BULLETIN OF THE DRYLANDS: PEOPLE, POLICIES, PROGRAMMES



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Cover from left to right: Aerial photograph of a Sahelian village by David Bourn, Akan chief by Doran H. Ross, map of a village in Côte d'Ivoire.

Editorial

THE presidents of South Africa, Nigeria and Algeria **1** have been drawing up a new MAP for Africa. The Millennium Africa Programme (or MAP for short) commits African governments to respect human rights and the rule of law. President Mbeki who has been spearheading the initiative argues that African leaders must take responsibility for providing a more favourable economic and political environment to encourage sustainable growth and tackle poverty. Investors, both domestic and foreign, need a firm demonstration that government will play by the rules. Rather than wait for the World Bank and IMF to lay down conditions, African leaders should press their fellow presidents to abide by these commitments. Such interference in neighbours' affairs runs counter to the Organisation of African Unity (OAU) charter but the principle of non-interference has recently been broken in practice on many occasions.

The OAU which meets in July to agree the MAP's objectives and design offers a valuable chance to push governments towards greater accountability to their peoples. A map well-drawn and executed could do much to dispel the image commonly held of Africa by outsiders of corrupt, brutal and greedy regimes, operating without a care for their needy citizens.

Impact of climate change on drylands



How will global warming affect West Africa? Is rainfall likely to rise or diminish? How might local people protect themselves better from such variations and risks to their livelihoods? These are some of the questions addressed by the Impact of Climate Change on Drylands (ICCD) research programme, which reported results at a workshop held in Wageningen, in April 2001.

The project looked at trends in annual rainfall and drought over the period 1960 to 1995, for the semi-arid and sub-humid zones in West Africa. The data show a period of high rainfall in the 1950s and 60s, followed by a considerable decline in the 1970s and beginning of the 1980s (see also *Haramata* No. 38). The last 15 years have witnessed a slight upward trend in rainfall.

What will be the impact of global warming on the West African Sahel? Many drylands elsewhere in the world may benefit with several climate models predicting that rainfall levels will increase. But this favourable scenario seems not to be the case for the Sahel. One scenario projects a considerable drop in rainfall, rise in temperature and higher variability at the start of the wet season. However, there are other scenarios which indicate that the more arid regions of Mauritania, Mali and Niger may actually receive more rainfall as a result of global warming, but less rain is forecast for the sub-humid zones of Mali, Burkina Faso and Ghana.

Whatever measures may be taken to address global warming now, some degree of climate change can no longer be avoided and it is important to start thinking about how policy makers, donors and NGOs could assist Sahelian people in adjusting to this new situation. People's options for assuring food sufficiency are many fold and do

not just rely on agriculture, but may involve greater market involvement, social security networks and changing consumption patterns. The research results underlined the importance of understanding mobility and migration as central strategies in adapting and coping with

changing conditions.

Migration is viewed too often as a process to be discouraged, yet people throughout the world have depended on this as a means to make ends meet. Diversification of incomes and livelihoods provides another pathway chosen by many people, but its significance for rural households is not always recognised by policy makers. More reflection is also needed on how to best help government, societies and families prepare themselves so that they get through drought periods without losing their assets and livelihoods.

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More or less poverty?

In 1997, the Copenhagen Social Summit set a target for the world's governments to aim for, of halving the proportion of people living in extreme poverty by the year 2015. The latest evidence shows little, if any progress, and diverse opinions as to why the data show a widening in income inequality between rich and poor people, and nations. Some argue that what the poor need is more globalisation; better access to markets will help lift their incomes and opportunities. Others reject this prescription, and say that globalisation is part of the problem.

Robert Wade in the Economist shows how income distribution at global level has been widening rapidly, due in part to higher rates of economic growth in developed countries, faster population growth in developing nations, and slow output growth in rural China, India and Africa. Economic liberalisation and new technologies tend to benefit the better-off. At the same time, the prices of manufactured goods and services produced by high income countries have been rising faster than for goods and raw materials produced by poorer developing countries. As a result, many people see migration to wealthier countries as their only hope.

The World Bank's new report on African Poverty at the Millennium provides more detail on the extent and variation in poverty levels within and between African countries. It identifies key characteristics of the poor in Africa, such as disability, conflict, HIV/AIDS, gender bias, lack of assets and access to services, as well as remoteness. It takes the view that political and social causes are paramount in explaining the deep-rooted nature of poverty and limited progress achieved. Poor people lack the political voice and strength to demand changes in government priorities. Donors have tried to push governments to adopt more 'pro-poor' measures, especially through the debt relief process, but donors themselves only direct a small share of a declining aid budget to poverty reduction.

Taking US\$1 a day as the poverty line, the authors find almost half the population of Africa falls below this level. Not only has Africa become poorer relative to other parts of the world, but in a number of cases, life has become harder than 30 years ago and people have actually become poorer. For some, impoverishment is a temporary event, with possibilities of moving out of poverty as circumstances change. For others, becoming poor ensnares them in a trap from which it becomes almost impossible to escape. Examples include entering debt bondage arrangements whereby people are forced into working as bonded labour. Equally some groups are more vulnerable to impoverishment because of their weaker rights to assets, such as land. Thus, for example, women and migrants are

both particularly at risk from losing rights of access to land, since they are dependent on negotiating with those who hold the underlying rights over land.

The report acknowledges that wealthy elites have tended to bias policies and government provisions in their own favour, and thus considers increased democratisation as one key element in improving the lives of the poor. While a number of countries have seen real economic growth rates over the 1990s, falling commodity prices, conflict and low levels of private investment have weakened their performance. Inequality within countries remains high and has likely increased. While recognising the importance of the small holder farm sector, they argue that there are real doubts about the future of such patterns of agriculture. They reckon Africa needs increased commercialisation, larger farm size, greater capital inputs and lower unit costs. This will, however, generate a large number of poor, assetless rural families.

Much discussion of poverty supposes that 'pro-poor' measures can be bolted onto a political and economic system which is constructed to benefit wealthier and more powerful groups and countries. But more fundamental change may be necessary to address the concentration of wealth and power in the hands of the few, such as through land reform.

Global inequality: Winners & losers, by R. Wade. Economist no. 8219, April 28th 2001. African poverty at the millennium, World Bank, 2001. Fax: +1.202.477.6391. Feedback@worldbank.org.

Rio + 10

Remember Rio's Earth Summit? Think back to the global enthusiasm for sustainable development, drawing up of environmental conventions and agreement of Agenda 21, the blueprint for the planet's future...

So how do things look ten years'on? Governments are preparing for a new global summit on Sustainable Development to be held in South Africa, in September 2002. This will mark the tenth anniversary of the Rio summit and allow nations, civil society, researchers and activists to re-visit the hopes of a decade ago. Given the location of the summit in Africa, special attention will be focused on concerns of this continent. Hence, poverty and desertification are likely to be hot topics.

Preparations for the Johannesburg conference will take place over the next 15 months with a series of regional, sub-regional and global meetings aimed at identifying areas of progress, and highlighting positive cases. All countries are being encouraged to launch a series of initiatives to generate interest and participation in the preparations for the summit. These include the suggestion to organise a national level competition for school children to draw posters capturing their perceptions of 'sustainable development'. Equally, governments are urged to consult with their peoples to identify 3 or 4 specific targets which they would like to achieve over the next five to ten years which would make a significant difference to sustainability. World business, trade unions, NGOs and researchers are all organising themselves for the Jo'Burg summit, as it will provide a great opportunity to share and exchange ideas and experience.

If you want to keep in touch with the process, find out who is taking responsibility for preparatory events in your own country. You can also make contact with Network2002, a monthly update of all the related processes and events. Email tmiddleton@ earthsummit2002.org or send the following message Network2002-subscribe@egroups.com. IIED is also planning a series of activities and events in preparation for Rio+10. For details, visit www.iied.org or write to Tom Biggs, IIED, 3 Endsleigh Street, London WC1H 0DD, UK. Fax: +44.207.388.2826

Trade or aid?

