

LIVELIHOOD TRANSFORMATIONS IN SEMI-ARID AFRICA 1960-2000

Proceedings of a Workshop arranged by ODI with Drylands Research and the ESRC in the series 'Transformation of African agriculture'

**The Old Theatre, London School of Economics
Wednesday, January 17th 2001: 10 am – 5-30pm**

1 INTRODUCTION

The workshop was opened by Simon Maxwell of the Overseas Development Institute, who referred to the earlier study carried out under the ODI on the Machakos District, Kenya, 1960-90. The current study was a follow up, in which similar methodologies had been used to examine changes in four different semi-arid areas of Africa – Makueni District, Kenya, Diourbel Region, Senegal, Maradi Department, Niger and the Kano hinterland in northern Nigeria.

2 PRESENTATION OF MAIN RESULTS

Michael Mortimore and Mary Tiffen presented the overall results.

1. *Geographic limitations on the research areas*

The research was concerned solely with semi-arid farming areas in sub-Saharan Africa, where

- Rainfall is
 - Low
 - Seasonal (4-6 months per year)
 - Variable
 - And, in the Sahel, recently in decline
- Bioproductive potential
 - Is generally low, limiting choice of crops
 - Water can be concentrated, naturally or artificially, only on small areas for higher value produce

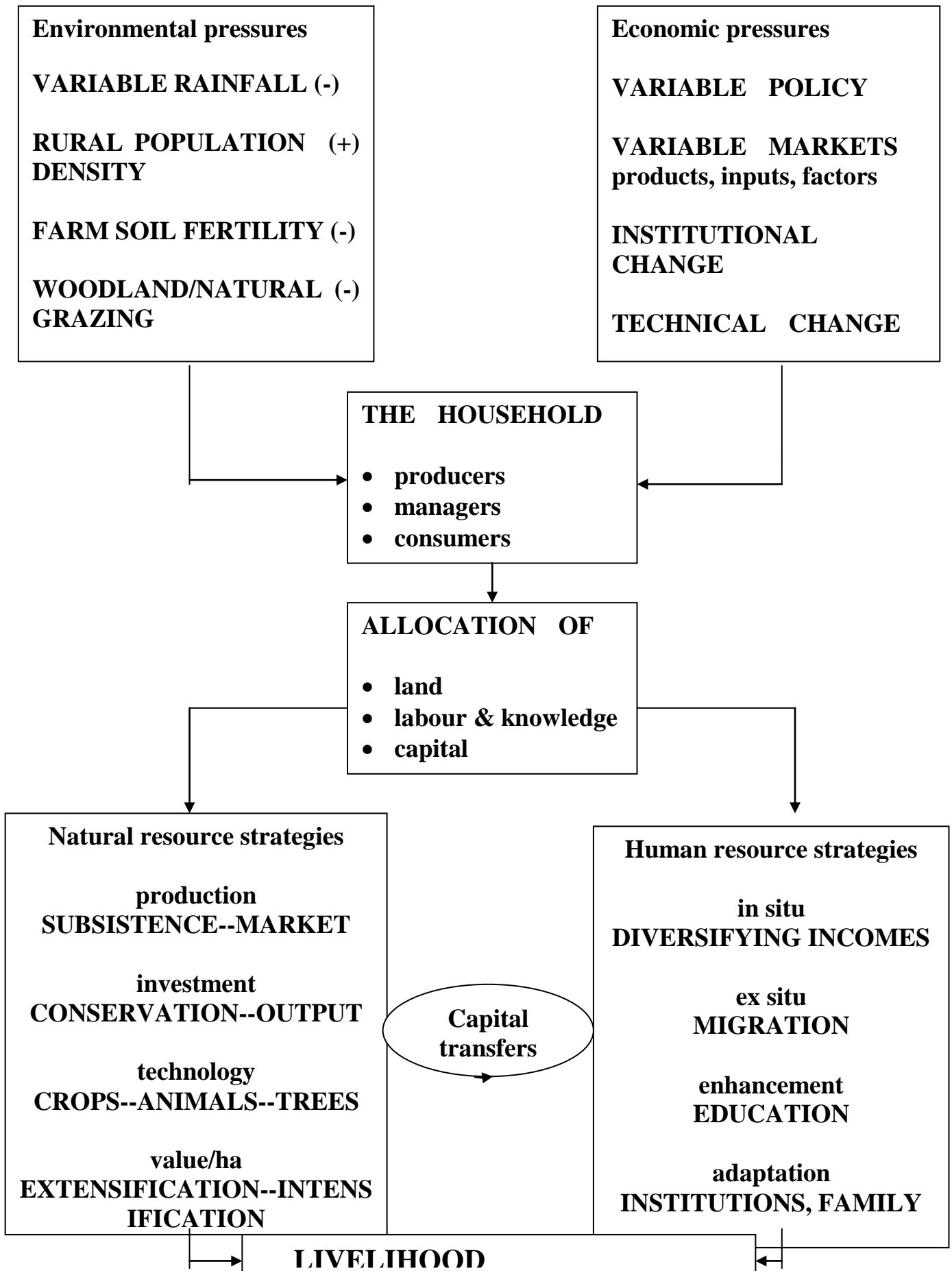
These characteristics were illustrated by rainfall statistics and graphs for the four selected study districts, and plant biomass production by rainfall, farm and non-farm.

