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Women and food sovereignty

LEISA

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Guddi Bai Verma from Madhya Pradesh (India) harvests wheat from her field. Credit: Ami Vitale/Panos Pictures.

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 Women participate, everybody benefits



Shen Shicai and Qian Jie

In a rural mountainous area of southwest China, livestock production is a crucial part of family livelihood. Although women play an important role in livestock-keeping, they are often left out of extension activities and training opportunities. A recent project has successfully changed this situation, by attracting the participation of women and poor people. Women farmers responded positively, claiming greater confidence about their abilities and awareness of how to improve the condition of their livestock. Their household food security and economic positions saw immediate benefits as well.

28 Technology alone is not enough

Florence Lubwama Kiyimba

A few years after introducing a forage chopper to women dairy farmers in Uganda, a study was conducted to see if it really did reduce their labour. While the chopper did ease the chopping activity, getting this new technology to fit into women's lives was not as straightforward as the designers had planned. Agricultural engineers and aid workers should pay attention to the dynamics that emerge during the introduction of a technology, rather than "pushing" more technologies onto women, in order to enable them to achieve true food sovereignty.



LEISA Magazine informs fieldworkers, researchers, farmers and policy makers about the latest developments in small-scale, sustainable agriculture. It offers readers around the globe an opportunity to share knowledge, information and opinions. LEISA Magazine aims to contribute to improving the sustainability of small-scale farmers' livelihoods. LEISA Magazine appears four times a year, in 154 countries.

ILEIA is the Centre for Information on Low External Input and Sustainable Agriculture. It seeks to promote sustainable agriculture, through LEISA Magazine and other forms of information exchange. ILEIA is part of the worldwide LEISA Network, which publishes magazines on sustainable agriculture in India (in English), Brazil (in Portuguese), West Africa (in French), Latin America (in Spanish), Indonesia (in Bahasa Indonesia) and in China (in Chinese).



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31 Cuba's success story, further developed

Francisco Dueñas, Dagmara Plana, Isis Salcines, Bárbara Benítez, Laura R. Medina and María E. Domini

An urban agriculture co-operative on the edge of the capital city, Havana, Vivero Alamar, is one of Cuba's most famous co-operatives because of its abundant organic vegetable production. A recent study among its 170 producers showed that women (½ of the workforce) carried more responsibilities when considering home and work tasks, but enjoyed less decision-making power. This study was an eye-opener for the workers and stimulated great discussion among them on how to make roles more equal. This led to changes that met both women's and men's needs better, and improved capacity on the farm.

36 Women and land after conflict in Rwanda

Marian Koster

Land tenure is a sensitive issue in every agricultural society. Even if most farmers are women, men are often the ones to have the official land titles. This becomes problematic when families split up and women become divorcees or widows. Generally, land policies are difficult to change, but after conflicts, women may obtain more prominent roles in society and land policies can change for the better. This is what happened in Rwanda, where women's land rights improved after the genocide of 1995.



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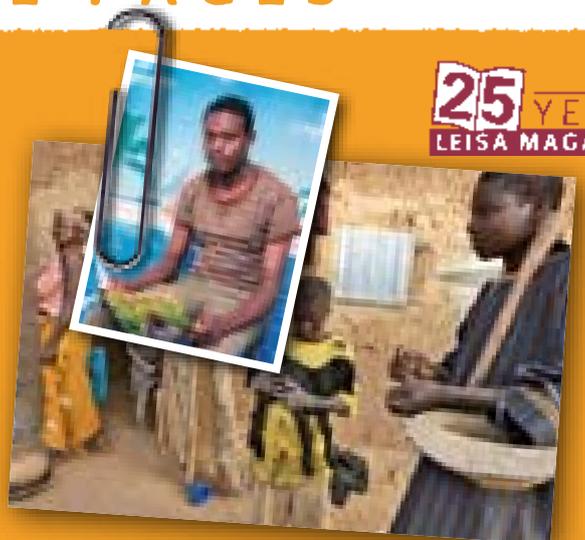
4 The Future of Family farming

Michel and Marceline Kaboré from Burkino Faso make a living through farming. Their son Jean-Baptiste wants to become a farmer as well.

14 Celebrating our jubilee

We have been falling over backwards with surprise at the many entries you sent us for the photo contest, texts on the Future of Family Farming, and pictures of you reading LEISA Magazine.

On this page you can also find our jubilee sections "How I stay informed" and "After publication...", where readers share their experiences.



18 Inspired by

Bed Prasad Khatiwada is a horticulturalist from Nepal. He read about plant clinics in LEISA Magazine, contacted the author, got some useful advice, and is now implementing plant clinics in several regions of Nepal.

34 Update from the field

We return to a school project in the Canchis province, in the Peruvian southern highlands, that provides children with an education that is explicitly linked to local knowledge and maintaining biodiversity.



Photo: Saïlbo Some, ASUDEC

AGRICULTURE THE WORLD OVER

Farming for food

Michel Kaboré and Marceline Ilboudo are small-scale farmers in Boutenga, some 30 kilometers east of Ouagadougou, capital of Burkina Faso. They own about 3.5 hectares of land, on which they grow maize, millet, sorghum, cowpea bean, peanut and rain-fed legumes, mostly for household consumption. To supplement their income, Marceline also brews beer, and in the dry season Michel works as a tailor. The family owns six sheep, eight goats, one donkey, one cow, five pigs and 53 chickens. Livestock is their social security, says Marceline. “At any time, we can sell an animal to meet our needs. We don’t sell our cereals because we might end up selling our life.” Michel and Marceline were not able to send all their children to school. As Marceline says: “If you spend all your savings sending your children to school, there is no money left to take care of a child if it falls ill.”

Son Jean-Baptiste wants to be a farmer as well. He intends to move away from the family compound and start his own farm with his new wife Victorine. “Being a farmer is good. The only problem is rainfall. With good rainfall, farmers can be even better off than civil servants in Ouagadougou. In the city, it is sometimes difficult to obtain food. That is why city people buy land from rural people to produce livestock and eggs, which they sell in the city. This proves that there is money in farming, at least in livestock. With a little support, we should be able to make a profit.”

From left to right: Salamata Kaboré (orphan niece), 19; Michel Kaboré (father), 57; Antoinette Kaboré, 17; Marceline Ilboudo (mother), 49; Victorine Kabré, 21 (daughter in law); Jean-Baptiste Kaboré, 24. In the foreground: Ferdinand-Wendyam Kaboré, 11. Not in the picture are daughters Noélie, 22; Sophie, 15, and Katherine, 12.

Food sovereignty is food for thought

Food is a hot issue, and rightly so. Whereas 1.2 billion people eat too much, there are almost 900 million people suffering from hunger. Over the past year, the number of malnourished people has increased, due to climbing food prices and rising unemployment levels (from 190 million in 2007 to 210 million in late 2009, according to estimates by the International Labour Organisation, ILO). Unfavourable weather conditions are aggravating the situation.

Small farmers' views

There are hugely different views on what the causes of the present food crisis are, as well as on how to address problems of food insecurity, hunger and malnutrition. In this issue of LEISA Magazine we have chosen to pay special attention to a perspective on food that has come from small-scale farmers themselves. The concept of food sovereignty was coined by the international peasant movement La Vía Campesina; it refers to the right of farmers to produce food for their own communities and country, in their own way and on their own land. This, they argue, is a critical condition for reaching real food security – not just for these farmers but for many others in their countries and regions, and globally.

Voices and choices

Agricultural policies favouring modern agriculture have increased the marginalisation of small-scale farmers. This has “pushed” many farmers and their organisations to embrace the concept of food sovereignty. They want to reclaim their rights and produce food on their own terms. They do not want to return to “old ways” but build on what they consider feasible; they want to work with nature, not against it.

Food sovereignty is an important concept that deserves to be understood. It is not “just another buzzword”. The overview article by Michel Pimbert explains more about food sovereignty and how it differs from food security. In “Two Views” you will also find two contrasting perspectives on food – one taking local food systems as the basis for food security, and the

other highlighting the need for small-scale farmers to be more competitive producers in regional markets. Equally interesting are the interviews with women which we include in this issue, explaining what food sovereignty means to them.

Women and food

Women and food are inseparably linked. We cannot write about food sovereignty without addressing women’s role in food production. In many situations women take the main responsibility for food production, processing, storage and cooking. Often they play a key role in its marketing as well. But modernisation of agriculture has taken several crucial food-related responsibilities out of their hands. For instance, women are often experts in seed selection – knowing best which seed produces a crop that does not only yield well but also has the best taste, stores better or produces good fodder. With the increasing commercialisation of seed, women lose control over food production.

Farmers wish to produce food in their own way and on their own land

Despite facts demonstrating the important contribution of women to agricultural production, the perception persists that what women do is marginal; real agriculture is about modern technologies, economies of scale, specialisation and mechanisation. So where do women fit into this type of agriculture? What useful knowledge will be lost when the so-called backward “traditional” agriculture has disappeared? Who will control the food, and the resources needed to produce it? In this light, it is no surprise that women are deeply involved in the food sovereignty movement.

European farmers

The concept of food sovereignty has come from the South, but is finding fertile ground in Europe as well. An increasing number of “modern” European farmers work hard to develop more sustainable ways of farming. They want to live from the product of their work, not from subsidies. They want to become less dependent of the “agro-bio-business complex” for their seeds and animal feed. They develop direct marketing strategies, selling their produce through regional farmers’ markets and believe in an economy based on solidarity and the ecology.

Seeing these parallels between farmers’ struggles in different parts of the world makes their message more compelling. Food sovereignty is food for thought. Dear readers, we wish you a good read, and invite you to share your thoughts with us!



Photo: Lucy Davies / Oxfam

Women demand their rights to be treated equally as farmers.

THEME OVERVIEW

Women and food sovereignty

Most of the world's food is grown, collected and harvested by over 2.5 billion small-scale farmers, pastoralists, forest dwellers and fisherfolk – more than half of whom are women. Women's knowledge and labour play a key role in sustaining the many diverse, local food systems that still exist today throughout the world, particularly in developing countries.

Michel Pimbert

Many people derive their incomes and livelihoods from selling, processing and exchanging local food. Think of all the small food industries in every quarter of cities in countries in the South, and women serving lunch and dinner in their food stalls on every street corner. Localised food systems provide the foundations of people's nutrition, incomes, economies and culture throughout the world. They start at the household level and expand to neighbourhood, municipality and regions. Such food systems constitute a whole network of local organisations, each active in different sectors of the food chain: production, storage and distribution. Women make up most of the workforce of local food systems. They contribute decisively to food security and local economy.



Supporting women is supporting their families.

Global developments at local level

Governments and global food industries make us believe that a new era is coming, in which big companies will produce food for everyone. The current political agenda is so dominant that the press, universities, schools and extension services all implicitly promote “free markets” as the only and best way for development. This implies that small-scale farming is outdated: small farmers will leave their villages and settle in cities, where they will find employment in industry or services, and they will buy their food from the local supermarket that sells food from all the continents. If a harvest fails in one global region, then another supplier will step in. This “food security” agenda

Women and food: Some facts and figures

- Rural women are the main producers of the world's staple crops –rice, wheat, maize, sorghum and millets– which provide up to 90 percent of the rural poor's food intake.
- In Southeast Asia, women provide up to 90 percent of labour for rice cultivation.
- In sub-Saharan Africa, women produce up to 80 percent of basic foodstuffs both for household consumption and for sale.
- Women perform from 25 to 45 percent of agricultural field tasks in Colombia and Peru.
- Women constitute 53 percent of the agricultural labour in Egypt.
- Fewer than 10 percent of women farmers in India, Nepal and Thailand own land.
- An analysis of credit schemes in five African countries found that women received less than 10 percent of the credit awarded to male smallholders.
- Only 15 percent of the world's agricultural extension agents are women.

(Source: www.fao.org/gender/en/agrib4-e.htm)

promises bulk food production so that there will be enough food for all on the planet.

It is an interesting vision. But, do free markets provide the best food security? Free trade has been promoted in the past decades, and yet, last year, markets showed that they are not the stable food suppliers we were made to believe. In early 2008, investors started hoarding food, the price of rice peaked, and importing countries were hardest hit. Local food prices doubled and the number of hungry people increased by almost 200 million worldwide.

Food prices in such a system may go up or down dramatically, pushing more and more people into poverty. These developments are out of the control of rural people and even of governments. This is more a threat to women than to men, for in most rural households, it is women who are responsible for putting food on the table every day.

The right to food and sustainable food production

Fortunately, free market development is not the only development option. There are other development models for the future of food and farming. Farmers, food workers, nomadic pastoralists and indigenous peoples have a role to play in a more reliable global food system. Especially if they are women.

The food sovereignty model is such an option. The concept of food sovereignty had already been under discussion for a few years when it was released at the International Conference of La Vía Campesina in Tlaxcala, Mexico, in April 1996. In the words of La Vía Campesina:

“Food sovereignty is the right of peoples to define their own food and agriculture; to protect and regulate domestic agricultural production and trade in order to achieve sustainable development objectives; to determine the extent to which they want to be self reliant; to restrict the dumping of products in their markets (...). Food sovereignty does not negate trade, but rather it promotes the formulation of

trade policies and practices that serve the rights of peoples to food and to safe, healthy and ecologically sustainable production.”

