of the rural family and its financial management (WPs 9, 10, 20, 22, 26)

The nature of the rural family is changing. Family residences can be spatially separate – partly in old and new farm areas, partly in urban areas. While family units headed by adult children have independent incomes, there are financial flows between closely related units, to meet varying needs and investments. Livestock are important as a source of emergency funds and regular expenses. In Kenya, primary education of children is regarded as a priority call on funds, and secondary fees, which may lead to a skilled non-farm job, are afforded if at all possible. Parents in Diourbel and Maradi do not see a French language primary school as either relevant, or in tune with their Islamic social norms, and obtain unskilled work via social and religious networks.

The policy implications are firstly, the importance of a primary education which provides literacy in local as well as international languages and skills relevant to rural life as well as a preparation for higher education. Secondly, livestock are an important element of family capital, but at risk from disease and poor veterinary policies.

Incentives to invest and policies (WPs 1, 3, 4, 7, 10, 11, 22, 23, 33, 39)

People make choices to invest in the farm, human capital, or off-farm. Macro-economic policies affect both their ability to accumulate resources, and the direction of investments. Private farm investments have been largest in Kenya, large in Niger, and small in Senegal (except for livestock). Too much emphasis on credit provision can divert attention from the value and sustainability of private investments, and in a risky semi-arid environment it can bankrupt both borrower and lender. Public investment should be concentrated on public goods not provided for by the private sector.

2.3 What is new in these findings for development policy?

The newness of finding is important in considering research-policy impacts and processes. If it affects a well-established paradigm it will attract opposition and controversy, which may be helpful in making debate widespread, but also risks that it will be disregarded.⁷ Findings that simply require some modifications to existing policies are more easily put into practice.

In this case there were some important challenges to preconceptions.

It can pay to invest in drylands. For many years, donors have debated the relative merits of investing their funds in low or higher potential agro-ecological regions. Influential considerations in this debate have been low and variable productive potentials, alleged over-population, degradation of natural resources, and rural-urban 'drift'. Yet while donors have been debating public investment options, this research has shown that dryland communities –including poor people – have all along been willing and (to an unexpected extent) able to sustain small-scale private investments in natural resource-based livelihoods.⁸

There can be a positive linkage between population growth and natural resource management

The research has shown that a positive linkage between population growth and natural resource management, as proposed in the 'Machakos hypothesis', can also occur under West African conditions. Impact on the policy debate requires that we give policy makers a better understanding of the incentives required by autonomous smallholders. The necessary technologies are often known, but the right conditions for their uptake are too often absent. Especially under an open market regime, with reduced intervention capacity on the part of the state, smallholder capability should be the cornerstone of policy.

Urbanisation can have a positive impact on rural resource management

A long-standing antipathy to rural-urban migration is challenged by findings which emphasise rural-urban linkages, and therefore, recommends furthering market growth, productivity and efficiency in the urban as well as rural sectors. A positive linkage between urbanisation and sustainable productivity was proposed in the West Africa long-term perspective study (Snrech, 1995), but, like most challenges to paradigms, that requires reinforcement by other studies. The expanding urban market stimulates farm investments, and non-farm incomes can provide investment capital for farming.

⁷ The nature of the research-policy interaction and the methodologies for putting research results on to the agenda have recently been discussed in relation to development policies. There are often common paradigms that "serve to define the problems that are to be addressed" (Stone, Maxwell, & Keating 2001), p.7. Examples are the population growth-environmental degradation-poverty nexus (common in the 1980s and early 1990s), the necessity of state marketing systems and state interventionism due to the immaturity of the private sector (in the 1960s) and the market-oriented "liberalism" which began to replace it in the 1980s. Here the role of researchers is "to provide the foundations for alternative paradigms" (ibid, p. 7). The plural is important: it usually requires several pieces of research that come together to challenge the paradigm.

⁸ This is also attested in (Reij and Steeds, 2003).

The degree of challenge to existing paradigms varied by country.

In Senegal and Niger, the research overturned an old paradigm of overpopulation and degradation in favour of recognition of farmers' capabilities and adaptiveness. In Senegal it also brought out the existence of two political and economic regimes which barely recognised each other – a francophone socialist state⁹, with a tradition of control and top-down intervention in markets and farm practices – and a society, initially mainly peasant, but increasingly incorporating urban elements, which looked to the Mouride religious leadership and utilised Mouride networks to develop its own commerce and markets, which spoke indigenous languages (especially Wolof), and ignored French schools, and literacy in roman script.

In Nigeria, it brought out the competence of indigenous trade in grains and livestock, collecting from small farms, which had maintained supply and relatively stable prices over time despite enormous growth in urbanisation. Currently, many important government policy makers think that growing food needs can only be met by a large farm sector employing tractors and modern chemical inputs.

In Kenya, the findings were less revolutionary, but they brought out the importance, and hazards, of livestock-raising in semi-arid farming areas, the priority given to education in farmers' investments, and the way families have circulated money between urban and rural members to alleviate hardships and/or to make investments

2.4 Appropriate methodologies for research policy interaction at different levels

We adopt the hypotheses put forward by (Crewe and Young, 2002) that good quality research, local involvement, accurate messages and effective dissemination strategies are all important if the aim is more evidence-based policy making and that the nature of relationship between researcher and policy maker shapes how much influence they have over each other. However, our aim was limited to helping the research results enter the policy debate in the countries concerned. Whether, after discussion, policy is modified is a matter for nationals, taking into account their other priorities. We think policies are frequently developed in terms (Stone *et al.* 2001) describe as 'muddling through'. Policy makers compromise to meet conflicting aims and constraints, or proceed by incremental change which is less costly and difficult than fundamental change.