2. *Research Goals*

- to obtain a better understanding of the response of small holders 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
- to validate the Machakos hypothesis that there can be positive linkages between population growth and livelihood intensification

The research started when there was great concern for good environmental management. Donors now emphasised livelihood development to overcome poverty. The results showed the two objectives were not incompatible, and that farmers in semi-arid areas had always had a multi-pronged approach to their livelihoods.

A DEVELOPMENTAL MODEL FOR LIVELIHOODS



3. *Developmental model for livelihoods*

The original Machakos model had proposed that

As land becomes scarce in the original settlement the options are:

- Migration to a rural area with vacant land
- Urban migration
- Intensification of the existing farmed area

Currently, in most of the study districts, the first option no longer exists, though it was till very recently open in Makueni and Maradi.

An alternative Livelihoods Development Model was presented. Central to this is the household, which combines producers, managers and consumers. Since we are concerned with farmers, it possesses both land and labour. It is subject to environmental and economic pressures (including those derived from policy), which influence its decisions on the allocation of its labour and strategic choices about its combination of activities. Activities can be natural resource-based (modes of agricultural and livestock production) and/or labour based (diversifying incomes, migration, education, adaptation of family and other institutions). Because activities are managed in a family framework, capital generated by one activity can be invested in an alternative activity, as the family seeks to develop its overall livelihood capacity.

The model, and the research results, present the rural household as having a good management capacity, and making intelligent decisions to respond to changing market opportunities and to develop their land and human resources. Hence, the key necessary characteristic of good policy was that it should enhance people's ability to take advantage of opportunities, rather than directing or prescribing what they should do with their labour and land assets.

4. *Population increase and urbanisation*

Population increase is a common pressure driving change since it alters land/labour relationships. All 4 areas had experienced rapid population growth in the past 40 years, but whereas in Makueni and Maradi the population could initially spread out to less attractive but vacant land, in Senegal and Kano the frontier had already closed by 1960 (the saturation point in French literature). This had led to rapid urbanisation in both cases. The importance of urbanisation for rural livelihoods is that there is

- An increasing market for foods the semi-arid areas can produce, *if currency management and national subsidy policies allow*. In Nigeria, there has been a huge increase in the demand for local foodstuffs; in Senegal policies have long favoured the import of rice
- An increasing alternative market for rural labour on either a seasonal or permanent basis

Non-farm income has always been a component of income in semi-arid areas due to the long dry season, but it has increased in importance, and in West Africa the element due to migratory, urban activities rather than local in situ activities was increasing.

1. Land-based production over time

This was illustrated by charts showing

- Output value/ sq. km, Machakos, 1957-87
- Groundnut and millet yields/ha, Diourbel, 1960-94
- Groundnut and millet yields/mm rain, 1960-94
- Millet and sorghum yields/ha, Maradi, 1979-98
- Output value per capita, Machakos, 1957-87
- Groundnut and millet yields/per capita, Diourbel, 1960-96
- Cereal output per capita, Maradi, 1964-98
- Livestock population, Diourbel, 1960-96
- Livestock population, Maradi, 1988-97

Notable features were the maintenance of millet yields per unit of rainfall in Senegal, (while falling per ha and per capita), maintenance of millet output per capita in Maradi, with variable but falling yields, and the rising importance of livestock in Maradi and Diourbel.

5. *Intensification and soil fertility indicators*

A model was presented on the transition from degradation to intensification as population density increases. There was evidence of a stage at which a transition was made from extensive agriculture, which suffered degradation under increasing population density, to intensification and recovery. Evidently intensification and output was influenced by policy, land availability, and rainfall trends.

Soil fertility indicators, for Diourbel and Maradi presented a mixed picture, with fertility maintained on manured fields (not all fields). This was particularly illustrated in Sob village, Senegal.

Characteristic of intensification as population increased was

- Advance of cultivation (percent of area)
- Increase in peak labour per hectare – labour that might not be available if other work options were preferred.

6. *Access to land*

Tenure changes were taking place at an increasing rate due to:

- Scarcity of unclaimed resources
- Subdivision of claimed resources
- Consumption needs
- Market participation
- Monetisation of the factors of production

The responses were characterised by

- Adaptation of custom
- Investment
- Individualisation
- Inequality
- Competition

7. Nature of the rural family and its financial management

The rural family remains a strong social unit, united by ties of affection and duty, but it is changing its nature. Family residences can be spatially separate – partly in new farm areas, partly in urban areas. While different family units headed by adult children have independent incomes, there are family financial flows between units, to meet

- Consumption needs, emergency or regular
- Investment needs, farm or non-farm, including education of young
- Social networking (ceremonies, festivals, marriage, funerals, religious brotherhoods, etc)

Examples were given for Kenya and Senegal. In both, funds were derived from crops, livestock and non-farm income, with livestock being important as a source of both emergency funds and regular expenses but there were also strong differences. In Kenya, livestock were exposed to high disease risks and education of children was regarded as a priority investment (in the hope it would lead to a skilled non-farm job). Educated children often provided investment funds for the farm. In Senegal education had low priority, and unskilled jobs in urban centres and abroad (mainly in marketing and transport) were rather obtained through religious and family contacts and related social investments in the important Mouride brotherhood. The main investments have been in urban development and overseas petty trade. In so far as there was investment in farming, it was directed to livestock, disease appearing under better control than in Kenya.