Better terms of trade for poorer countries might produce better results than continued dependence on the whims and fancies of donor agencies. Figures produced by the Organisation for Economic Cooperation & Development (OECD) or the 'rich man's club' as it is known, show that subsidies to the agricultural sector of OECD members cost developing countries \$20b a year in lost trade and other distortions to the global economy. Total subsidies paid to the OECD agricultural sector totals US\$330b a year, which is only slightly less than sub-Saharan Africa's total GNP, and many times the aid budget.

Such subsidies enable rich country farmers to continue to live and work the land, although they are not competitive with producers in many poorer countries. Agricultural subsidies of one sort or another now comprise more than 80% of the EU's budget. For many commodities, subsidies form three-quarters or more of the final price. As a result, European farmers generate surplus meat, grain and fats that must then be destroyed, or dumped on other people's markets.

EU members have committed themselves to address such a bsurdities, partly through pressure from the World Trade Organisation negotiations, where lower cost food producers are pushing for change. Equally, with the likely entry of a number of poorer countries from the eastern part of Europe, the system of agricultural subsidies would become unsupportable and thus must be cut. But farmers continue to exercise great political power in much of Europe so while current subsidies may go, they will probably reappear in some other form.

INTERVIEW

Amara Diaby took up his post as mayor of the Commune of Gogui, in the Nioro district of Mali, on 20 September 1999. In this interview with Haramata, he shares his experience of decentralisation. Gogui lies in the far northwest of Mali, in a largely pastoral region which borders on Mauritania. As readers of Haramata will remember from our last issue, the Malian population went to the polls in May 1999 to elect rural councils (Communes Rurales) for the first time.

How do you see the progress of decentralisation in Mali, a year after the new local Communes were set up?

The launch of decentralisation in Mali has been greeted with a degree of pessimism, by the rural communities themselves and by some administrators. People thought it was just yet another "good idea" and I remember - while I was on a tour to raise awareness in preparation for the local elections – people saying to us: "We've heard enough; we've listened to enough delegations come and tell us one thing and another; it will just be the same this time and we won't see any real improvement." So they were anything but enthusiastic. At the same time, some government officials thought that the new arrangements for local government would be catastrophic: imagine farmers, fishermen and cattle herders in charge of local government! In their view, the project contained the seeds of its own destruction. But now the foundations have been laid for the future; by one means or another, with help from the government, we have managed to keep afloat; and though we lack resources, the new Communes are making good progress.

The Rural Communes are new institutions, set up less than two years ago. How do they fit in with the other customary and modern institutions that have existed for many years?

It is true that various other bodies were in existence before the new *Communes* were introduced. Some customary chiefs were not in favour of decentralisation, because they thought that the new mayors would take over their powers and functions. And we still suffer from misunderstandings about our relations with national state structures working at local level: they tend to downplay the role of the mayor, who is therefore prevented from influencing their activities within the *Commune*. When the state needs the support of the local community, it turns to the mayor; and when the local community needs the support of the state, it also turns to the mayor. The mayor, as the figurehead of the *Commune*, represents both the state and the local community. It is not just a question of introducing new structures and rules; what is needed is a radical change in attitudes and behaviour.

For many mayors in Mali, administrative responsibility must be something new. How have you prepared yourself for the task?

Before I was put in charge of the *Commune*, I was a shop-keeper; I knew nothing about the job of mayor. Since my election, I have followed a number of training courses on decentralisation, run by Jam Sahel, and IREC (see box for details). These have helped me gain a better understanding of the functions of the mayor in the local government set-up. Central government also wants to promote the *Communes*. So we do not feel neglected; there are many people wanting to support us in this difficult task.

Local people are hoping for an improvement in their living conditions; at the same time, it is difficult to persuade them to contribute funds to their own development, especially if they do not feel that things are changing for the better. How do you reconcile these social demands with the need for financial contributions?

It is true that there are enormous expectations, particularly as regards health, education and economic development, because under the system we inherited, the Communes were totally deficient in infrastructure. But all sectors of society have understood that decentralisation is a great opportunity. In my Commune, there is only one school and one dispensary for eight villages, serving a population of ten thousand inhabitants; that is clearly inadequate. Therefore, our strategy for encouraging people to take part in communal life is to show them exactly what the Commune can do with the means at its disposal. For example, with the help of the Ten-Year Education Programme (PRODEC), which the government has just launched, our Commune has been able to open schools in the southern villages. True, the schools are very basic, but they enable local children to benefit from some schooling. When they see initiatives of this kind, local people become enthused and are more likely to support our cause.

How do the Rural Communes fund their activities?

It is true that money is a key building block. Since the Communes were set up, central government has made a large contribution, though it is still not enough. We received start-up funding, which enabled us to launch our first activities. We also drew up simple budgets, taking into account the taxes we can collect: taxes on cattle, on trees and on markets. This has helped us offset the cost of our

activities. We recently received a further subsidy, which will enable us to fund the projects we have planned for 2001.

Does the geographical position of your Commune present any special challenges?

The Commune of Gogui consists of eight villages, almost all of which are on the border with Mauritania. We connect with Mali to the south, while to the east, west and north, we are surrounded by Mauritania. Managing people and the economy is very difficult in these circumstances. But this is compensated for by the trading and cultural ties between our two peoples. We want to promote good neighbourly relations so that both parties can benefit.

What are your plans for this year?

This year, we are planning a programme linked to the new international road between Nioro du Sahel and Mauritania which will be tarred. This road runs through the Commune and is completely changing the outlook of local people and local authorities. While we plan to continue improving our education and health infrastructure, our ambition is also to set up markets in the villages along the road, so as to promote trade between Mauritania and Mali and ensure the local people derive as much benefit as possible in terms of improved livelihoods.

Thank you and best wishes for your future progress. I hope we shall be able to come back and see how you are getting on in a few years'time.



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Objectives and activities of the IREC (Rural Institute for Civic Education)

The IREC is a project set up by the Programme d'Appui pour le ■ Développement et la Paix au Sahel Occidental (PADP – Support Programme for Development and Peace in the Western Sahel). It was founded one year ago and is currently engaged in four Cercles of Mali: Yélimané, Keyma, Nioro and Nara. The IREC's objective is to inform citizens of their rights and duties so that they can become more involved in the social and economic development of their area. The year 2000 was devoted to training mayors, councillors and elected representatives in the Yélimané and Nara districts. The Institute also trained the general secretaries and other administrators of all the Communes in the Nioro district

The IREC's first aim is to set up centres in each Commune to give intensive literacy courses in the local languages (Peuhl, Soninké and Bambara). A large number of the people who sit on the committees responsible for monitoring and managing conflicts are unable to read and write. These people are elected representatives and, once they have been trained in literacy, will be able to take further training in civic education run by the IREC. In addition, there are many teaching aids written in French – on conflict management, for example – which would be valuable for the monitoring committees and sub-committees if they were available in local languages. The IREC is therefore collecting and translating the information put out by the PADP and other organisations.

Haramata would like to thank Mouhamadou Maïgiraga, director of the IREC.

Land rights under pressure

ustomary tenure provides the best protection for the land claims of poorer people? True or false? In all four areas covered by this research programme on land rights and governance, 'customary authority'to control land remains very important, despite the state's attempts to impose other forms of governance. And it demonstrates that as land becomes scarcer and more valuable, such customary systems provide no guarantee of equitable access for poor, vulnerable groups.

Research was focused on the Kimani swamps, in Kajiado District of Kenya; the dams in Mmutlane village, Shoshong Hills, Central District of Botswana; the Sourou valley, Bankass cercle, in Mopti region, Mali; and the Mutale river valley, Northern Province, South Africa. It examined changes in land and water management, systems of local governance, and social and economic differentiation. It also looked for evidence of environmental change.

All four sites showed a considerable increase in output and yields over the last two decades, especially of irrigated fruit, vegetables, rice and other crops, oriented towards market sales. Local initiatives had in all cases been paramount in achieving such improvements in productivity, with little or no role played by formal 'development' agencies, government or projects. Improved access to markets and better roads have generated a strong interest in gaining access to the land, water, labour and technology required to grow irrigated crops. This is leading to an intensification of agriculture, and diversion of water from lower to higher value uses.