3 THE ENDORSEMENT AND DISSEMINATION EXERCISES

3.1 Level (1) – donor policies and opinion

Endorsement of the key finding related to the capacity of farmers to adapt and change, and the importance, therefore, of creating an enabling environment for their investments was sought at an international workshop in London to consider the results, which was part of the original project. and journal articles. It was particularly gratifying that two

⁹ The two-stage elections of early 2000, which brought into power M. Abdoulaye Wade, ending the monopoly of the Parti Socialiste in favour of the "politics of alternance" (O'Brien *et al.*, 2002) took place after the completion of the main research.

notable French researchers with long connections with Niger in particular and the Sahel in general, Claude Raynaut of the Université of Bordeaux 2, and Philippe Jouve of CNEARC, were able to come, along with three representatives of French government aid organisations, and two from the Club du Sahel.¹⁰ There was very good representation from the Netherlands, and one each from Germany and Denmark. Amongst the international organisations, IFPRI and the World Bank were represented. The Ambassador of Senegal participated and asking for the results to be transmitted to the Ministries of Environment and Agriculture¹¹. While the working groups that discussed the various aspects of the findings endorsed the importance of an enabling environment, such a workshop can only make a small contribution to the policy debates by donors and the opinion-formers of whom they take note.

3.2 Planning in-country programmes

Planning of in-country endorsement and dissemination work immediately followed the London workshop. The country co-ordinators (Dr Francis Gichuki of Kenya, Dr Yamba Boubacar of Niger, Dr Joseph Ariyo of Nigeria, and Dr Adama Faye of Senegal), together with Drylands Research staff, made proposals

- (1) for dissemination of the research findings in ways that influence policy formulation and implementation
- (2) bringing in people who can influence the policy debate nationally and locally, but who had not necessarily been involved heretofore in policy debates with donors (villagers, producer organisations, MPs, customary and religious leaders, etc).

The involvement of villagers from the start was considered important, and therefore, the need to use the local language and to involve the local language media (Hausa in the Kano area of Nigeria and Maradi in Niger; Wolof in Senegal and Swahili or Kikamba in Kenya).

DFID agreed in October 2001 to fund a small follow up programme in each country, emphasising the need for securing local endorsement of the results. It would test the quality of the research, and, if positive, give confidence that accurate messages are being disseminated. The chosen method was workshops at some or all of four levels, at the discretion of country team leaders,¹²: within a firmly limited budget:-

- (1) with the rest of the research team, who had not had the opportunity of endorsing the final version of the country synthesis,
- (2) with farmers in the villages sampled in the study,
- (3) at district level with the village representatives and district leaders and officials together, using the local language as far as possible, so as not to put village representatives at a disadvantage in discussions with researchers and officials and
- (4) at a national forum.

¹⁰ CNEARC funded the French translation and print of the Niger synthesis paper, and took 100 copies for distribution.

¹¹ Embassies of the other countries had been invited, but only Senegal accepted.

¹² There was no provision for in-country participation by Drylands Research. This was not due only to the funding constraint, but also because it was felt that the research would deliver a more powerful message if it was locally owned and presented.

The programmes were carried out more or less as planned in Senegal, Niger and Nigeria, but took a more limited form in Kenya.

3.3 The Senegal experience

The Senegal team was initially led by Dr. Abdou Fall of the Institut Sénégalais de Recherches Agricoles (ISRA) and after his departure, by Dr Adama Faye, initially of ISRA, later in Coopération Suisse. Here, the first stage of securing endorsement from the rest of the team was felt very important. The intermediate project workshop had identified two areas where it was felt further work was needed: supplementary field work by the Centre de Suivi Ecologique to clarify what was happening to fallow and uncultivated land, and more detail on rural income and investment strategies. DFID had provided the funding for these, and as a result the final synthesis contained important material the rest of the team had not heard discussed. In particular it revealed that many growers of groundnuts did not currently sell groundnuts. A majority of the researchers met in November 2001 for a day and a half to discuss the unexpected aspects of the synthesis, and the London workshop output. Adama Faye felt it was important to enable all those researchers who so wished to participate in the village meetings, since without team endorsement of the most striking findings, the material could not be confidently offered for debate elsewhere. This did, however, limit the money available for other activities. Seven team members met again on the eve of the village meetings, and agreed the summary findings which each should put verbally to the villages. It was felt particularly important to get the village view on the authenticity of two points:

- Whether the rural population was really stable or declining rather than increasing (important as the general view in Senegal was that a growing rural population was the cause of environmental decline)
- The present role and importance of groundnuts

Various circumstances have put the role of groundnuts at the forefront of the national policy debate. Senegal has since the 1960s endeavoured to see that the groundnut crop is sold, in shell, to the state processing plants, to be exported as oil and meal. The state has controlled prices, and arranged the supply of inputs, such as seed and fertiliser, on credit till 1984. Inefficiencies and corruption in the system led to the dissolution of the responsible organisation, ONCAD in 1980, with massive debts, and, under a reluctant structural adjustment programme, credit was abruptly halted in 1985, and subsidies on rice and fertiliser were abolished or reduced. Production of groundnuts fell to 500-600,000 tons in the 1990s. Prices remained fixed by the state, despite liberalisation for other products (Gaye, 2000), (Wilson Fall, 2000) (Faye *et al.*, 2001) and two parastatals controlled the trade.¹³ Under partial liberalisation informal traders were allowed to operate outside the formal three-month marketing season, dealing mainly in shelled nuts and artisan-processed oil and meal for the internal markets. IFPRI data shows the informal trade to have been stimulated by the devaluation of the FCFA in 1994, securing between 60 and 70% of the output that farmers wished to sell (IFPRI, 1997). However, this countryside trade does not seem to have been noticed by the intellectual and governing elites of Dakar.

¹³ SONACOS processed groundnut oil and meal for export and also imported and processed the cheaper soya and palm oils for sale to Senegalese consumers. SONAGRAINES was responsible for collecting and transporting groundnuts in shell to the factories during the official three month trading season, and for distributing approved seed.