8. Relevance of education

Kenya parents saw the education provided by primary schools as essential for communication skills, and relevant to rural life as well as preparation for higher education and jobs. However, some were beginning to doubt the value of Year 8, and the cost-benefit ratio of secondary education. Parents in West Africa, while valuing wisdom for their children, were less likely to see academic education in a French language primary school as relevant, or in accordance with their Islamic social norms.

9. Policy links – non -farm

Given that in semi-arid areas livelihoods depend on a combination of farm and non-farm incomes, relevant policies embrace those directed towards creating more remunerative non-farm opportunities, for example, the development of rural towns with water and electricity for workshops, and a school curriculum relevant to informal and self-employment.

10. Policy links – markets

All the studies had shown farmers' ability to transform their output in response to market signals. Policy on infrastructure was important.

- Senegal - from groundnuts in 1960 to livestock and non-farm income in 1999
- Niger – from groundnuts to cowpeas and tiger nuts in response to Nigerian demand
- Nigeria – from maize as a minor to a major crop, from groundnuts to cowpeas

11. Prices

Governments had recognised the importance of prices and reacted by attempting to control them in the belief this would enhance stability and improve the investment climate. Normal seasonal price fluctuations are well-known to farmers and traders and

provide incentives for storage. Uncontrolled millet prices were in fact more stable in Niger than the controlled prices of Senegal. Uncontrolled meat prices in Senegal showed stability or gradual rises, rather than the more violent fluctuations of controlled groundnut prices. In Makueni, prices for labour, bull services, grazing land rental varied according to demand, quality, marginal output, etc. There is no doubt that the Wolof of Senegal and the Hausa of Niger and Nigeria are equally skilled price bargainers.

What can cause dislocation are sudden changes such as those caused by devaluation, abrupt removal of subsidies, an inflationary burst such as Kenya experienced in 1993, which affect both farm managers and managers of community assets such as water facilities. Monetary policies are important in relation to

- Avoiding over valuation of the currency, which leads to food imports as well as eventual devaluation
- Avoiding acute inflation
- Tariffs for food imports and agricultural inputs
- Credit policies

12. Credit

Credit is often seen as a remedy but it can bankrupt both borrower and lender. Credit policies must consider

- Is it repayable by farmers?
- Is it viable for governments?
- Does it have a limited role in introducing new technologies?

Maradi farmers first bought new farm implements with credit, but have continued buying them since credit stopped, because the Nigerian food market was providing a profitable outlet for the extra production they enabled.

13. Limitations on governments

All four countries considered have static or falling GDP per capita, leading to limited taxable capacity. For some, aid per capita has been high in the past, but is now falling rapidly. Hence, all policy recommendations have to take account of limited government resources. This justifies our emphasis on policies to enable private household investments which have played a greater role in the past than has been acknowledged.

3 PRESENTATIONS OF COUNTRY CO-ORDINATORS ON FARMER INVESTMENTS

The four country co-ordinators presented their view of the main highlights of the research in a joint presentation, with examples from their own countries.

Dr Francis Gichuki, University of Nairobi, Kenya, introduced this by emphasising the huge investments made over time in developing farms in Makueni by the farmers, particularly in water-harvesting and soil conservation, but also by government. The questions in relation to these are:

- Are the investments timely?
- Are the investments effective?
- Is policy intervention timely?
- Did policy create an enabling environment?
- What are the implications of untimely and inefficient investments?

- What is the way forward?

Examples of supportive policies in Kenya were soil conservation and most education policy. Some government investments had not been timely or efficient, or had been too sudden (education and water costs off-loaded on to consumers when incomes were falling, some educational changes, cotton parastatal abolition) and this could deter farmers from making their own complementary investments. As chains break at the weakest link, there is need for government, community and individual farmer partnership in development, with government providing support where needed.

Dr Joseph Ariyo, Ahmadu Bello University, Nigeria explained the Kano study had been more limited than the other country studies, concentrating on policies and food marketing. The farmers' investment environment could be divided into two main periods:

c. 1950 – mid 1980s

Rainfall was variable, but macro-economic policies were slowly evolving and fairly consistent, providing a farm investment environment with moderate risks which led to large farm investments.

Prices were stable except when there was civil unrest or drought (1960-72/3)

mid 1980s – present, characterised by

Decreasing rainfall

Rapidly changing, sometimes contradictory macro-economic policies particularly

- (i) Massive devaluation of the national currency;
- (ii) Withdrawal of subsidies on fertilisers, and other farm inputs
- (iii) High fuel prices (which are major costs for traders)
- (iv) Trade liberalisation

Therefore investment environment became very risky marked by hyper-inflation, crippling industry and its demand for agricultural raw materials leading to:

- (i) Competition with imported foods
- (ii) Sharp decline in consumer purchasing power and falling effective demand.