During the 1996 World Food Summit, held in Rome, Italy, La Vía Campesina presented a set of mutually supportive principles that offered an alternative to the world trade policies and would realize the human right to food. Food sovereignty thus implies the *right* of individuals, peoples, communities and countries to:

- safe, nutritious and culturally appropriate food and to food-producing resources;
- define their own agricultural, labour, fishing, food, land and water management policies which are ecologically, economically and socio-culturally appropriate to their unique circumstances;
- manage, use and control life-sustaining natural resources: land, waters, seeds, livestock breeds and wider agricultural biodiversity, unrestricted by intellectual property rights and free from genetically manipulated organisms;
- produce and harvest food in an ecologically sustainable manner, principally through low-external input and organic production as well as artisanal fisheries;
- choose their own level of self-reliance in food and develop autonomous food systems that reduce dependence on global markets and corporations; and
- protect and regulate domestic production and trade and prevent the dumping of food and unnecessary food aid in domestic markets.

The food sovereignty policy framework is elaborated by a global network of social movements and civil society organisations. These organisations aim to bring together indigenous people, pastoralists and other rural groups from both South and North and to give them a voice and influence in



Photo: Find your feet

Rajkishuri, Chadana and Kamla participate in a self-help group in Pachayat, India, and gain knowledge and self-confidence, which is crucial to voice their needs and interests in the community.

global developments. It is a citizens’ response to the multiple social and environmental crises induced by modern food systems (McIntyre *et al.*, 2008; Pimbert, 2009).

Food security, food sovereignty and political choices

The food sovereignty concept was developed as a reaction to the increasing (mis)use of “food security”. Still, the two concepts are often confused.

The mainstream definition of food security, endorsed at food summits and other high level conferences, is concerned with everyone having enough good food to eat each day. But it does

Bartering for a diverse diet

Autonomous and sovereign food systems are not just an illusion. In fact, many examples already exist. People are very creative in combining opportunities and keeping control over their livelihoods. The *chalayplasa* in Peru is a network of local food markets based on bartering that has gained importance during the last decade. It is a response to imperfections of the cash economy and permits rural families to eat more types of food products than they can grow themselves.



Photo: IIED

Selling fruits and maize in the barter market.

The barter markets take place in the Lares valley in the southeastern Andes. The region is about 3600 km², encompassing some 30 communities, with more than 4000 people exchanging on the markets. There are three agro-ecological zones: the *yunga* (<2300 m above sea level), the *quechua* (2300-3500 m) and the *puna* (>3500 m). At the weekly market in Lares, *yunga* women bring up their fruit, coffee, yucca and coca, *quechua* women bring corn, pulses and vegetables and *puna* women offer potatoes, tubers, wool and meat. Altogether they trade more than five tonnes of food per week. Products are traded in the barter markets according to socially agreed measurements. Some products are exchanged one to one, such as potato and cassava. Others are traded by volume, as one or two handfuls of a product. Almost one third of the households’ food comes from barter markets.

Barter markets have long existed in the region. Coca, wool, maize and transport facilities were traded. When the coca trade was prohibited in the 1970s and people were forced to participate in the cash economy, the “non-currency” economy still continued alongside it. Today, women in the Lares valley think barter markets are the second-best way to procure food, after subsistence farming.

not talk about where the food comes from, who produces it, or the conditions under which it is grown. This allows food exporters to argue that the best way for poor countries to achieve food security is to subsidise and import cheap food or to receive it free as “food aid”, rather than to produce it themselves. This makes countries more dependent on the international market, drives small-scale farmers, pastoralists and fisherfolk off their land and into cities, and ultimately worsens people’s food security.

Food sovereignty promotes community autonomy, i.e., women and men determining for themselves just what seeds they plant, what animals they raise, what type of farming they carry out, what economic exchanges they engage in, and what they will ultimately eat for dinner. A political dimension comes in here: contrary to the rather technical concept of food security, food sovereignty points to the responsibilities of people and governments. They have to take into consideration the local consequences of macro political and economic processes.

The link between women and food sovereignty is evident. Women do the bulk of the labour in agricultural food production and commerce, as they are mostly responsible for providing their family with food. Their husbands may be more concerned with cash crops, as every household has its expenses (taxes, school fees, investments, etc.). Because of their close relation with subsistence farming, women have specific, but unrecognised, traditional knowledge of seeds, harvesting and storage techniques and traditional products. Most have no rights to access land and water and have little decision-making power.

Women speak up in the food sovereignty movement

Women have decisively shaped the concept of food sovereignty (Desmarais, 2007). They have established new spaces in male-dominated structures such as through La Vía Campesina’s Women’s Commission. Women have also influenced global policy debates. Just a few examples:

- *On the right to produce.* Women insist that farming peoples everywhere “have the right to produce our own food in our own country” and had a strong voice in La Vía Campesina’s “Declaration of Rights of Peasants – Women and Men” (2009).
- *On agro-ecology.* Women emphasise the need to reduce the use of health-endangering chemicals (e.g., pesticides, antibiotics, growth hormones).
- *On property rights.* Women have systematically highlighted the inequitable control of land and other resources between men and women.



Photo: Sharad Pandey

Women are responsible for the bulk of work in food production. Their families profit directly from improvements in women’s access to land and agricultural inputs.

- *On democracy and citizens’ voice in policy making.* Women stress that this is needed to realise equal access to land and ensure the positive impact of agricultural policies on their lives.

Readers of LEISA Magazine see that issues emphasised by women are of tremendous relevance for *all* food producers and consumers, not just for women.

Food security and food sovereignty in Niger

In Niger, West Africa, 65 percent of the rural population regularly faces hunger. International organisations provide food aid and have established a system of food banks. Food is stored in poor villages, where people can sell their crops just after the harvest, and buy food at reasonable prices at the time of food shortages. In this way, people save a lot of money because food prices on local markets triple during the famine season. They have “food security” but remain dependent on foreign support – both to buy food from elsewhere, and to maintain the food-bank system.

When asking people what they would need to secure the production of their own food, the answer is clear. They need regular, reliable access to the same plot of land. Under the present system, traditional Chiefs rotate their plots so that farmers cannot invest in the land they cultivate; therefore they cannot nurture the land. Some plots seem to be productive, but similar land next door seems to be less productive – so some land is underutilised.

Elsewhere in Niger, farmers planted 5 million hectares of trees because they were given the rights to plant, harvest and sell. In agro-forested areas, the land is shadier, more fertile, and as a result, children are better nourished. People can produce their own food and they can engage in the market if they wish to. People now rely on a more autonomous and locally controlled food system.

How to promote women's roles and food sovereignty?

The food sovereignty agenda stipulates that it is not the market that should control food systems, but people and their democratic organisations and institutions. Food policy is too important to be left to corporate monopolies, agricultural professionals and economists alone. It must also be the domain of ordinary women and men. Food sovereignty implies greater citizen participation and more direct forms of democracy in the governance of food systems. Citizens, and especially women, must nurture the skills and processes needed for active civic engagement in public affairs. This is not an easy task. For example, local organisations play key roles in the reforms for food sovereignty; yet local organisations do not always create enough space for women. To reverse existing gender biases and discriminations, women will need to further strengthen their capacity for collective action and to be heard.

The food sovereignty movement is confronted with a well-organised network of people in science, business and mainstream politics. The network of family farmers, local food processors and women leaders needs to become politically stronger. It can form a movement interlinking villages, towns, neighbourhoods and ecological units, and function as a counter-power to promote deep systemic change in society. Such a movement can both oppose and link up with local government and state organisations as well as with large food companies – as long as they act on behalf of ordinary citizens. It can organise and co-ordinate new forms of citizen-controlled economic exchanges that combine both subsistence and market-oriented activities. The movement also needs to find ways to develop and share knowledge that is ecologically literate, gender sensitive, socially just and relevant to context. The whole process should lead to the democratisation of research and farmer-centred innovation systems, in which women play a key role in defining research priorities. Similarly, food sovereignty implies the implementation of radical agrarian reform and gender equitable redistribution of right of access to and use over resources, including land, water, forests, seeds and means of production. The notion of territory, collective rights and self-determination must be at the heart of more gender-equitable agrarian reforms (Pimbert, 2009).

Many women and their networks are now engaged in these processes of transformation. They, and the men they work with, are generating hope and new solidarity as they globalise the struggle for food sovereignty.

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People's Food Sovereignty Forum 2009

Rome, 13 – 17 November 2009

Representatives from civil society, non-governmental organisations and people's movements of small-scale food providers, will meet to share and articulate findings, proposals and actions at local, regional and global levels.

The timing is designed to facilitate interaction with the 2009 FAO World Food Summit and to bring the voices of people's organisations to the ears of the heads of state and governments and to the international institutions gathered to discuss how to deal with an increasingly hungry world.

www.foodsovereignty.org



... that Farm Radio International is having a radio scriptwriting competition on smallholder farming innovation? The competition is committed to promoting gender equality and encourages scripts that feature innovations by women and men who are involved in farming and food production. You can send in your script – which is to be based on conversations with local farmers – until November 1st. Read more about it on our blog, LEISA's Farm, at www.familyfarming.typepad.com. You can also sign up to receive new posts in your inbox.

Trading forest products to increase food sovereignty in Liberia

Big business in the forest

As in most parts of the world, women are the ones primarily responsible for household food security in Liberia. Although Liberia is blessed with an abundance of fertile land and forests, rural populations have few rights in decision-making. The strongest parties – primarily male illegal loggers – seize the most profitable opportunities. Within this context, development organisations are addressing women's immediate food needs through group formation and training.

Adam Norikane

Liberia is a country still recovering from 14 years of civil conflict. Poor infrastructure, limited educational possibilities, undefined rights of rural communities and an underdeveloped economy have stifled the country's ability to develop. Foreign development organisations, meanwhile, continue to pour aid into the country, in an attempt to raise agricultural productivity, promote international trade and raise health and educational standards.

Giving rights for sustainable forest management

In 2005, Liberia's forests covered 33 percent of the country, or 3.15 million hectares. Today, it still represents the largest remaining portion of the West African Upper Guinea Moist Forest ecosystem. But Liberia, like many West-African countries, does not have well-established forest tenure rights for communities. Typically, in a situation where rights are not clearly defined, the strongest party takes the most profitable



Photo: Frederick Johnson

Women collect wild snails and other protein-rich food from the forest.

opportunities, which in this case are uncontrolled logging and poaching. This has resulted in deforestation and loss of biodiversity. Yet, local forest users can hardly be blamed: they engage in illegal activities in the absence of rights and incentives to sustainably manage the forests. Over the last decade, communities have been increasingly persuaded to conserve and protect their forest resources, yet they also need economic alternatives.

A new Community Rights Law addressing forest use is nearly approved and will attempt to promote sustainable management. It will offer communities the right to participate in the sale of timber concessions or carbon credits. It will take months (or longer), however, to effectuate the devolution of those rights to the community level and, for now, more immediate incentives are needed. The development of non-timber forest product businesses is one such incentive. These businesses place greater value on forest products and therefore raise awareness on the importance of sustainable management of forest resources.

Recognising women's role in forest management

Communities are dependent on the forests for firewood, spices, rattan for furniture, and thatch for homes. Wild game, snails and fish from the forests are a source of protein that complements staple foods from farming. Women, in particular, have the difficult task of putting food on the table every day, and edible forest products are a welcome addition. Moreover, non-timber forest products can improve food security by increasing household income to purchase food.

As the forest is typically managed as an open resource, people engage in a race to harvest or hunt as much as they can. For them, sustainable forest use has little meaning. Only when people obtain legal rights to harvest forest products will there be an incentive for sustainable forest management. Having some



Photo: Adam Norikane

Some forest products are for home use, while others can be sold on the market. Sustainable use plans allow farmers to receive extra food and income.

basic rules to regulate the harvest of non-timber forest products by local communities is a first step. It can provide a more structured environment from which to design small-scale forest management plans.

The Land Rights and Community Forestry Project, funded by the U.S. Agency for International Development (USAID), was initiated in December 2007 to assist the Liberian Forestry Development Authority in devolving rights and responsibilities to the rural communities. The project is working in the Nimba and Sinoe counties and helps communities to establish forest management plans and to build capacities of producer groups. Many of the rural forest communities do not have the necessary business skills for profitable marketing of their products. In Liberia, women make up approximately 60 percent of the agricultural workforce and do an estimated 80 percent of the trading. They are the main resource and food acquisition decision-makers. It is mostly women who harvest firewood and collect fish and snails, spices and oils for home consumption. If forests disappear or prices of forest products fluctuate, there is a direct impact on women's sovereignty over household food security. The project thus showed that it is crucial to strengthen the capacity of these women to make intelligent, sustainable business decisions that lead to forest conservation, poverty alleviation and food security.

Business training workshop

In March 2009, the project developed a non-timber forest product business training workshop entitled "Community Forestry as a Business". Incorporating simple business concepts of group organisation, planning and cost savings, this workshop helped both men and women in the communities to turn their use of non-timber forest products into real business. They are trained in the structure and framework of businesses, learning how working in a group can reduce their operating costs and how they can expand their marketing opportunities. Incorporating a value chain approach, the training gave forest users some tools to examine opportunities for economic growth, from the harvesting stage to processing and all the way through to consumer sales.

Illiteracy in rural Liberia is a staggering 70 percent. The training curriculum, therefore, was designed to facilitate learning through active discussions and the use of real-life examples. Although the business training required some literacy and numeracy, the material has been trimmed down to a manageable level for the predominantly non-literate people. This is particularly beneficial to women, who have a lower literacy rate than men.

Male domination of the most profitable products

During a pilot of the Community Forestry as a Business workshop in the Sinoe county, women would often allow the men to dominate the discussions, as often happens in participatory workshops. But what proved successful was splitting the group into separate men and women groups, to make sure women's voices were heard. The selection of non-timber forest products was a defining factor in women's participation. Women hardly commented when "typically male" activities were discussed, such as the processing of rattan into furniture. The discussion of forest products such as wild palm oil, spices or snail harvesting encouraged a much greater involvement. Targeting such products can make or break the successful inclusion of women into business trainings.