Land is becoming a commodity, with rights of access and use bought and sold for cash, or in exchange for a share of the harvest. This privatisation of land can be seen in the tighter controls exercised by those with claims over land, reduced access for other users,

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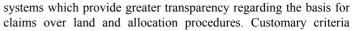
fencing of plots, and a growth in registration of land claims. The latter often takes the form of a piece of paper attesting to the sale or

rental of land between two parties, with some form of stamp conferred by the local government administrator. While such papers have no formal legal weight, they are recognised within the community.

It is often thought that 'customary' systems of land management preclude the emergence of market relations and that they provide better security for poorer, more marginal groups. This research disproves both assumptions. Land is being marketed despite the continued importance of customary leaders in local governance systems. In fact, local leaders are amongst the first to assert their claims over land and consequent rights to sell it, rent it out, or dispose of it in other ways, such as through sharecropping contracts. Such transactions are frequently with outsiders to the community with whom it is easier to establish market based relations, involving cash. Neighbours and kin may protest that such behaviour contravenes 'customary'practice, and denies them access to this land, but are powerless to prevent it happening.

As a result, there is growing inequity between those who can establish their claims over land, an asset which is of growing value in political and market terms, and those who cannot assert such firm rights.

How best to balance the role of customary systems with a broader set of interests and objectives? The researchers argue the need for

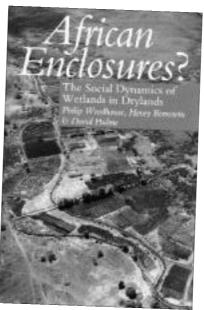


regarding claims over land need to be tempered by broader concerns linked to citizenship and equity. Otherwise, decentralised systems of land and natural resource management may tend to exclude weaker groups, such as women and migrants. The Botswana Land Boards have often been taken as a valuable model which combines representation of different groups, including customary chiefs, as well as those from government, women's associations, technical agencies and others. However, they seem to have been unable to check the increased inequity in access to grazing and privatisation of rangelands found in Botswana today.

The research found no evidence for significant environmental degradation at any of the study sites, although there had been major changes to the landscape, through the transformation of bushland into cultivation, often greatly increasing levels of productivity, and removing tree cover in favour of irrigated lands. There were also emerging problems which farmers will need to tackle, such as controlling pesticide use and

discharges into water supplies, and the infestation of rice fields by perennial weeds.

African enclosures? The social dynamics of wetlands in drylands. Philip Woodhouse, Henry Bernstein & David Hulme. Lames Currey, Oxford (2000). Contact for further details: phil.woodhouse@man.ac.uk



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Learning lessons from the South

A gricultural research in the UK is mostly initiated by research bodies in consultation with funding agencies. The gap between researchers and farmers has been growing wider over the last few years which may help explain poor rates of adoption or 'uptake' of research results. Farmers do not seem to be interested in many of the new findings.

You might have expected that organic agricultural research would present a different model, since it needs to focus on specific systems and ecologies. But, even here, farmer participatory research is rare. This gap led the COR (Colloquium of Organic Researchers) to organise a one-day workshop in March 2001 to discuss how to promote use of participatory research methods for organic agriculture in the UK. This topic was explored on the basis of group discussions following an introduction to Participatory Research and Development (PRD) methods. This involved much learning from experience gained in developing countries, as there are very few examples of this type of approach in the UK itself.

Discussion covered the difficulties of initiating such a process, as well as the need for major cultural changes and attitudes within research institutes. It was suggested that the first step should identify interested stakeholders to define a concrete programme together. Links should be made with a broad range of actors, such as growers and consumers, supermarkets, and regional associations. It will also be important to work with bodies like the Soil Association which certifies that a farmer is truly following organic agricultural practices. It was suggested that COR should maintain the momentum, identify and network with other stakeholders, as well as continue building bridges between researchers on the issue. There also needs to be some lobbying of funding bodies to consider more

flexible funding arrangements for PRD programmes.

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Farms and livelihoods transformed

Popular thinking sees dryland Africa as subject to environmental degradation and impoverishment of livelihoods, due to population growth and rainfall decline. But a study of four semi-arid areas of Africa shows a very different picture. Research in Makueni, Kenya, Diourbel, Senegal, Maradi, Niger and the Kano region of Nigeria provides clear evidence for rational and capable farmers, investing in the long-term sustainable management of land and natural resources, with the aim of diversifying incomes and livelihoods. These findings demonstrate that smallholders' own capacities provide the most appropriate starting point for thinking about policy interventions, so that governments with scarce resources can support and complement the many investments made by Africa's small-scale farmers.

This research was led by Mike Mortimore and Mary Tiffen in collaboration with Francis Gichuki, Kenya, Abdou Fall, Senegal, Boubacar Yamba, Niger and J. A. Ariyo, Nigeria. It was set up to test hypotheses arising from earlier work in Kenya, published in the book *More people less erosion – Environmental recovery in Kenya*.

The research confirmed that farmers know how to conserve the productivity of their land but, because they have limited access to

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cash and manure, they concentrate scarce inputs on their most valued farmland. Extensive investments in terracing, fencing, tree-planting and water development can be seen in Makueni. In Maradi Department, where predictions of environmental collapse have been common since the 1970s, there is now evidence of a significant transition to more sustainable natural resource management.

Vigorous and growing markets are vital to achieving positive transformations, since they provide new opportunities for farmers to adapt and change. In Maradi, investments have been spurred by growth of urban demand from Nigeria. In Senegal, policies in the past kept profits from groundnut cultivation low, and favoured the consumption of imported rather than domestically grown rice in the towns. As a result many people left farming, since it offered poor returns. Those remaining have responded vigorously to increased urban demand for meat, by developing animal husbandry and fattening of stock. In Kenya, the abolition of the Milk Marketing Board enormously stimulated investment in dairying. In all four countries the main farm market is now the growing urban population, not the export market. In many years, semi-arid farmers can sell coarse grains, pulses and livestock, but need to purchase food and other necessities when the rains fail.

Livestock and non-farm incomes provide essential safety nets. Livelihood diversity is increasing in all four areas studied. Makueni farmers invest heavily in education to equip one or more children for a good non-farm job. The successful child is expected to help in emergencies, and provide cash for farm investments. In Diourbel and Maradi, schooling is not believed to provide a successful avenue for rural children. In Diourbel, non-farm employment is obtained through kin and religious networks, and social investments are more important than educational ones. The low level of remittances provides mainly for family consumption needs. In Maradi, young men often work a few years away from home, to raise money for marriage and farm investments.

Food production is keeping pace with population growth in Maradi district, and in Makueni, though with substantial variations from year to year. The food provisioning system of urban Kano, which is based on millet, has successfully sustained a six-fold increase in population under a 30 percent decline in average rainfall since the 1960s. In Diourbel region of Senegal, growth in food production matches the fairly static rural population, but is not able to meet the growing demand from the rapidly expanding city of Touba.

Livestock production is important in Diourbel and Maradi, associated with innovations in fodder management, but is gravely handicapped by disease outbreaks in Makueni. Most farm investment in Diourbel is directed to livestock, not crops. Livestock are an essential element in cash flow, since they can be sold as needed for food, and they often finance school fees in Makueni. In Maradi many investments are associated with animal-drawn equipment.

The family remains a remarkably flexible, efficient economic and social institution, able to mobilise and direct labour and capital flows between rural and urban activities. By contrast, formal provision of credit was unimportant in Kenya, Nigeria and Niger. In Senegal, credit provision through the groundnut marketing system seemed to have created dependence on the state.

For more details of the research, contact: Mike Mortimore and Mary Tiffen, **Drylands** Research, Market Square, Crewkerne,



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Derived rights: Gaining access to land in West Africa

What are 'derived rights'?