Returns on investments were unsustainable and unpredictable. Suggested policy improvements were:

- Price stabilisation, with particular reference to inputs such as fuel and fertiliser
- Creation of diverse opportunities to generate incomes through
 - (i) improvements in infrastructure;
 - (ii) Development of alternative energy sources in rural areas;
 - (iii) Improvement of access to education; and
 - (iv) Micro-credit for irrigation

Dr Adama Faye (colleague of the Senegal co-ordinator, Dr Abdou Fall, Institut Sénégalais de Recherche Agricole) highlighted the transformation in the Diourbel region from 1960-1999. Farmers had reacted to various policies instituted with the aim of increasing groundnut production for export by

- Reducing groundnut domination in the cropping system and putting emphasis on food crops (millet, sorghum, cowpeas)
- Intensifying animal production
- Developing non-farm enterprise (trade, artisanal production)

- Exporting farm labour to urban areas and other countries

The question before Senegal was how to build a new paradigm and policy environment for sustainable rural development. This involved:

- Facing the dilemma of groundnuts, hitherto regarded as central to the rural economy and national requirements
- Recognising livestock intensification as a key-element for a sustainable production and income system
- Promoting non agricultural activities to alleviate land pressure
- Involving all the stakeholders including the Mouride leaders to debate these issues and the strategies.

Dr Boubacar Yamba (University of Niamey) discussed the policy environment in the Maradi Region, identifying three main periods:

1. *1960-1974 – Modernisation of the economy*

- Development of groundnut industry
- Guaranteed producer prices
- Increases in taxes on producers

Tax and price policy had been in contradiction.

2. *1974-1980 – Food self-sufficiency*

Prompted by food deficiency and the availability of uranium revenue, the government launched a variety of rural projects, some loan-financed. Credit was made available for new farm equipment.

3. *1984-Onwards – Structural adjustment*

The state had been omni-present, but had now withdrawn, leading to the end of credit and most projects. While this might be thought uncondusive to farm investment, in fact the capacity of adaptation had increased and farmers have continued to invest in new crops and equipment despite withdrawal of credit. Motivation was provided by the strong influence of Nigeria's economy on Niger's economy and the increased demand for food products.

4 PLENARY DISCUSSIONS

The role of education. Bradley asked for information on Niger or Nigeria. Toulmin gave the example of community schools being set up in Mali. Okai called for more gender analysis. Ariyo said Hausa farmers saw no obvious returns to formal education, who needed children's labour on the farm. Homewood cited Masailand, where income diversification was associated with a leader position or education. Fairhead said Islamic education was very important, and economics was not the only motivation for education. Mazzucato agreed the social returns were important and asked how risky educational investment was. Mary Tiffen responded with additional information from the reports. Maxwell said the study was an example of the power of the livelihoods approach and the findings connected with the education debate. Faye said that the Mourides in Senegal rejected state provision, having their own definition of education. It was necessary to involve them in the discussion on priorities.

The model and diversified incomes. Belshaw said that the model should show international as well as national economic influences. It should be made dynamic, with the household decisions affecting the technical and institutional via feedback loops. K Hussein asked for more disaggregation, the poor and less poor, who might be differentially affected by e.g. devaluation of the FCFA, access to education, credit. He also raised the importance of social networking, especially producer organisations. Niemeijer said there were pressures and opportunities in the model, but the poorest groups could drop out of sight. Okai asked for more definitions. Raynaut said the model was too general: there were differences by categories and region. He asked what the state could do about increasing inequality, referred to Murton's study in Kenya, and that poor people can better make labour than money investments. Jospin noted the importance of rural-urban linkages. Dorward said non-farm diversification was increasing and the poor were dropping out of the natural resource sector. Carswell asked when diversification income was substituting for, and when adding to, NR based activity. Toulmin said the model should have shown that dryland areas were often affected by non dryland events. Ambridge said livelihood analysis was useful in seeing what people have and do not have. The issue was the connection to policy changes.

Social institutions Mazzucato said in Burkina social networks for accessing land and labour affected the ability to intensify and could benefit the poor. Toulmin emphasised the continued importance of the family.

Discussions following the country co-ordinators' presentation

Belshaw noted 1979 was a seminal date in Nigeria – increase in petroleum price, massive spending, collapse of agricultural exports, labour sucked out of farming. Big issues such as these needed flagging.

Pender asked about soil conservation returns to labour. In a staged investment strategy, the first investments were the most profitable. The importance of livestock in livelihoods indicated the importance of giving more attention to grazing land. Okai noted total factor productivity analysis might not take account of ecological sustainability. Pain commented on the missing meso link between micro and macro priorities. Given the restricted funds, planning was about choosing.

5 AGENDA FOR WORKING GROUPS

Participants were invited to join one of four groups, as follows:

- (1) Conserving natural resources and improving their management
- (2) Increasing the value of crop, livestock and other NR-based output
- (3) Developing investment capacity and market access
- (4) Enhancing human resources and the non-farm sector

Each group was asked to consider the following key questions:

1. Is a view of rural livelihood transformation as driven by capacities as well as by constraints a practicable basis for policy formation?
2. What areas are critically important in constructing an enabling policy framework for livelihood development in the drylands?

3. Recognising that politicians are influenced by interest groups, how can a participatory debate on enabling policy formation be initiated and sustained at the national level?