There is always a risk that men will appropriate all of the business: they have a tendency to wrest control of household assets from women, regardless of whose labour produced them. In many business activities, such as marketing of maize or timber, there is a long tradition of male dominance and it

can be extremely difficult for women to participate. But forest management is a relatively new field, and non-timber forest products hold great potential for empowering women. Turning these products into businesses provides a unique opportunity to build and strengthen women's positions. For this, trainers must be able to adapt their training and focus on female-dominated forest product enterprises in order to elicit greater female participation.

Training alone is not enough

The Community Forestry as a Business workshop, however effective in building business skills, will fail to achieve its objectives if forest resource rights and autonomy are not devolved to the communities, and specifically to the women relying



Photo: Adam Norikane

Men have traditionally profited most from forest products, but training will give women more opportunities.

on the forest for their families' sustenance. The international development community and the government of Liberia need to act on this. Women, as the primary food providers for the household, need opportunities to grow and develop their businesses and thus increase their household food security. But being successful in business means not only having the skills to manage promising forest resources, but also having the rights to them. Users' rights to non-timber forest products for women are the first step to community autonomy over forest resources.

Adam Norikane was a Mickey Leland International Hunger Fellow assisting the Land Rights and Community Forestry Project in Liberia. E-mail: adamnorikane@gmail.com

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How can Africa feed itself?

Of the over one billion undernourished people in the world today, 265 million live in sub-Saharan Africa. Three-quarters of the hungry live in rural areas and include farming families. A significant number of African countries depend on basic food imports to meet their consumption needs. However, not everyone can afford to buy food, and the recent food-price hikes deepened this problem even more. In fact, just over half of the sub-Saharan population lives on less than US\$1.25 per day, which will not go far to meet all their livelihood needs.

Food sovereignty is based on the idea that people have the right to choose what to produce and what to eat. But how to translate this into good policy priorities and practices is not simple. On this page, two women professionals working towards improving African food and agriculture programmes provide their views on necessary priorities.



Photo: Nico Bakker

“Traditional food crops are healthier, cheaper and locally available”



Petra Bakewell-Stone, independent consultant, Tanzania.

“Food sovereignty for African farmers is being threatened by industrial agriculture and the global trade in food products. Industrialised food products are cheap and trade undermines traditional rural livelihoods, as they are often produced and processed far away. Also, food bases and consumer trends are becoming much narrower; the food security of Kenyans, for example, is largely dependent on a single grain, maize. Industrial agriculture is based on commercial seeds, agrochemicals and high water consumption, which increases the vulnerability of African societies to climate change, crop failure and livestock disease. All of this can put smallholders at risk. What complicates the situation even more is the increase in highly processed foods. Chosen for their convenience and their ‘modern’ appeal, ‘fast foods’ are not only nutrient-poor and expensive, but the methods for producing them are polluting and wasteful.

“It is ironic that in a region so richly endowed with a high diversity of plants (at least 1000 of which can be eaten as green leafy vegetables), per capita consumption of fruit and vegetables is declining. Traditional diets of grains and vegetables are giving way to those high in fat and sugar. As the main producers and preparers of food, women are disproportionately affected by the ‘nutrition transition’. This explains why they are so concerned with defining their own systems of food and agriculture. In traditional African culture, there is great emphasis placed

on food for self-sufficiency, seed saving and food stores, but traditional methods of preserving food are being lost. For example, preserving millet, pulses and vegetables by smoking or sun drying, is a declining technique.

“In order to avoid marginalising smallholder farmers, the role of traditional vegetables and staples needs to be more strongly advocated. There are many traditional crops which receive only minor attention in research, while being locally known for their high nutritional values and environmental suitability. These indigenous foods contribute to self-reliance and sustainable livelihoods, as they are relatively easy to grow and require minimal external inputs. Some even improve soil fertility through nitrogen fixation, such as pigeon peas, cowpeas, green gram and bambara groundnuts. Growing food crops that are adapted to the harsh and often dry environment of Africa is crucial to solving the food crisis. Besides, communities need to start producing for their own consumption rather than for export, and to take a more active role in guiding policies to that effect.

“We can be proud of our traditional food crops and local customs, and this should be reflected in our food and in our farming education at school. We should also organise gatherings of farmers, breeders, fisher folk and artisans in order to share knowledge and experiences. The ‘Slow Food’ movement is already gaining recognition around the world, including African countries like Tanzania. Slow Food campaigns emphasise the benefits of locally produced, traditional foods – they are healthier, cheaper and locally available.”

For this contribution, Petra Bakewell-Stone (dadapatra@hotmail.com) collaborated with Freda Chale from RESEWO, a Tanzanian organisation that advocates low-cost food production, for example through traditional varieties and organic manure. Other activities include collecting recipes and seeds. See the Networking page for more information on the Slow Food movement.

“African farmers can compete—but need more of the right public investments”



Karen Brooks, World Bank, Washington DC.

“African farmers are capable of producing enough food to meet the growing needs of African consumers. They already do so for many products, such as cassava, millet, sorghum, sweet potatoes and most of their maize. These foods are the backbone of most African diets. Only wheat (two-thirds of consumption) and rice (half) is imported in significant amounts for regional consumption. According to the FAO, the

Our digital newsletter, E-LEISA, contains a summary of the previous discussion on livestock and climate change. To subscribe to this newsletter, go to E-LEISA on the homepage of LEISA Magazine.

African continent imported about US\$ 3 billion more food than it exported in 2006, and this rose during the price spike of 2008 and early 2009.

“For successful production and commercialisation in growing regional markets, African producers need to be competitive in production but also pay lower transport costs. Yields of staple grains are low, but African small-scale farmers are competitive up to the farm gate. They compensate by low costs of labour and low use of purchased inputs. Low fertilizer use can however result in the mining of soil nutrients, since many farmers do not apply dung or plant residues as organic matter to improve the land they use for growing staple crops. Costs may therefore appear low in the short run, but production processes that lead to soil degradation are not sustainable. And low returns to labour keep farmers in poverty even if they are efficient producers.

“It is when their products leave the farm that many African farmers lose competitiveness – through high transport costs, loss to insects and spoilage and poor organisation of processing and retailing. Prosperous urban consumers switch to bread, pasta and other processed products that are less time-consuming to prepare than traditional cereals, and better packaged. Many traditional African staples suffer from lack of attention from research and food industries.

“In some cases, however, consumers prefer local products. For example, local beer competes successfully with imports in much of the region. Also, some locally produced fruits and vegetables need little processing and women in particular earn cash from them.

“African farmers, especially women smallholders, need public support from agricultural research and extension services, and access to seed and fertilizers. Climate change and environmental degradation create needs for drought-tolerant and pest-resistant varieties. Equally fundamental is access to land, which needs to be documented and registered. Massive investments are also needed in infrastructure, especially roads, power, water storage, irrigation and post-harvest facilities.

“This is an ambitious and capital-intensive agenda, but African governments and development partners are moving ahead to invest in the sector that employs about three-quarters of citizens. African governments have committed to spending approximately ten percent of their national budgets on needed public investments in agriculture and rural development. The international community, including the G8, has pledged additional resources, most recently committing US\$ 20 billion over three years at the July summit. The World Bank has more than doubled its new lending for African agriculture in the past year. These are promising steps that will help those who will really make the difference: African farmers, a majority of whom are women and who produce the food and take it to market.”

Karen Brooks is the sector manager for Agriculture and Rural Development in the African Region at the World Bank.

Join the debate at <http://ileia.leisa.info> → Open Forum



Photo: Jim Richardson

The farm of Yacouba Sawadogo in northern Burkina Faso. Yacouba has been a famous pioneer in using the technique of *zai*, small pits dug in the hard soil to promote plant growth and restore regions once thought lost to desertification in sub-Saharan Africa.

Enjoying our jubilee

We at LEISA Magazine are very much enjoying our jubilee year! Who would have thought you would send us so many letters and photos, compliments and congratulations? Thank you for all the heartwarming messages we received. We have to be careful not to get conceited from the many declarations of how LEISA Magazine has inspired you to try out new sustainable farming methods, or even leaving your old profession to have a go at farming.

Contest update: The Future of Family Farming

LEISA Magazine also announced our photo contest focused on the Future of Family Farming (see issue 25.1, Farming Diversity). We have already received many entries for this as well! The winners will be announced in the December issue of LEISA Magazine. You can still try to win a netbook, digital camera or radio with nine functions. It takes some readers a long time until



HOW I STAY INFORMED

Name: Stephen Ruvuga
Position: Director of MVIWATA (National Network of Farmers' Groups in Tanzania)
Country: Morogoro, Tanzania
Subscribed for: 11 years

What do you do?

"My organisation brings together small-scale farmers into a platform for lobbying and advocacy on issues of common interest. Our organisation numbers 70 000 members from all over Tanzania, who are organised in 16 regional networks. On the one hand, we make farmers aware of various issues that have an effect on their lives, such as land rights, the agricultural planning sector and policies on farming such as marketing, micro-financing and trade advocacy. We also conduct training and informational programmes

for improving farmers' productivity and sustainability. On the other hand, we conduct lobbying campaigns through demonstrations and meetings with parliamentarians."

Where do you get your information?

"We read various magazines such as LEISA Magazine and SPORE. Our office also has access to the internet, and although we do not always have a reliable connection, we get a lot of information from there. We also work in partnership with many organisations and projects and interact with the Ministry of Agriculture, which helps to obtain information."

How do you exchange information in your work?

"We have our own newsletter in Swahili, which comes out four times a year, and we distribute brochures and booklets on specific topics, for example one on indigenous methods of soil and water conservation. We produce radio programmes that include experiences of other farmers, and also organise meetings and training sessions. Finally, we also send out a monthly news bulletin on events and news of importance to the network."

the magazine reaches them, so we have extended the deadline to October 15th. Send your contributions to jubilee@ileia.nl. Be sure to send in photos of at least 1 MB, so that they will have a high enough printing quality. Many people also sent us letters explaining how they see the Future of Family Farming. We will publish a selection of those in our December issue too.

Major transformation coming...

Many readers have been asking whether the magazine can also provide discussions, background information, and information on how policies affect small-scale farming practices. We are working hard on meeting these requests. In the next issue, you will find LEISA Magazine has undergone a major transformation.

We will present our new look (and name!) during a conference on the Future of Family Farming, to be held on December 15, in the Netherlands. The conference is meant to highlight the relevance of sustainable family farming as a means of providing food security. We will provide you with a full report, in the renewed "LEISA Magazine"!

Poster of readers of LEISA Magazine

With this issue we have included a small poster of the contributions we received in reply to our request for photographs of people reading LEISA Magazine. This shows the wonderful efforts that



readers made: we received group photos, photos with studio backgrounds, photos that come from far away places. Thanks to everyone who sent in a contribution! We have gone to great lengths to include everyone and properly credit everybody – but in case a name ended up being misspelled, our apologies! Sometimes it was difficult to read the handwriting as mail that travels the world over tends to get battered in the process.

What kinds of challenges do you encounter in information exchanges?

"The greatest challenges have to do with communication down to the village level – it is not easy to get it out there. We have language challenges – we need to translate information from (usually) English to Swahili; and the whole process of distribution is expensive and time-consuming. Also, most farmers cannot get access to the internet, so we cannot use that medium to get our message out."

What kind of information do you still miss?

"I cannot think of any information that I miss. Personally, I am very satisfied with what I can get from the internet – and I also very much enjoy reading LEISA Magazine, to which I've subscribed since 1998."

Contact details

Mtandao wa Vikundi vya Wakulima Tanzania (MVIWATA), P.O. Box 3220, Morogoro, Tanzania.
E-mail: mviwata@africaonline.co.tz



Photo: Esif Arantassari

How translations help reach the intended audience

Kees Stigter knows all about gathering information about weather and climate – crucial knowledge for farmers when it comes to adapting to changes in climate. Stigter believes in sharing knowledge directly with those who need it most. The fact that his article on Climate Field Schools (written together with his Indonesian colleagues) was translated into Chinese, helped do just that.

I am a visiting lecturer in agricultural meteorology. I give what I call "roving seminars" in agrometeorology, aimed at extension workers and their teachers. I have been working in China for 12 years now, one month or more each year. Of the more than 25 countries I have worked in, this is by far the most difficult one in which to get something done. Language is a severe bottleneck: if my article had not been translated, no one in China would have read it.

But it is also the way information is distributed; information reaches farmers by way of a "cascade method": it trickles down from province level to county, to township, village and village technician, until finally it reaches the farmer. Many farmers complain that they do not have direct access to information, which makes it very difficult to give feedback. That was another reason I was happy to see the article translated; it provides an opportunity to get the information more directly to the people for which it is intended.

I sent the article to all of my Chinese colleagues and asked CBIK, the organisation that publishes LEISA China, whether they would be interested in another article, on how knowledge reaches farmers. There are no such things as Farmer Field Schools in China, and perhaps such a set-up could work there as well.

The original article published in LEISA Magazine, elicited a response from someone from the Natural Resources Institute in England. They would like to publish an article on how farmers can measure the amount of rainfall themselves, using self-made instruments. This is a lot less easy than it sounds.

To me, science is most gratifying when it connects with the needs and knowledge of farmers. For example, farmers are always telling me that where there is no forest, there is less rain. Until now, scientists have not been able to prove this, although recently, it seems that researchers in Russia may have found a way. Through the publication of our article, I have been in contact with the Forum for Tropical Water in Hyderabad, India, and was able to send them information about this new research. It would be great if there were proof of what farmers have been saying all along.