'Derived rights' describe the bundle of arrangements through which people gain access to land from others, usually non-family, and for a limited duration. An alternative term might be 'secondary rights', which conveys much of the same substance, involving the negotiation of rights of access between the primary rights holder and a person wishing to use the resource. Such arrangements take a variety of forms, which can broadly be described in terms such as leasing, tenancy, share contracts, and loans. However, such English language terms mask a great diversity within these arrangements, which take very different forms and content depending on time, place, and actors. In many parts of Africa, more than half the farmland is being used under such arrangements.

Derived rights have so far received very little attention from government and legislators. Debate surrounding land tenure and administration has tended to focus on questions of ownership and title, since it has often been considered necessary to introduce formal property rights over land, recognised and confirmed by the state by means of a cadastre, register of holdings and certificates of occupancy or title. Such arrangements are thought to be essential in providing the security needed to encourage sound management of land, increased investment and access to formal sources of credit. In contrast, customary rights have been consigned to second class status by most legislative arrangements. They have, at best, been

tolerated for so long as the land and resources in question have not been required by the state for some other purpose. In some cases they have been ignored, and in other cases sharecropping and tenancy contracts are actually illegal. In practice, however, there is a large gulf between what the law says, and local practice.

Contesting claims to land

The research studies covered very diverse settings, ranging from cocoa and plantation crops in southern Ghana and Cote d'Ivoire, to irrigated plots in northern Nigeria and Senegal, areas of massive inmigration in south west Burkina Faso, and high density and periurban zones in southeast Nigeria and southern Benin. In each of these settings, research demonstrates clearly the two opposing principles by which claims to land are commonly established and asserted by different groups in West Africa. The first is based on the original settlement and clearance of land, as a result of which rights to control this land are established, under the control of land chiefs. The **second** principle is based on the belief that claims are created through investment of effort, such that over time land users acquire rights over the land which they work. Thus, slogans such as 'land to the tiller' and rights acquired through 'putting land to good use' (la mise en valeur) have established a rival set of values for asserting claims to land. While this second principle might seem to concord with the first, in practice it favours the land user or tenant, in place of the customary land rights holder, whose ancestors cleared the land in an earlier epoch.

Each of the two above principles has been espoused by differing factions, depending on the interests served, and outcomes sought. In general, customary leaders have asserted the importance of the former principle since it strengthens their claims to control rights over land. By contrast, governments have sought to argue for the second principle, since this allows them to refute the claims made by cus-

¹ Derived rights of access to land and natural resources in West Africa has been undertaken by a team of 10 researchers from 7 West African countries – Benin, Burkina Faso, Cameroun, Côte d'Ivoire, Ghana, Nigeria, and Senegal – within a programme co-funded by the French and British governments, and jointly coordinated by GRET, France and IIED, UK.

Land becoming scarcer and more valuable

In much of West Africa, people now perceive land to be becoming scarcer, in greater demand and hence more valuable. As a result, people want to establish firmer claims over land and protect themselves from rival claimants. Land is being sought by a wide range of stakeholders, including non-rural dwellers who seek land both to cultivate and as an asset of growing capital value. While formal land titles may not exist in many places, people are trading rights of access to different resources, such that land has become, in effect, a marketable commodity.

Asserting control over land is an important strategy not only because of land's intrinsic productive value, but also because such control can be translated into means of gaining access to other resources. Thus, for example, access to land can be traded in exchange for farm labour, credit, ploughing or herding services. Structural adjustment, declining access to formal credit, and loss of agricultural subsidies have meant that people are increasingly keen to claim control over land as a bargaining chip when negotiating access to other resources. Thus, for example, land mortgage or pledging is an important means to raise cash in some areas, such as peri-urban southern Benin (Edja, 2001).

Land issues embedded in social relations

Evolving markets in land rights must be understood within broader social, economic, and political changes underway throughout the region. First, much of West African rural society is experiencing the fragmentation of large domestic groups into smaller, family units with principles of long term reciprocity being replaced by shorter term calculation of economic advantage (Amanor 2001). This means

that elders can no longer assume the free provision of labour services from their sons, since the latter have equally had to abandon their expectations of gaining land from their fathers, due to land shortages and sales of land outside the lineage (Paré 2001). Equally, relations between women and men have undergone significant change, with

events like marriages and funerals, will provide grounds for the con-

women increasingly demanding that they be rewarded for work done for their husband's estate. Second, West Africa has experienced major shifts in population, mainly from drier Sahelian areas to higher potential coastal regions. This migration has led to very great changes in patterns of land use and crop production, while generating particular political tensions. Land disputes in areas of substantial in-migration encapsulate the conflict of principles between first settlement and land to the tiller outlined above

Derived rights arrangements usually involve a range of social conditions linking the parties to Burkina Faso

tract to be revoked.



Whether harvested from rented or

family land, grain still needs pounding. the contract. These include the expectation that 'tenants' owe a duty of respect and service to the land rights holder. Thus, in Côte d'Ivoire, for example, migrants must maintain good relations with the family which has lent, or rented them their plots (Koné, 2000). Failure to present offerings, provide labour when needed, and to attend social

redit: Ray Witlin, World Bank Photo Librar

Land rights under negotiation

Widespread, flexible, and diverse

The derived rights research has shown the great diversity of arrangements and remarkable flexibility found within contracts. The various sharecropping arrangements have provided considerable security for land owners and users, enabling long term investment in land through the planting of tree crops, such as cocoa. While these arrangements are marginal in legal terms, they are central to production relations in many areas. In the southern Ghana case study, share contracts constitute the predominant means by which people gain access to land, accounting for 65% of all plots surveyed. Share contracts have allowed a continual reconfiguration of land, labour and capital to take advantage of new markets and opportunities (Amanor 2001).

Derived rights institutions have also shown remarkable flexibility over time, by shifting from one activity or crop to another. The *abusa* sharecropping system, in which yields are divided into three parts between those providing land, labour and capital, evolved particularly in the cocoa sector but has now moved to oil palm and other tree crops in Ghana, and to many kinds of food crop in Côte d'Ivoire.

Peri-urban and irrigated areas

Peri-urban areas exhibit the general patterns found for the region as a whole but in more extreme form. Contracts are frequently very short term in nature, with land valued less for agricultural production, and more as a speculative asset (Anikpo 2000, Edja 2001). In irrigated areas, a significant sum is usually required for payment of water fees, maintenance of structures, and purchase of inputs, labour and ploughing services. As a result, those owning rights to land often arrange with others who have access to capital to finance these costs. In many irrigation schemes, although tenants are not allowed to let out their land to others, in practice such sub-lets are very common as a means to raise credit (Mamman 2000, N'Diaye 2000, Tijani 2000).

Resolving disputes and seeking security

Land rights, claims and disputes are being handled in very diverse ways across the region. Both 'customary' and state systems for managing land have undergone extensive changes over several generations, such that reference to a dual system of land tenure is much too simplistic a picture of reality. Legal and administrative plurality describes actual practice (Lund 1993, Lavigne Delville 1999). People seek to strengthen their rights over land through resort to various sources of authority – not only the village, or land chief, but arrangements



Sorting palm fruit in Benin. Tree crops such as oil palm often generate special derived rights arrangements

also the local government administrator. Sometimes, the district agricultural department will provide a certificate of occupation for a farm plot, while elsewhere local people have been designing their own documents to record transactions and claims to land (Mathieu et al, 1999). Paper contracts often follow a model taken from elsewhere.

What impact on the poor?

Derived rights are being transformed as land becomes scarcer. Where land was formerly available through gift and loans, it may now only be obtained through short term tenancies. Equally, whereas share contracts were a means by which land poor but labour rich households could gain access to a plot, currently those seeking to sharecrop land must put forward a significant fee in order to gain

Credit: Yosef Hadar, World Bank Phooto Library

access (Amanor 2001). Poorer groups are finding their access to land increasingly difficult. However, it is not just poor people that depend on derived rights to gain access to land. Many richer, as well as poorer farmers have a bundle of different land holdings, some leased out to others land users, some hired in.