6 REPORTS OF WORKING GROUPS

GROUP 1: CONSERVING NATURAL RESOURCES & IMPROVING THEIR MANAGEMENT

Camilla Toulmin (Chairman and rapporteur)	IIED
Andrew Warren	University College, London, Geography
Bill Adams	Downing College, Cambridge, Geography
Yamba Boubacar	University of Niamey
David Bourn	Environmental Research Group, Oxford
Phil Bradley	University of Hull, Geography
Constance Corbier-Barthaux	Agence Française de Développement
Robin Grimble	Consultant, ex Natural Resources Institute
Hassan Hassan	World Bank
Kathy Homewood	University College, London, Anthropology
Adam Manvell	School of Development Studies, Uni.of East Anglia
Michael Mortimore	Drylands Research
David Niemeijer	Wageningen Univ, Env. Systems Analysis Group
David Okai	Consultant
Henry Osbahr	University College, London, Geography
John Pender	International Food Policy Research Institute
Claude Raynaud	University of Bordeaux II
Beryl Turner	Consultant
Magatte Ba	Centre de Suivi Ecologique, Senegal

First, comments regarding the model: There needs to be more feedback within the system, rather than it being linear in form. Clearly the natural resources available are not just given but are themselves transformed by human and livestock interaction. Thus additional loops are needed. Also it was felt that the options faced by poorer and better-off groups were substantially different, requiring a range of models to suit the different circumstances they face.

A reminder of the key findings from the studies to date:

- Farmers play a very active role in pursuit of more sustainable farming systems and improved livelihoods. They are highly competent in assessing the opportunities available and best able to find answers which are appropriate to their circumstances.
- They are highly responsive to economic conditions and market opportunities
- Households remain a critically important social institution within which much diverse economic activity takes place, investments are made and risks and incomes are pooled.

- There are winners and losers from the last 40 years of environmental, economic and social change.
- In general, farming systems have moved towards more sustainable production systems, a finding which is the result of actions by millions of small farmers and very rarely the result of direct government or donor intervention.
- Customary tenure provides a fluid, negotiated, dynamic set of institutions through which different groups try to gain firmer claims to land, and which has provided no disincentive for investment in agriculture.
- There have been enormous changes over the last forty years, such as a growing scarcity of land, the privatisation of certain resources (e.g. stubble) and the development of new forms of collective resource management.
- Natural resources are only one part of a broader livelihood system.

Question 1: Is a view of rural livelihood transformation as driven by capacities as well as by constraints a practicable basis for policy formation?

We felt it was very important to shift from an approach emphasising constraints to one in which capacities provide the major focus. We also thought that the term ‘opportunities’ was probably better than ‘capacities’. Such a shift challenges a techno-centred approach, in which constraints are identified from outside and solutions drawn up, to one in which people are the principal actors. Constraints clearly exist but they do not necessarily impose a firm cap on what people are able to achieve.

Question 2: what areas are critically important in constructing an enabling policy framework for livelihood development in the drylands?

We spent a lot of time discussing the role of the state – what minimum essential functions should it perform? It cannot be ignored and has a rightful place. A completely laissez-faire approach was not right. How to re-define its responsibilities in ways which support local actors, rather than hindering them? Such responsibilities would need to include:

- Providing an enabling environment.
- Negotiating, agreeing and enforcing the rules of the game.
- Certain public goods provision, such as monitoring environmental change and data collection. Equally trying to tackle certain issues where externalities are involved which require higher level action – such as soil erosion. Also, there are certain fundamental issues which need to be addressed at governmental level – such as provision of basic water supplies.
- There may be certain assets whose condition is irreversible – hence government has a rightful position in trying to ensure more effective long term management strategies.
- Creating a level playing field by providing an arena for trading off different objectives – e.g. is environmental sustainability the key objective and what trade-offs with meeting poverty eradication targets?
- Governments need to acknowledge the enormous power of markets and prices and their limited capacity to intervene.

We emphasised the fact that ‘policy’ cannot be defined in some neutral technocratic manner – policy inevitably needs to be linked to what you are trying to achieve which

itself needs to be negotiated between the various stakeholders involved. The political system needs to identify and agree objectives and priorities

What single thing could government do to improve NRM?

Ensure more effective representation of different interests, help resolve conflicts, act as impartial arbitrator, create a greater sense of security. Promote processes through which people can express their views and negotiate both with the state and with others.

It was felt that there was no evidence for governments having a longer term time horizon than local people regarding NRM. If anything, government and politicians work within much shorter timeframes than local people whose children and grandchildren will depend on the continued sustainability of certain resources.

Question 3: Recognising that politicians are influenced by interest groups, how can a participatory debate on enabling policy formation be initiated and sustained at national level?

Throughout the region, civil society organisations are playing a more important role, such as producer organisations, decentralised forms of local government, etc. These provide a means by which particular interests can be represented. But how can people in practice get their voices heard? What are the channels through which local people might be able to make their views heard? Participation is often largely cosmetic. Decentralisation equally does not necessarily provide the right structure and channels. People talk of empowerment – but what does this mean?

Is policy well informed? No, often not - due to an unwillingness to go out and seek ideas and views. How much does policy matter? It sets the broader framework within which people negotiate outcomes. Policy makers have a tendency to prefer tidy structures and solutions. In practice, life is rarely so simple. Hence, policy makers need to accept a degree of diversity and non-conformity which is right for local circumstances. Government and donors need to become more demand led. Yet their very organisation and structures tend to make this very difficult (spending targets, responsiveness to new initiatives, keeping up to date with the development jargon).

