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Rights and resources



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Cover photo
 Local Berta women collecting fuelwood not far from
 Sherkolle refugee camp. Photo: Jan-Gerrit van Uffelen.

*The editors have taken every care to ensure that the
 contents of this magazine are as accurate as possible.
 The authors have ultimate responsibility, however,
 for the content of individual articles.*

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23 Mahender Rautela:
water volunteer

William Critchley, Marit Brommer
and Girish Negi

Five years ago, Mahender Rautela resigned from his private sector job in Delhi to come back to his home hamlet of Chhabisa and join a small group of water volunteers. He wanted to help his community to cope with the increasing problem of water shortage, by protecting and maintaining water sources and mediating in disputes between water users.



ILEIA is the Centre for Information on Low External Input and Sustainable Agriculture (LEISA). ILEIA seeks to promote the adoption of LEISA through the LEISA magazines and other publications. It also maintains a specialised information database and an informative and interactive website on LEISA (<http://www.ileia.org>). The web site provides access to many other sources of information on the development of sustainable agriculture.

LEISA is about Low-External-Input and Sustainable Agriculture. It is about the technical and social options open to farmers who seek to improve productivity and income in an ecologically sound way. LEISA is about the optimal use of local resources and natural processes and, if necessary, the safe and efficient use of external inputs. It is about the empowerment of male and female farmers and the communities who seek to build their future on the basis of their own knowledge, skills, values, culture and institutions. LEISA is also about participatory methodologies to strengthen the capacity of farmers and other actors to improve agriculture and adapt it to changing needs and conditions. LEISA seeks to combine indigenous and scientific knowledge, and to influence policy formulation in creating an environment conducive for its further development. LEISA is a concept, an approach and a political message.

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18 Resolving resource conflicts
around Sherkolle Refugee Camp

Solomon Hussien, Assegid Tesemma,
Alemayehu Abebe and Jan Gerrit van Uffelen

In Sherkolle refugee camp in Western Ethiopia, ZOA Refugee Care has been working together with refugees and local people to jointly manage the natural resources on which they both depend. At the heart of their programme are Environmental Working Groups, community-based organisations that develop natural resource management plans with limited outside facilitation and assistance. The EWGs also develop binding rules and regulations about access to natural resources for both the local communities and the refugees. They are increasingly seen as instruments to manage natural resources sustainably and avoid conflict.

10 Lake Mweru is our bank

Nettie Aarnink and Paul van Zwieten



Since the 1970s, there has been increasing competition for the fish resources of Lake Mweru, Zambia. This has led to serious conservation problems. The Department of Fisheries found it increasingly difficult to implement the existing rules and regulations to prevent overfishing. It decided to involve local stakeholders in the process of establishing acceptable and enforceable conservation measures. One of the tools used in this process was the highly successful video *Lake Mweru is our bank*. (see page 33).

27 Community consultation and national lobbying in South Africa

Ben Cousins

A proposed Communal Land Rights Bill is being discussed in South Africa. The legislation makes provisions for formalising customary land law. This article looks at the implications of these discussions for the bill and draws the conclusion that only by establishing strong links between local action and national advocacy activities can the voices of local communities be heard.

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DEAR READERS

As you read on the back cover of the last issue, the LEISA Magazine is now available in five different editions and four different languages, thanks to our partner organisations in Latin America, India, Indonesia and West Africa. This represents a major step forward for the exchange of information on LEISA and we are very excited to see the different issues develop, each with their own character. ILEIA's new website is under construction and will be launched towards the end of the year. It will carry the information and articles from the five editions, thereby making a lot of LEISA material available in one place. We hope it will become a useful resource and a platform for information exchange.

Another major step for ILEIA is that we are now setting up our own offices after almost 20 years in Leusden. From the 1st of October 2003 we will be located at Zuidsingel 16 in the centre of Amersfoort, the Netherlands. Our new postal address is:

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Our email addresses remain the same: ileia@ileia.nl and subscriptions@ileia.nl. Our old postbox address will also remain in use for the coming year, so you do not need to change our address on the subscription card.

We hope you enjoy this issue on access to and control over resources.

The Editors



Access to grass, fuelwood and water. Photo: Jan-Gerrit van Uffelen

Access to and control over resources

Editorial

Access and control over land and other natural resources is regulated through many different systems and arrangements. Whether these systems are formal or informal, statutory or customary, restrictive or open, they all play a major role in rural livelihood security.

History, values and beliefs are reflected in the way societies organise their systems of agricultural production and natural resource management. They determine the extent to which farmers and other rural community members have the right and power to secure the resources they need to ensure food security and income. They also have an important influence on the political climate in which resources are managed and regulated.

Security

Security in access to resource use is essential to sustained agricultural production. Without long-term security farmers find it difficult to invest in improvements that only produce returns over many years. Farmers must feel confident that they will be able to benefit from their efforts. Secure land rights provide them with the opportunity to accumulate wealth and to ensure it is transferred between generations. They often have a very strong bond with the land they farm, land they may have inherited from earlier generations and would like to hand over to the next generation in good condition. Where the future is uncertain, people may make short-term, exploitative or destructive decisions about the use of natural resources (Zewdie p 21).

Securing access to land for food production represents a particular problem for many women living under systems of customary law. In Southern Africa, for example, the effect of HIV/AIDs in the rural areas has resulted in increasing numbers of farm households headed by widows. Many of them have been dispossessed of land

and agricultural assets under customary laws that invest land rights in the husband and his heirs. Without security of tenure women's capacity to produce food and care for their families is being seriously undermined (see the article on p 30).

Secondary access to land and other resources is not only a problem that confronts women. Other marginal groups such as herders, migrants and refugees often have serious problems in negotiating access to resources, as the article on the Sherkolle refugee camp clearly demonstrates (Abebe p 18).

In the rare situations where there are few limits to available resources, secure access is not a problem. As soon as land and other resources become scarce, however, either in real terms or because of restricted access, rights have to be regulated in ways that are acceptable to most of the community and give users enough security to invest efforts in sustainable management practises.

Different arrangements

There are many different ways in which access to land and other resources can be organised. These include freehold, leasehold, sharecropping and rental arrangements. There are also systems of usufruct in which the owner – whether this is the clan, traditional leaders or a landlord – grants rights to use the resource for a limited period of time. Access arrangements depend on many factors and are influenced by local conditions such as population density, the availability of land, its productivity as well as the socio-political context and history of the community concerned. In some societies, land use is egalitarian as most community members have equal access to land. Usually, however, access to land depends on social status gender and power structures, where the most influential in the society control most of the land and the poorer members work it under certain specified conditions.

All systems that do not depend on repression and the use of force to maintain themselves need the acceptance and support of the majority of their members. In addition, those responsible for enforcing them must have enough power, legitimacy and political will to do this effectively. Such systems provide a relative level of security – people know what the rules are today and what they are likely to be tomorrow. Systems that are deeply embedded in the culture and values of a community and continue to provide benefits for their members can be resilient enough to survive for centuries. An example is the *Subak* system of water management in Bali (Suarja p 25). However, some customary systems are also characterised by deeply entrenched biases against certain groups such as women and migrants.

The resilience of traditional arrangements for managing resource rights can also be seen in situations where new legislation has been imposed on local communities but can only be weakly or incompletely implemented (Aarnink p 10). In Africa it has been estimated that less than 10 percent of land is being administered under statutory law. Most of it continues to be regulated under customary provisions and in many countries these have yet to be formally recognised by the state. In West Africa, this has resulted in an ill-defined and sometimes contradictory relationship between statutory and customary law (IIED p 6). Some African countries are currently trying to give statutory status to customary practices, but this is a complex process and difficult to implement. This can be seen in the article on South Africa's efforts to introduce communal land rights legislation (Cousins p 27).

Change

Changes in access to land and other agricultural resources have, historically, often provoked violent and far-reaching reactions because not only do they affect economic security but also deeply disrupt cultural and spiritual life.

Customary systems of natural resource management that have evolved gradually over time are vulnerable to radical economic and political change. In rural communities in many parts of the world traditional rights and obligations were undermined by the imposition of colonial law and settler practices. In countries like Brazil, such interventions continue to have far reaching consequences (Vankrunkelsven p 15).

In areas of continuous population growth where pressure on agricultural resources fuels rapid economic and social change, conflicts and disputes over land and other resources are common. This is particularly so in peri-urban areas and in the agricultural hinterland of large cities, where expanding markets open up promising commercial opportunities. In such situations there is the danger that those with custodial powers and responsibilities in the traditional system may start to use them to their own advantage, ignoring the communal nature of the resources involved. In societies where the gap between rich and poor is widening an increasing number of the dispossessed are left to share a decreasing and frequently degraded resource base. The consequences of ineffective access to the political system has led those without land to organise themselves in popular movements to force a more equitable land policy (Corrêa p 16).

Resourceful people

In situations where governments are either unwilling or unable to meet their responsibilities for the management of resources that are under their control, rural communities often look for practical solutions. The role of informal leaders can be very important in such circumstances. This can be seen, for example,

in the article on the experience of Rautela, the water volunteer, who helps his community make better use of all available water resources (Critchley p 23).

In some cases, people have come together to improve the resources available, such as the pastoralist women of Ngurunit who took the initiative to collect funds and organise the digging of wells so they had a reliable and safe water supply (Lemunyete p 8). When communities improve access to resources such as water this can lead to a need to re-define rights of ownership and use. This was the case in the Arvari river where local initiatives to revive traditional small water-harvesting structures resulted in renewed river flow. The communities subsequently had to defend their rights to the water and fish production created as a result of their efforts, against outside interests (Kishore p 24).

For those who do not own or have access to their own resources, having the capacity to negotiate the right to use land and other necessities is critical. Share cropping is a strategy often used by landless and other marginal groups who find themselves without access to local resources (Tripathi p 13).

Understanding the dynamics

Access to and control over resources is about power, and there are usually winners and losers when change occurs. Many development projects that deal with agriculture and natural resource management do not pay enough attention to assessing or understanding the issues of rights and tenure before starting project activities. It is often assumed that development interventions will automatically benefit the community at large. Without proper management and channelling of resources this is unlikely to be the case. This is particularly the case with projects that considerably increase the value of resources.



Destitute nomads from Mali came to Christine Wells in Burkina Faso in search of pasture but found a wasteland. Photo: FAO/ F. Botts

This issue of the *LEISA Magazine* focuses on rights to renewable natural resources. However, it should be remembered that other resources are also necessary for a sustainable and responsible agriculture. Today, in many communities, the effects of poverty and unregulated social change have created barriers that inhibit communities from maintaining access to local knowledge and the richness provided by their traditional cultures and beliefs. Ensuring control over the way these human resources are protected and developed remains to be explored in later editions of the *LEISA Magazines*.

Land tenure and resource access in West Africa

Most West African countries depend heavily on natural resources for income, employment, livelihood, and export earnings. The legal and administrative measures that determine the access to and control over natural resources are, therefore, very important to enable improvement of long-term productivity, stimulate investment, encourage fair access and make it possible to avoid conflict.

In recent decades there has been rapid population growth and increased urbanisation and labour migration throughout West Africa. Some areas, such as the coastal countries along the Gulf of Guinea, have experienced heavy urbanisation. In other areas, pressure on farmland as a result of migration of people and cattle from drier to wetter parts has caused problems. These patterns are expected to continue, leading to land scarcity and a reduction in the size of holdings. Urban populations are expected to triple by 2030 creating an increasing market for food produced in the agricultural hinterlands.

West Africa's agricultural and ecological zones range from moist forest in the south to arid deserts in the north. Their history and socio-economic characteristics have resulted in many different systems for managing resources. However, there are issues common to all countries.

Common issues

Throughout West Africa contradictions exist between customary tenure and government laws and regulations (statutory tenure). However, customary tenure remains the most important system through which people regulate access to land and other resources. Customary tenure is based on the values and norms of each social group and this gives legitimacy to local decision-making.

Customary systems

In most customary systems land cannot be bought and sold freely. Despite this restriction, customary practices do not seem to have hindered investment in the small-farm sector. However, customary systems do have drawbacks. Powerful groups, for example, may use their position to access key resources, or try to sell land that is traditionally considered community property. In some customary systems the rights of socially marginal groups, including women and certain castes are poorly guaranteed. Also many governments do not recognise the legal power of customary authorities to regulate and administer land. As the interests of communities and groups in West Africa change this affects customs and practices of resource management. In addition, as commercial opportunities increase many customary tenure systems are tending to evolve towards individual rights.

Statutory systems

The state controls land in statutory systems and has the power to decide rights and titles. Statutory systems are based on state authority and are enforced by government to serve state interests. Statutory and customary systems have different ways of deciding on issues of access to resources. For this reason statutory systems are not always accepted at village level. As land becomes scarce and its value increases, problems caused by

the differences between customary and statutory law can lead to growing insecurity. In West Africa, other factors such as Islamic law and the impact of development projects can increase the difficulty of reaching decisions on the issues of rights to resources.

Effective and just implementation of customary and statutory laws and practices depends on clear definitions of the relationships between the two systems. One way to achieve this could be to define the areas in which statutory law applies - such as in peri-urban areas - and let the customary system apply outside these areas.

Registration

In West Africa, ensuring land tenure security is seen as a way of encouraging land users to invest in agriculture. At present less than 5 percent of land is in individual ownership under statutory law. Most of this land is in towns where its relatively high commercial value makes it worthwhile for owners to invest in registering title. However, experience shows that there are serious difficulties associated with land registration in West African conditions:

- Land registration is expensive for the state, requiring the maintenance of a centralised system for land survey and administration.
- The mapping and registering of title to many small plots and maintaining and updating registration is extremely difficult. In practice, widespread land registration is very time consuming and difficult. Legislation permitting or requiring registration is widely ignored.
- Once land is registered, informal, unregistered land transactions still continue along customary lines and registers quickly become out of date.
- Local elites and private investors generally have privileged access to formal registration systems and can exploit them to the disadvantage of customary rights holders.
- Survey and registration fees, illiteracy and bureaucratic processes discourage poorer rural people from registering land.
- Registration campaigns cannot deal with the full range of customary rights and they frequently undermine the security of women, other subsidiary rights holders, and community claims to common resources leading to increasing disputes and insecurity.

However, registration programmes may be useful in certain cases. For example, where customary systems have broken down or are very weak or where the value of resources has increased, leading to conflicts and disputes.

Other approaches

Registering individual rights is not the only way of regulating access and control to land and some other methods are being tested in West Africa. They include community land-use planning projects, such as *gestion de terroir* approaches where decisions on land and natural resource allocation are made at village level and accepted by government. Finally, farmers are also developing more informal ways of securing land transactions (rental land, sharecropping, or even sale) by involving witnesses and putting agreements into writing which are then signed by the village chief or even a local level administrator.

Conflict management

As resources become scarcer and more valuable, competition between users intensifies. It is therefore important that procedures and mechanisms are developed to resolve conflicts and disputes. Places where serious competition is likely to develop include peri-urban and wetland areas and regions that attract agricultural migrants. Relations between farmers and herders are likely to become tense as village cattle herds expand, grazing areas contract, fodder becomes scarce, and fields start blocking cattle tracks. In such situations customary systems for resolving conflict, where they exist and are still effective can be elaborated as a step towards dealing with disputes.

Common property resources

Common property resources remain important. Access to fuel wood, common grazing, the availability of non-timber forest products, fish resources and construction timber are important to most rural communities. Nationalisation measures by various governments and a lack of any recognition of villagers' rights in certain West Africa countries has meant that many common property resources are unregulated and open to all. In addition, resource use has altered because of interventions that have undermined existing management systems. Forests have been demarcated as government reserves, public boreholes have opened up grazing areas to all-comers, and traditional fishing regulations have been over-ruled by new projects and regulations. Common resources are under pressure, particularly in densely populated areas where a decline in fallow has reduced the amount of bush land available for forage and has led to an increasing assertion of individual rights to grazing and other resources.

Will it be possible, in future, for different users to agree on ways to manage common resources in the interests of long-term productivity, and will government be able to give sufficient power to local communities to enable them to negotiate and enforce controls on access to resources? Recent pilot projects have shown that such measures as the joint management of forest areas, and local management agreements between villagers and the government have considerable potential.

Pastoral livestock sector

The pastoral sector is critically important in many parts of West Africa and continues to be an important source of income and export earnings in drier areas. It is now recognised that the continued viability of the pastoral sector in the semi-dry areas of the savannas and the Sahel depend on herds being able to move as freely as possible between grazing areas and sources of water. They must also have access to dry season grazing because rainfall and forage resources are not enough to allow herds to remain in one place for long.

Pastoralism, in contrast to farming, is not recognised by most West African states as productive land use. This complicates the issue of pastoralists' rights in statutory law. It undermines security in pastoralist communities and makes it more difficult to deal with the problem of grazing areas being converted into agricultural land. Further, if pastoralists cannot use crop residues because farmers are using them for their own herds, grazing areas are reduced through cultivation and transhumance routes are blocked, it will be impossible to maintain a productive, mobile livestock system.

Future

In West Africa policies are being discussed to tackle these problems. These include decentralisation, clarifying customary and statutory tenure systems, and encouraging debate at local, national and sub-regional levels.

Given the diversity of most West African countries, the development of national policies on land and natural resource management must take local conditions into consideration. Several West African governments follow decentralisation policies that involves central government giving more power and responsibility to regional or district administrations and elected bodies. Land tenure administration should, if possible, be carried out at the lowest level of management leaving the higher levels of government to take on issue lower levels can not handle. This is the principal of subsidiarity. The idea behind this approach is that, by electing local representatives, local interests and needs are better served and contact between local people and the administration will improve.