Kees Stigter (cjstigter@usa.net) is visiting lecturer in agricultural meteorology. More information on this topic can be found at www.agrometeorology.org, the site of the International Society for Agricultural Meteorology, of which Stigter is the founding president. The article referred to here, "Climate Field Schools in Indonesia: Improving 'response farming' to climate change", was published in the December issue of LEISA Magazine in 2008.

A look at the Women Farmers' Movement (MMC) in Brazil

Getting food sovereignty and women's

The concept of food sovereignty gives visibility and recognition to the role of women in producing food and other agricultural goods. Getting food sovereignty onto the political agenda is very much related to the issue of women's rights, particularly those of rural women. By organising political campaigns, the Brazilian Women Farmers' Movement (Movimento de Mulheres Camponesas – MMC) is attempting to do just that. And in doing so, they demonstrate the important role of women farmers.

Laetia Jalil

The discussion that is currently going on around the concept of food sovereignty in Brazil has many political and social shadings. It reflects a complexity of social, political, economic and cultural realities. Food sovereignty guides the policy priorities of various movements – both within civil society and the government – and also links urban and rural areas. It even transcends national borders, to international organisations such as La Vía Campesina.

As a movement that has grown out of political activism in the 1970s, the Women Farmers' Movement recognises the relevance of the concept of food sovereignty for rural women. In Brazil, women represent 47.8 percent of the population residing in rural areas, of which only 16 percent hold titles to land. According to the Brazilian Institute of Geography and Statistics, 40 percent of the rural population has no basic identity papers such as a birth certificate, and of this total, 60 percent are women. Of a total of almost 15 million women, most do not have access to health services and schooling, nor does the government recognise their needs as family farmers, rural workers or victims of racism in the case of those of African descent. Without papers, people cannot have their basic human rights protected, and they can neither vote, hold titles to land, nor get access to credit.

Valuing food sovereignty

"Food sovereignty is about the right to say 'this is ours, this is what we produce', and to not depend on others to produce food for us. The seed we use is ancient, based on conservation practices of the first inhabitants of this land. A company cannot therefore come in and try to cheat us, saying that what we do is not valuable, useful or profitable. We can prove our worth through our daily farming practices. Our production has potential, and it gives us the strength to fight for and value what we do in our work and in our lives." Quotation from an interview with the municipal MMC co-ordinator in Descanso, Santa Catarina, May 25th 2008.

Campaigning for rights

An important focus of the activities of the Women Farmers' Movement is on the participation of women in public functions and the redefinition of their practices at home. The movement is found throughout rural and urban Brazil. Per state, it is organised into regions. Each region comprises a number of municipalities, whose co-ordinators organise grassroots groups, conduct training activities on women's rights and participation, and develop campaigns and workshops on indigenous seeds and medicinal plants.



Poster from MMC's national campaign for healthy food production: "Produce healthy food, care for life and nature."

In 2007, the Women Farmers' Movement embarked on a political campaign in preparation of the International Women's Day on March 8th. A march, bringing together a large number of women, kicked off the campaign to highlight women's roles in food sovereignty as well as issues such as violence against women and the struggle for welfare reform. The slogan "Produce healthy food, care for life and nature" stressed the importance of the production of healthy food.

The goals of the campaign were multiple: to advance the struggle for food sovereignty in order to combat hunger, poverty and poor health and to increase support for small-scale food producers through technical assistance, infrastructural improvements and subsidies. At the same time, the campaign intended to build awareness on biodiversity and environmental conservation, partly through agro-ecological practices. The campaign focused on agrarian reform and better public policies for rural areas, concerning things such as welfare, health, education, homes and transportation.

Activities on three fronts

The campaign initiated projects to revive local and forgotten varieties of seed (through seed banks, improvement and exchange), medicinal plants (preserving local knowledge) and agro-ecological production (by organising agro-ecological fairs that focus on food habits and sustainable care of the environment). Meetings took place at which people could learn about and exchange their experiences of using non-commercial seed and agro-ecological practices. Throughout the campaign, municipal co-ordinators also received training courses to improve their agricultural capacities and awareness of women's issues, in order to create a stronger network.

A year later, on March 8th, 2008, the Women Farmers' Movement organised simultaneous demonstrations throughout Brazil, to

rights onto the political agenda

present a series of demands to the government. For example, 600 women came to Florianópolis, a city in southern Brazil, to demand that the municipal government construct 600 water tanks, and set up 30 medicinal gardens and three literacy classes. Two women farmers explain the importance of their message:

“What is the relevance of March 8th? It is to strengthen our campaign. If we had a water tank, our gardens would be quite different, and we would not run out of food. Water shortages happen (we have already had one this year), so we hope that our message will mean an answer to this question.”

Rosalina Silva

“I think these two things the campaign and the agenda of March 8th are very much linked, because if I want my garden to produce, I need a water tank. If the state were to build and safeguard water availability, it would make a lot of sense. Because if you say to someone, ‘Make a garden’, a garden without irrigation will not succeed. For this, we have to fight because it is the right of women to have access to a garden, to water, to schooling.”

Iraci Colombo

Visible results

By implementing the campaign for healthy food production, the Women Farmers' Movement has come to understand better

how the practices of women farmers reaffirm the struggle for food sovereignty. The movement has become much stronger because of the campaign, particularly by linking rural and urban women. At the same time, the movement experienced that they can use the concept of food sovereignty to influence policies towards a more democratic society. A main highlight of the campaign was when the movement made specific demands to the Ministry of Welfare regarding the inclusion of women in the national discussion on universal welfare reform. As a result, the government was forced to include women in their official discussions on the reforms.

Battling for food sovereignty is not only about questioning the model of commercial production, but also about recovering and valuing local knowledge and family farming culture. Strengthening food sovereignty should at the same time strengthen the fight against oppression of women and degradation of the environment. This should lead to new social relations, characterised by solidarity, respect, recognition of diversity, and solving the critical question of inequalities between men and women. Only then can we change the world to change women's lives!

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Women farmers on food sovereignty: the Netherlands



My name is Margreet Arkema and I live in Noordbroek, in the north of the Netherlands. My husband and I, together with our two sons, have an organic cattle farm. We have cows of the Blondes race, some pigs and 400 chickens, as well as 100 hectares of non-organic wheat, maize and rapeseed. We are small- to medium-scale farmers according to Dutch criteria. We are

unique in that we raise different kinds of animals (most farmers have only one kind) and that we sell the meat in our own butcher shop. My eldest son is a butcher and once a week we call for the meat inspector to witness the slaughter of some of our own animals or those of colleagues. Chickens go to a slaughterhouse elsewhere. It is too expensive to do that at home: we would

have to hire the inspector for 2 days a week, to see every chicken before and after slaughter, as regulations prescribe. The shop has been our salvation: without that regular income, we would have had to sell some of our land. Prices of land are high and with our 100 hectares, you could call us wealthy. But it is not wealth that we can spend.

We started our farm in 1982, growing wheat and maize. Later we extended our activities with a cattle fattening unit, to have some work in the winter. When customers asked for organic meat, we only had to adapt our fodder to biological standards, as we already fulfilled the other organic requirements. The animals have room to go outside and the calves stay with their mothers: we have always liked that kind of farming more than intensive farming. I especially like the fact that our farming is local. We produce meat for the local market and our customers know exactly how their food is produced. I'm very proud of that. I only wish we could cultivate our own organic fodder. But we are on clay soil here and it is simply not possible to cultivate crops organically: weeding by hand is too heavy. So instead we deliver our non-organic wheat to a corn trader and buy organic animal feed.

Interview and photo: **Mireille Vermeulen**, editor
LEISA Magazine.

Bed Prasad Khatiwada, a Nepalese horticulturalist, has received LEISA Magazine ever since he was a student, and has regularly used it as a source of information. After reading an article on plant clinics in issue 23.4, he wrote to the author of the article for some additional information. What he got was much more: successful plant clinics are now being implemented in several regions of Nepal.



Being part of a worldwide network

Bed P. Khatiwada

Since 1997, LEISA Magazine has been one of my best sources of information. It provided reference material for my studies and later work at the Institute of Agriculture and Animal Sciences of Tribhuvan University. After my studies I joined the Society for Environment Conservation and Agricultural Research and Development Nepal (SECARD Nepal), a not-for-profit, non-governmental organisation that aims to develop agricultural systems based on an optimal use of local resources. In a project promoting organic agriculture, we used LEISA Magazine to understand and introduce ideas such as the integration of grain legumes into cropping systems, and the management of biodiversity.

Being a regular subscriber of LEISA Magazine, I came across an article called “Plant clinics for healthy crops” in issue 23.4. I went through that article several times and looked for additional information on the internet. I was convinced that plant clinics were an appealing idea, considering the limitations of the extension system in Nepal. Plant clinics seemed to give the possibility to reach a large audience in a short time and provide a service at the time and place where it is most needed. Equally

appealing was that the advice is based on a thorough observation: a sample (a diseased or infested plant part) can help to avoid that farmers misuse chemical inputs, and can help reduce production costs.

Trying it out...

I shared the information with my colleagues and especially with Surendra Dhakal, my supervisor and team leader. We

agreed to try plant clinics out as part of the Lamjung Food Security project, a project implemented by several organisations and funded by World Vision UK. We discussed the idea with farmer groups and with governmental and non-governmental organisations, looking with them at the potential benefits offered by plant clinics.

The idea of setting up plant clinics was embraced enthusiastically, but we



The original article, “Plant clinics for healthy crops”, as published in LEISA Magazine, Vol. 23.4, December 2007.



Photo: Pradip Neupane

Plant doctors Raj Kumar Adhikari and Bishnu Pokhrel providing technical services to women farmers in Dhading.

Plant clinics and plant doctors

Nepalese farmers face numerous problems related to pests and diseases, and plants often suffer from nutritional or climatic stress. These problems are almost always interrelated and therefore difficult to diagnose. In addition, extension agents need to cover very large areas, so it is impossible to provide a good advisory service to all farmers. Many farmers turn to the shops that sell pesticides and fertilizers, where they are recommended to use broad-spectrum fungicides or micronutrients. Malpractice is common, resulting in an unnecessary use of agrochemicals and in higher production costs.

The plant doctor can be an extension officer as well as a farmer. He or she starts by gathering information, examining the symptoms and asking the farmer for specific information. This method is called "field diagnosis". After systematic elimination of the most unlikely causes first, the plant doctor makes a recommendation, providing specific advice. Some problems may require a visit to the field or further investigation. Visiting a plant clinic is easy for farmers, they know when the doctor will be there and they can go whenever they have a problem. Information flows in many directions, with farmers actively communicating with other farmers and with the doctors.

only had a small problem: we knew very little about their implementation. I sent an e-mail to one of the authors of the December 2007 article, Eric Boa, head of Global Plant Clinic (GPC). He wrote an encouraging e-mail back, mentioning all the critical factors to be considered before starting a plant clinic. My colleagues and I were further encouraged by the interaction that followed. I was expecting suggestions, comments and perhaps some guidelines, but they were even willing to provide training!

This training took place in December 2008 in Besishahar, in the district of Lamjung, and it was given by Robert Harling, together with Eric Boa himself. Twenty-three people attended the course, including agrochemical dealers, government agricultural officers, students from the Institute for Agriculture and Animal Sciences, staff of World Vision International Nepal and representatives of organisations working on livelihood projects in Lamjung. The "how to become a plant doctor" course looked at the best ways to identify the cause of a plant health problem. Participants practiced interviewing farmers, filling out the clinic register and making recommendations to solve plant health problems.

As part of the training course, two pilot clinics were set up: one in Sundarbazar and one in Besishahar. During these

clinics, 53 farmers asked for advice regarding more than 90 problems (mostly referring to fungal and insect attacks). It was amazing to see long queues of farmers waiting to hear what the doctors had to say, and also interested in sharing their own ideas. This was an excellent training for us all, and we really "learned by doing".

...and scaling it up

Having participated in the training course, SECARD decided to try plant clinics on its own (with the technical assistance of GPC); two of them were set up in the Kathmandu area. World Vision started bi-weekly clinics in Lamjung, rotating them between Besishahar and Sundarbazar. These are going on right now, and the positive results are easy to see. GPC visited us again early this year, and talked to doctors and farmers, giving general recommendations on how to monitor our work and improve our impact. Keeping good registers is an important part of this approach.

A national workshop was organised in Kathmandu in May, with the specific purpose of introducing the plant clinic concept to a wider audience, sharing our results, and also discussing a way forward. The organisers made sure to invite the heads of the District Agriculture Development Offices of Kathmandu,

Bhaktapur, Lalitpur and Lamjung, as well as scientists from the Nepal Agriculture Research Council (NARC). We were happy with the interest they all showed and with the discussions we had. All participants agreed to help launch a broad plant clinic initiative. The plan is to incorporate the plant clinic concept into regular programmes and design a separate project for capacity building and networking. This is already on track. By joining the global network of plant clinics, I feel we are contributing to the development of an effective plant health system in Nepal.

Bed Prasad Khatiwada is currently providing technical advice to this initiative, and co-ordinating the work of various stakeholders, along with publications related to plant clinics. He is also member of the British Society for Plant Pathology (BSPP). E-mail: bedkhatiwada@gmail.com

Additional information can be found in the documents "Starting plant clinics in Nepal" by Eric Boa and Rob Harling, 2008, "Think big, start small: Developing a plant health system for Nepal" by Solveig Danielsen and Dannie Romey, 2009, and "Plant clinic initiatives in Nepal" by R.K. Adhikari (SECARD), published by DADO Kathmandu, SECARD and World Vision International Nepal.