GROUP 2 – INCREASING THE VALUE OF CROP, LIVESTOCK AND OTHER NR-BASED OUTPUT

Karim Hussein (Chairman)	Overseas Development Institute
Kate Longley, (Rapporteur)	ODI
Philippe Jouve	CNEARC, France
Adama Faye	Bureau de Cooperation Suisse, Senegal (ex ISRA)
Mamadou Faye	Senegalese Embassy
Johan Brons	Wageningen University, Netherlands
Mike Carr	Crop Water Management Systems (Int) Ltd
Fred Zaal	University of Amsterdam (Geography)
Irene Hoffman	Giessen University, Germany

1. Summary

View of rural livelihood transformation driven by capacities and constraints

Easier to build on capacity rather than overcome constraints, but there was insufficient emphasis on migratory pastoralist systems – how applicable is the livelihood transformation analysis to them?

Areas critically important in constructing an enabling policy

Policies are often seen to be counter productive, in that in some cases they can effectively prevent livelihood transformation, therefore the most effective enabling environment may be one in which the role of the state is reduced.

Given the current climate of globalisation and increasing liberalisation priority roles for the state were in providing:

- Legal frameworks
- Effective infrastructure and communication
 - Privatised agriculture input supply
 - Importance of regulating functions and quality control
 - Rural-urban links
 - Infrastructure
 - Globalisation
 - Lack of purchasing power by urban population
 - Marketing of agricultural products and role of private sector

The importance of institutional development in addition to technical development, for

- Professional producer organisations
- Production committees
- Regional organisations
- International co-operation.

2. Question 1

- Policy outcomes can be unexpected (both beneficial and negative)
- Overcoming constraints at policy level is often difficult – often better to build on local capacities.
- Information about the significance of certain events or phenomena (e.g. price changes) at local level is needed, to help local people to realise the implications and to evaluate and adapt local strategies.
- The approach is based too much on sedentary production, not enough attention to migratory/pastoralist production.
 - What about rangeland productivity?
- Focus on sedentary production systems makes it much easier to use the rural livelihood transformation approach.
 - Surprising that the Maradi paper did not address the Fulani pastoralist situation where permanent out-migration is part of a broader livelihood strategy.
 - Rural livelihood transformations allow the analyst to understand how people manage in a crisis and what the livelihood outcomes are – these outcomes can help to formulate policy e.g. land tenure arrangements based on “use” (valorisation) of land, but with control of the soil and water management initiatives on communal land?
 - People want to exploit land but (e.g. Senegal) lack of financial resources, i.e. the means to exploit land prevent this.

- Niger experience: a lot of difference between local and regional levels in terms of agricultural production – intensive production near village, more extensive as you move further away? – why? Farmers know how to practice intensive systems, but in some places they don't.

Constraints operating to pre-empt optimal productivity are complex (climatic, political, economic) and vary among different communities. If farmers don't take up intensive farming practice, it is not because they don't know how but because they lack the means so we need to promote greater access to means of intensification. Overcoming constraints to access raises difficult and important questions:

- How can the private sector help?
- What is the gap left by the state?
- What is the role of producer organisations?
- How can the state favour such organisations and promote access to means of intensification?
- Have liberalisation policies increased the risks to the producer?
- Concept of livelihood and local knowledge: if you provide better infrastructure will this overcome technical constraints? Does technology disseminate itself? We need to address technical constraints as well as infrastructural problems.
- Problem of micro-macro articulation.

3. *Question 2*

- Maybe the best enabling environment is to leave the policy out altogether – politics can be completely counter-productive to local regulatory functions.
- But what about conflict – e.g. at the “point of saturation” i.e. population increase – then when policies are developed there are inevitably winners and losers, and new dynamics and conflicts, e.g. north and south Niger.
- Current development ideas are fine, e.g. participation, empowerment, etc. But these components do not make good policy. Local – regional interface must be taken into account and the role of the state, or even doing away with the state altogether (i.e. extreme decentralisation/democratisation).
- Can we promote regulation without state intervention?
- Reliability/transparency of the state is important – its presence should be felt other than as an all-powerful flash of lightning.
- How can the state allow local processes to function?
 - Legal systems/security
 - Role of the state should be enabling to allow local initiatives to flourish, e.g. communications, transport
 - State should provide security and freedom from threat
 - Also infrastructure for communications
 - Rural-urban links must be considered. Rural producers are having to provide for more urban population.
 - Problem of markets and low food pricing is major reason preventing intensification – farmers have no incentive to increase production
 - Even though the state no longer intervenes in pricing, globalised markets may keep prices low due to cheap imports
 - Growth in urban demand can lead to expansion of agricultural activities, eggs, milk in growing demand, but it depends on purchasing power of urban dwellers.
 - In Mali, chicken and egg production remains low, despite demand
 - Technical difficulties which can be overcome in time

- E.g. Netherlands agricultural investment is heavily subsidised by Gov., same cannot happen in Africa.
- Not so much a question of subsidy but more of regulation, e.g. guarantee product quality – fertiliser etc, which will promote market developments
- Credit systems must be sustainable
- Private input supply services, e.g. insemination (AI)

M Carr – Tanzanian project – tea, cash crop – long term study and established technical research programme to increase production with private sector involvement, but small farmers not necessarily benefiting. In this example:

- Restructuring Gov. services towards privatisation – this is possible for cash crops, tea coffee, etc, but Gov. reluctant to go down privatisation route even though that was the official policy.
 - Govt bureaucrats/civil servants provided the biggest obstacle to change.
 - Act of Parliament eventually initiated to privatise the research system.
 - No simple solution - committees that incorporate local long term view are essential.
- Countervailing powers
 - Communications about pricing information

4. Question 3

Institutions at local, national level, civil society, producer organisations. Farmers' organisations are the best placed to influence politicians.