West African states have limited financial and administrative resources making it difficult for governments to become heavily involved in managing land at local level. However, government remains responsible for providing the principles and framework that guide decision-making on issues of tenure and access to resources and ensure that local organisations are transparent and accountable.

West African governments already support a number of initiatives related to land tenure and access to resources. National governments can draw on these to encourage local debate on the policy options available in land tenure. Public consultation is particularly important in countries preparing new land tenure legislation. Experiences such as *gestion de terroir* can provide useful insights into how community-based natural resource management works. Lessons can also be learned from initiatives to establish the co-management of forest and wildlife resources and programmes to improve the management of conflict.

Finally, the exchange of experiences between countries not only strengthens the capacity to analyse and solve land tenure problems, it also allows trans-boundary issues to be taken into account. At this level regional bodies such as CMA-AOC, CILSS and ECOWAS can provide representatives from West African countries with opportunities to discuss common problems in developing policy for land tenure and natural resources management. ■

Adapted for publication in the LEISA Magazine from the IIED Drylands Programme report Land tenure and resource access in West Africa: issues and opportunities for the next 20 years, IIED, January 1999, with the kind permission of the IIED Drylands Programme.



Improved well with hand pump owned by Salato Women's Group. Photo: Laura Lemunyete

Securing access to water in Ngurunit

Laura Lemunyete

Ngurunit location lies in the foothills of the Ndoto mountains in the semi-arid environment of Northern Kenya. The local Samburu and Rendille pastoralists live in scattered villages and depend on their livestock for milk, meat and other products. Water is a problem for both humans and livestock. Though many riverbeds cut through the foothills, most have no surface flow except during the twice-yearly heavy rains. The main river, which is also fed by some mountain springs, can sometimes flow for three to four months at a time but then becomes progressively drier further and further up the mountain like the other riverbeds.

These dry riverbeds provide most of the water for livestock and people when wells are dug at strategic points. During and after the rains water can be drawn from shallow holes dug in the riverbed. After the rainy season, when the area dries up, more extensive wells are dug deeper and deeper as the water level in the riverbed drops. These can reach up to 30 or 40 feet deep.

Traditional wells

In the past, wells were dug in the riverbed or in areas where water accumulated. During the rains, these were usually destroyed and re-dug in the dry season. Traditionally, those who

dig and maintain the wells are considered the owners. As this is laborious work, only the men are involved and they are recognised as the sole owners of the wells. Those who have not dug their own wells and women in general have access to wells under traditional rules.

The owner of the well has first priority, first for his livestock and then for his family's needs. Afterwards, if there is water, others can use it for their livestock. Women and children are the last to get water. As the dry season progresses, traditional rules start coming into play and people must respect the owners of the wells and the complex schedules regulating water access. Directly after the rains when there is plenty of water, women can get it from anywhere along the riverbeds by digging shallow holes and do not have to rely on the deeper livestock watering wells.

Problems

During the rains and immediately afterwards, everyone has easy access to water. However, when it starts to dry up problems arise. These include women and children having to walk long distances to existing wells and then waiting for the livestock to be watered. During times of drought when there is very little water, this can mean waiting into the night for the well to recharge because it has been emptied by a large herd. Sometimes they get no water at all.

Common problems associated with the traditional system of well construction and use, especially when water is scarce are:

- School children having to wait to get the water they need to take to school for cooking and cleaning, thus missing classes.
- Women having to wait for hours for household water, sometimes even into the night.
- In dual purpose wells (livestock and human) water is easily contaminated making it unhealthy for human consumption.
- Households that are not able to dig their own wells, especially women-headed households, become dependant on the good will of well owners.
- Digging and maintaining traditional unprotected wells requires much labour because they collapse when it rains.
- During times of severe drought people resort to stealing water at night and well owners must guard their wells to ensure their livestock get enough.

Solutions

From April 1996 to April 1997, there was severe drought in Ngurunit and wells up to 30 or 40 feet were dug in the main river bed because all other sources were dry. Women and children were hard hit. When the rains came and water became easily available again, the community, especially the women, decided to deal with the problem of water access.

One group, Salato Women's Group, started looking for ways to build their own wells. They used funds from various sources including their profits from craft sales, a grant from a development organisation and some assistance from a church group in America. In 1998, they started to build two wells next to their group plot. The well for their group livestock was finished in mid-1999. The other well was covered and fitted with a hand pump donated by a German aid programme in 2000. Once dug, both wells were protected with cement to prevent them collapsing.

These wells were the first in the area to be owned by Samburu/Rendille women rather than by individual men. Having separate wells for livestock and humans and especially the covered household well also set an example for hygiene. Although owned by the women's group, all households in the surrounding area could access the covered well.

The Salato Women's group was successful in building the wells because they had funds to hire labour. Women generally do not have their own property. Since coming together as a group, they had been able to get funds they could not have accessed as individuals. Over the years, the group's activities earned the respect of the men. As the group started to earn an income and build connections to outside assistance, men's attitudes started to change. They were willing to help them dig their wells and appreciated being paid.

The Salato women's decision to build wells fitted into the general pastoralist perception of the importance of water resources. Men in the area were able to support this choice because they also benefited from the wells, even if they did not own them. In Ngurunit, water scarcity is relative. There is water in many of the dry riverbeds if wells are dug deep enough. The major constraint is the labour needed to dig the well, hence the ownership rules. When a women's group was able to get resources to dig more wells, men were prepared to welcome this development.

From mid-2000 when the Salato Women's group second well was completed, the attitude towards water and access to water began to change in Ngurunit. The community started to try and get funds to build covered, hand pump wells that women and

children could use for household needs. One well was built for the primary school so children would no longer have to wait for long hours at individually owned livestock wells. A second woman's group also raised funds and built their own well to provide water for their tree nursery and their families.

In 2002 there was a drought. Even so, with some rationing, the availability of hand pump wells meant that everyone was able to meet their needs with less waiting and trouble than under the traditional well system. That year Salato Women's group also raised funds for a preventive health practises project. They built three more covered hand pump wells in villages that were farther away from the main riverbed. With clean water nearer to home, the group succeeded in reducing the workload of the women and young people who no longer had to walk long distances for household water.

By March 2003, Ngurunit sub-location had eight community hand pump wells for household water, five of them owned solely by women's groups. In addition there was also the original livestock well built by the Salato group in 1999.

Plans

The success of the hand pump projects and the empowerment of the women who own some of them, has shown there are workable solutions to the problem of water scarcity in this semi-arid area. Some outlying areas that now depend on the Ngurunit wells but do not have appropriate places for hand pump construction, are working on their own solutions such as rock rainwater harvesting systems and protected water pans. In Lebendera, Meingati Women's Group is the driving force behind developing their own community water sources. After seeing the success of the Salato Women's group in accessing water, they have realised that men were not the only ones who could control water, and that to care for their households, women also need secure access. In the villages of Illaut and Arsim, women's groups are also trying to get enough resources to develop wells for community use.

Women in the Ngurunit area are becoming increasingly independent in their access to water. In addition to the important changes in water access and control, the successes of the various women's groups in securing water has affected other aspects of their lives as well. Through the support and actions within women's groups, they have been able to gain control of many assets they did not have in the traditional system. These include ownership of livestock and group plots for income-generating activities and an increased capacity to run business enterprises such as beadwork and marketing local commodities and livestock products both on a group and individual basis. Any resistance men may have shown to these changes in the traditional pastoralist system has been largely neutralised by the clear benefits that these activities have brought to the community and individual households.

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Lake Mweru is our bank

Nettie Aarnink and Paul van Zwieten

Lake Mweru lies in the Luapula valley on the borders of Northern Zambia and the Democratic Republic of Congo. Its fishery provides food, employment and income to about 400 000 local people and supplies 40 percent of the fish sold on the Zambian market. Families in the area have a long history of combining fishing with cassava farming. However, since the early 1900s there has been a steady growth in fish trading between the lake and the towns and copper mines of Zambia and the neighbouring Congo. This has led to a heavy exploitation of the lake's fish resources and a strong inter-regional trade that increasingly overshadows the traditional local economy.

In contrast to the early 1970s when most of the fish caught were consumed locally, 70 percent of today's catch is either salted, dried or marketed fresh outside the region. Rapid population growth especially in the towns has created a big demand for fish and the recent liberalisation of the Zambian economy has made it easier for commercial interests to enter the Mweru fish market. This has resulted in considerable new investment in large vessels, fishing gear, and the development of freezing plants.

Government

Officially the Mweru-Luapula fishery is State property but in practise, it is a common resource open to everyone. The local Department of Fisheries (DoF) at Nchengele is responsible for "promoting sustained fish production and increasing food availability and employment opportunities based on the sound exploitation, management and conservation of fish stocks". However, it is difficult for the DoF to carry out its tasks because it does not receive the funds and manpower it needs from central

government. The weakness of the DoF and its inability to enforce conservation regulations has increased the problems of local fishermen who are finding it more and more difficult to adapt to the ecological and economic changes that have taken place in the fishery as a result of the heavy, unregulated exploitation of fish resources.

Local economy

The local farmer-fisher communities are made up of members of the Lunda, Bwila and Shila tribes but there are also many migrants who have been attracted to the area by its fish. Today, there are three categories of fishermen working on Mweru-Luapula. First, the owners of powerful large vessels that have the capacity to fish the lake for long periods of time, salt fish on board and act as a floating market for smaller fishing boats. Second, there are those who have earned enough money to invest in a plank boat equipped with several types of nets and a small crew, and there are the local, subsistence fishermen who set their traps along the shores of the lake and in the swamps and tributaries of the Luapula River. It is this last group of fishermen who are most at risk from the heavy and largely uncontrolled commercial exploitation of Mweru-Luapula.

Livelihood fears

Local people depend on fish for their livelihood. It is their main source of protein and fishermen usually reserve part of their catch for their families. Fish is their major 'cash crop' and is shared, bartered, and given in tribute. It 'pays' wages and settles bills. It also ensures the social and political security of the local fishing communities.

Those whose day-to-day survival depends on fish are becoming increasingly anxious about the future. Fish catches have been in



steady decline. In the late 1950s, fishers caught between 11 and 12kg of fish per 100 meters of net per night. Today, this has fallen to less than 3kg. Older people remember the huge catches of the past when young fish were thrown back into the lake to mature. Now undersized fish (*mponde nshima*) are routinely marketed.

To some extent the cassava gardens managed by the women of the household shield local families from the uncertainties of fishing. Once matured, cassava can be harvested when needed. It is, therefore, an important source of food and income and can be bartered for fish and other necessities when catches are low, nets are stolen, or when the families are in difficulties because a fisherman is sick or dies. However cassava is only one part of a fish-dependent livelihood system in an area where there are very few other sources of income.

Stakeholders

Local shopkeepers also depend on the lake. If their customers are unable to catch or sell fish there is no money to spend. Most of the shopkeepers in Mweru-Luapula started their businesses with capital they earned from fishing, trading in fish, or working on the boats. Apart from providing essential commodities, shopkeepers are important sources of credit to the local fishing communities.

Traditional authorities have also an interest in the lake. Tribute and other customary dues are paid in fish or with earnings from the fish trade. Tribute is an important part of local life and is seen as a token of respect. It ensures good relations between fishers and the traditional authorities who still have considerable power. Although the official mandate to manage the fishery is in the hands of the DoF, fishermen and traders know that chiefs have the power to 'punish' fishers who break traditional law by confiscating their fish or gear, that they can refuse to grant traders permission to enter their areas, and that they have the right to discourage inappropriate fishing practises.



Everyone has a stake in fish. Photo: Nettie Aarnink

Stakeholder action

Those with a stake in the fishery have not accepted the growing threats to their access and control of resources passively. Some local fishermen have set up fishers associations to combat net theft, destructive fishing practises and lack of support from local authorities. The first associations started in the north of Lake Mweru in the 1980s and followed the constitutions developed by Congolese fishermen. Gear registration systems were set up to protect nets and other equipment and in some places monitoring systems were established to track down stolen nets. Association members complained openly to government about their declining catch. They demanded better local management and enforcement of conservation measures by the DoF. They also wanted local councils to use some of the money collected by taxing the fish trade to provide better services and infrastructure. At the same time some associations took the initiative to educate their members about the value of conservation and the importance of obeying DoF regulations.

Other stakeholders, such as local business people and traders, also demanded better control of the fishery and action against competition - especially the freezing companies who they say "milk our fish". While shopkeepers pressed government to make funds available to enforce existing regulations and stop industrial fishing practises, consumers turned to their chiefs with complaints about the scarcity and high price of fish on the local markets, and women traders demonstrated against the closed season because it deprived them of their only source of income.

Conservation dialogue

In the early 1990s, in an effort to increase its effectiveness, the DoF changed its approach from trying to enforce government rules and regulations, to looking for more participative ways of involving stakeholders in the management of the fishery. This was a difficult and complex process for, although most of those fishing on Lake Mweru realised the consequences of heavy and unregulated fishing and respected the DoF as the "father" of the fishery, this did not encourage them to follow conservation measures. In the struggle for survival and the race for fish and a share in fishery-related profits the most common course of action was to ignore traditional and statutory regulations.

The DoF attempt to get local support for a more community-based management began with activities that aimed at helping stakeholders understand the background and objectives of the conservation process. This involved meetings and discussions

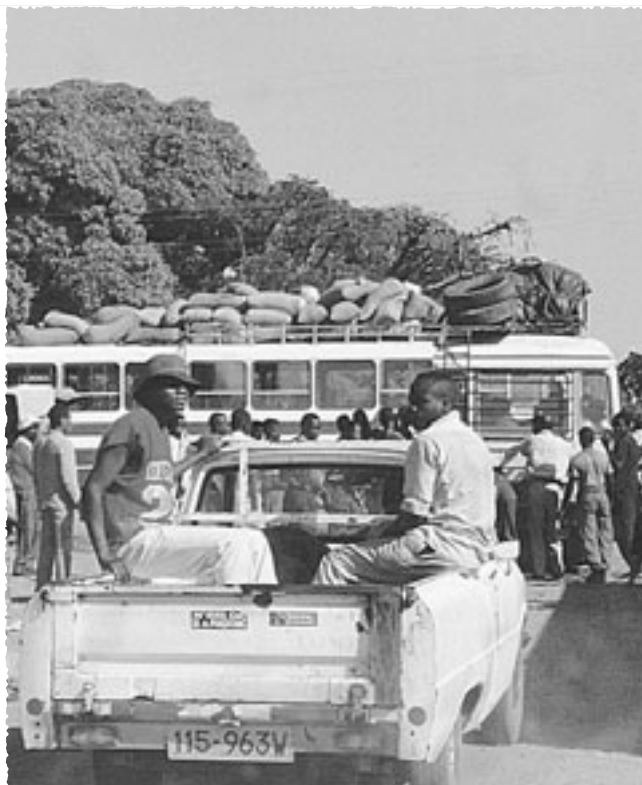


Fishermen on the shores of Lake Mweru. Photo: Nettie Aarnink

with fishers and their loosely organised and scattered fishing associations, and with traders, local business people and traditional leaders.

In 1992, as part of this conservation dialogue, the DoF organised a meeting for fishers and chiefs at which the management of the Mweru-Luapula fishery was discussed in an open and critical way. It became clear that past efforts at conservation, particularly dissatisfaction with the way in which the closed fishing season had been arranged, played an important role in people's attitude to rules and regulations. In pre-colonial times the opening and closing of the fishing season had been clearly accompanied by rituals and ceremonies. However, during the colonial period and later the country's fishery policy, including regulations relating to conservation, had often been applied in harsh and discriminatory ways or manipulated for political and economic ends.

Meetings and discussions, as well as joint field visits by staff and fishers and educative activities such as theatre, documentaries and pamphlets helped the DoF to get a clearer picture of the perceptions and concerns of different stakeholders. During participatory training and learning sessions, fishers made it clear that if stakeholders were to be involved in managing the fishery and in working out acceptable rules that were fair to everyone, the DoF should make sure they were enforced.



Fish continue to stimulate a thriving transport business.
Photo: Nettie Aarnink

Towards co-management

The experience and information exchanged during these meetings showed the DoF that there were initiatives being taken at the local level that could be developed further in a process of community-based management. Better and more frequent communication would lead to more information about social practises, strategies and resource users and how they control,

exploit, monitor or protect the fishery. As a result of the conservation dialogue process some DoF staff began to change their attitude to stakeholders and became more prepared to involve them in the conservation effort. The Nchelenge Fisheries Coordinating Committee, a management platform that included the district council secretary, the manager of one of the freezing companies, DoF staff, fishers, traders, marketers and chiefs was set up with these co-management objectives in mind.

To some extent stakeholders in Mweru-Luapula agree that the fishery should be state-regulated, provided rules are fair, applied to all, and are enforced strictly and transparently. But they also have to meet their daily needs for food and cash. Customary and social obligations have to be honoured. For many fishing families the need for short-term security may outweigh any sense of obligation to keep to externally imposed regulation that promise to protect future fishery resources but which clearly cannot be enforced.

Rethinking the balance

In Mweru-Luapula a weak DoF, a mixture of customary and statutory regulations and many, often conflicting stakeholder interests, encouraged stakeholders to ignore conservation measures. However, as the stakeholders meetings showed, there was a basis for developing a dialogue between the DoF and key stakeholders. The experience of the Nchelenge DoF has shown that in order to develop acceptable management strategies that balance the interests of local communities, commercial actors, and traditional and local authorities the DoF should:

- negotiate with all stakeholders to strike a balance between economic, social and ecological concerns
- increase its understanding of local perceptions and initiatives in management and monitoring.
- explore and monitor local ideas, strategies and initiatives. and understand how people at various levels cope with uncertainties or respond to new (external) developments.
- inform the Zambian government about initiatives for new policy, legislation and fishery management based on current trends.
- advocate an international, harmonised management framework with the Democratic Republic of the Congo, an issue strongly advocated by fisheries officers, fishers and local leaders in Zambia and the Congo.