Implications for government and land administration

Governments can follow two routes to managing land rights. The first involves developing detailed legal codes and administrative rules which lay down acceptable practices and the basis on which different kinds of land transaction will be deemed valid. Such approaches rely heavily on mapping, cadastres, survey and titling methods. The second option involves establishing a broad framework of principles which should guide land administration, which is then devolved to lower level bodies constituted according to certain rules of election, representivity, and accountability to central government.

In the past, many West African governments followed the first approach, and sought to assert their control over land allocation and use, through new legislation and direct intervention. Such approaches have been remarkably unsuccessful in achieving their goals, since they paid no heed to the need to understand social processes underway, and alternative sources of power and legitimacy to that of the central state. The second approach has become of greater recent interest, since it recognises the strict limits to state power and authority, as well as mirroring the shift towards more decentralised systems of governance. However, it requires government to give up direct control over land. Where grants of land are of great value to cement political alliances, such devolution of powers may be hedged about to maintain political control.

Key conclusions

Derived rights are a very important means by which people gain access to land. They have been remarkably responsive to changing circumstances and new economic opportunities. The insecurity surrounding derived rights stems in part from their position on the margins of the law. Greater knowledge, understanding and recognition of such arrangements by government could strengthen processes of dispute resolution and reduce uncertainty. The current trend towards decentralised governance in West Africa provides a valuable opportunity for land administration to build on local practice and adapt to the diverse settings found within the region.

For further information and detailed research reports from the different field sites, and a synthesis of overall research findings, please contact: drylands@iied.org; and lavigne@gret.org

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LAND MATTERS

Water: the key to pastoral resource management

How to manage Africa's dry grazing lands? This question still generates intense debate in spite of decades of research and dozens of failed attempts at finding practical solutions. The good news is that thinking has advanced from previous tenure models which sought to divide up pastoral land and allocate property rights to individuals, specific groups or the State. The central importance of maintaining livestock mobility in the face of high ecological variability is now almost universally accepted. Mauritania and Mali have both passed pastoral laws in the past year that defend the right of pastoralists to move with their animals within and between countries. Similar provisions exist within the Code Rural in Niger which also recognises the need for herders to have security of tenure over pastoral resources, particularly in their "home areas".

What is far less clear and still hotly disputed is how one goes about ensuring these principles are embodied in practice. One cause for worry is the increasing tendency, particularly in the agro-pastoral zones of the Sahel, of the State granting pastoral groups priority tenure rights over clearly demarcated and bounded pastoral zones. This trend clearly is in response to an ever-increasing process of agricultural encroachment. If pastoral resources are not legally protected little may be left over which to legislate in future. However, in the longer term, a fixed-boundary, common property approach to pastoral land tenure may result in other problems such as herders being "boxed-in", living in pastoral "islands" surrounded by an ocean of fields, with nowhere to go if the rains fail.

There probably is no single model for pastoral development in the drylands. What is needed are more examples of different mecha-



Igermaden social group, Karide Tamannit, Aïr, Niger

nisms for managing pastoral lands from which to learn. The PAGR-NAT 1 project in the Aïr-Ténéré national park 2 in the far north of Niger provides one such example with the work it has been doing on pastoral tenure issues.

Since its creation in 1987, the project has progressed from being a purely wildlife conservation project managed by WWF to an action-learning programme seeking to build the capacity of the resident Twareg population better to manage their own development. A central feature of the project is to work through and strengthen a customary institution (known as *echiwel* in Tamacheq) responsible for regulating resource access in the Aïr-Ténéré area.

The echiwel3 refers to an area or resource unit that in years of nor-

mal rainfall is able to provide sufficient resources (water, pasture, etc.) to support a given number of families and their animals. In the case of the Aïr-Ténéré, the *echiwel* corresponds to one or several sandy valleys with dense populations of *Acacia*, annual and perennial grasses as well as various water points and possibly salt pans. These "grazing areas" are used and managed by a well-recognised and fairly stable group of families who move in groups from water point to water point in search of pasture over the course of a year. Kinship and/or residence are the dominant factors binding these groups together rather than any allegiance to a given clan or lineage group. Hence one often finds, in any given *echiwel*, families belonging to two or more clans or lineage.

The key characteristic of the *echiwel* is that they are not fixed geographic areas with clear boundaries. Depending on the availabil-



Shallow wells at Tamannit, Aïr, Niger



ity of water and pasture in any given valley from one year to the next, the *echiwel* varies in extent and location. Furthermore, the social composition of the *echiwel* is such that each nomadic group will have clan and kinship ties with members of other *echiwel* in neighbouring or more distant valleys thus precluding exclusive claims being made over resources by any specific group. In practical terms this means that *echiwel* expand and contract in spatial terms as does their human and animal population depending on the environmental conditions of any given year. The lack of fixed spatial boundaries coupled with established systems of reciprocal resource access between nomadic groups from different *echiwel*, allow pastoral systems to flourish in what is otherwise a very arid and harsh environment (average annual rainfall in the region of 50 mm). The relatively homogenous composition of the residents of the Aïr-Ténéré is a major factor explaining this situation.

The project is still in its early years and there is still a lot of work to do. However, it has collected much baseline data on the *echiwel* system: the number, nature and condition of the water points, the different family members who use them from year to year, the nature of the social relations that bind together the families of the different nomadic groups, and the composition and condition of pastures. All this information has been computerised and can be used to produce highly detailed maps indicating patterns of movement by different families and groups between water points and seasons. With the addition of monitoring data on the natural and social environment,

¹ Programme d'Appui à la Gestion des Ressources Naturelles de l'Aïr-Ténéré jointly financed by the Danish and Swiss development cooperation.

² The park was granted the status of a World Heritage Site in 1991.

³ Loosely translated as "those places where we go to drink".

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the project will be able to demonstrate its impact on natural resource management. This level of detailed information is currently lacking, but so essential to contribute to a process of informed debate on the subject.

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Landnet West Africa meets

Nine West African countries were represented by 53 participants at the February meeting of Landnet West Africa, held in Ouagadougou. National networks have been firmly established in Ghana, Senegal, Nigeria, Burkina Faso, Mali and Togo bringing together individuals and organisations from a broad range of groups including government, NGOs, researchers, traditional chiefs, private sector, consultants and land tenure professionals. The main aim is to provide a forum for different interests and views, particularly enabling civil society to influence land policy, legislation and interventions. These groups are already demonstrating what can be achieved. GRAF Landnet Burkina has helped bring about the re-design of the proposed World Bank programme for achieving greater land tenure security. Landnet Senegal is supporting the CNCR (national farmers' organisation) to influence the reform of land legislation currently underway. Landnet Ghana hopes to encourage civil society input into planning the new World Bank project on land administration. Future activities include organising training and research on land issues, identifying themes of common interest within the region, and establishing a long term strategy to ensure the network's sustainability.

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Evaluating Eden



The Evaluating Eden project was initiated to take forward debate on community wildlife management, exploring myths and realities in many regions of the world. A recent report stemming from the project features case studies from Cameroon, the Democratic Republic of Congo, Niger and Nigeria. These highlight the diversity of approaches to collaborative management of wildlife resources, often reflecting local circumstances and opportunities. Recommendations include the need to monitor the success of conservation objectives, and role of incentives for stakeholders to manage wildlife sustainably. An enabling legislative and political framework, which is well-known and understood by local people is a critical precondition.

Dialogue and negotiation between

competing interests, while supporting the position of weaker groups, is another feature that may require capacity building within implementing institutions.

Promoting partnerships: Managing wildlife resources in Central and West Africa Jo Abbot et al. Evaluating Eden Series No. 4. IIED 3 Endsleigh Street, London WC1H 0DD, UK. ISSN: 1561-8382. E.mail: bookshop@iied.org

ISSUES AND PROGRAMMES **2**

Land titles: do they matter?

A slim volume by Hernando de Soto has become a best seller and is proving highly influential in international aid debates. 'The mystery of capital – why capitalism triumphs in the West and fails everywhere else' is a hard hitting, provocative book which argues that the poor need to be able to transform their property into marketable assets, if they are to gain access to capital and the global market economy.