The World Bank and IMF had been pressing for further reforms, and SONACOS has been on the programme for privatisation since 1995. Its growing level of debt is a burden on the state and probably deters private investors. It amounted to about \$84 million in 2000 (Ndiaye and Millet , 2001) and to around \$200 million in 2002 (warmafrica.com , 2002). In March 2000 the Parti Socialiste finally lost power to a coalition headed by the veteran politician Abdoulaye Wade (O'Brien *et al.*, 2002).

In the meantime, the rains had improved. The sudden change in groundnut production is shown in Table 1.

Table 1. Annual production of groundnuts in Senegal (tonnes)

1997	1998	1999	2000	2001	2002
551,394	579,067	1,014,247	1,067,951	959,859	532,936

Source: (FAO , 2002).

The large harvests stressed the parastatals, which were unable to buy all that was offered at the fixed price, and even so were increasing their debts to the government. Bank pressure increased. In November 2001 SONAGRAINES was abolished; the Bank believed its high marketing margin affected Senegal's competitiveness. Unfortunately, the private sector had had little time to obtain the necessary finance and vehicles before the new buying season opened in February; they had also to adjust to a new system whereby payment was made only after delivery to the factory, not at the point of collection. The official price was reduced from FCFA 145 to FCFA 120 per kilo, and limited to 400,000 tons. Many farmers did not know what was going on. Many accepted FCFA 70-80 from traders prepared to pay cash on the spot. In March 2002 Wade toured the groundnut areas, blaming the World Bank; he needed to win the local elections to be held in May (sundry local newspaper reports accessed on the web).

This was the background as our researchers debated the synthesis, and tested it with the villagers in November 2001. Most villages confirmed that population was not growing because of the emigration of the young. All four villages said groundnuts remained highly important to them, as family food, as fodder (hay and meal) for the animals they kept for their profitable fattening enterprises, and who produced manure for their millet, and finally, as a source of cash. They wanted to do more processing for the internal market. This contrasts the government view that the purpose of groundnuts is delivery to its processing plants, for export.

These meetings showed Adama Faye that the central questions needing debate at the regional level was how policy could be re-oriented towards assisting the home market for groundnuts and their by-products, challenging fiscal and other policies which favoured the lower quality imported oils for the consumer, and discouraged local processing of groundnuts for local needs. The research findings were also relevant to policy debates on state control of the groundnut trade and price.

The village meetings were asked to appoint four or five representatives to attend the regional meeting. This was to be hosted by the elected Regional Council, with invitations to representatives of national ministries from Dakar. Telescoping the meetings of stages (3) and (4) together was partly a response to financial constraints, and partly because it was hoped to secure attendance by some important Mouride leaders from their headquarters at the growing city of Touba, in Mbacké Department of

the Diourbel Region ¹⁴. It was thought to be easier to get Dakar officials to Diourbel, than to get Mouride notables to a semi-official meeting in Dakar.

At this point a presidential decree dissolved the Regional Council along with all other local authorities pending new elections in May 2002. Hence, a new basis for popular representation at the Région meeting had to be hastily found. Adama Faye use his contacts to involve the Conseil National de Concertation des Ruraux (CNCR).¹⁵ Swiss Co-operation enabled the participation of Dr Jacques Faye, a former Director-General of ISRA, and Director of Research at CIRAD, France, and now an independent consultant assisting producer organisations to make an input into policy debates. He had recently been appointed to support a planning group producing an action plan for the agricultural sector, as a basis for state policies, which has also been reviewed by the donors.

As a result of the discussions with CNCR it was decided to spend the morning in presenting the research results, and the afternoon in discussing their relevance to the Regional Development Plan, which would be critiqued by Dr Jacques Faye. It was further arranged that both Adama Faye and Jacques Faye would present in the local language, Wolof.¹⁶ This innovation was greatly appreciated by the village representatives, and their vigorous participation in the subsequent debates surprised and cheered the other participants. It had been deliberately decided not to invite aid agencies and to confine invitations to Senegalese institutions.¹⁷ Both the Ministries of the Environment and of Agriculture sent a high level official. The Deputy governor of the Region, the Prefect of Diourbel Department, opened the meeting. His speech showed he realised that the research had reversed some preconceived opinions on the role of population growth and rainfall in environmental degradation, and the need to recognise and encourage the farmers in their rational search for ways to maximise the return to the scarce factors.

While these issues were at the heart of the original research, it was the role of groundnuts which attracted the most vigorous debate. After the presentation of the results, and given the government's inability to buy groundnuts, some officials suggested groundnut cultivation should be abandoned. Village representatives argued that groundnuts remained a key crop not only for the cash they earned directly but also because of their contribution to their animal fattening enterprises, and their view won round the majority. There was also debate on why peasants were abandoning farming for commerce and non-agricultural activities. The farmers replied that they were

¹⁴ This city, second only to Dakar in size, is not officially "urban", because it does not have a municipal commune, unlike towns which are local administrative headquarters.

¹⁵ The CNCR is a confederation of the nine producer organisations devoted to particular products and interests. It is seen as a leading speaker on agricultural and rural development questions, and it plays an important part in organising rural people and in defining rural policies at the sub-regional level. It had been found during our research that most villages were aware of this body (Wilson Fall, 2000).

¹⁶ Their PowerPoint overheads necessarily used French. While Wolof has become the common language for trade and communication amongst urban people, it remains almost entirely an oral language (O'Brien *et al.*, 2002).

¹⁷ An exception was made for the British Embassy, in view of the origin of the funding, but they did not take it up. There was a representative of IFAD, which has a project in the area.

following recommendations when these were practical, but advice to diversify into vegetables was impractical given the water shortages in the area. They insisted on the necessity of being listened to by researchers, by advisers and the state. This was not only a question of language used, but of readiness by officials to feed the views of rural people into development analysis. Ways to find new outlets for groundnuts and their by-products were discussed. Farmers re-iterated the need to follow up on the points made in the village meetings (on the three roles of groundnuts, lack of improved seed, local processing, importance of fattening, emigration, functional education, credit needs, etc).