Seed fairs in Nampula promote food sovereignty

If you don't save seed, you are not a farmer

In parts of Mozambique, seed fairs have become an important tool for improving family farming and food sovereignty. The concept is simple: create a space for small farmers from different regions to come together to exchange seeds. Gaining access to (diverse) genetic material allows for new opportunities and ideas for reducing risk and increasing productivity on farms. But seed fairs also offer a way to value and strengthen farmers' knowledge and local culture, as well as strengthening farmers' movements. An inspiration to others to set up their own seed fairs!

Nico Bakker and Feliz Zenén Martínez Mendoza

In Mozambique, farmers as well as farming organisations are becoming more aware of the strength of their local food production systems, and the fact that these help them reduce risks. At the beginning of this decade, some farmers tried to improve their incomes by participating in cotton and sweet pepper “market outgrower schemes”: they obtained packages of seeds and chemical inputs from extension agents of big companies, who then bought up the harvests at the end of the season. Farmers were paid for their production, minus the cost of inputs. But this

experience left many farmers in debt because of high investment costs, and in the process of specialising in a particular crop, they became vulnerable to an uncertain climate and volatile markets.

Margarita Amisse from Natikiri participated for the third time. She brought groundnuts to the market and returned with sesame, cowpeas and rice. She also bought maize seeds for a neighbour. According to Margarita, the benefit of the fairs is that the seeds are less expensive than in the shops, and the variety is much greater as well.



Photo: Nico Bakker

Many of the farmers who participated in the seed fairs were women.

Real farmer

At the same time, food culture has been changing. Local crops such as cassava and sweet potato, as well as cereals such as sorghum and millet, are being increasingly substituted in the people's diet by crops that are not locally produced, such as potato and wheat.

With these challenges in mind, the Union of Agricultural Cooperatives of Nampula (UGCAN) organised its first seed fair in 2002 in the province of Nampula in northeast Mozambique. UGCAN's objectives were to: 1) create an opportunity for family farmers to exchange genetic material which was adapted to local conditions and customs; 2) promote the diversity of seeds used by farmers; 3) exchange experiences on the production of varieties adapted to local conditions; and 4) make farmers aware of the importance of controlling their own seed.

Since then, membership of UGCAN has grown to 2000 farmers. It was therefore decided in 2008 to replace the single central fair with five simultaneous regional fairs, in order to help farmers participate more easily, closer to home. On average,

about 140 farmer members (of which 40 percent were women) participated in each fair – and 700 members in total. Even more people benefited from the fairs as other, non-member farmers from the areas visited them and brought back materials for their neighbours as well. Practically all of the material (over 95 percent) at the five fairs was exchanged.

Adelaide Mesquita from M'puto participated for the fourth time. She brought groundnuts of the fast-growing Virginia variety and returned with cashew tree seeds and jugo nuts. The variety of cashew she acquired is known for growing fast and for having larger nuts. The jugo nut variety she obtained matures quickly (in two instead of three months). What she likes about the fairs is the diversity and the possibility to recover seeds that are lost when production is low. At the end of the fairs, non-member farmers from the area always come by to try to get seeds too – which can attract new members to the farmers' organisations.

Diversity is growing due to seed fairs

Genetic material is crucial for all agricultural production systems and its management determines to a large extent the food sovereignty of a given community. In principle, all family

Why farmers value seed fairs

- In general, farmers **value the diversity available** at the fairs, which is greater than that in the shops or from local distributors. In Nampula, the fairs offer more and more varieties over the years. Two examples are the supply of 'Virginia' groundnuts as well as the brown-streak-resistant variety of cassava: in the beginning, these were only brought by farmers from a particular area, but in recent years, more farmers from other zones also bring them to the fairs.
- Participating farmers do not look for "high-yielding" varieties but rather seek out **varieties that increase the probability of a yield** (crops that have a short cycle and are early maturing or pest resistant). Fast-maturing crops found at the fairs, such as groundnuts, maize, beans, sorghum, cassava and millet, attract much interest from farmers. This material helps to reduce the four-month wait for staple crops to mature once the rainy season begins, and so reduces the period of food scarcity. Resistance to disease and pests is another important factor – for example, a variety of cassava that is more resistant to brown-streak and certain varieties of millet and sorghum with long and flexible heads, making it difficult for birds to get at them.
- Farmers also value culinary qualities such as shorter cooking time and sweet taste, as in certain varieties of cassava, for example.
- Fairs provide an opportunity to **recover "lost" varieties**. Varieties become lost because of poor production, which obliges the family to eat or sell what they have saved. In Mozambique, this is often the case with maize and groundnuts as they are both cash and food crops and relatively easy to sell in times of crisis. Marupi, a wild cereal traditionally used in porridge, is another example. The reason it appears at the fairs might be that it no longer easily reproduces naturally.
- Farmers are curious and have a drive for innovation, and are therefore eager to **get to know new varieties**.
- Farmers appreciate the **easy access to seeds**. At the Nampula fairs, seed is exchanged or otherwise sold at a symbolic price.
- Seed fairs allow farmers to actively look for and **exchange knowledge regarding seed**.
- Finally, the farmers appreciate having a **space of their own**.

farmers in Mozambique save their seeds because, as they say, "if you don't save seed, you are not a real farmer". Managing seed is, however, a dynamic process. It is normal for farmers to exchange seeds with their neighbours and in this way create small differences in seed stocks between neighbouring farms. Seed fairs give farmers a greater opportunity to increase seed diversity, as they can exchange with colleagues further away.

This is certainly the case in Nampula, as the fairs have come to offer more and more diversity over the years. In 2008, each of the regional fairs had more than 20 different varieties on display, and the following produce was represented:

- Cereals: maize, rice, millet, sorghum, *marupi* (type of wild amaranth grain)
- Beans: cowpeas (*nhemba* and *ecute*), mung beans, fava beans, *jugo* (bambara) nuts, namara beans, pigeon peas, butter beans
- Oils: groundnuts, sesame, local sesame, cashew, castor beans
- Tubers: cassava, sweet potato, yam and local wild tuber
- Vegetables: okra, tomato, garlic, cabbage, chili pepper, local pepper, pumpkin, cucumber, onion, two other types of local vegetable
- Medicinal plants: African potato (*Uapaca kirkiana*), Indian mulberry (*Morinda citrifolia*), neem and two other local medicinal plants (seeds, leaves and/or roots)
- Fruit: watermelon, banana, orange, lemon, pineapple
- Other: sugarcane

Ana Leite from Murrupula participated for the first time and obtained a variety of light-skinned cassava. This variety is not bitter and can be eaten raw, which made it a much sought-after product at the fair. Ana Leite took home maize seeds and a cutting of a kind of sugarcane she had never seen before, so she was also given information on how to cultivate it. For Ana, the fairs offer diversity and an opportunity to discover new varieties.



Sitting under shady trees, farmers display a wide diversity of seeds and other genetic material at one of the seed fairs in Nampula.

How to organise a seed fair

1. Organise the fairs regularly, and avoid the busy time of the growing season. The Nampula fairs are annual and take place about two months before the rainy season.
2. Start with a central fair, but later increase the number of fairs to cover different regions, thus allowing increased participation.
3. Let the regions be responsible for organising their own fair, to allow local farmer leaders to gain experience in organising activities. In the Nampula case, representatives were selected for the different regions, as well as an organisational committee composed of leaders from each area.
4. When organising simultaneous events as UGCAN did, keep the logistics manageable. The five seed fairs catered to members within a 180 km distance from the UGCAN headquarters in Nampula.
5. Move the location of the fairs within the regions every year.
6. State clearly in the invitations that an equal number of women and men are expected to represent each area at every fair.
7. Also explain in the invitations that diversity and a good quantity of seeds are important, as is information about the seeds (when to plant, preferred type of soil, water needs, etc.).
8. Add some local cultural interest: for the Nampula fairs, local authorities were invited, as well as a drum and dance group. UGCAN members were also asked to prepare songs or a play that highlights the importance of seed.
9. Provide money to the organisational committees, which can also be used for food for the participants and guests. At the end of the fair, a breakdown of the costs should be presented to the participants.
10. Ensure that the seed be exchanged or otherwise sold at a symbolic price to keep it accessible to the farmers.
11. Keep out commercial seed companies (authorities inevitably suggest inviting representatives of seed companies, which of course completely negates the idea of the fairs).
12. Award prizes at the end of the fair to the areas that managed to attract the most seeds in terms of diversity and quantity.
13. Afterwards, evaluate the fairs to evaluate possible adaptations for the following year.

At one fair, participants identified three varieties each for maize, groundnuts, cassava, sorghum and rice and two varieties each for fava and *jugo* nuts, sugarcane, pumpkin, sweet potato, and millet.

In addition to the direct aspects of farming, seed fairs offer a way to appreciate and strengthen farmers' knowledge and local culture. They also provide an instrument for farmers to mobilise members, strengthen self-organisation, increase visibility, and show a novel approach for local organisations. ■

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Further reading

The FAO (Food and Agriculture Organization) produced a useful handbook in 2006, based on its LINK project (Gender, biodiversity and local knowledge systems for food security) in Tanzania. Following two studies and four seed fairs, FAO prepared simple guidelines for rural communities on how to organise a community diversity seed fair: FAO, 2006. **Community diversity seed fairs in Tanzania: Guidelines for seed fairs.** Report no 51, Rome, Italy. Downloadable at: www.fao.org/sd/dim_pe1/pe1_060701_en.htm

Livestock projects in southwest China

Women participate, everybody benefits



Photo: Chen Yong

Women farmers, including two Lisu Tibetans in traditional clothing, discussing their experiences in a "villager experimentation group" workshop in Gongshan.

Women play an essential role in animal production in the rural northwestern region of Yunnan province, China. However, women are often left out of extension activities and training opportunities. A recent project has found various ways to better target women farmers. By increasing their participation, as well as the professional training of women field workers, risks in livestock production were reduced and household economies improved. Women farmers also became more confident and aware of their rights as decision-makers on the farm.

Shen Shicai and Qian Jie

Livestock production serves various crucial roles in the livelihoods of marginalised and poor people. It contributes to local diets, provides cash, draught power, organic fertilizer, and is a means of transportation of heavy equipment. Those whose livelihoods are most dependent on animal husbandry are the poor, especially women, in remote mountainous areas that have little access to information, infrastructure and employment opportunities.

Gongshan county is just such a region, situated in the northwest of the province of Yunnan, China. To the west, Gongshan borders Burma and to the north, Tibet. Gongshan is a typical agro-pastoralist region and is home to a great variety of cultures and considerable biodiversity. In 2008, 32 percent of farmers' incomes came from crop products and 29 percent from animal husbandry. Crops include maize, rice, vegetables, potato and cash crops. Livestock consist of yaks, cattle, sheep, goats, pigs, horses and poultry. Crop cultivation and livestock production are strongly linked. Livestock also has a social function in this area, such as for gift-giving (exchange), and in wedding, funeral and religious ceremonies.

Women's agricultural roles in Gongshan county

Women and men have different roles and decision-making responsibilities in their agricultural activities. In general, women farmers are mainly responsible for subsistence crops such as maize, rice, vegetables and potato, whereas the men mainly carry responsibility for cash crop production. Subsistence crops are cultivated near the home, mostly for food for the family and livestock fodder. Cash crops grow relatively further away from the village and are usually sold on the



Photo: Shen Shicai

Farmer Huxiaohua milking one of her cows in the village Dimaluo in Gongshan. Once the cattle are brought home from the grasslands, women are usually responsible for this work.

market. Men make more of the decisions regarding purchase and sale issues for both cash and subsistence crops.

In livestock production, women mostly raise pigs and chickens, whereas men are usually responsible for feeding and grazing of cattle, goats, sheep and horses. Both men and women are responsible for the care of their respective animals, preparing fodder, cleaning the stable, disease treatment, and buying and selling. Male farmers are also responsible for heavy projects such as building fences, pens and silos for silage, while female farmers work on tasks such as making barrel silage fodder and grass production. In the summer months, men accompany the cattle, goats and sheep to grazing grounds in the mountain grasslands, while women stay close to home, where the pigs and chickens are kept. In the winter, however, the animals are brought back, and men and women share the responsibility of carrying manure and preparing fodder. This division of roles indicates that men have decision-making rights over the higher (monetary) value animals, while women care for the livestock having less value. More recently, however, there has been an increase in the number of young men travelling long distances to engage in labour, leaving more and more young and old women in charge of all agricultural production and other activities.

There are certain limiting factors restricting the development of animal husbandry in Gongshan, including disease, lack of green fodder sources in winter and spring, alpine grassland degradation and low local extension services. The project “Enhancing agro-pastoralist livelihoods in NW Yunnan province” was therefore initiated in 2003 by the Center for Biodiversity and Indigenous Knowledge (CBIK) to identify and try to solve these problems. An important part of the project was a study carried out in the following year to clarify social factors and gender issues in this country. The results of this research were useful for determining how new policies could be implemented.

Men targeted, but for women’s activities

From conversations with village leaders, government officials and women’s groups, it emerged that men often have access to more opportunities for receiving information, training and extension services in the community than do women. Government extension programmes, however, are usually focused on the most common agricultural products produced by women (i.e., pigs, chickens and subsistence crops), and less on larger livestock and commercial crops. But because women do not participate in these programmes, extension has had little impact on the capacities, social relationships and economic status of women. As a result, household economy and food security (which depends to a large extent on the contribution of livestock, in the form of meat, oil and milk) have not improved.