This book has been taken by many as providing strong arguments in favour of introducing land titling systems and, while this is certainly one of the threads of his argument, the fabric of discussion is much more complex and interwoven with social, historical and political analysis. It is odd that the arguments presented by de Soto reiterate the role that land titles can play in enabling their holders to access credit from banks using these as collateral security. Such arguments have been effectively dismissed by research from around the world which shows land titles (especially in rural areas) often cannot play this role. Property is not a simple commodity, which can be marketed like a bar of soap. It is deeply enmeshed within social and political relations. Banks may be very unwilling to take land as security on a loan because they know they cannot take effective possession of the land, nor find a ready buyer in case of a default on the loan. Formal titling systems also tend to be very expensive to establish and to maintain. Yet, if they are not maintained, their usefulness rapidly diminishes.

De Soto does a valuable job in describing the numerous hurdles encountered by poor people faced by multiple layers of government bureaucracy. He and his colleagues try, as a test, to set up a garment workshop on the outskirts of Lima, the capital of Peru. They find

that it takes 289 days working full time to acquire the papers and authorisation needed to be legally established. While if you want to build a house on state land, it takes 6 years and 11 months to complete the 207 administrative steps passing through 52 government offices. These obstacles mean that a large part of humankind, particularly in the developing world lives outside formal legal institutions, relying instead on a series of arrangements negotiated with friends, neighbours and patrons.

But there is no lack of entrepreneurship in the informal sector. The 'poor' are often much richer than we would assume. De Soto estimates savings amongst the world's poor as equal to 40 times the foreign aid disbursed since 1945. But such savings and assets are held in forms which do not enter the broader market system, and can only be traded within the narrow circles within which people know and trust each other. The global debate on 'poverty'tends to focus on the misery and powerlessness of the poor. It should also recognise the tremendous capacity of poor people to save, invest and improve their livelihoods.

Most developing countries are going through a process of urban growth, migration, industrial development and rural change at rates far more rapid than those experienced by western nations as they started to industrialise. The legal order in most countries has failed to keep pace and adapt to the massive economic and social upheavals of recent years. Many African countries have systems of law which were inherited from the respective colonial power, with few changes made since Independence. Yet such laws have limited relevance to the lives of most people, who continue to rely on a patchwork of arrangements, the product of negotiation and hybridisation. Lawyers tend to dismiss such extra-legal arrangements, since they fall outside the formal sphere with which they are familiar.

ISSUES AND PROGRAMMES

They prefer to exercise their skills within a known domain, and bemoan the unwillingness of people to follow what the law says rather than looking at how people are behaving in

practice and seeing how to accommodate these within a revised legal setting.

Extra-legality is by no means a phenomenon, but inevitable consequence of what happens when governments fail to make the law coincide with the way people actually live and work. Extra-legality stems from two different traditions of law-making. The first takes the view that lawmaking is an exercise by government to achieve desired changes in social and economic behaviour. Largely top-down, it sees the purpose of government to draw up a grand design to be enacted through legislation. The second view sees law as being a product of social change, needing to recognise and formalise what is currently underway. It understands that official law makes no sense if there is a sizeable part of the population who live outside it. Seeking the best means to integrate the two approaches is the challenge facing many African countries today. Far from being a technical task, it raises highly political issues concerning the distribution of power between different institutions and structures, and agreeing the principles underlying the property claims of different groups.

Do Soto's book describes experience from North America in the 18th and 19th century to illustrate how extra-legality can be addressed. Here, the newly independent USA had inherited a legal system based on English law, which ill-fitted the situation they faced. Many thousands of settlers were moving westwards and establishing farmsteads on lands which the government had planned to allocate to others, and ignoring the claims of indigenous peoples. These settlers invented their own kinds of arrangements and rights, such as 'tomahawk' rights, which recognised land as demarcated by the axe. Equally, 'cabin' rights and 'corn' rights provided evidence for a claim based on building a house and cultivating a crop. At first, government tried to evict these 'squatters', but it became impossible to do so because of the numbers involved and the strong populism they could muster behind their



cause. Thus, the government found itself faced by a situation in which its own system of formal law was being ignored, while a parallel system of rights was being established and managed outside the law. After some time, government had to recognise and provide legal backing to the 'people's law'. Settlers found themselves no longer being called 'squatters' but hailed as 'pioneers'. They were offered rights of pre-emption on land sales, whereby they could purchase the land which they had been occupying at a lower than market price, and thereby acquire a formal title. In this way, by embracing local practice, formal law became legitimate in the eyes of local people.

If government is to legitimise the broad spread of extra-legal arrangements, and integrate them into a coherent framework, what should it do? De Soto proposes four key elements to such a programme:

- Identifying and classifying assets which currently lie beyond legal recognition;
- Providing political leadership at the highest level, to champion the rights of the poor and contest the challenge from vested interests, who want no change;
- Developing an operational strategy for identifying, clarifying, and achieving consensus regarding the spread of property rights, and then recording them in a system which can be maintained; and
- Providing the accompanying measures to promote professional skills and services, such as banking, credit, mortgages, public utilities, and insurance.

De Soto warns against the view that land must be properly surveyed, mapped and recorded before it can be registered. He rightly notes that enormous sums of money have been wasted on cadastral surveys, mapping and titling programmes, and emphasizes that 'property'is not a physical thing which can be mapped – rather it is composed of social relations and values. No amount of mapping will create consensus regarding who is the legitimate owner of a piece of land. Indeed, mapping may aggravate tensions and conflicting claims to land where the issue of property rights and their basis has not been addressed. As he notes 'property law and titles imposed without reference to existing social contracts continually fail; they lack legitimacy. To obtain legitimacy, they have to connect with the extralegal social contracts that determine existing property rights' (p.156).

But any programme to register property will generate problems. Who will win out if and when all property and assets are properly documented? 'Poor people' are themselves highly diverse in their interests, assets and claims. They are not a single, undifferentiated group. The process of trying to sort out the respective property rights of each person or group will throw up many conflicting claims. Are there means of ensuring that registration of property benefits poorer and more vulnerable groups, and not just the better-off and educated? Unless explicit measures are taken to address the bias against marginal people and communities, they are likely to lose the few claims which they can currently muster.

The mystery of capital: Why capitalism triumphs in the West and fails everywhere else. Hernando de Soto. Bantam Press, London and New York. 2000. ISBN: 0-593-04664-1. More information can be found at www.ild.org.p







Local forest management in the Sahel: Towards a new social contract. P. Kerkhof. 2000. SOS Sahel International (UK). Available free of charge in English and French from SOS Sahel International (UK), 1 Tolpuddle Street, London N1 0XT, UK. Fax: +44.207.837.0856. E.mail: mail@sahel.org.uk

If you are looking for a good history of forest management in the Sahel, then this book is a good place to start. It is short and well written with limited use of jargon. It draws on field experience from a range of community-based forest management projects in the Sahel with a particular emphasis on three SOS Sahel projects in Mali, Niger and Sudan. The analysis is rooted in experience, and gains from being honest in its portrayal of approaches and systems that are working and those that are not.

The early chapters present a brief history of how the colonial powers and independent governments have tried to manage Sahelian forests. The very autocratic, technically driven and centralised management systems of woodland management for the past 80-90 years are contrasted with the dynamics of Sahelian woodlands and how local people actually use them. These chapters reveal clearly the incompatibility of woodland

management tools designed for temperate forests in Europe, when transferred to the Sahel. The unstable, dispersed and unpredictable nature of Sahelian natural resources, forests included, demand management systems that are highly flexible and tailored to meet local conditions. One strength of the book is its coverage of customary institutions that in many cases continue to regulate resource access and management on the ground, in spite of government policy and laws which assume central control.

On-going reforms in the Sahel are redefining the role of the State in the field of resource management and new laws are being passed which will in theory give local people far more responsibility in the way woodlands are managed. These opportunities for change are not, however, without their problems. A key issue highlighted in this book is the relative absence of strong, vibrant and representative community-based organisations with the skills to take advantage of the opportunities on offer. The broad legislative environment is lending itself to a new social contract between the State and local people in the field of woodland management, but more needs to be done to build management capacities within various institutions being attributed responsibilities and

powers to ensure resources are handled in a sustainable and equitable manner.