- In the afternoon Dr Jacques Faye discussed the pertinence of the Regional Development Plan. This Plan ignored a good part of the regional economy:-
- The huge growth of the city of Touba and its economic attraction
- The important financial transfers back into the region made by emigrants
- The reduction of activities by the official oil mill at Diourbel and the agricultural research station at Bambey, with consequent falls in formal employment
- The likely impact of a new tarred road toward the Senegal valley

In the subsequent lively discussion it was agreed that farmers needed to organise themselves to defend the interests of the majority when plans were made. The following were underlined:-

- The need to take non-agricultural activities into account
- The importance of Touba and its market as a regional pole of development
- The importance of the religious leaders and emigrants in the region's economic life. The issue was how to attract them into business investments, since emigrant remittances currently mainly fund the consumption needs of their families at home, housing, and festivities.
- The importance of livestock as the origin of a new dynamic in farming.

The meeting was followed by a press conference on February 21 2002 in Dakar organised by CNCR. This highlighted the coherence which was desirable between the strategies which rural people were evolving for themselves, and official agricultural and rural policies, and the future of groundnuts. The resulting radio and press discussion focused on groundnuts, as the current question of the day. In Senegal as in Britain, the media seize on newsworthy highlights, and disregard what they think is less interesting. CNCR then undertook a national tour publicising the research and its results to its member organisations.

The continuing importance of the research findings and the policies signalled by Adama Faye was demonstrated when the 2002 groundnut season proved poor (Table 1). By November the newspapers were talking of the inability of the housewives in the groundnut region to buy groundnut paste for their Ramadan meals. In local markets a kilo of groundnuts fetched 150 FCFA while the official price remained at FCFA 120 (*Le Soleil*, Dakar, 27/11/02, fr.allafrica.com, accessed 22/01/03). On 2/12/02 *Sud Quotidien*, Dakar, was querying the competence of SONACOS in managing both its export and import activities, and hinting at important local persons with interests in the imported oil trade. On 13th December the government, in an attempt to enforce supplies of groundnuts to its factories, evoked old regulations and used the army to immobilise lorries at Louga belonging to traders attempting to supply internal demand. The president of the national union of traders and industrialists demanded to know why, after liberalisation, they could not supply consumers in Matam and Bakel, who did not

grow groundnuts but wanted to consume them. Were these citizens irrelevant to the Senegal State? (*Sud Quotidien*, Dakar, 3rd and 10th January 2003, fr.allafrica.com, accessed 22/01/03). They also threatened not to sell groundnuts to the state at less than FCFA 200, given that they were paying 150-190 FCFA to purchase it.

This case illustrates the importance of

- (1) thoroughly testing findings when they challenge local paradigms. It was the endorsement of the villagers that they were in accord with the experiences they had lived through that gave the team confidence to propagate the results (some team members have now used the results in forums other than the ones described here)
- (2) the initial meetings with the villagers. As a consequence, their appointed representatives came to the meeting confident that what they said was the general opinion of the village, while
- (3) the use of their own language meant they were not inhibited in the debates.
- (4) knowing the local political context. Senegal had arrived at a point where forty years of state control of the groundnut crop was ripe for challenge
- (5) the local contacts of the research leader, who was able to bring in a respected government consultant involved in its policy processes, and an influential, well-organised federation of interest groups, the CNCR, whose leaders had the language, skills and contacts to interact with both the government and with the non-francophone traders and farmers they represented.
- (6) and pressure groups whose interests are touched by the research findings. They are instrumental in affecting the local political agenda in democratic countries with a free press.

3.4 Kenya

In Kenya, events took a different turn. The only similarity was that there has recently been an important election, which has, as in Senegal, overturned an entrenched leader and party, and opened up new possibilities in the policy field.

The research in Kenya was a direct follow up of the Machakos study, concentrating on change in the semi-arid parts of Makueni District, which was separated from northern Machakos in a district re-arrangement in 1992. Its capital, Wote, had none of the infrastructure gained over time by the older district headquarters. In 1998 it still lacked a tarred road either to Machakos or to the Nairobi-Mombasa highway; it had no electricity, piped water, or until 1999, telephones, and was still too small to be an important urban market.¹⁸

Four of the five members of the Kenyan research team had participated in the previous Machakos research. They were led by Dr Francis Gichuki, a soil and water engineer at the University of Nairobi with an international reputation, and strong connections with the Kenyan Ministry of Agriculture through his graduate and post-graduate courses, and as a consultant.

¹⁸ The results of the 1999 census have not been published in any detail, but it appears likely that towns outside the district have increased in size substantially since the 1989 census. Machakos is up from 116,000 to 143,000 and Nairobi from 1,324,000 to 2,143,000, according to www.citypopulation.de/kenia, accessed 6/2/2003.

The Kenyan team had had two days of thorough interaction with farmers and officials at Wote at the mid-term workshop in autumn 1999, with working groups and some plenaries conducted in Swahili or Akamba, and while some new points were developed there, such as the importance of developing the potential of the grazing areas of local farms, there were no great surprises to those already familiar with the previous Machakos study. The mid-term workshop held in Nairobi had drawn a large attendance from Ministries and aid agencies due to general familiarity and interest in the Machakos output¹⁹. The audience included two of the three local MPs and many from the Ministry of Education, due to the good contacts of the sociologist team member, Charles Nzioka. Thus there had already been broad discussion of the output. Most of those who attended have since been sent the Kenya Working Papers.

Initially, both Francis Gichuki and Charles Nzioka were very ready to participate, and tried to arrange it for the Spring vacation, 2002.²⁰ However, the District authorities requested postponement, as they would then be engaged in constitutional review exercises. It was left to the summer, by which time Francis Gichuki was fully and lengthily engaged in other international commitments in the water field, and unable to plan the exercise with Charles Nzioka. The participation of both was felt necessary, as Francis had been the main author of the synthesis, and Charles was the person with the good local and political contacts. In the end, the exercise was abandoned.