Targeting women in the office and in the village

One way to improve services to women farmers is to strengthen the capacity and role of female staff at extension agencies, such as the Gongshan Animal Husbandry Bureau, as well as local veterinary stations. Field technicians carry out field inspections, on-the-spot training, and disease treatment, as well as organising farmers’ meetings in villager experimentation groups (VEGs). Following the participatory technology development (PTD) approach, male and female workers were divided into single-sex or mixed groups, which were responsible for extension work in the VEGs. The extension staff, both men and women, visited and interviewed villagers’ groups each month to learn what developments had taken place, how villagers understood and interpreted the information they received, and what the impacts of introduced technologies were, and then shared their findings at VEG meetings. Besides participating in research, the women technicians also received training in special topics, such as ethno-medicinal and traditional knowledge, livestock marketing and fodder resources. So far, 13 women have been trained successfully at four agencies (76 percent of the total female staff).

Another way to enhance the capacity of women farmers to solve their farming problems was to establish women-only villager experimentation groups. Through these groups, women farmers gained more opportunities to work together, share their experiences, express their opinions and also train new groups.

Different strategies for targeting poor farmers

Due to economic and social constraints, poor farmers in the community were only rarely able to participate in the project's activities. This was a special concern for the staff, who assessed the current situation and issues of poor farmers. To encourage their participation, the project offered more economic, social and institutional support to them than to wealthier farmers. The most important strategy for targeting poor farmers turned out to be the establishment of a "technology innovation fund". The fund was managed by a committee composed of only poor farmers, with at least half of them being women. The committee was responsible for establishing regulations for the fund, such as allocation of loans, repayment, and monitoring. In addition to this financial support, the project offered free training to poor farmers and gave them more opportunities to speak out at monthly and seasonal meetings. According to interviews with poor farmers, these strategies and activities played an important role in their lives, solving their immediate financial needs and developing community cohesion. In fact, some of the regulations and approaches developed by the farmers' committee were subsequently applied by the local government on a larger scale.

"We can do anything now!"

After four years, all villages now have more female than male villager experimentation groups, with 67 percent more female groups in total. Women farmers now have easier access to new information, training and extension assistance at the community and county level. According to the 2008 assessment, 95 percent of villagers interviewed (men and women) reported that women played important roles in the project's activities. According to many, few women liked to attend community and extension activities prior to the project, and even when attending the meetings, they said nothing. Four years after implementing the

VEGs, many villagers confirmed that the women had improved their capabilities, social position and economic benefits. For example, animal death rates were reduced by organising the livestock medical fund and establishing village veterinary monitoring and vaccination supply systems. Also, growing green fodder through bio-fencing and implementing silage-making were instrumental in solving fodder problems. As some of the women villagers said: "We can do anything now – even the men's work; we should have the same rights and opportunities in community activities as men. We have more confidence and greater awareness than before".

Each year, several (monthly, half-year and annual) village meetings are held in different parts of Gongshan. At these meetings, VEGs and female and male extension workers participate actively, sharing their experiences and new knowledge and designing plans together. Good relationships and a broad network have been established through these meetings, and have resulted in women farmers being more visible and being asked to help teach new participants in other villages.

Although CBIK held very few formal gender training events for farmers and field workers, the organisation of VEGs, the innovation fund and the various meetings, all helped to increase the participation of poor and women farmers, and the capacity of women extension workers. This experience shows that the more women who participate in the development process, the greater will become the capacity of women farmers, resulting in stronger livestock production, improved household economy – and ultimately, the achievement of food sovereignty.

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CBIK is a member of the global LEISA Network. This centre publishes a Chinese edition of LEISA Magazine. For more information, please see www.leisa.info.

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Women farmers on food sovereignty: Peru



My name is Teresa Yacsavilca de Casas. I am married to Laureano Casas, and we have four children. Three of them are already married and have their own children, so our family has grown quite a bit.

We produce organic vegetables and avocados in Ayas, in the province of Huarochiri, which is not very far from Lima. We sell them at the weekly market for organic products that is organised in the city. Selling organic products has helped us feed our children. It has also helped us provide better education for the two youngest ones. We earn more money, and I am also happy that many of those who buy our vegetables, acknowledge the fact that we are providing them with healthy and good quality products. Every time I can, I talk with those who come to buy products and promote the advantages of our organic products. In this way, women like me are contributing by disseminating our ideas. We also try to influence other farmers, by showing them the ways we control pests and diseases.

What we produce is good to sell, but it is not enough to feed us all, so we need to buy potatoes and maize in the market. This is basically because we don't have enough hands. Our children help us as much as they can, but they are busy studying and working. This is one of the big problems we see in the field: young people go to the cities or are less engaged in agriculture. And then we have to compete with large landowners...

Another important problem is that not all farmers produce healthy products. It is a pity that only those who have more money seem to be more aware of the importance of eating healthy products. Many of our neighbours do not share these concerns. Still, I suppose we are giving a good example. Katty helps us selling every Saturday, Paula helps us with the paperwork and accounts, and Marianella takes care of the small animals. As a result, we all have better incomes and better products.

Interview and photo: **Teresa Gianella**, editor LEISA Revista de Agroecología, the Latin American edition of the LEISA network.

Food for sale!

Our inbox for articles about women and food sovereignty contained quite a few articles dealing with local and regional food markets. We have summarised some of them to give you an idea of the variety of marketing opportunities and constraints that women face. The link with food sovereignty is clear: food products and their prices on local markets determine the room for manoeuvre within households when it comes to choosing what you eat, and how to pay for other needs and services as well. Women in Ghana transform cassava into “gari” to get better prices for it. Women in Nepal even get inspiration from the market to imitate western food products they see there, because their children like them so much. Markets may also offer new opportunities, as shown by the experience of women’s groups growing organic vegetables in Armenia.



Mauritania



Ghana

Camels bring in more money

Discovering and opening up a market can have large impact on the food sovereignty of households, as shown by the example of camel milk in Mauritania. In 1989, Nancy Abeiderahmane started a pasteurisation and processing unit for camel milk in Nouakchott. Today, this small centre has evolved into a large enterprise called Tiviski, with modern pasteurisation and Ultra High Temperature units, 200 employees and 700 to 1000 nomadic camel milk suppliers (depending on their migration and the availability of milk).

The camel herders can sell their fresh milk at three different collection centres. They are paid for the milk in tickets, which they can exchange for money at the factory. The milk that they sell is weighed and tested, then cooled down and stored. Once a day, all of the milk collected is transported to the factory. A Mauritanian development organisation has worked with the camel herders to improve animal care and feed. All of this has ensured a income for nomad families and changed the traditional idea that selling milk is for the poor. Now, you can make money from a camel. (MV)

Want to read the full article?
Contact **Mamadou Gaye**, journalist,
at maggay0104@gmail.com and look at www.tiviski.com

Better to sell than to produce

Throughout West Africa, urban vegetable production and marketing are important economic activities. They provide cities with fresh products that are otherwise hard to find. In urban Ghana, irrigated vegetable production is the dominant agricultural activity. Accra, the capital, has roughly 800 to 1000 vegetable farmers. Unlike in rural areas, where farming is a joint family affair, urban farming is not done jointly. More than 90 percent of urban farmers are men. This is not because of cultural reasons, but because of the heavy labour involved in irrigation. Women are more involved in wholesaling and retailing. Here, culture is the reason behind the division of roles: marketing, especially retailing, is considered to be “women’s work”. This cultural division of labour actually works well for women, as they do not merely sell what the men produce. Their influence starts before the harvest, when they order certain crops and sometimes even support the farmer with an advance to buy his inputs. Wholesale and retail trade yield better profits than vegetable production, and give women more power in dictating prices to the farmers. In Accra, women are better off by maintaining their cultural role than by trying to compete on the farm. (PR)

Want to read the full article?
Contact **Lesley Hope**, at the International Water Management Institute in Accra, Ghana, at l.hope@cgiar.org



Armenia

Photo: Nune Sarukhanyan



Nepal

Photo: Sabrina Regmi



Ghana

Photo: Edward Owusu Tenadu

Nature-friendly food

In Gargar, in the north of Armenia, members of the women's Farmer Field Schools grow more than 40 different types of organic vegetables and medicinal plants. They do so for a small elite market in the capital city of Yerevan, situated in the middle of the country. Their clients are hotels, restaurants, international organisations and people concerned about health and environment and willing to pay more for good food. Obtaining organic certification is very expensive and what the women do now is "trust-based selling" of nature-friendly products. This trust is promoted through farm visits, bringing consumers in contact with the women and their fields. The women market their products through an intermediary profit-making unit, which informs consumers via e-mail about the available products and then transmits the orders to specific women producer groups. The women send their products to Yerevan, where people at the unit sort, pack and deliver them. This unit has the capacities and the network in Yerevan, which are crucial for sale of their products and are just what the women miss. In the future, the women hope to buy a refrigerated lorry together, in order to transport their products to Yerevan without losses in quantity and quality. (MV)

Want to know more about the project? Look at www.greenlane.am or contact **Nune Sarukhanyan**, president of Green Lane, at office@greenlane.am

Market orientation

Many women all over the world are interested and well informed on what's for sale at the market. This "market orientation" guides them in their choices about what to eat and what to grow in their fields. In Nepal, some women are especially curious about the Western, imported products their children like so much. They take every opportunity to be trained in the processing techniques of these products. But to the surprise of the trainers and the development workers who are trying to introduce income-generating activities for women, they are not so much interested in turning these techniques into profit-making enterprises. Rather, they prefer to make pickles, candies and potato chips for home consumption, to ensure that their children eat products made from fresh and healthy ingredients. Women grow these ingredients (rice, vegetables and spices) on their own farms. Thus, the "market orientation" of Nepalese mothers is inspired by their children's desire for fast food products as well as their own preoccupation of giving healthy food to their children. (MV)

Want to read the full article? Contact **Sabrina Regmi**, researcher, at sabrgi@yahoo.com

"Have your price"

They have never followed any courses in classical economics, but they are familiar with one of the founding principles of economic theory, namely that of added value. For women in Akomadan, in the Ashanti region of Ghana, cassava is a favourite food product. They regularly put it on the dinner table in the form of *fufu*, cassava tubers cooked and pounded in a mortar and served with vegetable soup. But they also grate, ferment and roast a great deal of the cassava into *gari*. This makes the cassava multifunctional; cooked with water and sugar or condiments, it can serve as paste or porridge for lunch or dinner. *Gari* is also much easier to preserve than fresh cassava, as it can be stored for months or even years. The processing of cassava means a lot for the food sovereignty of households, as the cassava can easily be stocked until the end of the dry season. But the added value becomes especially clear at the market: women can ask a higher price for it.

One maxi nylon bag of *gari* (100 kg) can easily make US\$ 60, and women can produce up to 20 bags per hectare of cassava. No wonder the local cassava variety cultivated for this purpose is called *gye wo boo*, meaning "have your price". (MV)

Want to read the full article? Contact **Edward Owusu Tenadu**, teacher at the Akomadan Senior High School, Ghana, at tenadu75@yahoo.com



Introducing the forage chopper to women dairy farmers in Uganda **Technology alone is not enough**

Introducing new technologies to improve development is not as simple as it sounds. In Uganda, a zero-grazing programme was initiated to improve the food sovereignty of rural women. By confining animals in a stall within the compound, access to land becomes less of an issue and women can feed them close to home. But women then need to spend energy on growing and processing forage to feed the animals. Introducing a forage chopper was expected to help solve this problem. However, this then set other mechanisms in motion.

Florence Lubwama Kiyimba

Masaka used to be the food basket of Uganda but it is one of the districts that was torn apart by war and epidemics, leading to a total collapse of the food supply. Between 1979 and 1985, the agricultural production force was further reduced by the migration of men and youth to urban centers in search of employment and quality education. In an effort to restore agricultural production in the district, several NGOs have initiated agricultural development programmes targeted at food security and income generation. Because many men were absent, all efforts were geared towards assisting women to generate on-farm income while balancing their many household and care roles. One such intervention was the introduction of exotic or cross-breed cows for zero grazing.



Photo: Makumbi George

All family members can help when using an improved chopper.

Two NGOs that played a significant role in the livestock sector in Masaka district were Send a Cow (SAC) and Heifer Project International (HPI), whose initiatives are run by Masaka Diocesan Development Organisation (MADDO), a Catholic church-based organisation.

Both SAC and MADDO work with farmer groups. Beneficiaries of the zero-grazing project were selected from farmers' group members, targeting vulnerable and needy households in the community, with emphasis on women. They were given heifers, as these can provide a double benefit once having given birth, in the form of a continuing source of milk as well as a calf. Crucial in the intervention is the "pass-on the gift" notion of passing the first calf on to a next beneficiary. The assumed development mechanism of this project is that by putting a resource directly into the women's hands, their household economic position is enhanced. Incomes could be generated by increased milk production from the exotic animals and increased crop production resulting from the use of cow manure to improve soil fertility.

Tedious, time-consuming and dangerous

Traditionally, women play a key role in the care of cattle. Even where men are the owners of large livestock, it is the women who perform most of the household labour devoted to the animals. With the introduction of zero-grazing animals, women's roles within the livestock sector increased, as they were directly targeted for this enterprise.

The zero-grazing livestock production system is labour intensive. Forage processing for the animals requires growing forage just like other seasonal crops, harvesting, transporting it home, chopping it and then feeding it to the animals. These activities have predominantly been carried out by women, often assisted by their children. The high labour demands, coupled with a lack of sufficient land for forage production and forage scarcity for dry season feeding, means that the available forage must be used efficiently. Traditionally, the farmers chop the forage with a *panga* (a machete), cutting it into small pieces that can be easily consumed. This method is tedious, time-consuming, dangerous to the chopper and has a low output. A labour-saving chopping technology was therefore developed by the National Agricultural Research Organisation (NARO) to make this task less arduous: the forage chopper. In 2000, eight forage choppers were distributed to farmers in the project. Other farmers were required to buy the machines but due to their high cost, many opted for alternative technologies such as making local versions of the NARO design with cheaper materials, or re-constructing it and adapting it themselves.