Dryland forests have been shown to generate substantial benefits for local people. Their good management essentially revolves around setting up systems to reconcile the interests of a broad range of stakeholders. It is thus more of a socio-political challenge than a technical one. On the whole, local people know how to manage their resources and have been doing it for hundreds of years. What they lack are the means and authority to manage resources in a more equitable and inclusive way. Local institutions will need to prepare for managing growing competition over resources and the increasing involvement of external actors.

Environmental Change and the Autonomous Control of Tsetse and Trypanosomosis in Sub-Saharan Africa. Case histories from Ethiopia, The Gambia, Kenya, Nigeria and Zimbabwe. D. Bourn et al. 2001. ERGO, Oxford, UK. 248p. ISBN: 1-898028-05-2. To order, contact: Animal Health Programme Office, Centre for Tropical Veterinary Medicine, University of Edinburgh, EH25 9RG, UK. E.mail: ahp@vet.ed.ac.uk

More than US\$500 million have been



spent on tsetse and trypanosomosis research and control in Africa over the last twenty years. There is a huge body of scientific literature on the subject, dating back to 1900, and there are dozens of national, regional and international organisations all trying to control the spread and effect of the disease in humans and livestock. And yet the problem is remarkably persistent.

Why this apparent lack of progress? It can partly be explained by the poor coordination in control measures, and failure to appreciate the dynamic nature of the disease and how it has been affected by broader environmental changes. Trypanosomosis has also received low priority by most cashstrapped African governments, in the face of other, more pressing, concerns like malaria or HIV/AIDS. Furthermore, much of the motivation for controlling this disease has been donor-driven and centrally managed with minimal involvement of local people who have had other more pressing priorities.

This book provides an in-depth, historical perspective on trypanosomosis control in five African countries over the past fifty years. Ever-increasing land clearance for agriculture has resulted in a reduction in wildlife numbers and habitats, and meant that domestic livestock, rather than wildlife. have become the main mode for transmission of the disease. This has profound implications for the future of trypanosomosis control in Africa given the inability of national governments to invest the resources needed in field veterinary services.

The book concludes with a number of sustainable disease control options requiring relatively low management and external inputs, but they will depend on greater involvement by farmers in their implementation. Government too has to play its role by providing the enabling conditions for a more poverty-focused approach to animal disease control which recognises the key role that livestock play in local livelihood systems.

Les enquêtes participatives en débats. Edited by P. Lavigne Delville, N. Sellamna and M. Mathieu. Paris: Karthala, 2000. 543p. ISBN: 2-84586-116-8. Order the book at Karthala. Fax: +33.1.45.35.27.05. karthala@wanadoo.fr. www.karthala.com

This collection of papers provides a rare example of work in the French language on participatory methods. The last ten years have witnessed a growing body of practical experience with such approaches amongst organisations promoting community development, some of which is present in this book. Such contributions provide valuable food for thought and reflection.

Laid out in four sections, the first aims to establish the fundamental conditions necessary for the proper application of participatory methods, and the methodological safeguards essential to maintain quality. The second section presents evidence from practice derived from a diverse range of geographical and cultural contexts, which help highlight weaknesses and strengths of these methods. The third section goes on to look at more complex issues surrounding the relationship between researcher and researched, the risks of prior assumptions masking the researcher's ability to observe with a clear pair of eyes. Finally, the book provides a more theoretical set of reflections on methods and values relating to Participatory learning and Action (PLA) known as MARPin francophone Africa.

Rural livelihoods and diversity in develop ing countries. F Ellis, Oxford University Press, 2000. 273p. ISBN: 0-19-829696-7. Fax: +44.1536.741727. www.oup.com

The 'rural livelihoods' approach to development has become popular amongst researchers and donor agencies over the last 5 years (see Haramata 37 for a critical assessment). The livelihoods concept



attempts to move away from seeking technical solutions to the problems of poverty and risk faced by many poor rural people, and instead works with a much broader set of issues, such as differences in access to resources, and in the assets and networks which individuals and households can draw upon. Equally, the livelihoods approach has tried to link how the options faced by local producers are affected by policies at national and global levels.

In this book, Frank Ellis starts by setting out the concepts underlying the livelihoods approach, and showing how ideas have evolved since Schulz's path breaking work in the early 1960s, which made clear that peasants may be poor, but they're not stupid. He goes on to look at the very diverse elements which constitute most livelihoods, how they have been changing, and impacts of change on different groups. In an assessment of structural adjustment in Ghana and Tanzania, he argues that many farmers have benefited from economic and political liberalisation. Increased access to markets, cutbacks in bureaucratic power and the emergence of new economic opportunities have opened up a greater kaleidoscope of activities for farmers to pursue. Further reform may be necessary to ensure that governments create a truly enabling framework

within which rural people can identify and follow promising pathways to improved incomes and welfare. A section on fieldwork methods gives valuable material for both the first-time and seasoned researcher, amply illustrated by the case study chapter from rural Tanzania.

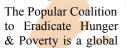
One important aspect of the book's approach is the emphasis given to the large number of non-farm activities which people undertake, as core elements in earning their bread. Rural dwellers are by no means reliant on agriculture for most of their income and needs. In many farming communities, non-farm incomes can make up more than half of the cash they earn. Hence, those seeking to reduce vulnerability of the poor should look not only at options for improving farm productivity but also at many off-farm activities. Ellis cautions the reader at the end of the book to beware use of the livelihoods framework as an obligatory toolkit, and argues the need for intelligent observation and critical thinking.

Ethnoveterinary practices, research and development. Edited by J Gefu et al. NAPRI, Ahmadu Bello University, PMB 1096, Zaria, Nigeria. 163p. ISBN: 978-2364-26-8. Fax: +234.69.551.272. E.mail:ethnovet@inet-global.com

A wealth of traditional knowledge and practice exists amongst Africa's herders and farmers which would be of great value in addressing animal health and husbandry. Yet, it is largely unwritten, and very little known. Such knowledge has equally been barely recognised by the animal science 'professional experts', whether vets, researchers or technical agents. This book presents papers from the International workshop on Ethnoveterinary practices held in Nigeria, in August 2000. The book covers a range of very important issues, such as how to document, refine and spread valuable practices developed by generations of herders, how to handle the intellectual property rights of those responsible for maintaining and developing such indigenous knowledge, and options for legislation to protect and promote such forms of knowledge. A number of key areas for attention were identified which include strengthening interaction between livestock keepers and researchers to identify and collate information on useful practices, carry out research to assess and standardise such methods, and establish local production of ethno-drugs for use and sale to farmers and herders for treatment of their livestock. Readers will find this a valuable resource on new work in this field.

RESOURCES

Alliance to fight hunger



consortium of organisations committed to the empowerment of the rural poor. It brings together intergovernmental bodies, civil society groups, and bilateral agencies. It considers that the poor can best be helped by improving their access to key assets, such as land, water and common property resources. At the same time, ways are needed to give them greater access to decision-making processes at local, national and global levels. Committed to building strategic alliances with others, the Coalition has recently produced two publications which outline why access to land is critical to addressing poverty: The Land Poor -Essential Partners for the Sustainable Management of Land Resources and Empowering the Rural Poor - Through Productive Assets Access to Participation in Decision-making.

Contact: Popular Coalition, IFAD, via del Serafico 107, 00142 Rome, Italy. Fax: +39.065043.463 and coalition@ifad.org

Online docs

The British Library for Development Studies is Europe's largest documentation base with thousands of journals, magazines, newspapers, research reports, CD-ROMs and newsletters. It constitutes a unique archive of much unpublished materials which you can access from your screen, giving access to titles and copies of documents. You can also request a monthly bibliography of the latest information in your subject area.