If the DoF can maintain a fully participative approach to managing the Mweru-Luapula fishery, keep the confidence and trust of key stakeholders and receive adequate support from central government, it may be able to succeed in developing conservation measures that provide security for local fishermen and, at the same time, create opportunities for a well-regulated exploitation of the fishery potential of the lake.

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Less influence means more work for women. Photo: Ramesh Sharma

Accessing livelihoods through shared farming

Seema Tripathi and Shiraz Wajih

In eastern Uttar Pradesh, more than 90 percent of the economy is based on primary production. The area has a high population density with some 1200 persons per square km. Land is divided each generation between the sons of the family and this has led to very high land fragmentation. The average land holding is now extremely small and around 70 percent of the families have access to less than 0.4 ha. This includes the 10-15 percent of families who are landless and work as agricultural labourers, cattle rearers, or as wage labourers in nearby towns.

This article is based on a study conducted in some villages in Gorakhpur district where the Gorakhpur Environmental Action Group (GEAG) is active. However, it reflects the general situation in eastern Uttar Pradesh. In the villages studied 60 percent of the land holdings are smaller than 1ha and farmers with larger holdings are considered to be better off. Only about 5 percent of farmers own more than 2 ha of land and this, in combination with other sources of income through employment or running small businesses, makes them relatively wealthy.

Land reforms have not helped much in this area. Laws such as the *Land Ceiling Act* that limits the amount of land that can be held by one individual, have only benefited small farmers in those areas where there are land holdings of more than 10-15 ha available for redistribution.

Livelihoods in the area are largely dependent on land-based activities, and opportunities continue to shrink as population and land fragmentation increases. The adoption of high input agriculture, including the use of hybrid seeds and agrochemicals, has led to increased costs and a reduction in crop diversity. This means that the economic margins in farming are becoming very small.

Markets and government purchase centres give priority to larger quantities of produce, which also disadvantages small producers both in terms of sale and price. As a result many small farmers often have no option but to migrate to the city.

Increasing labour costs and decreasing gains have also created problems for larger farmers. Absentee landlords who live and work outside the region, large landowners and families with older or physically less able members are not able to manage their own farms. Nevertheless, they want their land to be used and if possible to receive some income or products - food, fodder or fuel - from their fields. At the same time, there are a large number of smaller and landless farmers who have agricultural skills, but no way of earning a livelihood.

These two groups of people have developed a tradition of sharing their resources for mutual benefit. Where the resource base is shrinking this is a considerable help to resource-poor farmers. Share cropping has become a viable and acceptable mechanism for generating income for deprived communities.

Sharing resources

The history of present share cropping arrangements can be traced to the Zamindari abolition days in the 1950s. During this time, land titles and the right to transfer land was handed over to farmers. This changed the nature of negotiations as far as land use and payment of revenue was concerned. Previously, farmers (“*asami*”) paid the revenue to collectors (“*zamindari*”) for the use of land. Today, share cropping arrangements are agreed between farmers themselves. There has been no significant change in land ownership in the area since then, although hierarchical divisions (land being split between sons) and land consolidation (small plots belonging to one holder being brought together to create larger areas) have continued.

Currently, approximately 30 percent of the agricultural land in the villages studied was being worked under share cropping agreements. Some 45 percent of the smaller and resource poor farmers depend on share cropping for their livelihoods (see Figure 1).

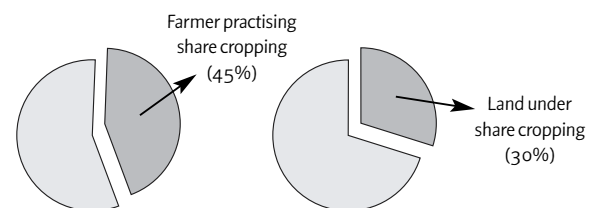


Figure 1: Percentage of farmers practising share cropping and land under share cropping in the study villages

There are three main kinds of share cropping systems:

Adhiya

Land is cultivated by resource-poor farmers who share inputs and outputs with the landowner on a 50-50 basis. In this system, the landowner provides land and one or more of inputs (oxen, labour, fertiliser, and seed). The produce is shared equally. This is the most common practise in the area and causes very little conflict. This arrangement is also common amongst farmers with equal status.

Honda

In this system, the land is hired on fixed terms by a resource-poor farmer. The fixed terms include the type of crop to be grown and how much of the harvest should be used to pay for the land. The landowner only supplies the land. All other inputs are provided by the share cropper. In some cases, the land owner provides a loan in kind (fertilisers and seed) or cash. This loan has to be repaid in addition to the share of the harvest agreed upon. At present, as share cropping becomes more common, landless people have started to compete for these arrangements. Under *Honda*, the element of exploitation is stronger, as the share cropper is responsible for any loss or damage caused by rainfall or other natural disasters. More conflicts occur under these arrangements.



Share croppers harvesting a field, Gorakhpur district.

Photo: Ramesh Sharma

Rehan

In this arrangement, land is leased at an agreed price for an average period of one to three years by a resource-poor farmer or group of farmers. The amount of cash involved in this system is relatively high and normally cash crops are grown on this type of land.

Other arrangements

In addition to crop-based sharing arrangements, resource poor farmers rear cattle - but more often pigs and goats - on a shared basis. The farmer cares for the animal(s) and also provides them with fodder. Offspring from these animals is shared on a 50-50 basis. Similar sharing arrangement also exists for fruit trees, where the resource poor farmer takes the tree at an agreed price, looks after it and harvests and sells the fruit. The income generated is shared between the owner and the farmer in accordance with the agreement between them.

Access and control

Share cropping mechanisms have evolved around the principal of mutual interest. The involvement of both partners can be seen in different farm activities. Table 1 provides an overview of the power relationship between farmers and landlords in share

cropping situations. The column "Influence" shows who has a say in decision making, and the column "Control" indicates who has the final word. For example, when decisions about the choice of variety have to be made farmers and landowners discuss this together. However, if there is a difference of opinion it is the landowner who decides.

The preferred crops for share cropping are paddy, wheat, sugar cane, maize, groundnuts and vegetables. The landowner and the farmer usually have different preferences about which crop to grow. Labour intensive cash crops are generally preferred by the landowner, whereas farmers usually prefer crops that provide safer returns and require less labour. Share cropping arrangements are mostly agreed between a male farmer and the landowner. This means that women involved in working these fields have even less influence on decision making than is normally the case in family farming. For them, share cropping usually means more work.

The agreement between landowner and share cropper is bilateral and in a conflict situation, decisions are controlled by the land owner. However, as the system of share cropping has become more prevalent and socially accepted, generally agreed and uniform rules have emerged. The land owner is morally bound to adhere to these rules. However, there is nothing that can stop landowners from taking other decisions. If a conflict of interests arises, resource poor farmers are at a disadvantage. However, in the absence of other viable livelihood options, the system of share cropping provides large numbers of resource poor farmers with access to a livelihood.

Effects on farming systems

The crops grown on shared land and farmers' own land do not differ very much. However, on closer inspection it becomes clear that farmers give priority to their own land when implementing LEISA techniques. GEAG has been dealing with both types of land and has found that it is on farmers' own land that effective LEISA models have been developed. Farmers incorporate organic compost and bio-fertilisers and practise principals of diversification on their own land because these practises ensure long-term benefits from the extra labour and precious organic inputs invested.

Conclusion

In the prevailing situation of landlessness and a complete lack of alternative livelihood options in the villages, the shared farming system has brought land controlled by comparatively better-off farmers who are unable to farm it fully back into agricultural production. More importantly, although such arrangements can be exploitative, they provide a source of livelihood to significant numbers of people.

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Table 1: Influence of landowners and farmers on different farm activities

Activities	Influence	Control
Choice of variety	landowners, farmers	landowners (sometimes farmers)
Use of fertiliser	farmers	farmers (sometimes landowners)
Use of pesticides	landowners, farmers	landowners (sometimes farmers)
Irrigation	farmers	farmers (sometimes landowners)
Type of crop	landowners (sometimes farmers)	landowners
Type of products produced	landowners, farmers	landowners, farmers
Decisions on labour and other investments	farmers (sometimes landowners)	landowners (sometimes farmers)

Access denied: the Brazilian land issue

Luc Vankrunkelsven

From the time the Portuguese established themselves in Brazil in the sixteenth century, the country has been ruled by an economic elite whose power lies in land. A major piece of legislation enacted in 1850 - the *Lei da Terra* - recognises two forms of land use in Brazil: *propriedade* (possession) and *posse* (right of use or usufruct).

Lei da Terra defined land in capitalistic terms as a commodity to be bought and sold, making it possible for a small minority to establish control over the countryside. As a result, when slavery was abolished and impoverished immigrants started to enter the country in the late nineteenth century, most of them could only claim users' rights to land. Known as *posseiros* or "farmers without papers" their heirs still depend on usufructory rights granted by private and company landlords.

Green counter revolution

Demand for fair land redistribution has increased steadily in Brazil in recent decades. However, the military dictatorship (1964-1985) and the United States wanted no "communist-type" land reform. Instead they encouraged the Green Revolution - a counter revolutionary answer to the cry for justice. Super seeds, pesticides and large subsidies were made available and resulted in a new gold - soya. But family farms drawn into soya monoculture were unable to compete with the large estates. *Posseiros*, without papers and rights were driven from their farms and joined the hundreds of thousands of farm labourers who, having lost their jobs because of mechanisation, joined the massive exodus to the cities.

Churches and resistance

During the military dictatorship the churches were the only places where people could organise and many civil society movements emerged from the grassroots of the Christian community. Amongst these was the trade union CUT (*Central Unica dos trabalhadores*) and the PT (*Partido dos trabalhadores*) - both established by the present socialist President of Brazil Luiz Inácio Lula da Silva - as well as the *Comissao Pastrol da Terra* (CPT), *Movimento dos Trabalhadores Rurais sem Terra* (MST), women's organisations and human rights groups. The CPT, CUT and MST were particularly important actors in agricultural politics.

The organisations involved in land issues such as the CPT, CUT and MST support each others efforts. CPT is a service of the Catholic Church. It helps farmers and farm labourers as well as the urban poor and their organisations in their struggle to hold on to or acquire land. In some of the provinces where the MST is less strong CPT organises land occupations.

The trade union CUT works with farmers, farm labourers and urban labourers. Since 2002, several alliances such as *Federação dos Trabalhadores da Agricultura Familiar da Região Sul* (*Fetraf-sul/CUT*) have been formed. CUT has established a number of cooperatives on *assentamentos* (redivided land), particularly in *Mato Grosso do Sul*, the north and the north-east.

One of the organisations most specialised in the fight against unfair concentrations of land is the MST. MST has a strong international reputation and this status is reflected in its website which is available in six languages. Since the late 1990s, MST has broadened its perspective to include agroecological issues.

Land reform through the market

In 1998, then-president Fernando Henrique Cardoso launched "land reform through the market". With financial support from the World Bank, local banks provided money to farmers so they could buy land from estate owners. Farmers, in fact, were paying for the land reform which was their right and richly compensating estate owners at the same time. The effect of Cardoso's programme on small farmers was disastrous: land prices rose and many went bankrupt, unable to pay back their loans. Even so, in this way, 80 000 farmers gained access to land. Cardoso's approach raised considerable discussion in Brazil and within the landless movement. Lack of credit eventually put an end to this neo-liberal approach to the land problem.

Lula and land reform

Since January 2003, when President Lula came to power, there has been more hope of a strong land redistribution policy. Lula is closely associated with the fight for land reforms. One of the priorities of his government is the *Zero Hunger Programme* in which the family agricultural model has been given a central place. The question for all those concerned with the politics of land reform in Brazil is whether "Lula" will be able to stay out of the landowners "clutches".

For its part the landless movement currently follows a double strategy: it puts government under pressure by encouraging land occupation yet it is also ready to engage in dialogue. On 2 July 2003, the President met several representatives of MST. These amicable discussions were not greeted with enthusiasm by the country's estate owners.

Future direction

The land issue continues to be a life or death struggle. In the first 6 months of 2003 alone, 31 farmers have been murdered. Whilst the landless movement demands that a national plan for land reform be drawn up which would ensure one million farm families will receive land rights by 2006 and an immediate solution is found to the problem of the 120 000 farm families living in camps, landowners are organising themselves to hold on to their (il)legal possessions. In this highly volatile situation it is difficult to predict the direction land reform will take in Brazil.

A full version of this article is available from ILEIA.

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A demonstration for the right to land. Photo: Movimento dos Trabalhadores Rurais Sem Terra (MST)

More than access to land: MST in Brazil

Ciro Eduardo Corrêa

Brazil is a continent in itself and has abundant natural resources. The potential that lies in its water, soil, biodiversity, coastline, diverse climate and mineral wealth is to be envied. It has one of the world's largest river basins and its people come from many different ethnic and cultural backgrounds. It is a rich and fertile country.

Yet Brazilians live in conditions that compare to the most needy in the world. Incomes are heavily concentrated. The richest 10 percent take 48 percent of annual income leaving the poorest 20 percent to share just 2 percent between them. Today, 23 million Brazilians live below the poverty line, and 52 million cannot get enough food for a balanced diet.

Analysis

The social and environmental degradation prevalent throughout Brazil is rooted in the way agriculture has developed in the country. Agriculture has always been subordinate to the logic of foreign trade, its profits generated by exploiting natural resources and the labour of the Brazilian poor. Since the time of European colonisation, extraction and later the extensive productions of export agriculture for the European market have been the main priorities.

This pattern has been sustained in recent years by advanced technological interventions. The "modernisation of agriculture" has enabled Brazil to maintain its present agricultural export strategy, which is based on extensive *latifundio* (estate) land-holding patterns, export-oriented commodity production and sub-human labour relations. In Brazil today one percent of rural household own 47 percent of the country farmland while more than 12 million people live in landless destitution. At the same time 166 million hectares of arable land lies unused in large estates. Small farmers make up 80 percent of the countries rural

population yet they own less than 18 percent of the available farming land.

A drastic reduction in the demand for farm labour has intensified poverty. In the last ten years more that five million jobs have been eliminated by mechanisation in the sugar plantations alone. In 1984, hundreds of thousands of hectares of agricultural land was lost through the creation of the Itaipu dam, the largest dam in the world. In the cotton and coffee plantations 65 percent of the labour force have no formal working papers and work 14-16 hours for US\$2.00 a day. As a result there is a constant exodus from the countryside to the already overcrowded cities. In the last 30 years 20 million people have left the rural areas for the towns. In 1903, when Brazil's total population numbered some 17.4 million 80 percent of its population lived in the rural areas. A hundred years later Brazil has a population of 175 million people and 80 percent live in the overcrowded urban areas. Staple food is scarce and although agribusiness ensures that Brazil has a favourable export surplus, it still imports such basic items as beans, rice, and wheat. In 1990, Brazil imported US\$1 billion worth of basic foodstuffs. Today, it imports US\$10 billion.

Agrarian reform is fundamental to the social, economic and political transformation of Brazil and there is an urgent need for an extensive and large-scale re-distribution of land. The political and economic geography of the country needs to be changed and land given a real social function.

Organising the landless

The struggle for land has dominated Brazil's history. The *Canudos* resistance movement and the *Contestado* war in the late 1800s and the Peasant Leagues and MASTER movement of landless farmers from in the 1950s and 1960s are typical of actions taken by rural workers to access land and improve their working and living conditions. *Movimento dos Trabalhadores Rurais sem Terra* (MST) is part of this tradition.

MST is one of 35 people's organisations fighting to get agrarian reform onto the political agenda. Established in 1984, it is active in 23 of Brazil's 27 States. More than 1.5 million people are involved in the MST, and it has managed to provide access to land for some 300 000 families who now live in 1600 settlements. Another 80 000 claimants are still living in camps while negotiating the legality of their claims. The process of land occupation and the struggle to secure tenure rights is a complex, hazardous and sometimes violent process. MST supports groups in occupying land and in their efforts to negotiate and formalise legal ownership. When claims are recognised, MST works with the new settlers to establish communities in which agroecological and social reform guide development.

The wider activities of MST touch all aspects of community life including education, health, cultural identity, environmental education, leisure, sports and jobs. As an organisation MST tries to introduce men and women to a fairer, more fraternal and egalitarian way of life. Over the years it has developed its own methods and ways to help people organise their struggle and while winning land is important, its wider objectives are to initiate a process of agrarian reform that will not only re-organise the land tenure but also contribute to deeper transformations in the society as a whole.

Taking care of nature

MST's struggle for agrarian reform is, in fact, a struggle to preserve life and nature. MST has always tried to increase the awareness of landless workers of the important role they play in preserving nature. In general, the areas chosen for agrarian reform tend to be areas that have been devastated and degraded by inappropriate and exploitative estate management. In MST settlements, the major challenge has, therefore, been to regenerate the environment and ensure that there is enough environmental education to encourage sustainable practises. Considerable effort is invested in elaborating ways to sensitise and educate families to the need to promote reforestation, build seed beds and nurseries for native and exotic trees, preserve the river banks and springs, build ecological corridors, work towards the collective management of forests and develop settlement patterns that encourage soil and water conservation.

With a growing awareness of the importance of agroecology, MST has also introduced new production and consumption patterns into its settlements. Healthy, pesticide- and chemical-free food is cultivated, a wide diversity of plant life is encouraged, and animal varieties that are best adapted to local conditions are reared and bred. In addition MST is involved in strengthening the local economy, ensuring that settlers do not become dependent on any single product and trying to establish links to wider regional markets where there are other potential sources of income.