However, during the planning, Francis Gichuki had discussed the results with the Ministry of Agriculture and how these might be packaged for the district meetings. He had also prepared for them a shortened version of the synthesis. When the main programme fell through, the Ministry was still keen for this to be disseminated, via three serialised articles to be published in the *Mkulima Newsletter* distributed to all agricultural officers in the country, and also by two short articles in the Farmers' magazine. In effect, the results were being endorsed by the Ministry, and the recommendations within their field will become known to District agricultural officers and farmers, who can both apply what seems relevant and feasible in their own circumstances. Dissemination of the summary via an IFPRI-managed East Africa network is also under discussion.

The experience demonstrates that while local ownership is important, it does not necessarily follow that the research results, even if accepted as valid, are seen as priorities either by the researchers concerned (who have other commitments) or by the district authorities, (who have to meet a variety of priorities imposed by central governments). However, even in such a case, relevant results can find an audience if the researchers concerned have good local contacts and knowledge of how things work.

¹⁹ Lunch at a good hotel was an added attraction.

²⁰ Nothing much can be organised in Kenya in December and January, due to Christmas and then general preoccupation with amassing school fees.

3.5 Niger and Nigeria²¹

Research-policy dialogue in Maradi Department and Kano State began as early as 1995,²² with

- (1) An international research and policy seminar at Maradi, attended by representatives of research institutes in both countries and some government officials from Niger (conducted in French and English)
- (2) Direct discussions with senior administrators (including the Prefect) in Maradi
- (3) Visits to State and Federal government departments and research institutions in Kano.

The research proposal (for Maradi Department) that was an outcome of these talks failed to receive funding because the agency concerned (Canada) cut off aid links with the government of Niger following a military coup early in 1996, while the work intended in Kano was impeded by sanctions against the Abacha regime in Nigeria.²³

In Niger, research finally took place July 1999 - end 2000, thanks to the grant from DFID/ESCOR. The subsequent endorsement programme began in early 2002. A team meeting was not possible as members had dispersed, but Dr Yamba Boubacar (country co-ordinator) and Bouza Ibrahim, also of the University, met to plan activities. They then travelled to Maradi and held meetings in the four study villages to present the research findings for endorsement and comment. Attendance at the village meetings was 50, 100, 90 and 30 including women. They endorsed the main finding that productivity-enhancing investments had become more and more crucial to success in farming. Issues frequently raised concerned difficulties in obtaining, and paying the price of fertiliser (distributed through formal channels), lack of information about market conditions (and in some, poor access to them) and feelings of exploitation by private traders (even though many of them also traded) and the inadequacies of education. Copies of the synthesis were distributed to government officials and organisations in Maradi in preparation for the District workshop, (including a Hausa summary).

The District Workshop was held in Maradi on 6 May 2002, and attracted 40 participants from the villages, government and other agencies, and two of the researchers.²⁴ Plenary discussions were in Hausa and in French. There were three working groups (in Hausa),

²¹ Niger and Nigeria are discussed together as Maradi and Kano form parts of the same economic and cultural region, and the studies were closely integrated from the outset.

²² Funded by the Club du Sahel.

²³ It was understood that the proposal for a study of long-term change in Maradi Department was on the point of approval when the policy change took place. With regard to Nigeria, DFID removed it from its list of target countries for natural resources research, with the consequence that co-funding for in-country work in Nigeria could not be found until 1998. (Earlier work whose findings are drawn on in the Kano-Maradi study had not been developed to a full dissemination phase, though a single workshop was held in Kano in 1997.)

²⁴ Yamba Boubacar was joined by Mahamane Issaka of Institut National de Recherche Agronomique (INRAN) du Niger. There were 12 farmers' representatives from 3 of the 4 villages (the fourth one was unable to come); Maradi prefecture (represented by the Secretary-general), technical government departments, chiefs of agricultural services, NGOs, development projects, and civil society. Traders were not invited, as the keenness of others to attend meant all places were quickly taken up. The workshop had to be hastily rearranged from its original mid April date because of a Presidential visit to the area.

on: Agricultural inputs; Education and information; and Marketing alternatives. The farmers' representatives were interviewed by the Hausa language media.

A Workshop was held in Niamey on 10 October, 2002, to which a range of senior representatives were invited from research and policy institutions.²⁵ For this meeting, the relevant *Working Papers* were distributed, in French. The sudden calling of an Inter-Ministerial Meeting deprived the national workshop of many of its targeted participants outside the research community. As resources had been committed and as it was not possible to reconvene, the meeting went ahead on the basis of a very restricted participation.

In Maradi Department the interaction between researchers, villagers and policy makers was strongly positive, although the villages are located 1200 km from Niamey, where all but one of the research team are based. It was felt that the project went further than many earlier research studies in the Department had done in setting up a three-way communication, in which research was not only performed, but also reported and discussed. Village people are not at all cowed in open discussions with 'experts' provided that the language of debate is understood. The Maradi workshop was the second participatory workshop held there (and for the officials and agencies, the third) since the beginning of the research. We hope that a habit of consultation has been initiated. At the same time, much ground needs still to be covered, including strengthening relations between researchers and development projects and programmes. It has also to be recognised that while some of the issues discussed can be resolved or improved at Departmental level (for example, improving the distribution of fertiliser), others require national policy changes, or the provision of additional resources.