For details, contact: M.G. Bloom @ids.ac.uk, or tel +44.1273.678263. Dial in to www.ids.ac.uk/blds

Webnets

FRAME and NRM Tracker web sites are two new information sharing networks on environment, natural resource management and sustainable development issues in Africa. FRAME gives you access to tools, technical documents, country specific analyses, and more. It also provides a place to share your information, so that practitioners working on NRM in Africa can exchange ideas and experience with others. NRM Tracker provides a tool for learning about the 'who, what and how?' of local natural resource management initiatives in

Africa. Keep an eye on the websites, since they frequently post new material. Of particular interest to French speakers will be the French language version of the NRM Tracker site.

Go and visit them at: www.frameweb.org and www.nrmtracker.org

Taking stock

Vetaid has recently produced a video which explores the importance



of livestock in development and draws parallels between challenges facing herders in the North and South. Based on experience from Tanzania, Mozambique and the Scottish borders, the programme encourages reflection on the roles that individuals, organisations and governments play in development. The issues raised in the video and suggestions for group activities are presented in the accompanying information pack. Although produced primarily for an undergraduate audience, the pack is also suitable for use with youth and community groups.

To order a copy of Taking Stock – Livestock and development, please contact Vetaid, Fax: +44.131.445.6242. E.mail: mail@vetaid.org. Price: £5.

Conservation tillage

The African Conservation Tillage network ACT aims to encourage the adoption of conservation tillage principles and practice in Africa. Formed in 1998, it brings together practitioners (such as farmers) and promoters (such as industry, advisers, researchers and policy makers) who believe that accelerating the use of conservation tillage is essential to achieve more sustainable land preparation methods. The monthly e-newsletter has news, forthcoming events, publications, training and job opportunities.

Contact: Richard Fowler at africanCTnet@iafrica.com http://www.fao.org/act-network

Future harvest

Upbeat information on how science can provide answers to food production and poverty is provided by the Future Harvest website. Drawing from the work of the international agricultural research institutes supported by the CGIAR, it gives snappy illustrations of new thinking and approaches to raising yields. The genetically modified 'miracle'golden rice which fixes vitamin A in its grain is one success story featured, while another concerns the use of *Coca*

Cola bottle tops as a handy measure for micro-doses of chemical fertiliser by millet farmers in Niger.

Visit them at: www.futureharvest.org

Knowledge buzzes

Honey Bee magazine celebrates the ingenuity of peasant farmers, and the innovations they come up with. Set up 12 years ago, this fascinating newsletter aims to create links between farmer innovators, make visible their multiple inventions, and ensure recognition of the intellectual



property rights embodied in the ideas developed by such farmers. Mainly focused on India, the latest issue also records local ways of breeding improved

rice in Sierra Leone, methods of building earthquake proof houses, non-chemical means of controlling cotton diseases, and the bicycle 'hoe'.

Contact for details and subscriptions: Prof. Anil Gupta, Honey Bee, Indian Institute of Management. Fax: +91.79.630.7341 or E.mail them on honeybee@sristi.org

Training in agricultural research

The ICRA courses have provided a very valuable, hands-on opportunity for those involved in agricultural development to sharpen their skills, and learn new approaches. Taking 6 months, half is spent



in class and half working in Africa, Asia or Latin America. The courses are run in both English and French language options, and aim to strengthen expertise in working with others, and with policy makers, extensionists and, most of all, with farmers. If you want to take part in the session for January to July 2002, you should apply for details now. A limited number of fellowships are also available.

For English-speaking candidates, contact ICRA, PO Box 88, 6700AB The Netherlands. Fax: +31.317.427046, or icra@iac.agro.nl Those interested in the French language course should contact ICRA Montpellier +33.46704.7526, icra@agropolis.fr

MEETING

Brief yourself for Jo'burg

Want to know more about 'sustainable development' and debates leading up to the Johannesburg summit? What are the main issues at stake, and why does it matter? IIED's World Summit on Sustainable Development programme is preparing short briefing notes to help busy people get a handle on what they'll be talking about 10 years after the Rio Summit. First briefing papers to come out include: Lessons from the theatre - Should this be the final curtain call for the Convention to Combat Desertification?; Climate change negotia tions – A view from the South; Striving for good governance - The role of Local Agenda 21s; Striking a balance for trade and sustainable development; Biological diversity - More debate than action? and *Pro-poor tourism – Harnessing the world's* largest industry for the world's poor. Essential reading on the plane going to your next meeting!

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Contact Tom Bigg, wssd@iied.org Fax: +44.207.388.2826 and visit the iied website where you can download the papers.

Conference on croplivestock production

The International Livestock Research Institute (ILRI) are organising an international conference on *Sustainable crop-livestock production for improved livelihoods and natural resource management in West Africa*, 19-22 November 2001 Ibadan, Nigeria.

The purpose of the conference is to take stock of lessons from two decades research on how crop-livestock systems contribute to sustainable agricultural intensification and improved livelihoods in West Africa. Three central themes will be addressed:

- I Crop-livestock systems research.
- I Future trends and emerging opportunities for sustainable intensification of crop-livestock systems.
- I Strategies for improved partnerships and output delivery for poverty alleviation.

In addition to keynote papers on the conference themes, a half day will be devoted to more informal exchange of information to allow participants to present examples of research and/or training tools and techniques they have used.

For more information, please contact the Conference Secretariat: Tim Williams, ILRI/IITA, Fax: +234.2.241.2221. E.mail: t.o.williams@cgiar.org

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Pest control the natural way

Farmers in South Africa use local plants as pesticides to protect their crops. In Capricorn District (formerly Central Region), Mr P. Modiba plants garlic (*Allium sativum*) and a root crop called motsi (*Zanthosoma sagittifolium*) in rows at the field border and the centre of the field to prevent moles, rats and snakes from eating his sweet potato crop. The pests are attracted to the motsi as it is more tender than the sweet potatoes, and at the same time are repelled by the smell of garlic. There is no side effects to using these plants next to the sweet potato, and moreover, both these plants are edible!

In one of the pilot villages in Vhembe District (formerly Northern Region), farmers M. Netshithuthumi and M. Livhebe use pests to control pests! Green beans used to be infested with the CMR beetle (*Mylabris oculata*) and most farmers could not afford pesticides. Farmers collect the CMR beetle, roast and grind them into fine powder, and then soak two handfuls of the powder overnight in 5 litres of water. Then they spray onto plants. When the beetle is touched, it excretes a poisonous substance to protect itself against enemies. It seems that it is also toxic to the beetles themselves when applied on the vegetable crop! This pesticide costs nothing, but farmers have found that the powder is only effective when fresh.

In Vhembe District, farmers R. Davhula and M. Tschihombela use "mushongwa wa tshithu", a mixture of aloe (*Aloe swynnertonii rendle*), malongakanye (*Cissus quadrangularis L.*), mihiri (*Combretum imberbe wawra*) and mutangule (*Euclea divinorum hiern*) to control bollworms,

stalkborer, cabbage bugs, aphids and cutworms in vegetable crops. Farmers mix equal portions of the plant materials, soak them in water overnight, sieve and then spray on infested plants. After a few days, the pests disappear. This formula is easy to prepare, and cheap. Plants which have been sprayed are safe to eat after 7 days. But beware one disadvantage! High concentration of the mixture burns the leaves. The agricultural Research Council has tested the effectiveness of the famers' mixture and found that it was as effective as the pesticides normally used. Environmental effects from use of these plants as pesticide are unknown.

In another village in Vhembe District, farmer J. Vhengane uses a solution of 'Sunlight'soap and tobacco to control locust, bollworms and aphids in cabbages. First, he boils 100g of tobacco leaves and 125g of 'Sunlight'soap block in 5 litres of water. After 15-20 minutes, the solution should be sieved and allowed to cool, before being applied. It seems an effective and cheap way of repelling pests, with no apparent side effects or environmental hazards.

Information collected and documented from farmers from the BASED¹ pilot villages. For more information, contact J.J. Mkhari, M. Netshivhodza and M.J. Ramaru at BASED, PO Box 4645, Pietersburg, South Africa. Fax: +27 (0) 15 295 7090. E.mail: base.gtz@pixie.co.za

¹ Broadening Agricultural Services and Extension Delivery programme