International co-operation links, at national level, realising that other countries share the same problems.

Regional organisation, e.g. CILSS

GROUP THREE: DEVELOPING INVESTMENT CAPACITY AND MARKET ACCESS

John English – Chairman (JE)	ex World Bank
Polly Gillingham – Rapporteur	Huntings
Joseph Ayodele Ariyo – Resource Person (JA)	Ahmadu Bello University, Nigeria
Lucy Ambridge (LA)	DFID
Kathy Baker (CB)	SOAS
Prof. Michael Barbour (MB)	Consultant
Andrew Dorward (AD)	Wye College
Will Frost (WF)	DFID, Forestry APO
Joos Kosster (JK)	Club du Sahel/OECD
Valentina Mazzucato (VM)	University of Amsterdam, Economics
L. Molenaar (LM)	Ministry of Foreign Affairs, DGIS, Netherlands
John Nelson (JN)	Drylands Research
Remco Oostendorp (RO)	Free University, Amsterdam. Department of economics

The discussion was wide ranging and often diverged from the three key questions

1. Question 1: Is a view of rural livelihood transformation as driven by capacities as well as by constraints a practicable basis for policy formation?

The group agreed with this assertion, but we did have some discussion about the implications of the morning's discussion and methodology:

- a. JK felt that the morning's discussions had painted a rosy picture and that things are not working out too badly for poor people. He felt that the analysis needed to be a bit more disturbing/shocking.

In response JN said that the research is showing the government policy is having both a positive and negative impact. For example, the PDRM project shows that markets are important in rural livelihood transformation, but not everybody has access to markets.

JA also argued that given the conditions that small-scale farmers operate in, they do their best.

MB said that people in the research areas are not at the bottom of the ladder in terms of poverty and are doing relatively well – there are areas where people are much worse off – e.g. Sudan – with no infrastructure, drier climate.

RO and AD had some questions about methodology, particularly how study villages and households were selected. JA and JN explained that selection was not random, but on basis of location (agro-ecological zone) and available secondary and historical data. Similarly, households were selected on basis of profile in order to get cross-section of society. The important factor was not the village data alone, but how village data varies according to external processes (e.g. devaluation, markets, etc). JA pointed out that not all of the work in Nigeria had been at the household level, but at market level – from big urban market centres, through regional markets to village markets.

JE concluded this discussion by saying that the first study (Machakos) had started approximately 10 years ago with a focus on natural resource management issues. Areas were selected on basis of available data about the different agroecological zones. Secondly, the aim was to marry a number of different issues and studies.

2. Question 2: What areas are critically important in constructing an enabling policy framework for livelihood development in the drylands?

1. It was generally agreed that markets will develop wherever opportunities develop. The example was given by VM of livestock markets in Burkina Faso. Devaluation of the CFA saw a huge increase in the number of livestock markets without any external intervention. The group agreed that the important thing was to discuss how to support the development of enabling conditions for markets rather than markets themselves.
2. RO – Need to recognise the broader influence of markets beyond just increasing commodity exchange – they also provide opportunities for paid labour and alternative, non-land based sources of income. He gave the example of Benin,

where they found that it was the areas furthest from the markets where the most intensification of agriculture had occurred because closer to the market people had been influenced by the broader opportunities the market had offered. It was agreed that this was an important point as the concern of this discussion is on developing broad-based sustainable livelihoods rather than just agricultural intensification alone.

3. Supporting complementarity. AD – need to support complementary markets. For example, there might be a good market in fertilisers, but it would work even better if finance markets worked so that more people could get credit to afford the investment at beginning of cropping season.
4. Financial Markets. JK – Finance markets crucial. This was agreed to by the group, in particular the need to build confidence between government and the private sector. The private sector needs a government that will support infrastructure development etc but not interfere in development of markets themselves.
5. Micro-level institutions. VM – There are many micro-level transactions and local-level institutions, and we need to work through these as well as the macro-level. In many areas social exchange is just as important as commodity exchange. If we understand what is happening at the micro-level, it will help us understand what the impact of macro-level changes is.
6. MB asked whether we really should ‘rescue these miserable parts of Africa’. This research is tending to focus on the short to medium term. But in 20 – 30 years time we may find that these areas really have no comparative advantage, and it would be better if people moved to areas that are developing economically and require their labour. Responses to this were made by AD, RO, JK and LA, who argued that we need to empower people so that they can make choices, including:

- Stay put and invest in agriculture
- Stay put and diversify
- Migrate

LA argued that one of the purposes of this research is to clarify what we need to do to help farming to remain a functional and viable option, and what policies are needed to achieve this.

3. Question 3: Recognising that politicians are influenced by interest groups, how can a participatory debate on enabling policy formation be initiated and sustained at the national level?

1. JK said if we are really to influence policy in terms of it being understood and owned ‘in-country’ African ministers and private sector actors from Africa need to be closely involved in research such as this. They often do not know about such research work, so how can they learn about it, let alone from it? This is why having the African partners that are involved in this research here is important, but we need to go further. There was general agreement to this, with more discussion of the idea of offering choices – which resulted in point 2:

2. Offering choices requires a profound change in the way we do aid. LA introduced the example of the Uganda Project for Modernisation of Agriculture, which is Uganda's equivalent of the PSRP process. This is a very collaborative process with a chain of discussion and feed back through national government, local government and people themselves. There is ownership at all levels, but it has so far taken more than three years and still not complete. DFID is changing the way we do aid – untying aid will be important in this.