Activities

Since 1997, MST has accumulated much experience in agroecology and forestry. Many settlements produce and market organic rice, soybeans, peanuts, cassava, corn, cashews, coffee, bananas, peaches, chickens and pigs.

Together with other social movements in the *International Via Campesina*, the MST is involved in the *Campaign for Seeds as the Heritage of Peoples in the Service of Humankind*. The objective of this campaign is to confront the global process of privatising biodiversity in which a few major trans-nationals are taking over life on the planet and turning nature into a commodity. MST has undertaken activities to recover local seed varieties focusing on corn, rice and beans, crops that are basic to the food security and

animal husbandry of its settlements. In the municipality of *São Miguel do Oeste*, in the southern State of Santa Catarina, for example, 48 varieties of corn have been recovered and an additional 18 corn varieties and five bean varieties are being bred. During the last harvest, 80 metric tons of seed was collected. This was enough to secure supplies for local families and provided a surplus for further distribution.

For several years, MST has been building up the agroecological production of horticultural seeds through BIONATUR and today they are the only suppliers in Brazil producing and distributing such seeds. BIONATUR grew out of the need to confront the monopoly that multinationals have established over the seed market. It was first established in Rio Grande do Sul, a state in the far south of the country and subsequently expanded to other regions of Brazil. BIONATUR works exclusively with horticultural varieties. There are no hybrids. The result of these activities has been to enhance the regional distribution of seed and today these are being cultivated as near as possible to the regions in which they were obtained. In 2002, BIONATUR produced and marketed seven tons of seeds from 32 different varieties. By 2008, it expects to be marketing 15 tons of seed from 56 different varieties.

Another important activity has been the biodiversity management project in the settlements of *Pontal do Paranapanema* in the south-eastern State of São Paulo. Here MST enabled gene flow between three areas of native forests classified as Interior Atlantic Forest. These forests cover 33 000 hectares, 400 hectares and 300 hectares respectively and are home to many small farmers. The project consisted of planting exotic and native species in the areas belonging to farming settlements in order to enhance gene exchanges amongst the various species of animals and plants in the three forest areas. Over time a migratory corridor for animal species (in particular birds and insects) has been created and the transmission of genetic material from the native trees that make up these ecosystems has been greatly facilitated. From a social perspective, these islands of biodiversity – which also contain multiple-use agroforestry groves – will support the improvement and diversification of farming activities in rural allotments located between the forest fragments.

In the same region, Ribeirão Bonito, some 123 families are involved in a project known as *Abraço Verde* – the Green Embrace. The main aim of this project is to plant a belt of native and exotic trees between the forest and the areas used by farmers for crop and cattle production in order to halt degradation. From an economic and social point of view, the sustained exploitation of the Green Embrace has provided a new source of income for these rural communities, and has helped to reduce conflicts over access to fauna and flora.

Challenges

The MST faces many challenges. One major difficulty is that agrarian reform is still seen as a way to compensate the landless and to relieve social tensions, rather than as policy to restructure land tenure. Therefore, MST has adopted a broad agenda in which it commits itself to lobbying for public policies that reflect not only a concern for the value of rural spaces and the preservation of the landscape but also guarantees the well-being and rights to land of those who live in the countryside. ■

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Resolving resource conflicts around Sherkolle Refugee Camp

Alemayehu Abebe, Solomon Hussien,
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At the present time population movements have taken on unprecedented proportions. The total number of refugees alone has reached over 20 million. The majority of refugees tend to find themselves in places that are environmentally fragile, and where resources are limited. Displaced populations, like other marginalised groups, are forced to rely directly on local natural resources to sustain themselves in the short term. Poverty, the struggle to build sustainable livelihoods and lack of control over resources characterise their experience. Their daily struggle to make ends meet does not promote sustainable management. This situation often brings refugees into conflict with local populations over essential resources.

A major problem for the many refugee women living in camps all over the world is access to fuelwood. Options to ease this burden seem very limited, yet fuel is a primary household need and lack of access directly affects a household's poverty status and food security.

different ethnic tribes such as Mabaan, Funj, and Uduk who have fled fighting and insecurity in the Blue Nile province of the Sudan. The camp is located in a sparsely populated area in western Ethiopia around 50 km from the Ethiopian-Sudanese border. The area is hilly and covered with patches of deciduous and bamboo forests. The local inhabitants are the Berta communities who depend mainly on agriculture and a little trade. Berta cattle have been decimated by the tsetse fly and as a result they can no longer rely on animal traction, which has a serious impact on their agriculture.

The Sherkolle camp operates under the concept of partial self-sufficiency, meaning that 75 percent of the food needs of the refugees are covered by the World Food Programme. The refugees are expected to make up the remaining 25 percent by engaging in backyard farming on small 20 by 20 metre plots within the camp boundaries, and by engaging in a variety of income generating activities.

In 2001, ZOA Refugee Care undertook an assessment into access and control over natural resources and found high levels of potential conflict between refugees and locals in accessing fuelwood. Actual and potential levels of conflict between refugees and hosts differed from one fuelwood collection area to another, depending on the distance from the area to the nearest Berta village. High levels of conflicting interest were found in the area directly bordering the refugee camp, as the camp is set amidst local villages and the Berta did not like to see the refugees collecting fuelwood in the forests around their villages.

Sherkolle camp is organised in six zones with a different ethnic group living in each zone. A resource map drawn by the refugees in February 2001 indicated that each zone in the camp had its own fuelwood collection area. The study showed that it took the different tribes between four to eight hours for a round trip to collect fuelwood, a four-fold increase since the camp was established in 1997.

Refugees, especially older women, negotiated access to fuelwood resources in the direct vicinity of the camp by working for locals or by collecting fuelwood for them.

Collecting fuelwood in areas further away from Berta villages met with lower resistance from the Berta. As travel times to these areas were much longer and the trips more demanding, they were mainly undertaken by younger refugee women. Forest guards, local Berta men employed by the local government and funded by the UNHCR to control the fuelwood collection, imposed major restrictions in these areas. Refugees were not allowed to use axes and were to collect dry wood only. If axe marks were found on the wood it would be confiscated. Paying small amounts of money to the guards or, in some instances, giving in to their demands for sexual favours would allow the women to return to the camp with their fuelwood.

The problems of unequal access to and control over fuelwood resources, as reflected in the statements made by refugee and local women, is presented in Table 1.

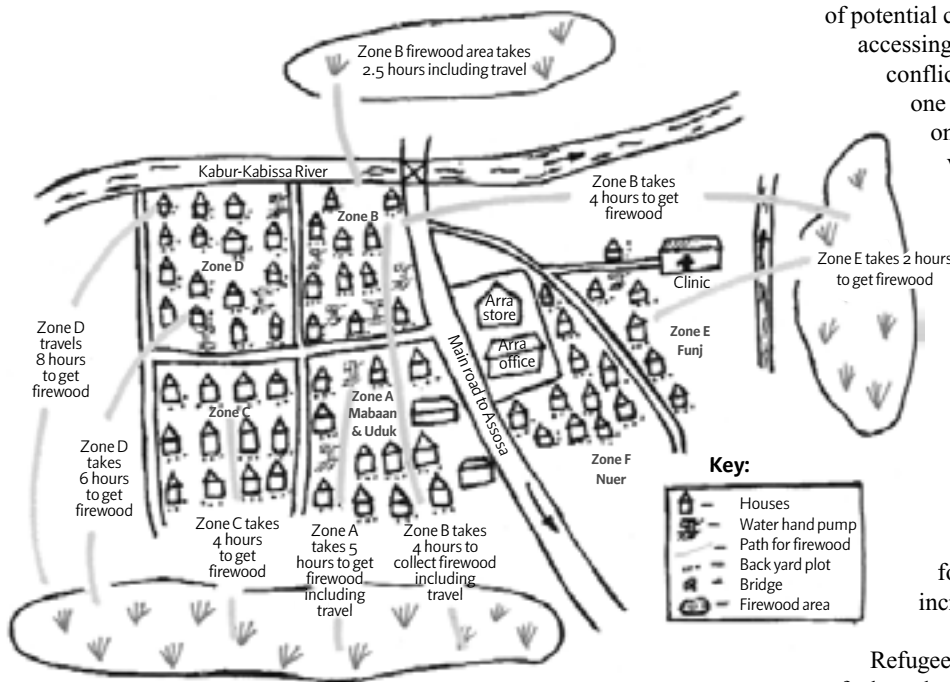


Figure 1: Resource map drafted by refugees in February 2001

So far, the United Nations High Commissioner for Refugees (UNHCR) and its government counterparts have paid little attention to the issue of access to and control over resources when locating refugee camps. Some NGOs however, are tackling these issues. In Sudanese refugee camps in Western Ethiopia, for example, ZOA Refugee Care, a Dutch international NGO working worldwide with refugees, internally displaced and disaster victims, has been working together with refugees and locals to jointly manage the natural resources on which they both depend. One of these camps is Sherkolle.

Sherkolle

Sherkolle is a relatively small refugee camp, established in 1997, which hosts around 16 000 Sudanese refugees from

Table 1: Complaints of refugee and local fuel wood collectors

	Refugee (%) (n=80)	Host (%) (n=91)
It's demanding		
'It makes us very tired, it's heavy work, we suffer from the hot sun'	8.8	76.9
'Getting weak, makes me sick, body ache'	1.3	38.5
'Getting thirsty/hungry'	11.3	3.3
'It's far'	67.5	58.2
'It's difficult to penetrate the forest'	2.5	0
'We face a fuel wood shortage'	0	23.1
It's dangerous		
'I am hurting myself'	13.8	54.9
'Since we are forbidden to use an axe we have to use our hands, stones or sticks'	13.8	0
'We are afraid of the wild/dangerous animals in the forest like lions and snakes'	61.3	29.7
The system works against us		
'My axe is or will be confiscated by forest guards or the local people'	51.3	0
'I am forbidden to collect fresh fuel wood'	2.5	0
'We are caught up by the fire set by the locals'	3.8	0
'We are being checked, or send away, by the forest guards – wood at times is confiscated'	25.0	0
'I risk getting punished by the forest guards or locals, put in prison or being beaten'	2.5	0
'Fight with the locals or guards, chased out, threatened by guns'	42.5	0
'Locals ask us why we don't return to our homeland, they insult us, quarrel with us'	28.8	0
'We are being asked for money, work for locals, share our wood, being used as slaves'	27.5	0
'Being raped, asked to be their wife, have sex with men in the forest'	5.0	0

Fuelwood collection is seen as a very demanding activity by both refugee and local women. In 2001, refugee women spent an average of 28 hours a week gathering fuelwood and local women a surprising 27 hours a week, though the latter group combined it with some agricultural activities. Since the arrival of the refugees, Berta women say they find it harder to collect fuelwood. A quarter of them said they were experiencing a fuelwood shortage. Refugees consider fuelwood collection to be a dangerous business. They have to use their hands, stones and sticks to break off and split wood. Berta women complained they found it difficult to use their axes. Many of these had been acquired recently after being confiscated from refugees. Refugee women collect in far-away areas and face wild animals more often than the local women. They feel very strongly that 'the system' is against them. Restrictions are imposed by forest guards, local people (mainly men) or both.

The findings of the assessment highlighted that the system of access to and control over resources has resulted in increasing frustration and tension. The local Berta were becoming increasingly concerned about the loss of forest cover in their area. Not only was fuelwood collection becoming more difficult but their livelihoods were becoming less secure. Normally their grain supplies are sufficient to cover a six to nine month period only. After these supplies are used up they depend heavily on the wild foods they find in the forests.

The refugees for their part were frustrated and agitated by what they saw as an unfair system of resource control. It seemed just a matter of time before serious conflict would erupt. The refugees knew that this might threaten their stay at the camp and they did not look forward to returning to insecurity at home. The UNHCR and the Ethiopian government agency responsible for managing the camp only discussed issues related to the camp and its inhabitants at a regional level. Access to and control over resources was not very high on their agenda.

Only a comprehensive, community-based approach involving host and refugee community representatives, including women, could ease the tension. Fundamental for the success of such an approach would be the creation of a forum that offered a non-threatening environment, where refugees and local leaders and

representatives could share and discuss their problems and start thinking about ways to encourage positive change.

A programme for change

In consultation with the local and refugee communities, ZOA Refugee Care designed the Agri-Environmental Education and Protection programme. Assessments taking into account the perspectives of the refugees and the Berta, the local and regional government as well as the perspective of UNHCR and its government counterpart have created the basis for change. The programme is made up of the following four interrelated components:

Awareness

First, the programme makes refugees aware that the agroecology of the Sherkolle camp is different to that of their home areas. The fact that the camp is located amongst Berta villages creates an extra challenge as far as maintaining the natural resource base is concerned. Local people are made aware that indigenous and context-specific knowledge and expertise in managing natural resources is being permanently lost. For example, the Berta use fire to clear their lands. A generation ago the use of fire was subject to a complex set of rules, regulations and sanctions. Now fires often burn out of control for weeks during the dry season. Not only do these fires expose hillsides to erosion because fragile vegetation is burned, they also result in a gradual loss of biodiversity reducing both the variety and availability of wild food plants. The Berta have noticed this because wild foods form an important part of their livelihood security.

The programme provides context-specific agri-environmental education, developed in consultation with the communities. It does so via a number of avenues, including community meetings and seminars, group discussions, field 'studies', cultural awareness programmes, environmental education at primary and secondary schools and setting up school and debating clubs. Well-respected Berta and refugees are trained as facilitators to guide the dialogue on environmental and livelihood issues within their communities. Refugee and local facilitators meet once a week and they receive a one-week refresher course every three months. They do not usually work together although sometimes they go together on visits to familiarise themselves with each other's situation.

Establishing structures

A key element of the project has been the establishment of Environmental Working Groups (EWGs). The aim of the EWGs is to enable refugee and host communities to develop rules and regulations for access to natural resources, to work out natural resource management plans, and to empower community members who have the skills and interest to further develop the resources available in the area. Harmonising their different perspectives has resulted in a set of regulations that are, generally speaking, well observed by both the local Berta and the different refugee groups. Part of the work of the EWG is to make sure that people adhere to these rules and that the sanctions agreed upon are applied. The EWGs are also responsible for the progress of the natural resource management plan in their area.

Demonstrating appropriate practises

Small farmer field schools have been established and leading farmers selected and trained to demonstrate a range of appropriate sustainable resource management practises. They address the demand as well as the supply side of the fuelwood including issues such as fuel-efficient stoves, stove and fire management, mud block construction, community-managed nurseries, multi-purpose live fences, and small-scale fuel and construction wood plantations. A joint irrigation scheme has also been set-up and refugee and host farmers learn to work together to produce vegetables year round. The farmer field schools and the irrigation scheme are the responsibility of the EWGs, while ZOA provides technical expertise and some inputs.

Indigenous resource management systems

Between 1975-1991, the former Ethiopian government disengaged and replaced local leadership and management structures by a highly bureaucratic, top-down and sectorised government system. The changes were so dramatic that indigenous forest resource management systems suffered greatly. At present, the project advocates that government policies recognise and accommodate the most important elements of these indigenous resource management systems. A positive development is that the present Ethiopian government has acknowledged the potential role of community-based organisations. The EWGs fit well within that category.

Environmental Working Groups

The EWGs form the heart of the programme. They are community-based organisations that develop natural resource management plans with limited outside facilitation and assistance. Awareness-raising about resource base degradation and the demonstration of sustainable resource management practises are central to the EWGs. The older refugees in particular supported the set-up of EWGs because they recognised the approach from their own traditional resource management practises and were well aware of the need for improved management in their present environment. They were also strongly motivated by the fact that the EWGs provided a way of improving relationships with their hosts and they knew from past experience that poor relationships could compromise their stay. The younger refugees showed keen interest in more appropriate practises because they regarded them as 'modern' and representing 'a way forward'. The Berta saw the EWGs as a vehicle through which they could make their complaints and concerns about the collection of fuelwood by refugees heard. They also saw that the EWG could help them regain control over their resources, which they had lost under the former Ethiopian government.

Communities were asked to suggest candidates for the EWGs who were well respected and trusted. Those in leadership

positions, such as sheiks, chiefs and church elders either took part in the EWGs themselves or publicly expressed support for candidates. ZOA's request to have at least two women selected for the EWGs met with surprise and lively discussion. In the end it proved much more difficult for the Berta than for the Sudanese refugees to have women selected for the EWGs.

Environmental Working Groups were established at three different levels. Each higher level has more decision-making, monitoring and sanctioning powers. EWGs at zonal level (in case of the refugees) or village level (the local Berta) consist of six members. They meet each week to discuss on-going issues and the progress of activities on agreed natural resource management plans. The refugee and Berta EWGs meet together twice a month to inform and discuss issues and activities. The EWGs at this level delegate individuals to represent them in the EWG at camp level. At this level the UNHCR, its government counterpart and aid agencies are also represented and overriding issues at the camp and its surroundings are discussed. The EWG at the third and highest level brings together representatives of the EWG at camp level, Berta EWGs established in villages further away from the camp and provincial authorities.

The way forward

So far the experience with Environmental Working Groups in and around Sherkolle refugee camp has been very encouraging. Awareness raising and the demonstration of appropriate practises and techniques have become more and more under the control and responsibility of the EWGs themselves.