In developing the forage chopper, it was assumed that the technology would save time and labour for the women by reducing chopping drudgery as well as increasing the productivity of their animals through better quality feeds. In this way, women could get more control over their own labour and this would free them for more income-generating activities. A research study examined this assumption and looked at the effectiveness of the forage chopper as a labour-saving technology for the women.

Saving labour for whom?

The forage chopper does in fact ease the chopping activity, making it safer and allowing women to get assistance from their family in processing the forage. However, the introduction of one labour-saving technology does not imply that women have control over their saved labour. In male-headed households, it is frequently observed that women spend more time in the fields, assisting the men. On the other hand, men very rarely assist their wives in tasks related to dairy production. Clearly, decisions about technologies have implications for power and social relationships, and the real effects are sometimes opposite to the effects intended by the designers of the technology. Moreover, taking up new technologies is not a simple process. New technologies are often considered to be threatening and challenging, and must be successfully "domesticated" or "tamed" before they can be incorporated into people's lives.

For the zero-grazing project, the forage chopper had been pre-tested with the farmers during the technology development process before it was disseminated further. Nevertheless, after over three years of using the technology, it emerged that the forage chopper needed to be reconstructed to suit the women's needs during the "domestication" process. Whereas the original NARO design worked perfectly well from the designers' point of view, the users found it constraining in design and cost. Women found that it required more time to operate, they needed to adjust the chopper's height to allow their children to help out with the chopping, and the cost was prohibitive for the subsistence



Photo: Makumbi George

Zero-grazing – having the cattle close to home in a confined area – reduces the need for land but increases the workload of women, as it is usually they who perform most of the household labour devoted to animal care. Technology especially suited for women, like an adopted chopper, makes life a lot easier for them.

farmers who made almost no profit from this type of farming. Most women removed all the parts that were constraining the machine's operation and subsequently re-constructed the machine using various types of materials. The alterations made by the users were attempts to adapt the original design so that it would better fit their requirements. With the improved farmers' version of the forage chopper, many farmers started reproducing the technology themselves. Effective forage processing for the animals implies increased production of milk for the family and the community, as well as increased value of the animal.

Don't throw technologies at women

Economic empowerment has been widely identified as a strategic factor in improving women's positions. However, how

technology interacts with gender needs must be well understood because technology could create new needs for the users as well. This study revealed that while putting resources (in this case, first the cow and later the forage chopper) into the hands of women, the introduction of a technology is a dynamic process which sets other mechanisms in motion. It also revealed that no single technology works effectively on its own. Even though women's labour was eased in one activity, it did not mean that their overall labour burden decreased, because they then had to engage in other activities defined by their husbands. Also, although they had been involved in the pre-testing phase, women needed a longer period of time to use the chopper before they knew how to work with it efficiently – they later redefined it to fit better with their needs.

The process of "domesticating" a technology through alterations, as happened with the forage chopper, also applies to the dairy production system as a whole. To make the heifer "work", all sorts of adaptations in the use of material resources, learning new tasks and changes in the division of labour are needed. Agricultural engineers and aid workers should therefore pay attention to the dynamics that emerge from the introduction of a technology, rather than "pushing" more technologies onto women. With more research, the real needs of women can be revealed at the household level. Only then can interventions truly make a difference at the social and political level to optimize women's control over their labour and enable them to achieve true food sovereignty.

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Women farmers on food sovereignty: Bangladesh



My name is Shalballi Morang. Our main problem is always the availability of water and this seems to be getting worse. Rains are late and the water level is getting lower. This is what determines whether we harvest enough rice or not. When we don't, we need to request a loan in order to buy food. Sometimes we sell some of our animals or fish, or I earn money sewing clothes. With that money we go to the market or buy rice from a neighbour.

My husband and I farm 300 decimals (which is slightly more than one hectare) in the village of Dhairpara, in the district of Mymensingh. We are Garo people, so we always share the workload between husband and wife. We are also helped by our three children. We basically grow rice, as do all our neighbours. For a long time, we have been using hybrid seeds, which give higher yields. But these plants need more water and also fertilizer,

so in the end they are more expensive to grow. This is one of the main things we learned from the project we are working with, run by Caritas Bangladesh. In this project, seeds of traditional varieties are collected and made available to us all. Last year we obtained 5 kg of seeds from Mr Matindra Mankhin, one of our neighbours and one of the most active participants in this project. Some of the participants are even running their own breeding programme! Mr Mankhin has now seeds of more than 90 different varieties. Even if yields are slightly lower, we are sure to harvest enough. We complement this with the crops from our kitchen garden and with fish from our pond.

Interview and photo: **Jorge Chavez-Tafur,** editor LEISA Magazine.



Vegetables and fruit for the urban population of Havana, produced right in the middle of the city.

Cuba's success story, further developed

The potential of urban agriculture for feeding a growing population is becoming increasingly visible. In Cuba, “urban farms” contribute to a large extent to the island’s food self-sufficiency. As in all food production systems, women play a very important role in urban agriculture. Recognising this role and the overall contribution of women, makes for even better results.

Francisco Dueñas, Dagmara Plana, Isis Salcines, Bárbara Benítez, Laura R. Medina and María E. Domini

Statistics worldwide show that the world’s urban areas keep growing – in particular in the less industrialised countries. It was estimated that in 2005, half of the world’s population lived in cities, and that the total numbers will double by 2030. The production of vegetables in and around cities is therefore growing, in response to the urgent need to feed urban dwellers. The advantages of urban agriculture are being increasingly recognised: it contributes to community development and local organisation, as well as to the production of a great diversity of food, in large quantities.

Urban agriculture in Cuba

Cuba is one of the countries in which urban agriculture has developed the most. A severe food crisis hit the country after the collapse of the Soviet Union in 1991. The production of food in the cities was seen as one of the solutions to the problem (reducing transportation costs and as well as the need for machinery). Special emphasis was placed on production without external inputs (as these were not available), resulting in highly efficient organic systems. The problem of having many “new” producers was that they lacked experience in producing

vegetables on small plots. Therefore an extensive network was built up for the provision of training courses and extension services, and the distribution of seeds and tools. As a result, urban agriculture has shown an impressive growth during the last 15 years. It is now estimated that at least 350 000 “urban farmers” grow crops on more than 70 000 hectares. Whereas in 1994 Cuban cities harvested 4 000 tonnes of vegetables, the Ministry of Agriculture recently reported that during the first three months of 2009, the total harvest of vegetables exceeded 400 000 tonnes; largely reducing the need to import food.

Located only a few kilometres east of Havana’s centre, Vivero Alamar is a co-operative of 170 producers working on 11 hectares, right in the middle of a highly-populated neighbourhood. It started in 1997, when a plot of 3.7 hectares of unused land was given by the government to a small group of producers. Today it is one of Cuba’s most famous “*organopónicos*”, as these agricultural enterprises are known. They all produce organic vegetables (even if most are not certified organic), which are sold either directly to consumers or through the local markets. Alamar shows high (and increasing) production levels throughout the year. Local schools and hospitals also benefit, as they receive at least 10 percent of the vegetables produced. All co-operative members receive a

monthly salary which is much higher than the average wage of a civil servant.

Managers of the *organopónicos* have considered a series of incentives in order to attract both male and female members, such as a seven-hour workday and possibilities for formal education. But these efforts have never been separated from the traditional and widespread notion that men are responsible for working outside the home and earning money, while women are to take care of the family, with no financial remuneration. Even though Cuba's political system ensures equality between all members of society, in most areas, women combine the responsibility of working and caring for the family, while men have only a marginal role in the latter.

We were not really equal...

Considering that objectives as self-esteem and respect to all producers have been top priority in Alamar since 1997, and the fact that almost one third of all members are women, we decided to look in detail at the roles of men and women. We started with a thorough appraisal, considering specific tools and also running open interviews. We organised a series of workshops with all co-operative members, highlighting what



Photo: UBFC Vivero Alamar

Women producers play an important role in the co-operative.

The results were clear. They showed that in spite of the rhetoric, our successful *organopónico* was reproducing the traditional stereotypes of Cuban and Latin American societies, where women have more responsibilities, but less decision-making power. As expected in a *machista* society, our results showed that men are not much involved in household activities. Women take care of their children, but at the same time, they participate fully in all production activities.

The survey showed that men and women had different expectations. Men hardly recognised that women are also interested in higher yields for the co-operative, while women considered men and women to have similar needs and objectives in that respect. Women expressed a specific need for further training and interest in a more active participation in decision-making at all levels.

Starting in January 2009, all results were presented to the members of the co-operative. We had interesting discussions about the results – especially when looking at the inequities. But, more important, the management team took the results seriously. It was not possible to force men to simply play a more active role at home, so Vivero Alamar organised a series of internal seminars on gender issues, aiming at “institutionalising equity” within our co-operative and helping all members to reach their personal objectives. We offered additional training to women, especially on production issues such as seed conservation or pest control. Special attention has been given since then to the participation of women on exchange visits, as trainees and also as trainers. Women have played a

Box 1. Daily activities

Time	Activity	Women	Men
5.00 – 7.00	Prepare breakfast	x	
	Feed animals		x
	Get children ready	x	
7.00 – 12.00	Go to work	x	x
	Daily activities in Vivero Alamar	x	x
	Lunch	x	x
13.00 – 18.00	Daily activities in Vivero Alamar	x	x
	Get children from school/check homework	x	
18.00 – 23.00	Prepare dinner	x	
	Eat dinner	x	x
	Study	x	
	Watch TV/Rest	x	x

we hoped to achieve and inviting everybody to participate. Men and women were placed in separate teams and asked to make lists of all their daily activities (see Box 1) and then used the results as part of the discussions. In another workshop, also with separate teams, we asked the participants to state their needs and objectives, and to show if, according to them, these apply to both men and women (see Box 2).

Box 2. Needs and expectations

According to men...	Men	Women	According to women...	Men	Women
	need/want to			need/want to	
Increase production levels and yields	x		Increase production levels and yields	x	x
Ensure an income	x		Ensure an income	x	x
Improve environmental aspects	x	x	Protect the environment	x	x
Improve worker's own training options	x	x	Have access to training options		x
Increase work efficiency	x		Health security	x	x
Improve irrigation systems and seed quality	x		Help more at home		x
Improve working conditions	x	x	Have sufficient access to all resources	x	x
Increase the number of recreational activities	x	x	Participate in all decision-making processes		x
			Increase their own communication with children	x	x

more important role as Alamar's representatives in various "innovation festivals" or "agrobiodiversity fairs", which are organised regularly throughout the country. This has been very useful for all those involved: some of our female workers were able to establish links with representatives of other organisations, exchanging seeds and ideas. But it has been very useful for Vivero Alamar as well, as women's participation in internal discussions has increased dramatically. As Norma Romero, one of the most active participants in this project said, "this has helped us to combine training and an exchange of ideas; sustainability and empowerment".

Our analysis also showed that many women in the co-operative are single mothers, with specific needs and concerns which we somehow had to meet. At the same time, we saw that there are certain roles and responsibilities for which women are better suited than men – and we could make good use of that. This was shown in a small survey we did among consumers (those who buy our products at the co-operative's gate): they preferred women as salespersons as they are more friendly, much more alert and know more about the quality of the products. Paying attention to these issues gave us an opportunity to strengthen our links with the local population. We are now in a better position to fulfil our role as producers of food that is healthy and available to all.

Changes and continuity

Although women represent less than a third of our workforce (43 out of 170 co-operative members), we are proud that half of our managers are women (leading, for example, the

commercialisation unit, the personnel office and the financial department). Their election to these positions was the result of a democratic process in which all members were involved. But it was certainly also the result of our own reflective process and of our recognition of the contribution made by women.

Acknowledging the positive results that have been achieved by small-scale production units, and recognising the need to further increase food production on the island (especially after the devastating impact of hurricanes Gustav and Ike in 2008), the Cuban government is now assigning land to individuals or groups, hoping that these units will be managed as efficiently as the urban *organopónicos*. Starting with peri-urban areas (at approximately 10 km distance from the cities), this will lead to many opportunities for increasing production levels. But it also presents new challenges, as, once again, few producers will have the expertise and knowledge for producing on small-scale plots. Recognising the current and potential role of women will only help us all to reach our objectives. ■

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Women farmers on food sovereignty: Senegal



My name is Wolimata Thiaw, I'm 57 years old. I am married, and have children and even grandchildren; the eldest is already 25 years old. I live in Popenguine, 71 kilometres from Dakar, the capital of Senegal. I am president of a women's group there, COPRONAT, which fights for the protection of the environment.

We women have an important role to play in food security and it starts in our homes! We cannot go on consuming imported food products. The food customs within our families must change and this change has to come from us. All our dishes are based on rice, whereas we can also prepare many delicious dishes with

maize, millet or beans. And all of these products are cultivated in Senegal, so they are plentiful, less expensive and they can preserve our children's health. We don't need factories to transform food products into nice food, we just need some creativity!

In Popenguine, land prices have gone up because of land speculation. Women have little chance to obtain land. To circumvent this problem, we should promote the cultivation of subsistence crops. Women can also farm more vegetables to nourish the family and even to sell on the market. Instead of its failed programme GOANA ("Great Offensive for Food and Abundance"), the government could initiate a project focused on women. You could think of something like "one woman, five boxes!" to promote vegetable gardening. If every woman would receive five boxes to grow her own vegetables, she wouldn't need a garden and it would mean a lot for the availability of healthy food in all households. We could fabricate the boxes using other materials than wood. We could make our own compost by re-using household waste and thus have green fertiliser. Many of the things we commonly do in our homes could be used to initiate projects promoting ecological sustainability.