The following evaluation was written by the in-country Co-ordinator²⁶:

This research has launched a social dialogue in Maradi in which the peasants have been able to express themselves without constraint. They were very pleased that the research findings were taken back to the villages and verified with them. They did not hesitate to state their positions in the presence of administrative authorities. Specific interests and constraints of rural people are only rarely taken into account, which has blocked agricultural policies from taking effect in the past. The peasants denounced the gaps and deficiencies in education, training, and information dissemination. This freedom of speech offers hope for agricultural policy, and underlines the importance of finding ways and means of improving their access to information and to an education adapted to their interests. The success of the current national poverty programme will depend to a large extent on the State's capacity to integrate these interests. In the village meetings, the peasants did not hesitate to ask about the problems encountered by rural people in the other countries studied by Drylands Research, and about the solutions they had proposed – an interest that illustrates their thirst for information. To give the peasants an optimal chance to improve their situation, it is essential to reinforce their capacities with reliable information and education that is socially integrated (Y Boubacar).

²⁵ These included INRAN, the Population and Health Department, the Livestock Department, the Government's land tenure review body, the European Union, and the University of Niamey.

²⁶ As translated from the French by Drylands Research in its report to DFID.

In Nigeria, in consideration of the powers of state level government, and the impossibility of staging a meeting in the Federal capital, Abuja, within the budget, only one Workshop was planned, and was held in Kano on 25 July, 2002. Initial contacts had been made to secure the participation of representatives of the traders and farmer-traders interviewed for the research, and there was a strong participation of 49 with very diverse backgrounds²⁷.

Dr Ariyo presented a summary of all relevant *Working Papers*. The findings of the Food Marketing Study were then presented in more detail by the three researchers involved Dr. J Ariyo, Dr Ben Ahmed and Professor Voh).²⁸ After a plenary discussion there were three working groups (two in English and one in Hausa) to discuss common issues: what policies to stem declining prices and enable better livelihoods? What policies for stabilising price fluctuations? What policies for income diversification? How to improve market efficiency? And how to facilitate producers' access to capital, technology, and inputs?

The Chairman of the Hausa Group, Yusuf A. Abdullahi, expressed the participant's delight for being put in a group where they could participate actively and at having Hausa summaries of the research reports, which they indicated they would use among their people back in the villages or markets. The down-to-earth views stemming from direct experience which they then expressed had considerable impact on the following plenary which aimed to bring together the views of the three groups, although the final agreed communiqué was more emollient. The in-country co-ordinator saw their contribution as the most valuable aspect of the workshop:

The Workshop brought policy makers (at the state level) and actors in food production and marketing (farmers and traders) in the Kano region into a face-to-face contact to discuss the findings of our study. During this encounter and among the many issues discussed the farmers and traders voiced 'new' concerns that were unrecognised or generally ignored by policy makers. These were (1) concern about the deteriorating quality of fertilisers and agrochemicals coming into the market, (2) an admission that access to profitable farming is rapidly disappearing in the region due to the rapid growth in population and the need to upgrade local crafts into cottage industries as well as training/retraining of the people for such industries as a means of diversifying livelihoods, (3) the need for government to recognise and remove the high hidden cost of marketing, especially unofficial levies that are being collected daily by government officials on the roads (the police, immigration officers, vehicle inspection officers, custom officers, traffic wardens, officers of the National Drug Law Enforcement Authority, officers of the Federal Road Safety Corps, officers of local councils, etc.) as a way of

²⁷ Agricultural and Rural Development Authorities (Kano, Katsina, Jigawa States); Institutes of Agricultural Research and Agricultural Extension, Zaria; Federal Livestock Authority State ministries of agriculture, Federal Fadama Programme, International Fertilizer Development Centre, SassaKawa Global 2000, grain and livestock traders, farmer-traders from villages, the press, Women in Nigeria (NGO), producers' associations, the Cross-Border Trade Research Network, Ahmadu Bello and Bayero Universities

²⁸ Dr Voh's prepared summary had to be presented by Dr Ariyo when Dr Voh was unable to come at the last moment due to an accident.

reducing the large differential between farm-gate and retail/consumer prices of food commodities. (4) Farmers also bemoaned their lack of access to institutional credits and debunked the popular notion that they view such credits as easy money that they are prone to handle irresponsibly. They called for a thorough study of integrating traditional institutions into institutional lending mechanisms as a way of improving the loan recovery process.

Participation in the workshop was very lively, although it was restricted to the state level and lasted for only one day due to the limited fund available. The major impact of the workshop in our view is that it has generated awareness, among state officials who attended, of the foregoing concerns of both the farmers and traders in the region. The policy implications of these issues require the collaborative efforts of all tiers of government in the land to work out. It is necessary, therefore, to expose higher-level policy makers to these and other findings of the study in order to carry the awareness forward and influence future policies (J. A. Ariyo)

4 LESSONS LEARNT

Our research has shown that policy is key. Comparison of the long-term impact of differing policy regimes shows that the state, and the donor community behind it, may have a determinative role in enabling smallholders to reach their potential. Empowerment and opportunity were two themes highlighted in the World Development Report, 2000. Critiques of policy, and of their impact, over 40 years show that the evidence base was often weak, and that the influence of ruling paradigms was at times excessive. The knowledge base for policy makers is still deficient in these areas. Translating knowledge into policy process is little understood, but we now list some of the lessons learnt from the exercise just completed.

Targeting. It is important to decide at which levels the research-policy findings are applicable, and we have distinguished four – international, national, sectoral and sub-national. The simplest situation is where technical findings apply to a sectoral ministry, and require minor changes in its current policies and resource allocations. For example, grazing land management on small farms in Kenya, if communicated to professionals and farmers by agricultural newsletters, may result in more attention being given to this area. Such a response would be in a *bureaucratic mode*. Other issues require the participation of democratic institutions across more than one level, a slower and more complex process – for example, state support for agricultural input delivery in Nigeria, Niger and Senegal. Major changes in policy are only likely to occur after wider debate, possibly also involving pressures from donors (level 1), and civil society (level 4). This is a *political mode*.²⁹

²⁹ In Kenya, the Soil and Water Division has long been the best resourced part of the Ministry of Agriculture, owing to donor support. A shift of resources into regenerating grazing land could be accommodated bureaucratically within the Division, but a switch in favour of veterinary services would involve a different department and a political decision, with both donor and civil society interests participating. The strength of civil society organisations is critical – in Kenya, tea and coffee farmers are better organised than those producing grain and livestock.