New technologies that save fuelwood or develop fuelwood resources are being adopted. Concerns of women related to the collection of fuelwood are now taken seriously and are being addressed, for example by agreeing on safe access paths to fuel collection areas for refugee women. Rules and regulations have been agreed upon to prevent tree cutting and to access fuelwood, grazing lands and water sources. A situation that had the potential to escalate into serious conflict has been defused. The EWGs are maturing and are increasingly seen by the communities as important instruments in sustainable natural resource management. As a sign of their increasing confidence, the EWGs themselves have raised issues related to indigenous wild food plants, natural medicines and the fires that destroy many herbs and plants with medicinal properties, and the question of who can collect which non-wood forest products and when.

EWGs, nevertheless, still depend on outside assistance for facilitation and inputs. In order to be more sustainable, they need to concentrate on low external inputs and find ways of generating some income to finance their activities. However, the biggest challenge is now for the Berta EWGs to be recognised by the regional government as community based organisations that can play an important role in managing and developing natural resources. In trying to re-create indigenous resource management systems based on local reality they are taking into account environmental conditions as well as the social and political context. When it comes to the refugees, the challenge is not only to address current issues through the EWG, but to build up the interest and capacity that will enable refugees to set up EWGs when they return to their own areas to facilitate their rehabilitation and reintegration. ■

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Forest access: policy and reality in Kafa, Ethiopia

Yihewew Zewdie

Kafa is a predominantly highland region in southwest Ethiopia. About one third of Kafa and the surrounding area is covered by tropical rain forest comprising a rich mixture of species arranged in three or more stories. The forest ecosystem makes an important contribution to the livelihoods of people in the area in a variety of ways. Tree species with several high horizontal branches, for example, are ideal for hanging cylindrical log beehives - a widespread local bee-keeping practise. The forest provides shade for coffee and a variety of commercially valuable spices that thrive when protected from frost and direct sunlight. The forests also supply rural communities with fuelwood and timber, which they use both for household consumption and for sale. There is urban demand for both wood and non-wood forest products such as honey, coffee, and spices.

This article draws on research and case studies from six forest villages in Gimbo *Woreda* (district) of Kafa Zone (Figure 1). In the case study areas, the level of income from non-wood forest products varies from household to household but averages at least a third of the annual cash income of the rural households. This income may not be sustainable due to heavy deforestation as timber production is sometimes excessive. However, it is worth noting that the considerable effort local people make to secure access to forest resources is a direct consequence of the importance of these resources to their household economy.

Land reform and access to forests

During the late nineteenth century, Ethiopia's central government expanded to control the Kafa region, replacing the Kafa kings as the dominant authority. Land and forests were allocated to local notables and wealthy and powerful outsiders. The latter were interested in extracting some of the more commercially valuable forest goods, such as coffee. The majority of the local population became tenants, who could only access forest resources through a variety of tenancy arrangements.

In March 1975, the new military government of Ethiopia (known as the *Derg*) that ruled the country between 1974 and 1991, issued a land reform proclamation that brought all land resources in Ethiopia – including farmland, grazing areas, and forest land – under the direct administration of the State. As part of the reform, grassroots level Peasant Associations (PAs) were established.

One of the tasks of the PAs was to implement the land reform and to solve land conflicts. As the land reform proclamation was decreed without adequate preparations, it came to be implemented in a hasty and haphazard way, leaving considerable space for local interpretation. In most areas, the land reform proclamation was, therefore, implemented in ways compatible with local notions of fairness and entitlement.

The involvement of the PAs in controlling access to forest resources varied. In some of the case study areas, the PA authorities saw the land reform as a means of redistributing agricultural land only. The absence of specific directives on the utilisation of forests reinforced this view - the law dealing with forest resources came into being only five years after the land

reform proclamation. The villagers in these communities continued to claim forest access through locally recognised customary channels. The principles informing customary forest access included geographical proximity to the resource, proven track record of use, and ancestral claim of ownership.

In other communities, where conflicts over local forest user rights threatened the smooth implementation of the land reform, the PA authorities intervened and distributed patches of forest to needy households as their respective bee-keeping and/or coffee collection domains, although this intervention was never included in the land reform.

Neither the PA-sanctioned forest access nor the forest utilisation through customary principles were formally recognised. In “official” government thinking, forest resources were basically expected to be preserved and passed on to future generations.

In March 1990, about a year before the *Derg* fell and the government changed, the *Derg* proclaimed a halt in land re-allocation. This was also taken as an order to the PA's to disengage from allocation of forest rights.



Figure 1: Map of the study areas in southwest Ethiopia

The current forest legislation

The post-*Derg* Ethiopian government (1991 – present) continued to support the state control of land resources. The current land law encourages the participation of private investment in agriculture and recognises the “holding right” of farmers to farmland. It is, however, silent regarding the natural forest from which most of the marketable forest goods are produced. The country's present forest proclamation has a strong element of forest protection, but does not spell out the villagers' rights to use the forest clearly. The proclamation makes timber processing by villagers an illegal undertaking, and introduces an element of uncertain legality to forest gathering operations such as bee-keeping and collection of wild coffee and spices. This is in direct conflict with traditional forest use practises.

The forest proclamation entrusts the Ministry of Agriculture with the tasks of controlling, protecting, and managing forest resources. The proclamation puts great faith in the role of ‘forest guards’, who are employees of the Ministry of Agriculture, to protect forests from fire hazards and forest use violations. In spite of these efforts, encroachment into natural forest areas is widely reported. Forest guards have neither the

incentives nor the organisational backing to hinder this trend. Not surprisingly, forest resources in highland Kafa continue to be seen and utilised as village commons. This complex situation is a consequence of a mismatch between government policy, implementation capacity and grassroots realities and the informal forest access mechanisms described below should be seen as instruments developed to secure forest livelihoods within the restrictions of the local socio-cultural environment.

Wejoo and Gogoo

In the present post-*Derg* period an increasing proportion of younger households have no *direct* forest access rights. Although traditional rights can be inherited, the prevailing population dynamics make it difficult for younger families to benefit from this arrangement. All the same, local people employ a number of informal mechanisms that enable the younger generation and other sections of the population to participate directly in the local forest economy.

One of these mechanisms is *Wejoo*. Under this system, parents grant their sons trees when they come of age so that they can gather forest products for themselves and their families, and also in anticipation of their continued support in forest and food farming activities. The other informal forest access mechanism is *Gogoo* (which literally means “equal share”), a sharecropping arrangement for forest goods. Both *Wejoo* and *Gogoo* are originally traditional practises; however, they rose to prominence in recent years as mechanisms of coping with a lack of institutionally recognised forest access mechanisms.

Gogoo is a much more widespread means of forest access than *Wejoo*. Its importance as a means of forest access can be explained in terms of three main factors:

Distribution of skills

The uneven distribution of skills in bee-keeping and lumber production means that some holders of tree rights need a share partner to realise the economic value of their forest resources. In honey production, for example, those who have direct access to tree resources seek the services of skilled partners in preparing and mounting beehives on the high branches of forest trees. Harvesting is a joint undertaking and the produce is divided equally. In wood processing, the processor takes two-thirds of the income from the planks produced, while the tree ‘owner’ receives the remaining one-third. Wood processing is an illegal activity, although the individuals involved are well known locally. Weak enforcement of forest laws combined with uncertainties concerning villagers’ continued use of natural forests has encouraged wood processing for short-term benefits, although it is an unsustainable practise.

Timing

The need for timely coffee collection among larger scale coffee growers also necessitates involvement in sharecropping. During the main harvest period (October – November) share tenants (the collectors) receive a third of the total quantity they pick. At the second coffee harvest, which mainly involves the collection of fallen coffee beans, share tenants receive half of the amount collected. Collection of fallen coffee beans is a time-consuming and a socially despised activity, which may be why the amount given to the share tenant is higher.

Stigma

There is a cultural stigma associated with the marketing of buckthorn and spices, but the increased commercialisation of these products has prompted right holders to opt for share cropping arrangements. For buckthorn, which is used as a condiment in the preparation of local alcoholic drinks, share

tenants are made responsible for selling the produce that the tree right holder has gathered, and the sale proceeds are divided equally. For spices (notably, Ethiopian cardamom – *Aframomum korarima*) the share tenant is responsible for both collection and marketing, as the tree right holder usually desires to dissociate completely from the sale of spices, a low status activity. The share tenant retains half of the sales proceeds and gives the other half to the right holder.

Gogoo has been identified in particular as an important means of securing access to forest resources for younger households who have no PA-allocated or customarily recognised bee-keeping domains. Moreover, the *Gogoo* arrangement has helped resource poor farmers, including women, to generate cash income that would otherwise have been difficult to come by.

The way forward

The forest access situation in highland Kafa shows a complex combination of state tenure and *de facto* private rights of use similar to the overlapping systems of tenure that exist in much of Sub-Saharan Africa. Local people have developed forest access arrangements that have reflected the changing realities. However, lack of official recognition of locally tailored forest access rights has contributed to tenure instability and encouraged a short-term mentality in the use of forest resources, for example through illicit timber production and wood processing. Reconciling the state’s position as an overall resource owner and the villagers’ concern for security of forest use rights is therefore an important issue.

Policy makers need to formally recognise the forest use rights of rural households, in a manner similar to the recognition of farmland. This might facilitate the development of village-level institutional norms that would challenge destructive forest uses. Sustainable forest management demands that ‘rights’ to use forest resources are accompanied by corresponding farmer ‘obligations’ in forest conservation. The forest law should, therefore, be re-oriented to support local organisational development and forest management, rather than a blanket policy of forest protection through the use of forest guards, as has hitherto been the case. These steps should be taken as preliminary measures aimed at stabilising local forest use at a sustainable level. At the same time, it is also important to address the inequalities in direct forest access between generations, through local-level consultative processes.

The interest that even non-tree right holders such as *Wejoo* beneficiaries and share tenants in NWFP activities - have in the local forest economy is an asset that has to be seized upon for enlisting the co-operation of villagers in bringing about sustainable forest management. Extension agents and other grassroots level field workers entrusted with the responsibility of advising farmers with improved agricultural practises and natural resource conservation should recognise the multiple tenure under which forest resources are utilised. In practise this includes recognising and consulting with beneficiaries and rights holders under informal access systems like *Wejoo* and *Gogoo*. ■

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Mahender Rautela: water volunteer

William Critchley, Marit Brommer and Girish Negi

Five years ago, at the age of 35, Mahender Rautela resigned from his private sector job in Delhi to come back to his home hamlet of Chhabisa, in the poor mountain state of Uttaranchal in northern India. He took up farming for an income - and dedicated himself to helping others in his spare time. Rautela joined a small group of existing part-time water volunteers. He wanted to help his community to cope with the increasing problem of water shortage. While other volunteers - elderly men - were already doing something towards the problem, Rautela felt that someone younger and more dynamic was needed to take charge of managing the water, and particularly to 'do justice to the shy ones'.



Rautela in an irrigated kitchen garden. Photo: William Critchley

Why the streams and springs have been drying up over the last 20 years or so in the region is another story: rainfall hasn't decreased, but water levels have gone down dramatically. Some observers point to the invasion of thirsty *Chir* pine trees in place of the original oak forest, some blame increased extraction of water by pipelines upstream for urban use, and yet others criticise poor land use practises. Whatever the reason, the stream in Chhabisa where children used to swim in summer is now a trickle. The irrigated area has fallen to less than 10 percent of what it was. In the driest months - when the *naulas* (step wells) have dried up, the villagers are solely dependent on the unreliable and limited supply from the government pipelines. In areas of water scarcity, no drop of water should be wasted - but dripping taps and broken pipelines are common features in Chhabisa and other neighbouring villages. Many families in the area have to do with less than 100 litres of household water per day - a recipe for disease and poverty.

Water volunteers are a phenomenon of the last 20 years, a response of society to the growing water shortage problem. Water volunteers are now characteristic of all villages in the region and there may be between three and five part-time volunteers in a typical settlement. Rautela has become the lead water volunteer in Chhabisa. Dedicated individuals step forward informally and spontaneously, and society then accepts them on the basis of their integrity and hard work. The role of water volunteer is not limited to a particular caste, they mediate for everyone. However, volunteers do tend to come from the better educated, better off groups. Rautela, of course, has worked in Delhi, and has a comfortable home overlooking the village fields. He speaks English, which is a rarity in Chhabisa.

But what precisely is the role of these water volunteers, and how are they accepted by the community? These are questions we put

to Rautela on the veranda of his cottage during the height of last summer. Vital of course is protection of water sources and outlets - step wells (*naulas*), springs (*dhara*) and pipelines. Yet what also became clear to us is that fair distribution and prudent use of limited water can make a big difference locally. So a water volunteer needs to keep his eye both 'upstream' - where the water comes from, and 'downstream' - where it is shared and used.

Rautela explains that in Chhabisa two water pipelines have been installed by the Government. The first of the two pipelines is now an ageing 40 year-old, and it is becoming increasingly unreliable. But the irony is that villagers are not permitted to 'interfere' with these, even when they break down. They are therefore continuously dependent on the slow reactions of government officials for help, which is often needed urgently. Rautela, with his fellow volunteers, now patrols the pipelines regularly for cracks in joints and dripping taps - walking, so to speak, where the shadow falls between the law and people's urgent needs. Not surprisingly, leaks are repaired quickly in Chhabisa. Rautela makes sure that this happens, even though he often needs to collect money from the villagers for tools and equipment. Officially this tends to go 'unnoticed'. The community appreciates it.

This begins to give us a clue to the character of a water volunteer. He (it is rarely a 'she' we discovered: it's basically considered to be a man's job) needs to tread with caution and sensitivity, bridging the gap between local society and government, while also helping to settle internal disputes. Conflict resolution between resource users, where common property resources are dwindling and populations are growing, is a concern worldwide. Such mediation is one key role of a water volunteer - but without the protection of an official position or the comfort of the salary that goes with it. The volunteer receives no tangible benefits. Strangely, this lack of 'officialdom' helps. That is probably because it's hard to turn away a well-intentioned, and good-natured, volunteer. Personal integrity establishes their authority within the community. Significantly, water volunteers often tend to be elected to the village *Panchayat* (village council) on the basis of their selfless deeds.

The day before we talked to him, Rautela had mediated between two families: one had allowed irrigation water to flood the ground floor of another's house. This was wastewater from the main storage tank in Chhabisa. After women wash cooking utensils in rationed amounts of water (washing clothes is not permitted here in summer), the waste is collected in an adjacent



Two of the authors interviewing Mahender Rautela in front of his house in Chhabisa. Photo: Girish Negi

storage pond with a capacity of 2 000 litres. Rautela oversees the use of that water - for irrigation of people's kitchen gardens where chillies, tomatoes, potatoes and fruits are nurtured. The area irrigated is between a quarter and one hectare, depending on the season. He supervises a rotational system: each of 14 nearby families receives the flow on a given day. These days can be 'traded' through negotiation. The flooding incident was resolved through such bargaining, arbitrated by Rautela.

Of course the key is how to attract and keep volunteers who are as effective and popular as Rautela: such volunteers are, we were told by one villager, 'as scarce as the water in this area'. Nevertheless Rautela carries out his work with evident satisfaction, and there is no question that he, and his like, are appreciated in their communities and become trusted leaders. He has a gentle demeanour, but a firm commitment to seek for equitable access to water. Where water is limited and communities are affected it is not just scientists, or digital information highways to which we should turn, but local 'social hydrologists' as well. Their skills of applied common sense and

tact can make their impact both potent and immediate. Villagers recognise this, and in return grant informal authority to such community members, to help control - and make better use of - their common resources.

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Arvari Sansad: the River Parliament

Ambuj Kishore

The Arvari is a small river in the drought prone Alwar District of Rajasthan, India. For decades, the Arvari ran dry apart from a brief flow of runoff from the monsoon rains. Now, thanks to water-harvesting efforts in the region, the river holds water all year round.

The change began in 1987, when the NGO *Tarun Bharat Sangh* (TBS) started helping villagers in Gopalpura village to construct and rejuvenate traditional earthen dams called *johads* (see *LEISA Magazine* 16.1, p 14-15). More than 350 *johads* have been built in the Arvari catchment, and the active participation of villagers in the planning, design, implementation and monitoring of water resources has led to strong feelings of community ownership. *Johads* are small-scale structures but they have made a large-scale impact on water conservation. The improved availability of the water in this drought prone area has greatly improved the quality of life of those living in the area. In addition, the water harvested and stored in the *johads* caused the water table in the entire catchment area to rise. From 1996, the Arvari river began to flow strongly again and became perennial.

The question of ownership of these improved water resources, however, has been a source of recurring conflict. The first *johads* in the village of Gopalpura were declared illegal because formally as water resources belong to the state. When the villagers planted trees in the watershed catchment they were warned they would be fined because the land belonged legally to the state revenue department. Finally, after continued resistance by the villagers, an unwritten understanding was reached with the state agencies to let the villagers manage their environment.

The next challenge came as the Arvari River began to flow and the fish came back. In 1996, villagers received notice that the state had granted a contractor a license to fish in the river. Although the villagers are all vegetarians and do not eat fish, they realised that this might set an important precedent about control over the water resources. The villagers insisted that the

river was theirs, it had begun to flow again as a result of their efforts, and they were entitled to a say in its management. The result has been a drawn-out battle between them and the fisheries department.

The *Arvari Sansad*, or *Arvari parliament*, was formed on 26 January 1999 as a way of managing the river and its waters fairly and to create a united front against outside intrusion. The river parliament represents 72 villages and meets four times a year to discuss problems and to decide on the best strategies for land and water use. It has 142 members who are nominated by their respective village institutions. The parliament has framed rules for the use and protection of the river and the surrounding land that relate to water use, the type of crops grown (excluding crops with high water needs), tree felling and illegal hunting. Another issue addressed by the parliament is the increasing value of land in the area - farmers and herders are coming under pressure to sell their land to businesses that depend on water extraction. A coordination committee comprising members selected by the parliament handles the operations and ensures that the rules are observed.