JE's summing up:

- The societies which we work with are very much market driven and will respond rapidly to market opportunities
- Enabling markets requires infrastructure and sound financial markets
- Other social mechanisms are also important, and we need to work with these micro-level institutions.

There was some final discussion on the role of local government, which is not addressed specifically in the research papers. No major conclusions were reached, but there was one final passing shot from JB: Democracy has been disastrous for poor people as politicians follow populist policies rather than sound policies, and people do not necessarily elect the most competent people.

GROUP 4: ENHANCING HUMAN RESOURCES AND THE NON-FARM SECTOR.

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Pippa Trench (Rapporteur)	SOS Sahel
Deryke Belshaw	School of Development Studies, UEA
Francis Gichuki	University of Nairobi
Christian Lund	University of Roskilde, International Development
Mary Tiffen	Drylands Research
Christian Webersik	St Antony's, Oxford

1. Question 1: Capacities versus constraints

We felt this represented a false dichotomy and did not see the need for an either or approach.

Starting with capacity avoids an elitist technocratic approach from dominating from the beginning but we need to look at constraints as well

- need to define where we are at from the beginning
- need to take into account external factors such as devaluation in the region or international policies.

Capacity approach acknowledges and validates indigenous knowledge and seems very similar to the participatory approach of development agencies which also has drawbacks if taken alone. (Belshaw: communities may not be able to solve conflicts).

2. Policies to enable institutions

Need to define what institutions we are talking about: Range from: Private, CBO, FBO, NGO, Govt, parastatal. Interlinkages between them fundamental.

Looking at service provision:

Local level institutions, e.g. Harambees in Kenya may be a source of one off provision such as building a school or clinic, but recurrent funding (teachers, materials) is more problematic as they depend on a surplus coming from somewhere. In resource rich environments which have the ability to pay from within the community one could imagine a virtuous cycle. But in poor areas, lack of surplus, leading to reduction in services leading to less investment in human resources leading to lower surpluses - one could imagine a vicious cycle. (DB)

Decentralisation – an unstoppable process in West Africa with its own momentum – is a source of different forms of institutional investment from local taxes, with what should be greater accountability and investment at meso level. DB: Allocating resources between districts requires a rational, unpolitical basis.

Looking at the relative advantages of different sources of service provision is to some extent a political debate, e.g. relative advantages of public-private partnerships, but we can draw lessons all the same.

- Need to look at where existing models went wrong (e.g. parastatals) before coming up with new ones (FG).
- Some institutions inherently more accountable than others, e.g. debate over whether extensionists should come from the area or from a different area. Home town associations have a massive potential for source of finance and information and their finance is often directed to human resources (education, school). But individuals also have big incentive to be accountable so that they can e.g. retire as a respected member of the community.
- “Negative social capital” or criminality cannot be ignored – corruption plays a role in undermining institutions at all levels and investment. Has also led to backlash against politicisation of any “private” institution because of potential for corruption.
- Niger case – public authority exercised is exercised by people below the lowest recognised level of local government, and this is legitimised by people’s behaviour. “Parallel polity” taking place whether we like it or not and the State has to catch up because these unofficial institutions will not be able to use opportunities for collaboration or make long term broader policy choices.

So back to the question of prioritising policy:

1. New policy comes in on top of old policy and does not necessarily resolve the old problems.
2. Policy for what? Question needs greater definition, e.g. South Africa “policy to support rural farmers” did not differentiate between wealthy black large scale farmers and resource poor small scale farmers.
3. As the studies show, any policy will always be renegotiated according to local needs, priorities, power balances, interests.

Taking this into account there was consensus on two areas for policy prioritisation:

- a. *Decentralisation* to cope with the diversity of environments (ecological, economic, etc.) that exist and with this the ability to allocate resources in a way which reflects this diversity.
- b. *Improving governance/accountability* through incentives as well as regulations

Other policy ideas that were put forward but not fully debated include:

- support to urban /high population areas in arid regions as a cost effective way of boosting off-farm income (trickle back effect – but it doesn’t resolve on-farm capacity demands)
- streamlining costs rather than off-loading costs of existing system to civil society
- continued education and adult learning (information and communication)

3. *Question 3*: Not tackled.

7 CONCLUDING PLENARY AND FINAL REMARKS BY CLAUDE RENAULT

The research had yielded a rich narrative through its historical approach. It showed farmers are active, and have overcome huge constraints. There is consistency with Boserup's hypothesis that people innovate and find solutions. People have a good memory of their locality and the promises they have heard before.

There is still a question over appropriate policies. External actions have contributed to constraints and vulnerability, which farmers must rectify. As we also are outsiders we should not make a list of priorities. If we want a single narrative it is that local situations are diverse, and the question is how to meet the challenge of this diversity, and give space to the strong dynamics which are at play and which are specific to the locality, and in which local people are the actors.

The important word was negotiation, and how to enhance negotiations between actors at different levels. Under what conditions can policy enhance the capacity of local people to make their voices heard, taking account of the contradictions within communities, and between communities and outsiders. The state had to play a role as guarantor and regulator of the rules of the game. We had to think in terms of processes rather than ready-made solutions.