National differences. Each country configures its *democratic, policy-making and civil society institutions* differently, and research-policy dialogue needs to be tailor-made. Powers to effect change through sub-national administrative units depend on constitutional provisions and revenues. There are significant differences between anglophone and francophone countries, and in the architecture of political pressure from donors, elites, and other interests. Scale is also relevant, and geographical or cultural distance from the centre. For example, Maradi is a department in a centralised state, small in demographic terms, whereas Kano is a strong state in a very large federation. As it enjoys an elected assembly, in theory it should be possible for rural people to influence policy through political representation. The organisations that constitute civil society range from the local to the nationally confederated, and vary in their linkages to the political centre. For example, the Mouride brotherhood in Senegal, the churches in Kenya, and the grain and livestock traders of Nigeria differ in many respects. Few countries have an equivalent to Senegal's Conseil National de Concertation des Ruraux.

National ownership. Engagement with a policy-making process must therefore be led by senior and experienced national researchers, and make use of their knowledge and institutions, and their contacts and networks. *National 'ownership' of research findings and the resultant research-policy dialogue* does not begin with a transfer of findings at the end of the project, but must ideally begin with research design and continue through its execution and follow-up. In this case, there was a continuing relationship between Drylands Research (the co-ordinating partner), in-country researchers (mostly employed in national partner institutions), district and local level administrators and professional departments or agencies, and collaborating families in the sampled villages, through to the endorsement exercise. This has now ended except to the degree that the national researchers wish, or have resources, to carry it forward.³⁰ However, what was lacking in the initial dialogues was contact with, or involvement of, national Ministries as opposed to research institutions, and this is a partial explanation of their low level of participation in the final workshops in Senegal and Niger. There is a problem here in that limited resources of finance and time at this stage have to be concentrated on team building and getting the research off to a good start, rather than with networking at the relevant Ministries. There is a possible role here, which we did not exploit, for the local branch of the commissioning agency, or the Embassy, to suggest and promote contacts.

Taking research forward at the national level. New research has no automatic claim to be taken seriously by national policy makers. The analogy is not sequential actions (research followed by policy) but *flexible interaction*. Such interaction needs resources, as dialogue throws up new questions, as well as taking time, calling for commitment by researchers to the policy process. Who should decide what research findings justify such investment, and what do not? One party to the dialogue is the policy-makers, who have

³⁰ The degree of involvement in design and in the endorsement exercises varied by country. National influence on design was higher in Niger and Nigeria due to funding having been available from Club du Sahel for preliminary visits, as described above, before the proposal was written, and a second visit for other purposes enabled consultations on team members. In Senegal, the proposal was written after only brief consultation with Dr Adama Faye and CSE, during a visit to Senegal for other purposes in 1996, but both he and Dr Abdou Fall came to the UK before field work began, for consultations, the team was largely picked by them, and the inception workshop was very thoroughly prepared by them. There are obvious problems in getting funding for consultations before a proposal is written and accepted.

their own agendas and pressures to cope with. The other party is the national research leaders and their colleagues. They too have other priorities, including a need to, or interest in, pursuing other research and livelihood opportunities. The long gap between the completion of in-country research in 2000 and the endorsement and dissemination exercises in 2001-2 meant that some of our researchers had become otherwise involved. It would be ideal if endorsement, dissemination and research-policy dialogue could be provided for in a research proposal. However, there are practical difficulties in seeing so far ahead when the research findings, and therefore appropriate modes of follow-up, are unknown.

Taking research forward at an international level. The London Workshop in January, 2001 provided an opportunity to insert preliminary findings into international debate. It would be unrealistic to pretend that this was more than a modest beginning. Parallel policy processes are in train at national level in many countries, such as ‘sector-wide’ planning and Poverty Reduction Strategies. They present a complex challenge for a bottom-up approach such as the one developed in this work. It is desirable, but not easy, to find *ways of linking independent research* into such donor-driven initiatives.³¹ Their remit extends beyond the drylands. However, the Drylands Development Centre (UNDP), the Global Environment Fund, and the Global Mechanism of the Convention to Combat Desertification, as well as UNEP, have key roles to play in bringing new knowledge to bear on drylands development policy.

In the longer term, where findings are important enough to justify it, a book can be more influential on international opinion formers than web-sites. It makes findings available to agencies other than the funding one, and can be used in the universities teaching both agency and national staff (as is the case with (Tiffen *et al.*, 1994).³²

Placing findings in policy context. A coincidence between the research findings and *policy matters currently occupying political and public attention* is very helpful, as the Senegal experience illustrates. However, if such a coincidence is lacking, it cannot be engineered. The participation of national policy makers in the research design, although perhaps ideal, is unlikely always to be practicable, especially if the research questions received opinion that is already expressed in policy. Managing such counter-orthodox outcomes – especially if additional validation is thought to be necessary before accepting them – is not straightforward. This research, as we have noted, does challenge some received opinion on dryland management. It is also possible that research findings can have unpredicted relevance for departments not involved at all in its planning. For example, this research found relevance to educational policies.³³

Validation and participation. *The validity of research findings is important.* If they are based on local research, the synthesis derived from them needs to be taken back and

³¹ It was not possible to carry forward our activities to a point where any direct engagement with these processes was practicable. The time and financial constraints referred to in relation to Ministries apply also to the development of initial contacts with local offices of relevant aid agencies and development institutions.

³² It has not yet proved possible to attract funding for writing a book to synthesise findings.