Villager's efforts have resulted in the departure of the fish contractor and they also succeeded in turning away a beer company that had hoped to set up a brewery using local barley and fresh water. The members of the river parliament and their communities have gained increasing confidence in their ability to take collective action, but this has not always been an easy process. Suspicions and conflict between different castes and factions need to be managed, and the village councils maintain many traditional limitations: they still rarely include women and the landless poor.

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Traditional water management in Bali

I.G. Suarja and Rik Thijssen

The Indonesian island of Bali is famous for its unique system of irrigation. Guided and informed by religious values, it combines impressive feats of engineering with complex and elaborate social structures.

Most of the 162 large streams and rivers that flow from Bali's mountainous interior have cut deep channels into its soft volcanic rock. This has made it impossible for farmers to dam and channel water for irrigation in the usual way. Instead, they have taken to cutting tunnels through the rock, and constructing elaborate aqueducts and bamboo piping systems to carry water to the top of a series of terraced rice fields. From here it can flow, with gravity, from *sawah* (field) to *sawah*.

Community organisations called *Subak* control the water irrigation system to ensure reliable, fair and equitable distribution. Besides its technical functions, the *Subak* also provides social benefits including strengthening the possibilities of its members to maintain social contacts. This is reflected in the various communal activities undertaken in the form of task-oriented self-help groups (*seka*).

Community groups and group activities are traditionally very important in Balinese society. They reflect the significance attached in Hindu philosophy to the relationships an individual has with others members of society. This is a highly valued principal particularly in rural society.

Bali's famous *Subak* system is one of the most vital components of Balinese society. Built over the course of several centuries, it remains an integral part of Balinese life and is a product of the island's history and culture.

Subak

Irrigation is essential to Balinese agriculture because of the long dry season that extends from April to October. The elaborate system of channelling water from lakes, rivers and springs across countless *sawahs* is controlled by fully autonomous *Subaks*. Their engineering knowledge is sophisticated and the tunnels they build and maintain through the hills can be up to 3km long and 40m deep.



The Subak system makes water available for irrigation in the hills.

Photo: Rik Thijssen

The distribution of irrigation water among *Subak* members is based on the principle of *ayahan*. This is the right of the *Subak* members to make use of available water resources in exchange for *ngayah* or free communal work on *Subak* activities. All *Subak* members have the same right to irrigation water. The amount of water is computed by dividing the total amount of water available by the number of *Subak* members.

A *Subak* consists of all the landowners – or their representatives – in a particular rice production area. The *Subak* is not only responsible for the construction and maintenance of canals, tunnels, aqueducts and dams, and for the distribution of water, but also coordinates the planting and organisation of ritual offerings and festivals.

Registered *Subak* members are mostly men because they are regarded as the representatives of their family. However, women are also involved in meetings as they play a major role in the various religious ceremonies.

There are about 1500 *Subaks* on Bali (1999) each with about 200 members and they cover a total irrigated area of more than 90 000 ha. The organisation of the *Subak* includes the *Paruman Subak* (General Assembly), the *Prajuru Subak* (Board), and the *Kerama Subak* (Members). The general assembly is the highest forum, and allows for open and democratic discussion among the *Subak* members, in order to create consensus on issues of general interest. The *Subak* Board is elected through the General Assembly.

Participatory management is typical in *Subak* organisations. A *Subak* head can call for meetings to discuss and decide upon issues such as maintenance work, cropping plans and the



Collective burning of rice straw to control pests. Photo: Rik Thijssen

allotment of water to members. Responsibilities and duties for *Subak* activities are equally distributed among the members, regardless of family status or social position. Obligations are in direct proportion to the amount of water *Subak* members receive for irrigating their rice fields. For example, farmers who receive one *tektek* - the amount of water necessary for one-season irrigation of rice fields with an area up to about 1 ha - are asked either to take full part in manual activities, or to provide financial compensation as specified in *Subak* regulations.

Subak organisation

- **Sedahan Agung:** the highest *Subak* institution, located at the office of regional income at district level. A *Sedahan Agung* is a regional government position with a regular government salary.
- **Sedahan Yeh:** similar to *Sedahan Agung*, but located at a lower hierarchy of a watershed of a river (*yeh*) in a district.
- **Subak Gede:** *Subak* organisation at a watershed ecosystem, socially organised, led by a *sedahan* or *pekaseh gede*, at sub-district level.
- **Subak:** water user organisation at a part of a watershed area, headed by a *pekaseh* and socially organised.
- **Tempek:** the lowest hierarchy of water user organisation at a planting area, led by a *kelian*. A *tempek* is usually an area with natural boundaries such as a creek, tall trees, rock outcrops, etc.
- **Kerama:** individual member of a *Subak*

Participation

Subaks are not societies for Balinese Hindu's alone. Farmers of other religious beliefs living in the *Subak* areas may also participate in the system and those farming other people's land are also included in the *Subak* system. Their 'share-cropping' contracts state who is responsible for paying *Subak* fees and this is usually the landowner.

It is possible to distinguish three types of *Subak* members. Apart from the special members, such as Hindu priests, there are 'active' members, who carry out the essential work of maintaining the irrigation systems and 'passive' members who prefer to pay for maintenance. There are also two types of meetings: the more regular, short meetings where work is divided between the 'active' members and, only if necessary, general meetings to discuss more serious issues. All members are expected to attend these.

Why cooperation?

What is the basis for this widespread cooperation? It might be thought that upstream participants in this cooperative network would be less inclined to cooperate because cooperation means they would have to leave some water for the farmers downstream and therefore would not be able to use it all themselves. However, in the particular ecology of Balinese rice paddies the flow of irrigation water affects the population dynamics of rice pests. If fields are planted randomly, rice pests can easily move from one field to the next after harvest, allowing pest populations to escalate. By coordinating planting over a wide enough area, farmers can create large fallow spaces that prevent pests from migrating between food patches. In this way pest populations are kept small. The rather low incidence of pests and diseases in the rice might, however, also be attributed to other specific agricultural practises, such as the collective burning of rice straw, maintaining water layers on fields after harvest and herding ducks in harvested fields. Even ceremonial offerings have been identified as possible reasons for pests being lured or scared away.

In short, both upstream and downstream participants gain advantages from cooperating with each other. Pest damage is reduced upstream, while downstream farmers experience less water stress.

Collaboration

Officially there is no link between the *Subaks* and government institutions and the autonomy of *Subaks* is guaranteed by their legal status defined in local Balinese regulations. However, government agencies have sometimes tried to 'use' the existing *Subak* cooperatives for their own purposes. These have included agricultural extension, introduction of new rice varieties, as well as the provision of credit for chemical fertilisers. At one stage taxes were also collected through the *Subak* heads. Most of these government 'intrusions' have back-fired and the *Subaks* have proved their resilience by surviving these attempts to hijack the community groups for reasons other than their main objective: fair and equal provision of irrigation water to farmers.

Farmers see the *Subak* as their one and only agricultural organisation. Such aspects of their agriculture as planning the time when a new crop should be planted or the use of fertiliser, for example - can be dealt with through the *Subak* if there is a clear relation with the provision or use of irrigation water. A *Subak*, for instance, decides on the type of rice to be grown, depending on the amount of water that is expected to be available. In some cases, when there are signs of water shortages, a *Subak* can also decide, as a group, not to grow rice but to plant alternative crops (*palawija*) that are less water demanding.

Resilience

Irrigation water management by community organisations on Bali has proven to be effective, efficient and durable. The *Subak* system has adapted itself time and again over the last 1000 years. Any minor conflicts that have arisen have generally been effectively solved. This capacity to resolve problems is only one of the strengths of this system that is deeply rooted in Balinese traditions.

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Women play an important role in *Subak* ceremonies. Photo: Rik Thijssen

Community consultation and national lobbying in South Africa

Ben Cousins

South Africa's new democratic government is working on a large and ambitious land reform programme. During apartheid, access to land was determined by race. Black South Africans were removed from their lands and resettled in so-called homelands. These areas included some of the poorest and most degraded soils in the country and they became islands of rural poverty whose main function was to provide industrial labour for South Africa's farms, mines and urban areas.



Figure 1: Communal lands in South Africa

The Republic's current land policy has three main aims: to redistribute land, to give back land taken away under racist and discriminatory practises, and to develop a system of land tenure that will give the rural population living in the homelands a greater degree of land security as well as protecting farm workers and labour tenants from arbitrary evictions.

Insecurity

Communal land has a second-class status in South Africa. Those living under these types of tenure arrangements are dependent on the local authorities – the traditional leaders – for access to land and the right to use it. Rights of occupation are not recognised and this increases insecurity. The near-collapse of land administration has further aggravated the situation and women are in a particularly difficult position.

In many places development projects have been held up because the status of land is unclear. This has had a particularly deep impact in community areas where houses, roads and other infrastructure are urgently needed. These problems have increased the tensions that already exist between traditional authorities and local administration and make it more difficult to determine how land should be allocated for development and how access to common resources such as grazing, firewood and water should be guaranteed.

A draft Bill

In August 2002, a draft Communal Land Rights Bill (CLRБ) was published and the public was asked to discuss its contents. The aim of the Bill was to transfer title or ownership of land in the former homelands from the state to local communities. Before this could be done, however, communities would have to make an inquiry into lands rights in the area, organise community meetings to inform people of the proposed changes, and reach agreements on what constituted the boundaries of the community. Before transfer of ownership can be completed, the community also has to work out a set of rules that describe the land tenure rights of all individuals, households and families in the community. The community's legal right to own land can only be recognised when this has been registered. After this has been done a Land Administration Committee (LAC) must be elected to manage the property.

Under the proposed CLRБ, traditional leaders can become members of the LACs, but only as advisors and they must not make up more than 25 percent of the LAC. Such groups as the *Congress of Traditional Leaders of South Africa* have protested strongly against this regulation and have demanded that the traditional role of tribal authorities in administering land be reinstated.

LACs

In the Communal Land Rights Bill, the LACs have great power. These bodies are responsible for the land administration system at the local level. Within the community they are responsible for defining land rights and making sure they are recorded and registered. However, the draft CLRБ does not make any provision for supporting the LACs either financially or institutionally. Officials will be made available if inquiries are necessary or communities need help to implement the law but this is very inadequate given the enormous and difficult task facing the LACs if the Bill is passed.

What the Bill means

The publication of the draft CLRБ in 2002 has stimulated widespread public debate on communal tenure reform in South Africa. Although the government said it wanted to encourage discussion on the issues proposed in the new legislation, it has done little to facilitate this process. Instead it has been left to civil society organisations and others involved in community land reform to get discussions going on the CLRБ. In recent months many activities have been organised in the communal areas to encourage the exchange of experiences and views on existing land tenure arrangements and the new legislative proposals. The National Land Committee and the Programme for Land and Agrarian Studies of the University of the Western Cape has been involved in this process through a project designed to increase people's understanding of the effect the Bill will have on their rights to access and control of land. Amongst project activities was a symposium to discuss experiences of tenure reform in other parts of Africa, the provision of capacity building support to NGOs working on land tenure issues, and advocacy and lobbying activities such as holding workshops on the Bill with a range of civil society stakeholders.

A series of seven consultative meetings were also held between November 2002 and April 2003. These meetings were attended by 700 participants from 75 rural communities in 5 provinces and representatives were chosen from the meetings to report their recommendations to the Parliamentary Portfolio Committee on Agriculture and Land Affairs.

Community views

The field experiences of NGOs and views expressed by community members in the consultative meetings suggest that the CLRB has many weaknesses. These conclusions have been confirmed by those attending the consultative meetings. Many were concerned about the negative effect the collapse of the present system of land administration has had on land security in the communal areas, and were disappointed that the draft CLRB did not go far enough in dealing with the chaotic and complex situation in which land rights would have to be administered. There was no attempt in the Bill to define the relationship between the LACs and local authorities, for example, and although the draft CLRB gave LACs far-reaching powers, it made no attempt to create a link between their work and the function of local government. Where tensions already existed between traditional leaders and local authorities it was felt that the provisions of the CLRB would only make them worse. There was an urgent need to resolve this standoff and it should be taken into consideration in redrafting the CLRB.

Common property

The fact that the draft CLRB made no provision for managing access to and control of common resources such as grazing, mud, thatch, wood and water was seen as a very serious omission. If the new Bill does not protect these rights, the rural poor can be denied access by more powerful members of the community or by interventions from outside.

Those attending the consultative meetings also raised the complex and sensitive issue of boundaries. A major criticism of the Bill was that the boundary issue was not well covered by the proposed legislation. Under the terms of the draft CLRB, title would be transferred to the communities as a first step towards tenure reform and it would be the job of the LACs to define community boundaries. It was pointed out that serious problems could arise in situations of conflicting claims, especially if these were tribally based. Representatives from areas with experience of boundary conflicts such as Elim in Limpopo Province, where communal land borders on the three former 'homelands' of Gazankulu, Venda and Lebowa, warned that the CLRB seemed to be "returning to apartheid thinking" in basing its proposals to formalise boundaries along traditional (ethnic) lines.

Whilst defining tenure rights and granting title to land would remove one of obstacles to development, confirming old boundaries in communal areas where there was already overcrowding and land shortage would only make the situation worse. Legislation such as the CLRB could not deal with this type of problem and there was a need for more comprehensive land policy.

The consultative meetings also provided women with the opportunity to discuss the implication of the proposed legislation for their right to access and control land. It was agreed that the CLRB did little to improve women's land security. They could still be evicted from their land when their husbands died or they divorced, and no provisions had been made to include them in communal decision-making processes

on land issues. The biggest weakness of the CLRB as far as women were concerned was that it did not state that land rights must be given to men AND women and that land should be allocated to women on the same terms as men.

Local action to national lobby

Concerns about the implications and possible effects of putting the CLRB into practice were widespread amongst NGOs and other organisations working with local communities on land tenure issues.

The need to discuss the implications of the CLRB provided a focus for a wider discussion on land tenure reform. It gave those who had discovered the limits of local action the chance to link up with a wider national lobby. In this way they would be better able to put pressure on government for a national policy framework and new legislation on communal land rights that was strong enough to guide the highly sensitive and complex process of land tenure reform. The consultative meetings described here give an indication of how local experiences, views and strategies can be brought to together and taken forward into a process of national lobbying and advocacy.

Alternative proposals

Discussions on the CLRB during the consultative meetings indicated that the new Bill should:

- Recognise existing occupation and use rights and give them the status of secure property rights, without waiting for a time-consuming and expensive process of transfer of title which government is unwilling to devote sufficient funds to or create capacity for;
- Ensure that measures to secure individual rights were complemented by mechanisms to support the management of common property and other resources held in common;
- Make sure people can participate in community processes as stakeholders with guaranteed rights;
- Explicitly define and secure the rights of women;
- Provide rights holders and local land administration bodies with government support as part of a wider, clearer programme of rural development.

A revised version of the CLRB is scheduled to go before parliament in August 2003. It remains to be seen whether community and civil society views will be taken into account. What has been made clear from civil society action is that consultations not only yield powerful insights into the nature of land tenure problems but can also lead to the development of potential solutions. The conclusions of meetings such as those mentioned above have shown that there is a limit to the progress that can be made on land tenure issues through local actions alone and that it is necessary to establish links with other community groups in a co-ordinated process of lobbying and advocacy at the national level. ■

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Both these articles are available from ILEIA. Considerable material is also available on the website of the University of the Western Cape at www.uwc.ac.za

Recording land rights at Ekuthuleni

Donna Hornby

Ekuthuleni, a former mission station farm owned by the Department of Agriculture and Land Affairs (DLA), lies in Melmoth on South Africa's north coast. Long-term tenants at Ekuthuleni asked the DLA to upgrade their informal tenants rights into community ownership so that land rights issues would no longer delay the development of their area. The DLA agreed, and aims to complete the process of transferring the land to a Communal Property Association (CPA) in 2003. 240 households are involved in this process.



Members of the Ekuthuleni Communal Property Association viewing a boundary map. Photo: AFRA

Some residents at Ekuthuleni wanted individual land ownership while retaining links to the Ntembeni tribe that administers them. However, this option raises problems:

- People with incomes below the poverty line cannot afford the costs of surveying and transferring property;
- Government property administration agencies (specifically Deeds and Surveys) are far away from poor, rural people and their rules and requirements difficult to understand;
- Exclusive nature of ownership can undermine household access to essential firewood, grazing, thatching, water, herbs and mud;
- Simplification of ownership rights can erode the complex rights that extend to family members in practise.

In 1998, the DLA contracted the Association for Rural Advancement (AFRA), a leading South African NGO, to assess the tenure rights of people at Ekuthuleni and recommend how it should proceed with the application to upgrade them. AFRA advised the DLA to transfer the land to a communal entity, which would allow the community to develop its own constitution on how land would be held and

managed. This would be less expensive to arrange as individual rights, and would ensure links were retained with the tribal authority.

AFRA offered to help the community to develop legal, affordable and accessible records of household land rights in order to strengthen the communal system and give households more security over their holdings. Records or "individual ownership documents" would provide households with evidence of their land rights and enable them to settle disputes and access credit. More importantly, they would protect holders from arbitrary eviction or loss of land rights, and give them the right to decide how to manage and use the land.

Registration

The first step in the registration process was a detailed tenure revue to establish how land was currently being allocated, subdivided and transferred. Research showed a widespread experience of insecure tenure resulting from changing practises and rules. It also showed there was local capacity to administer land allocation and rights. The next step was to find cheap ways of providing land records to households.

A stakeholder meeting including participants from government departments, academics and tenure experts met to discuss this problem. Systems and procedures for producing and maintaining records were discussed at a community workshop late in 2000. Much progress has been made on producing and presenting these records and deciding on who would be responsible for maintaining them locally. Everyone is aware that managing the process of formalising tenure requires great care because changes can threaten existing arrangements.

In Ekuthuleni AFRA is still working on ways to provide affordable and accessible records of household land rights. An advisory committee of key stakeholders that includes NGOs, CBO, and government departments directs and guides the process. A major objective is to develop and support local structures and establish links to external institutions that can help issue records, mediate disputes and assist in the evaluation of records when credit application are being assessed or disputes resolved. Project experiences are shared with other NGOs and government departments, as well as with national and international tenure experts in order to influence tenure reform in South Africa.

Recording rights in informal tenure, to ensure security and at the same time creating links to formal institutions is a complex process. In a system like South Africa, where an extremely accurate and secure formal land tenure system exists side by side with an informal tenure system that depends on an individual's ability to negotiate rights through local institutions, it is a major challenge. ■

For more information on the Ekuthuleni experience see www.oxfam.org.uk/landrights/custten.rtf

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Food production and HIV/AIDS

In Zimbabwe, where two-thirds of the population live in the rural areas, poverty and underdevelopment have facilitated the spread of HIV/AIDS. Throughout Southern Africa, governments have tended to see HIV/AIDS as a health problem. However, experience shows that HIV/AIDS is much more than this. Not only has the epidemic caused social and emotional devastation but it has crippled the capacity of many village communities to produce the food they need for an adequate and nutritionally balanced diet. Without reliable and varied food the population becomes more susceptible to disease and the sick deteriorate quickly. The remaining households do not have the strength and energy to meet the increasing demands made on them by the HIV/AIDS epidemic including caring for the sick and orphans at the same time as they have to take increasing responsibility for providing good food.

Poor diet leads to deteriorating health and effects both physical and mental development. In both the short and long term this can only lead to an intensification of poverty and the persistence of conditions that break people's resistance to disease. For those already infected with the HIV virus good nutrition can help delay the onset of AIDS. The sustainable production of good quality food is, therefore, basic to breaking the cycle of poverty related disease. However, food production depends on secure access to natural resources, and in many parts of Southern Africa large numbers of rural households do not have access to sufficient agricultural land or the agricultural inputs they need to grow food.

Impacts

HIV/AIDS has caused a particularly heavy death rate amongst able-bodied men and women. This is clearly reflected in the demography of rural Zimbabwe. More than 52 percent of the country's population are women and 86 percent of them live and depend on land for their livelihood. Women account for 70 percent of the agricultural population but many have no land, few resources, are illiterate and excluded from information and decision-making processes because of their weak social status. HIV/AIDS has had a dramatic effect on the lives of many of these women. In communities devastated by HIV/AIDS it is becoming increasingly difficult for them to meet their responsibilities and provide food and care.

Two systems

Zimbabwean women have no constitutional rights under customary law. This is a legacy of British colonialism which maintained the system of traditional law alongside the statutory law they introduced to support their colonial administration. For the British, both at home and in the colonies farmers were by definition men. They had little interest in the complexities and inequalities of women's land rights under customary law, even in those areas hardest hit by labour migration.

Since the early 1900s, land tenure arrangements in Zimbabwe, as in neighbouring Botswana, Zambia, Malawi, the Republic of South Africa and Swaziland have been based on British, Roman Dutch and customary law. These systems apply to different categories of women and define rights of ownership and access according to their own specific principals.

Under statutory law women can buy land on the open market but not many rural women are able to get control of land in this

way. In pre-colonial times, customary land tenure arrangements offered relative security to all members of the community. Women were given pieces of land to manage in their own right either by their fathers or by their brothers and husbands. The political and economic changes of the twentieth century, however, have destabilised customary practises and gradually eroded the effectiveness as far as women's rights to land are concerned. Today, in Southern Africa where customary law puts the inheritance rights of a man's paternal relatives above those of his wife, the traditional system is often unable (or unwilling) to meet its responsibilities to his widow.

The provisions of statutory and customary law as these were developed in the colonial period were taken up in the constitution many of independent African states. Zimbabwe is an example. Whilst the Zimbabwean constitution states that every citizen has an equal right to the ownership of property, women do not have the right to land under customary law. More recent legislation passed by the Zimbabwean government has strengthened customary law and further weakened the position of women living in communal areas. Today women have no secure access to land and can never be certain that they will be able to benefit in the long term from the labour and capital they invest in land that they hold through rights that belong to their husbands or other male relatives.

Agricultural productivity suffers not only because implements and other assets often have to be sold to pay for medicine, but also because women, although they play a major role in agricultural production, may not always have the agricultural knowledge they need to carry out tasks traditionally done by men. A hidden effect of HIV/AIDS is that the transfer of agricultural knowledge between generations and from one member of the rural community to another is rapidly deteriorating. The impact this has on women's capacity to deal with agricultural problems is intensified by the fact that women generally have less access to agricultural extension services than men. While access to land is fundamental to food production, it must be combined with the knowledge and capacity to use it effectively. ■

This article has been compiled by the editors.

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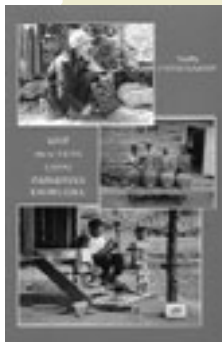
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Best practices using indigenous knowledge

by Boven K, Morohashi J (eds). 2002. 280 p.
ISBN 90 5464 032 4. Nuffic-CIRAN (Centre for International Research and Advisory Networks),
PO.Box 29777, 2502 LT The Hague, The Netherlands;
UNESCO-MOST (Management of Social Transformation Programme). Email: ik@nuffic.nl; www.nuffic.nl/ik-pages;
www.unesco.org/most/bpindi.htm

Indigenous or local knowledge refers to a body of knowledge, know-how and practises maintained and developed by peoples, generally in rural areas, who have extended histories of interaction with the natural environment. This publication, the result of cooperation between Nuffic and UNESCO/Most, aims to encourage researchers and policy makers to take indigenous knowledge and practises into account in all activities affecting local communities. It presents 22 best practises illustrating the use of indigenous knowledge in the development of cost-effective and sustainable strategies for poverty alleviation and income generation in Africa, Asia and the Americas.

The publication includes the guidelines used to document the cases, the cases themselves and indexes to facilitate searching the information. The practises presented in this publication have also been added to the Indigenous Knowledge database, available at www.unesco.org/most/bpindi.htm (WR)



Agriculture and HIV/AIDS by Guerny J du. 2002. 16 p. ISBN 974 680 204 6. United Nations Development Programme (UNDP), South East Asia HIV and Development Project. www.hiv-development.org/publications/ewrs.asp
The impact of HIV/AIDS on the farm-household level is impressive, ranging from abandoning the cultivation of remote fields or cash crops to the sale of assets to cover medical and funeral expenses. In such a context, agricultural policies and programmes have a crucial responsibility in reducing the conditions that create vulnerability in rural populations, leading to higher risks of HIV infection. This paper argues that the agricultural sector should not attempt to carry out health work for which it is ill equipped, but concentrate on activities in agriculture. Agriculture can be developed in such a way as to increase the resilience of rural populations and thereby contribute significantly to HIV prevention. (WR)

INASP rural development directory

2003/2004 2003. 455 p. ISBN 1 902928 15 6 GBP 25-. International Network for the Availability of Scientific Publications (INASP), 27 Park End St., Oxford OX1 1HU, UK. Email: pwr@inasp.info; www.inasp.info/pubs/rd
The aim of this Directory is to provide access to a wide range of information on rural development, and particularly to promote South-South information dissemination and interchange. It contains profiles of more than 430 international, regional and national networks and organisations around the globe. Each entry provides contact details

and a brief description of the organisation, highlighting its objectives, activities, subject areas of interest and geographical coverage. In addition there is often further information provided by the organisations, including newsletters, journals or online documents. The directory is also available on the INASP website at www.inasp.info/pubs/rd or www.inasp.info/south/index.html where the contents will be updated on a regular basis. CTA will make copies of the CD Rom available free of charge to its ACP subscribers. INASP also has a limited number of copies of the print version at available for organisations in developing countries which do not have access to computers with CD ROM drives.

People-oriented approaches in global conservation: is the leopard changing its spots?

by Jeanrenaud S. 2002. 68 p. ISBN 1 84369 036 5.
International Institute for Environment and Development (IIED), 3 Endsleigh Street, London WC1H 0DD, UK. Email: INFO@IIED.ORG. Institute for Development Studies (IDS), Sussex, UK. Email: IDS@IDS.AC.UK (Institutionalising participation series).
Local people were once considered a threat to nature and were often removed from protected areas. Today, global conservation organisations like WWF and IUCN are promoting a wide range of people-oriented conservation approaches. This publication includes the main findings of a collaborative research programme coordinated by IIED and IDS. The programme was designed to examine the dynamics of institutionalising people-centred processes and participatory approaches for natural resource management, and includes case studies in West Africa, India, Indonesia and Mexico. The authors of this publication suggest that it is important to exercise caution in claiming that 'participation' has been mainstreamed in global conservation programmes. An analysis of people-conservation narratives identifies contrasting ways in which 'nature', 'problems' and 'solutions' are framed. Beyond possible lessons for conservation agencies, this study highlights several questions and issues of wider interest to organisations involved in participatory natural resource management. (WR)

Alterorganic: local agendas for organic agriculture in rural development: Proceedings of an international workshop at Bonn-Königswinter, Germany, October 21-24, 2002

by Kotschi J, Bayer W, Becker T, Schrimpf B (eds.). 2003. 186 p. ISBN 3 8236 1403 7 EURO 10. AGRECOL, Johannes Acker 6, D-35041 Marburg, Germany. Email: info@agrecol.de; kotschi@agrecol.de; www.agrecol.de
This workshop was prepared by the AGRECOL working group on Organic Agriculture in Rural Development. The group has taken care to identify key problem areas faced by developing countries in the promotion of their organic sector, as well as important experiences from developing countries, as stimulants for focused and result-oriented discussions. Much of the discussion and many of the activities concerned with promoting organic farming in the South have been focused on marketing organic products in the North. This workshop aimed to broaden the discussion. Producing for overseas markets is only one of many reasons for promoting ecologically sound or organic agriculture in the South. This volume presents the papers contributed to the workshop and the main outcomes of the working groups and the plenary discussions, including the Bonn Declaration prepared by the participants. (WR)



Economic change, governance and natural resource wealth: the political economy of change in Southern Africa

by Reed D (ed.). 2001. 168 p. ISBN 1 85383 872 1: USD 25-. Macroeconomics for Sustainable Development Programme, WWF-International. Earthscan Publications, 120 Pentonville Road, London N1 9JN, UK. Email: orders@lbsltd.co.uk; www.earthscan.co.uk
As the debate regarding the benefits and costs of globalisation evolves, this book confronts the stark realities of how economic and political reforms in southern Africa have affected the poor and the environment. It further examines the crucial role of international development and business communities in creating effective institutions for long-term, sustainable prosperity and social vitality.

The common property resource digest

International Association for the Study of Common Property (IASCP), PO Box 2355, Gary IN 46409 USA. Email: iascp@indiana.edu.

This quarterly publication of the International Association for the Study of Common Property (IASCP) addresses common property issues from all over the world. Besides a forum discussion on what makes institutions for the management of common-pool resources emerge and function successfully, the March issue presents a series of short articles dealing with the role of the commons in Eastern Europe's transition away from communist property systems. A digital library of the commons is available from the website: <http://dlc/dlib/indiana.edu> (WR)

ODI natural resource perspectives

Overseas Development Institute (ODI), 111 Westminster Bridge Road, London SE1 7JD, UK.

Manage, India. Email: nrp@odi.org.uk; www.odi.org.uk/nrp/

This Indian edition of the Natural Resource Perspective series is co-published by National Institute of Agricultural Extension Management (Manage) and Overseas Development Institute (ODI). The series presents accessible information on current development issues from a policy point of view. It is available in print and from the website www.odi.org.uk/nrp/ as a pdf file.

integrating land into broader strategies and implementing specific land policies that will help increase growth in a way that benefits poor people. The full report is available online at http://econ.worldbank.org/prr/land_policy/text-27809/ (WR)

The economic role of women in agricultural and rural development: revisiting the legal environment: summary report of a seminar Kampala, Uganda 19-23 February 2001

2002. 72 p. ISBN 92 9081 2621. Technical Centre for Agricultural and Rural Co-operation (CTA), PO Box 380, 6700 AJ Wageningen, The Netherlands. Email: cta@cta.nl; www.cta.int/pubs/women/index.htm

Recognising the importance of the role women play in agricultural and rural development is fundamental to any attempt to strengthen their economic situation through improved legal rights. The legal environment provides the framework determining women's access to productive resources. The objective of this regional seminar was to raise two important issues regarding women's legal status. First, the state of current legislation and the way it treats women, an issue of lobbying for change on the part of women and raising awareness on the part of the legislators. Secondly, it addressed women's awareness of their legal rights and their ability to claim these rights, an issue of information, legal literacy and legal counselling. The seminar addressed these issues through papers focusing on the legal environment in Eastern and Southern Africa, women's entitlement to productive resources and their access to legal rights. It concluded with recommendations for policies and strategies to strengthen the legal status in rural areas in the region. With this report, CTA provides a valuable document for everyone involved in gender and rural development. The report also provides an annex with a list of website resources on the topic. (WR)



Going home: land & property issues

2000. 47 p. The Refugee Studies Centre (RSC) in association with the Norwegian Refugee Council, Queen Elizabeth House, 21 St Giles, Oxford, OX1 3LA, UK. Email: fmr@qeh.ox.ac.uk. (Forced Migration Review no 7: ISSN 1460-9819). Housing and property restitution has emerged as one of the most important components of post-conflict reconciliation and rehabilitation. This special issue of Forced Migration Review deals with many of the difficult issues arising from schemes to restore property to returning refugees. Contributions about situations in Asia (Bhutan), Lebanon, Central Africa, Latin America (Guatemala, Colombia) and Europe (former Yugoslavian countries) make this issue to a valuable source of information on the topic. It also describes an innovative self-help project seeking to promote eventual restitution and return. (WR)

Stakeholder incentives in participatory forest management: a manual for economic analysis

by Richards M, Davies J, Yaron, G. 2003. 238 p. ISBN 1 85339 559 5. Overseas Development Institute (ODI), ITDG Publishing, 103-105 Southampton Row, London WC1B 4HL, UK. Email: itpubs@itpubs.org.uk; www.itdgpublishing.org.uk.

This manual aims to help the economic analyst assess the incentives of local forest users in a context of multi-purpose forestry. The main users will be those with a formal training in agricultural or natural resource economics, but with limited experience in applying economics in participatory forest management. What makes the manual innovative is its approach to enabling small farmers and foresters to participate in using economic tools to analyse their situation and identify solutions to their problems. Using concrete examples from Bolivia, Ghana, Mexico, Nepal and Zimbabwe, the authors give practical



Evolving land rights, policy and tenure in Africa

by Toulmin C, Quan J (eds). 2000. 336 p.

ISBN 1 899825 51 7 GBP 12.50. Drylands Programme, IIED, 3 Endsleigh street, London WC1H 0DD, UK.

Department for International Development (DFID). (DFID issues). Email: drylands@iied.org; www.iied.org/drylands

The material in this book draws on a 1999 workshop on Land Rights and Sustainable development in Sub Saharan Africa, at which DFID brought together policy makers, researchers and civil society representatives from across the African continent. The book follows the overall

thematic structure of the workshop. It examines the linkages between land reform, economic growth, and poverty reduction. It discusses the legislative and practical challenges of tenure reform and the harmonisation of customary and formal land rights in both anglophone and francophone Africa; the management of Africa's commons; opportunities for and constraints on women's land rights; institutional arrangements for securing and managing land rights; the challenges of decentralisation; and policy and implementation processes that are currently underway. The appendix provides network addresses. (WR)

Land policies for growth and poverty reduction: a World Bank policy research report

by Deininger K. 2003. 208 p. ISBN 0 8213 5071 4. The International Bank for Reconstruction and Development/The World Bank, 1818 H Street, NW Washington DC 20433, USA. Email: feedback@worldbank.org; www.worldbank.org

This report aims to strengthen the effectiveness of land policy in support of development and poverty reduction, by setting out the results of recent research in a way that is accessible to a wide audience of policymakers, NGOs, donor agency officials, and the broader development community. Its main message rests on three principles: First, that providing secure tenure to land can improve the welfare of the poor, by enhancing the asset base of those whose land rights are often neglected. Second, that facilitating the exchange and distribution of land, at low cost, through markets as well as through non-market channels, is central to expediting land access by productive but land-poor producers. Third, that governments have a clear role to play in promoting and contributing to socially desirable land allocation and utilisation. This report can make an important contribution in the policy debate on land. It can provide the basis for

advice on how to conduct farmer workshops, rapid rural appraisals, key informant interviews and household surveys that incorporate simple economic tools in ways that allow greater discussion, feedback and debate with local farmers. (WR)

Lake Mweru is our bank: a documentary on resource management of a Zambian fishery 1995. EURO 25.– STUG Video productions, P.O.Box 3011, 6802 DA Arnhem, The Netherlands. www.stug.nl

This video is a documentary on resource management, created to inform policymakers, politicians and fishery managers in Zambia about the complexity and dynamics of the Mweru-Luapula Fishery and its significance for the livelihoods of so many people. It highlights the importance of considering economic, social, political and historical aspects of fisheries management next to ecological dynamics. It provides insight into the conflicting interests of various stakeholders. The formulation of new policies for community-based management of inland fisheries could be much improved if these policies are based on the area specific problems and potentials. Such policies can only be put in practise if local ideas and initiatives for managing the fishery are taken into consideration.