³³ DFID has important educational programmes, but its Education Advisors were not involved in the initiation of this research.

endorsed at the appropriate level. Without this endorsement, the researchers may not have the confidence to promote the results, particularly if they question received opinion. Village people and researchers can (and should) converge on research findings, and on the public action that is desirable to take forward agreed priorities, because village people naturally accept a long-term view. This is very different from a traditional expectation that village people should accept expert diagnoses without question. Participatory policy discussions at local level have a strongly positive reception among people accustomed in the past to authoritarian, one-way government. *Empowering such discussions on an 'evidence-led' basis* is both a worthy and a worthwhile activity for researchers. Much still needs to be done to incorporate evidence into empowerment. Demand for information, new knowledge, and opportunities is buoyant at local level. Participation, of course, raises expectations – or creates perceived entitlements. In some of our collaborating villages, researchers have already come under pressure to deliver some form of follow-up.

Local people can only endorse and debate research findings effectively with officials and researchers in a *language with which they are thoroughly familiar*. They may bring up new and important issues which outsiders have not hitherto considered. Insights can emerge from an exchange of views unimpeded by a need to express them in an unfamiliar medium. In order that they do this, the *ratio of participating officials to local people* also needs to be considered. Four local people versus 40 officials does not work; 16 versus 30 does. It was also helpful that local people had time to consider the findings and their implications in meetings at village level, before meeting with officials at district level. They came with considered views, secure in their knowledge of the village consensus.

However, *this activity takes time and resources*, and requires careful consideration of language and literacy issues.³⁴ It can be particularly important if stereotypes of rural people by professionals reflect inaccurate or patronising perceptions, or low expectations. The promotion of a more participatory or empowering approach in areas such as extension or the management of common resources can only work if local agents of sectoral ministries are convinced of the abilities of local people, while taking realistic account of their constraints.

Involving local pressure groups. This can be important in the political mode, or their exclusion destructive. It is important not to omit traders, who by the nature of their work link urban and rural, supply and demand, and interact and overlap with both farmers and officials. This is particularly relevant, now that development policy has become more market-oriented. In our work, we did not involve them explicitly at the district mid-term workshops, or in the endorsement workshops in Senegal and Niger, but the Nigerian endorsement workshop showed how valuable their input can be.

³⁴ The language issue has many facets. Written Hausa in Nigeria can be produced with a normal keyboard, and is widely understood, with its own literature, newspapers, etc. Hence, farmers and traders at the workshop were glad to have Hausa documents to take back to their home areas. The French transliteration of Hausa can only be produced on specially modified typewriters, and is difficult to transmit by email (Yamba Boubacar). Very few people are literate in it, though some Niger migrants to Nigeria have picked up literacy in the Nigerian Hausa orthography.

Institutional change. Institutions are accorded a high profile in both the *World Development Report 2002* and *WDR 2003*, and in current development policy debate. In our long-term studies and in the participatory endorsement exercise, however, no clear agenda for changing institutions emerged. The long-term trends identified in each country have mostly taken place within a given institutional framework, or through autonomous adaptations (for example, in customary resource tenure and family institutions), which suggest that interventions should only be undertaken with great care. However, experience in the endorsement exercise shows that the *participatory policy process* itself should be ‘institutionalised’, not necessarily through new structures but by building guarantees of empowerment and participation into existing (and well understood) power relations.

REFERENCES

- Coe, Luetchford, and Kingham (2002). id21: Tracking routes towards impact. www.id21.org/id21-info/impact . Accessed 21-1-0003.
- Crewe, E. and Young, J. (2002) 'Bridging research and policy: Context, evidence and links', *Working Paper 173*. Overseas Development Institute, London.
- FAO. FAO/WFP crop and food supply assessment mission to Senegal (2002). www.fao.org/WAICENT/faoinfo/economic/giews/english/alertes/2002/y8165e0 Accessed 24-1-2003.
- Faye, A., Fall, A., Mortimore, M., Tiffen, M., and Nelson, J. (2001) 'Région de Diourbel: Synthesis', *Drylands Research Working Paper 23e*. Drylands Research, Crewkerne, United Kingdom.
- Gaye, M. (2000) 'Région de Diourbel: Politiques nationales affectant l'investissement chez les petits exploitants', *Drylands Research Working Paper 12*. Drylands Research, Crewkerne, United Kingdom.
- IFPRI. Senegal (1997): Research. www.ifpri.org/themes/mp02/senegal/snfind.htm. Accessed 24-1-2003.
- Ndiaye, B. and Millet, D. (2001). La théorie de faire faire: la filiere arachidiere au Sénégal. users.skynet.be/cadtm/pages/francais/interviewbadaradamien.htm .Accessed 23-1-2003.
- O'Brien, D.B.C., Diop, M.-C., and Diouf, M. (2002) *La construction de l'état au Sénégal*. Karthala, Paris.
- Reij, C. and Steeds, D. (2003) *Success stories in Africa's drylands: supporting advocates and answering skeptics. A paper commissioned by the Global Mechanism of the Convention to Combat Desertification. Draft Report* Centre for International Cooperation, Free University of Amsterdam, Amsterdam.

- Snrech, S. (1995) *Preparing for the future: A vision of West Africa in the year 2020: Summary report of the West Africa Long Term Perspective Study*. Club du Sahel/OCDE/OECD, Paris.
- Stone, D., Maxwell, S., and Keating, M. (2001) Bridging research and policy: An international workshop funded by the UK Department for International Development, Warwick University, 16-17 July 2001. www.gdnet.org/pdf/Bridging.pdf . Accessed 10-1-2003.
- Tiffen, M., Mortimore, M., and Gichuki F. (1994) *More people less erosion: environmental recovery in Kenya*. John Wiley & Sons, Chichester, UK.
- warmafrica.com. (2002). Senegal: The peanut blues. www.warmafrica.com/index/geo/4/cat/5/a/a/artid, dated 19-03-02. Accessed 23-1-2003.
- Wilson Fall, W. (2000) 'Région de Diourbel: The family, local institutions and education', *Drylands Research Working Paper 20*. Drylands Research, Crewkerne, United Kingdom.

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