Borders, rules and governance: mapping to catalyse changes in policy and management by Alcorn JB. 2000. 24 p. International Institute for Environment and Development (IIED), 3 Endsleigh Street, London WC1H 0DD, UK. Email: sustag@iied.org (Gatekeeper Series no. 91 ISSN 1357-9258)

This issue of Gatekeeper is about the role that mapping techniques and satellite imagery can play in improving local decision-making and enabling local analyses to be shared with outsiders in order to improve national level policies. Maps reveal information about conflicts, overlaps and trends in areas where rights and responsibilities are cloudy. Mapping programmes can empower civil society efforts to bring accountability and transparency to local and national governments. This paper uses numerous examples to highlight the power of maps in bringing about local change. (WR)

The future of community lands: human resources by Ndione E, Leener Ph (de), Ndiay M, Jacolin P, Perier JP. 1995. 236 p. ISBN 1 85339 248 0 (pbk): USD 28.50. GTZ Supraregional Project 'Natural Resource Management by Self-Help Promotion (NRMSH)', Wachsbleiche 1, D-53111 Bonn, Germany. Intermediate Technology Publications (ITP), 103-105 Southampton Row, London WC1B 4HH, UK. This detailed account of the experiences of the Research-Action-Learning Group (GRAF) of ENDA (Environment and Development Activities in the Third World) in Senegal traces the history of relationships between local people and external agents, both governmental and NGO. The cases refer to tree planting on community land in the Thiès area and dam building in the Kaolack area. Differences in perception of natural resource management become obvious when tree planting in Africa is seen in the context of deforestation and afforestation in Europe: in the eyes of the Africans, trees were instruments of colonial domination. The fascinating history of development in the Thiès area, related by local farmers themselves, points to numerous indigenous projects, experiments and innovations without external assistance. The history is told from only one viewpoint; other ethnic groups in the area, such as the Fulani herders, might have enriched (and

confused!) it. ENDA-GRAF makes a very honest and revealing analysis of the convoluted path of interaction between them and the various local interest groups, and uncovers the very diverse interests and power issues within each "community". Some very useful ideas for analysis of actors and motivations are given. Creative management of uncertainty and reflective analysis of failure and confrontation were important keys in the learning process by both villagers and fieldworkers. The book gives much food for thought. This publication originally appeared in French, but, strangely, the original is not mentioned. (AWB)

Water rights and empowerment by Boelens R, Hoogendam P (eds). 2002. 256 p. ISBN 90 232 3764 1: EURO 25.00. Van Gorcum, PO Box 43, 9400 AA Assen, The Netherlands. Email: assen@vangorcum.nl In the Andean region, local users, organised into peasant or indigenous communities, have built most irrigation systems. Commonly, they also manage their own systems collectively. This book emphasises the issues of internal water rights, within irrigation systems, but since collective rights between irrigation systems or between these systems and other types of water users are becoming increasingly important, it also includes a chapter on collective rights within the context of water management in watershed or catchment areas. Further chapters reach beyond the system level: discussing the issue of local collective rights regarding other normative frameworks, other groups of local, regional or national interest, and from the perspective of national legislation. With this book, the authors seek to contribute to the development of methodological proposals that strengthen local water control and empower peasant and indigenous communities. (WR)



Land, trees, and women: evolution of land tenure institutions in Western Ghana and Sumatra

by Quisumbing AR, Otsuka K [et al]. 2001. 90 p. ISBN 0 89629 122 7. International Food Policy Research Institute (IFPRI), 2033 K Street, N.W., Washington, D.C. 20006, USA. (Research Report 121). Email: ifpri@cgiar.org; www.ifpri.org/pubs/pubs.htm

How do women's land rights change as customary tenure systems give way to individualised land tenure? While the individualisation of land rights creates incentives for poor farmers in marginal areas to adopt agroforestry, not much is known about its impact on women's land rights. This research report examines the evolution of customary land tenure institutions in areas of Western Ghana and Western Sumatra where traditional matrilineal inheritance systems have been changing. In these two areas, the authors find that individualisation of land tenure has contributed to both increased gender equity and to greater efficiency in agroforestry management. While property rights institutions are moving toward providing proper incentives for efficient natural resource management, the authors conclude that any program or legal framework that assigns rights to resources must be evaluated for barriers to women's participation. This book is recommended for professionals involved in natural resource management, agroforestry, gender and development, food policy, rural development, and property law/property rights. (WR)

Visit our website: www.ileia.org

Land rights in Africa

<http://www.oxfam.org.uk/landrights/>

Access to land, which remains for many people in Africa the ultimate form of social security, is being severely threatened. The threat comes from a combination of local and international factors, which include excessive liberalisation, the search for foreign investment, and an often-blind faith in market solutions. This online "resource bank" of documents and references contains papers and reports from Oxfam GB and its partner organisations, its allies, and land rights specialists. The aim of the resource bank is to spread greater awareness of land rights issues, to make current information widely available, and to provide a point of contact for key actors in Africa and elsewhere. The resource bank is available for people without Internet by sending an email to www.4mail@web.bellanet.org.

Land Tenure Center

<http://www.wisc.edu/ltc>

The Land Tenure Center serves as a global resource institution on issues relating to land ownership, land rights, land access, and land use. The Center conducts research programs throughout the world on issues such as land tenure, land use, agrarian reform, land markets, legislative drafting, registration and titling, institutional dimensions of rural development, and natural resource management. LTC's research activities emphasise collaboration with host country institutions and individuals.

MYRADA

<http://www.myrada.org/index.html>

MYRADA is a NGO managing rural development programmes in three States of South India and providing on-going support including deputations of staff to programmes in six other States. It also promotes the Self Help Affinity strategy in Cambodia, Myanmar and Bangladesh. Their mission is to encourage a process of ongoing

change in favour of the rural poor, by enabling them to build and manage appropriate and innovative local level institutions rooted in values of justice, equity and mutual support. The core strategy is based on the belief that enabling people to build up experience in governance - through managing their own institutions - is a major factor contributing to their empowerment.

The United Nations Research Institute for Social Development (UNRISD)

<http://www.unrisd.org>

Poverty eradication, the promotion of democracy and human rights, gender equity, environmental sustainability and the effects of globalisation are overarching concerns in UNRISD's work. These concerns are reflected in research carried out. An overview, together with details of the projects is available on this website. UNRISD also pursues an active and varied publications programme, which includes in-house and commercially published books, special reports, programme and occasional papers, as well as newsletters on specific events and the Institute's work in general. This website provides a catalogue of their publications, and free online access to many of them.

ODI Forest Policy and Environment Group

<http://www.odifpeg.org.uk/publications/>

The RDFN papers, outputs from the ODI Rural Development Forestry Network, are available from this website.

MEAD-ESA (Media for Environment, Agriculture and Development in East and Southern Africa)

MEAD-ESA is a new network for journalists, editors, radio and television staff, web masters and information officers concerned with the agricultural and environmental aspects of development. At a recent meeting of national representatives in Nairobi, strategies were discussed to increase journalists' capacity to report on agro-ecological problems and ensure that articles and features dealing with these issues appear more regularly in the local media. In this way, MEAD-ESA hopes to increase awareness of the many experiences, initiatives and results of research that already exists in the public domain but which is little known to agricultural policy makers and farm practitioners. MEAD-ESA was established in Lusaka in October 2002. It has national branches in Zambia, Malawi, Zimbabwe, and Kenya. It is also associated with journalists concerned with these issues in West Africa, Ethiopia, Mozambique and South Africa. The network is open to all those interested in this area of reporting and information sharing. Contact: Parkie Mbozi, pmbenzi05@yahoo.com, Aghan Daniel, bta@swiftkenya.com or chimarcel@hotmail.com

CBNRM Net, Community-Based Natural Resource Management Network

<http://www.cbnrm.net>

Worldwide, people working on Community-Based Natural Resource Management (CBNRM), as practitioners, managers and researchers, are talking about an urgent need for greater communication capabilities. Capabilities for networking on CBNRM would make it possible for people to exchange experiences, manage relevant knowledge, and support learning across countries, sectors, cultures, and languages; and in this way achieve better results. *CBNRM Net* is a response to this call. *CBNRM Net's* web site provides a powerful set of broad, robust and useful networking tools aimed at linking stakeholders. As a complete, integrated, and adaptable knowledge management tool, *CBNRM Net* is presented as a service to the global CBNRM community of practise.

The Centre for Alternative Agricultural Media (CAAM)

<http://www.farmedia.org>

CAAM is an Indian network for alternative agricultural journalism. One of their objectives is to facilitate the media to focus on the positive efforts carried out in the rural areas. As an example of their work, the first event contributing to this objective is Harogerige Hogona Banni (Come, let us visit Harogerige). This programme will unfold the different stages of sustainable

Call for contributions to a sourcebook on participatory research and development

Contributions are being solicited for a proposed Sourcebook on Participatory Research and Development, featuring field-tested concepts and methods for enhancing local people's participation in research.

The focus will be on developing-country experiences associated with managing natural resources to support agriculture and rural livelihoods. Copyright-free and highly illustrated, the sourcebook is primarily intended for fieldworkers seeking to learn and apply participatory approaches in their research activities. Development of the sourcebook is a collaborative effort by the Users' Perspectives With Agricultural Research and Development (UPWARD) Network and partners around the world (see www.eseap.cipotato.org/upward).

For more details about the sourcebook and guidelines for contributions, please contact Ms. Hydee de Chavez, CIP-UPWARD, c/o IIRRI DAPO 7777, Metro Manila, Philippines (email hydee@laguna.net).

development in Harogeri to the media. BAIF Institute for Rural Development in Dharwad (India) has been working effectively in 22 villages including Harogeri, in Dharwad district for six years. Through its participatory activities, BAIF has reached the poorest of the poor. The programme has helped people improve their lives, by enhancing the natural resources in their villages and adopting many other developmental practises.

The Association of Agricultural Research Institutions in the Near East and North Africa (AARINENA)

<http://www.aarinena.org/>

AARINENA's mission is to contribute to the enhancement of agricultural and rural development in the Region. By fostering agricultural research and technology development and by strengthening collaboration within and outside the region, the website provides a list of regional and international organisations with details.

Network, smallholder irrigation market initiative (SIMI)

<http://www.siminet.org>

Access to irrigation is a limiting factor to the productivity and profitability of small farms in many parts of the world. Low-cost micro-irrigation and a series of other low-cost technologies related to small-scale irrigation like treadle, rope and similar pumps, small-scale water storage technologies etc. have a good potential to allow a large number of small farm households to escape the most severe poverty by producing high value cash crops for local and more distant markets, or food during the dry season, and thus to increase household incomes and improve livelihood security. Information, resources and links related to smallholder irrigation technologies, as well as market creation for their large scale dissemination are now available on the new website of the SIMI network.

Bees for Development

<http://www.beesfordevelopment.org/>

This new website of Bees for Development is an information service at the centre of an international network of people and organisations involved with apiculture in developing countries. Beekeeping is an effective way for poor people to strengthen their livelihoods, and Bees for Development works to provide information to assist them.

Policy Discourses On Women's Land Rights In Sub-Saharan Africa: The Implications Of The Re-Turn To The Customary

by Whitehead, A

and Tsikata, D.

This article examines some contemporary policy discourses on land tenure reform in sub-Saharan Africa and their implications for women's interests in land. It demonstrates an emerging consensus among a range of influential

policy institutions, lawyers and academics about the potential of so-called customary systems of land tenure to meet the needs of all land users and claimants. This article which was published in the *Journal of Agrarian Change*, vol. 3, nos. 1 and 2, January and April, 2003 is available as a pdf file from the "Land rights in Africa" resource bank at: <http://www.oxfam.org.uk/landrights/Re-turn.doc>

PLAAS NETWORKS:

• **Co-Govern, promoting common property in Africa**

<http://www.uwc.ac.za/plaas/co-govern/>

The website of Co-Govern: Networks for Influencing Policy and Governance of Natural Resources. This project works to strengthen networks of African researchers and land professionals, to promote exchange of experience, dialogue and analysis, and identify ways of ensuring that local practise better informs legal reforms and policies regarding CPRs.

• **Pan-African Programme on Land and Resource Rights (PAPLRR)**

<http://www.cbnrm.uwc.ac.za/paplr>

The PAPLRR network aims to develop and articulate a pan-African voice on land and resource rights, policies and advocacy, and engage with other stakeholders at regional and international research and policy-making events.

Both of these Networks are coordinated by the Programme for Land and Agrarian Studies (PLAAS), School of Government, University of the Western Cape, South Africa.

<http://www.uwc.ac.za/plaas/>

Water policy briefing

<http://www.iwmi.org/waterpolicybriefing>

Challenges of Integrated River Basin Management in India, issue 3 of the Water Policy Briefing series. This paper, available online, is about tailoring water management solutions to South Asia.

LEISA issue March 2004

Underutilised plant species

It has been estimated that humans have, at one time or another, cultivated or collected more than 7000 edible plant species. Today, however, only about 30 crops form the basis of world's agriculture. Over 50% of our energy requirements are now met by just three crops: rice, wheat and maize. The continuously narrowing base for global food security limits the options available to farmers, and reduces the agricultural biodiversity necessary to provide security in resource-poor environments.

Many underutilised species are particularly useful in marginal lands where they have evolved through selection over generations to increase productivity and withstand stress conditions. These crops contribute to sustainable production and usually require less external inputs than high yielding

varieties of major crops. Often they contain essential micronutrients not present in staple foods. These crops are also part of a great cultural heritage and diversity that enriches our lives. Many rural people and development organisations have recognised the importance of these underutilised and neglected species and have successfully increased their production and utilisation, thereby improving livelihoods, providing more options to small farmers and increasing diversity within the agricultural system. This issue of LEISA will present some of these successful cases. We invite articles on experiences with revival, conservation, cultivation, utilisation and marketing of underutilised plant species that are interesting to field practitioners and will make it possible to promote the use of these species.

Deadline for contributions is the 1st of December, 2003.

You are invited to contribute with articles (about 800, 1600 or 2400 words + 2-3 illustrations and references), suggest possible authors, and send us information about publications, training courses, meetings and websites. Editorial support is provided by ILEIA. Authors of published articles are entitled to a standard fee of US\$ 75,-.



Diversity on display at the first agricultural biodiversity fair in Guangxi, China. Photos: Authors

Celebrating diversity in China

Ronnie Vernooy and Yiching Song

It is market day in Guzhai township, Guangxi province, and there is excitement on the streets because the fair has come to town. No ordinary fair this, it is an agricultural biodiversity fair, the first such event ever to be seen in the province - or very likely anywhere else in China for that matter.

Many hundreds of local farmers crowd the section of the main street where the fair has been set up to view the diversity of crops and seeds on display. Others are there too - township officials, merchants, curious children, important visitors from Beijing, even a local television crew filming the action. What they see is a rich diversity - 38 crops and 107 varieties. There are 31 varieties of maize, 17 of beans, 16 of vegetables, 14 of cereals and eight root crops. Some are rare and unique to the area, such as black wax maize and mountain lily. There are also traditional herbs, spices, and medicinal plants - almost all of them landraces.

This rich array of diversity is displayed in booths just like produce at a regular market, and at each booth there is a neatly printed card giving details of the type and origin of the items laid out. Proud farmers and some researchers and extension agents attend the booths, happy to talk about their produce with anyone who asks - and many do.

The fair-goers are impressed. "I didn't know it was possible to grow so many varieties of crops here," says one. An older farmer examines the maize on display and shakes her head in wonder. "I haven't seen these seeds since the 1960s," she says. "There are seven maize varieties here that I've never seen before," responds her companion.

Throughout the day the participants - farmers, researchers, and officials - exchange many opinions, ideas, experiences, and of course seeds. In the afternoon a committee that has been assessing the wealth of diversity at the fair awards prizes to the most outstanding displays. The first agricultural biodiversity fair in Guangxi province is attended by more than 2000 people. It is a huge success - and it will not be the last such event.

Multiple functions

The fair was the culmination of a year of planning and preparation by local farmers and a team of researchers who have been working in the province since 1999 to improve the livelihoods of resource-poor farmers through participatory plant breeding (PPB) techniques. It provided an animated demonstration of the results of a project, now in a second phase, that is a joint effort by the Center for Chinese Agricultural Policy (CCAP) and the Guangxi Maize Research Institute (GMRI). This project is built on a study carried out in the 1990s by the International Centre for Maize and Wheat Improvement (CIMMYT) and is supported by Canada's International Development Research Centre (IDRC) and the Ford Foundation.

This may have been the first agricultural biodiversity fair in China, but the concept has been tried successfully elsewhere, from neighbouring Nepal to the Andean highlands of South America. The fair in Guzhai adapted the experiences of similar fairs held in other countries to the Chinese context. Its purpose was primarily to bring together farmers, plant breeders, extension agents, seed merchants, and policy makers, and to demonstrate to them the diversity of genetic resources, knowledge and ways to strengthen resource management, as well as plant breeding and seed supply. The fair also provided opportunities for the exchange of both seeds and knowledge, and a chance to explore the market demand for PPB improved varieties. Last but not least, the success of the fair gives farmers the confidence to continue to strengthen local seed development systems. ■

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Other experiences with seed fairs have been described in previous LEISA Magazines. See for example the Zimbabwean experience described by Neuendorf, page 24 of issue 15.3/4, Seeds for agrobiodiversity.