Interview and photo: **Saftou Sall** editor AGRIDAPE, the West African edition of the LEISA network.

The national education curricula of many countries aim to prepare children for a “better life” in the city. They do not relate to their daily lives and do not recognise the important role that children play, nor their culture, values or context. Vol. 20.2 of LEISA Magazine published an article from Peru that showed the many interesting results that can be achieved by following an intercultural approach in the curriculum - linking education to culture and the environment. Five years on, these activities are not only continuing; they have also expanded considerably.



Photo: Jorge Chavez-Tafur

Full colour agricultural calendars are regularly used in everyday lessons.

Our cultural roots give fruit

Five years ago, we published a magazine on “the new generation of farmers”. We had originally planned to highlight how children prepare for their future role as farmers, so we were surprised to see a different focus in the articles we received. Children in rural areas already play a very important role in small-scale agriculture, and are not only preparing themselves for the future. At the same time, they go to school. Sadly, they often feel alienated at school – a result of having teachers who come from elsewhere and are unfamiliar with local culture, and of using educational materials which do not reflect daily rural life.

A different type of school

It was thus interesting to read the article by Elena Pardo and Rocio Achahui about their school project in ten primary schools in the Canchis province, in the Peruvian southern highlands. By working closely together with parents and teachers, they created a “different type of school”: one developed in accordance with the local culture and language, incorporating local knowledge into the curriculum. This reflected the fact that, in local Quechua culture, people have a strong relationship with the natural environment and this has many benefits in terms of agricultural production and natural resource management.

This project went further than just teaching indigenous languages in primary schools, as normally supported by the Ministry of Education. In their school system, the authors focused on Andean poetry, art and music, and on Quechua values and culture. Special attention was given to the local biodiversity and all the agricultural and pastoral practices based on it, for, as Elena explained, “biodiversity is the basis of cultural diversity”.

Two specific aspects were essential to the success of their approach: training teachers and involving parents. The first was necessary in order to successfully combine “modern” and “traditional” knowledge. Training provided an opportunity for reflection and learning, which helped the teachers to develop an open and supportive attitude. By involving parents and their daily activities, it became much easier to incorporate “their” knowledge into the educational processes.

Spreading these ideas

After their article was published in 2004, Elena Pardo and her team have continued to focus on the strong links between cultural and biological diversity, and also to reflect on the advantages that this perspective can bring. Since 2006, they have been involved in the regional “BioAndes” programme which, through different organisations from Bolivia, Ecuador and Peru, has carried out a series of activities on the basis of a “biocultural approach”: if current changes in society are the main cause behind the degradation



Photo: Rik Thijsen

Room to learn and to express their own culture.

Agri-cultural diversity

As a result of factors like latitude and topography, it is possible to find thousands of animal and plant species in Peru, representing a large percentage of the world's biodiversity. Some crops have been grown for thousands of years, and are thus part of the country's large agrobiodiversity. One ancient indigenous crop is maize, grown from the coast and the Amazon basin to the Andean highlands, and consumed in many different ways (even as *chicha*, a popular drink). Having been part of Peruvian society for so long, it is only logical to see many expressions of traditional culture directly linked to it. One of these is now being used by school teachers in Pitumarca as part of their regular activities.

Last May, the primary school in Huito hosted the whole community to help harvest a small plot sown with maize. The day was organised according to the traditional custom, which meant "warming" the plot to be harvested with incense and coca leaves, and paying respect to Mother Earth. Harvest began with the village elders cutting a few plants and placing them such that they pointed towards sunrise. Permission was then requested from all local deities (or *Apus*), all plants were cut and then also placed in an east-west position, with all community members singing *haychay*, a ritual song. Small heaps were then put together for all plants to dry, and then the whole group went to eat together, where they thanked *Sara Mama* or Mother Maize.

of agrobiodiversity, then local values and culture might also be a fundamental tool for its conservation. Some of the BioAndes activities center on the cultivation and commercialisation of organic fruit, while others look at the promotion of ecotourism. The novelty has been that all these activities pay special attention to local, traditional knowledge (like the elaboration of an agricultural calendar, or

the reintroduction of traditional farming techniques). All projects also tried to establish strong links with local level authorities, thus ensuring broader results.

In the field, Elena and her team have continued with their work in the primary schools of Labraco and Hanchipacha, in the district of Pitumarca, using the agricultural calendar as a tool to help them organise their annual work (on the basis of, for example, rituals, festivals and special celebrations). Naturally, they have encountered some difficulties. Their main disappointment has been the lack of interest from the Ministry of Education: "It seems as if they are not interested anymore in intercultural education, even though there are special norms for this, which have to be followed." In spite of this, it is clear that adding and considering all the cultural, economic, social and spiritual aspects of life in the community is of great help during the regular courses and activities.

Work with the schools in Pitumarca also includes the documentation of local biodiversity with teachers and students, and the use of these materials in many different ways. The teacher training programme which was described in 2004 still continues, with several exchange visits taking place throughout the year. Elena is proud to say that this has had to expand, as a logical consequence of having more and more teachers interested in it. By the end of 2007 there were 37 teachers involved, coming from ten different schools, and working with more than 500 children. Today, work has also started with a very large school in the nearby city of Sicuani, with more than 50 teachers getting directly involved.

Elena and her team have also spent time writing about this approach, documenting it thoroughly so that other schools can

replicate it. There are now other projects in the Cusco region, working with many different schools, which are following a similar approach. At the same time, the teacher's network has written two readers which are used in many other schools. Some teachers have gone to Bolivia and to other regions of Peru to present their results. "They are getting really famous!", Elena adds with great enthusiasm.

Measuring results

Elena and her team have also started working with two secondary schools. This has been interesting as they have been able to follow some of the children who had been taught with their school programme in previous years. It has therefore been possible to compare them with children coming from regular primary schools. Those coming from inter-cultural schools score better on tests, can read and write in both languages, and are much more able to express themselves in general. They also show special abilities (and a clear interest) when working in the field or when helping with weaving, for example, resulting in a direct contribution to their families' production activities. And they are very clearly proud of their identity. As Elena concluded, "I especially like the fact that, whether they are in their village or in the city, these children are very proud of their culture. This is great". (JCT)

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Their article appeared in Vol. 20.2, June 2004. Additional information was provided by Sarah-Lan Mathez-Stiefel and Cecilia Gianella of the BioAndes programme. Readers can also read more about the work of CEPROSI in an article published in volume 1-2007 of the COMPAS magazine.

Call for contributions

Small-scale livestock production

Vol. 26.1, March 2010

Animals play an important role in rural life: besides milk, meat, eggs and wool, they provide manure for growing crops, and they also serve as a savings account for people. In the first issue of the coming year, we are interested in showing how small-scale farmers manage their animals in their farming systems and how they link it with other economic activities. What advantages does such an integrated approach bring in terms of food availability, productivity, efficiency or sustainability?

Current developments in the world's food production and consumption systems make this all particularly relevant. Meat consumption is growing drastically, leading to serious problems

in terms of, for example, deforestation and emission of greenhouse gases. What role can small-scale farmers play in order to ensure food security? Can small-scale farmers avoid the risks that characterise industrial production (for example, in terms of wide-scale animal diseases and even danger to human health)? And how do they manage livestock where land competition is high? We are interested in highlighting different production approaches, including all those issues related to sustainable fodder and feed production. Lastly, we will look at the role of local organisations (co-operatives, networks) and we will consider interesting examples of local, regional and national livestock policies.

We invite you to send us your contribution, submitting a 500-word summary of your experience and ideas. Please refer to the factors that make your experience special, and to the reasons why you think it is relevant to others. Please write to Karen Hampson, editor, at k.hampson@ileia.nl. We look forward to hearing from you before November 15th, 2009.

Women and land after conflict in Rwanda

Female-headed households often experience inequalities in access to resources and income-generating opportunities. Conflicts may make women poorer. But it is important to realise that conflicts also offer an opportunity for change in which gender stereotypes shift and gender roles and identities can be renegotiated. Did genocide and civil war in Rwanda lead to new opportunities for rural women?

Marian Koster

Rwanda is one of the most densely populated countries in Africa. It is also one of the poorest, with a GNP per capita of US\$ 230. In 2001, 60 percent of the total population (that is, 5.4 million Rwandans) lived below the poverty line. The genocide of 1994 was preceded by a turbulent period of economic crisis, civil war, mass emigration, and political transition, which affected every Rwandan. The country's resource base was largely destroyed and mistrust (still) puts an enormous strain on community cohesion and solidarity.

Land is Rwanda's primary resource. Over the years, however, the amount of land per farm holding has decreased considerably, from 1.6 hectares in 1983 to 0.72 hectares at present. Women

in Rwanda play an important role in agricultural production and provision of food for the family. The percentage of female-headed households grew from 25 percent in 1991 to 34 percent in 1996, due to male mortality during the war, HIV/AIDS, massive migration movements, and the imprisonment of suspected "genocidaires".

After the genocide, the Rwandan government established a Ministry of Gender and Social Affairs. Gender mainstreaming is actively promoted in all policies and programmes. Many formal restrictions on women's opportunities to work and own property have been removed by the revised Matrimonial Code of 1999. Have these new laws and policies strengthened women's claims to land and food sovereignty? The case of Rwanda shows that historical political developments, customary rights and new opportunities influence women's positions.

Disputing land rights

In 1990, the war started with the Tutsi-led Rwandan Patriotic Front (RPF) invading the country from their base in Uganda, trying to overthrow the Hutu regime. Many people were displaced

Constance was born in Rwanda. Her father, a Tutsi, owned a considerable amount of land in the eastern part of the country. When fighting broke out in 1990, the family fled to Uganda. They returned in 1994, after the Rwandan Patriotic Front had taken control over the country. They found their land and belongings intact, as the family that had taken possession of their belongings during their absence had fled in fear of reprisals of the RPF and the many Tutsi returning from their long exile. Constance, by then a widow with several children, took over the farm from her father. But in 1996, the local authorities obliged her to divide her land among herself and a landless family that had recently come to settle in the village. Constance lacked the labour to cultivate all of her remaining land, and she resorted to using hired labourers. Constance grew bananas, beans, potatoes, cassava and maize. She owned a cow and calf and was widely known as a good and innovative farmer. She was often selected by the local authorities to attend agricultural workshops. However, when one of her children fell seriously ill and was in need of expensive medical treatment, Constance was no longer able to pay her labourers and she was forced to sell part of her land.



Secure access to land means that women can choose to grow cabbage, for family consumption and for sale.

and forced to live in camps north of Kigali. Tutsi refugees fled to Uganda, where they joined thousands of other Tutsi who had been in exile since the 1950s and 1960s in fear of ethnic strife. The land that refugees left behind was taken over by those who remained, mainly Hutu. After the genocide in 1994, the RPF gained control over the country and hundreds of thousands of Hutu fled the country, while some 800 000 Tutsi returned. The government tried to settle them in the east of the country. Returnees could settle upon temporarily unoccupied land, left behind by Hutu in 1994, or on land whose proprietor had died during the events of the 1990s. Problems arose as a second wave of refugees returned en masse in 1996, after the closure of one of the refugee camps in the Democratic Republic of Congo. The initial government response, allowing first wave returnees to settle on unoccupied land, was not supported by the Arusha Peace Agreement from 1993. In this document, it was stated that no refugee who had spent more than 10 years outside Rwanda could lay claim to land. According to the Arusha Accord, the first returning refugees were merely allowed to cultivate land on a temporary basis. In the National Habitat Policy, introduced in 1996, land owners were required to share their landed property with landless first- and second-wave returnees.

Whereas some women mainly felt the negative effects of this policy of land sharing, it needs to be acknowledged that many landless households, including many female-headed ones, benefitted from it. However, not all women were equally likely to benefit. Widows, and especially Tutsi widows, were significantly more likely to have benefitted from the policy of land sharing than Hutu women.

Land tenure rights of women

According to customary land tenure systems in Rwanda, only men had rights of access to land and land was divided among male heirs only. Traditionally, there were a few ways for women to claim land. A widow who had neither male children nor living male relatives through her deceased husband, could inherit land. A woman could also receive gifts of land from her father. Land could, for example, be given to married women, newlyweds, or at the birth of a child. In both cases, land thus received remained a woman's own property and was inherited by her sons. This gift could also take place in the form of temporary user rights. Temporary gifts could be given to daughters rejected by their husbands and to daughters who never married and did not bear children. Espérance (see Box below) did not profit from such arrangements because she lived far away from her family and already had given birth to several children. In the face of progressive land scarcity, women have become increasingly barred from exercising their land inheritance rights. Moreover, the number of widows and female orphans is high. When left with no grown-up sons able to claim their inheritance, women's claims to land are weak at best, if not entirely invalid.

Espérance has no family living near her. She has recently divorced and lives, together with her children, in a small house provided to her by the mosque. She has no land on which to grow food but she does try to grow some maize and beans in the tiny garden behind her house. She sells the produce on the market. With the proceeds she then purchases cassava and sweet potatoes, which are much cheaper, thus trying to feed her family. In addition, she sells her labour. Espérance has difficulty combining the care of her small children with labour, however, and this is reflected in the low income she is able to generate by working.

In 1999, the Matrimonial Code (the "Matrimonial Regimes, Liberties and Succession Law") was revised, offering couples a choice of property regimes and –at least theoretically, as the code does not explicitly refer to land– extending the inheritance rights of women and girls to property within their birth families. But Rwandan law does not protect women's rights if they

have no legally accepted (i.e., civil) marriage, and only few Rwandan couples are legally married. Civil marriages not only require the traditional bridewealth to be paid, but also entail costs for marriage certificates and other identity papers (not to mention the cost of a wedding party). Civil marriages are simply too expensive for many young couples. When common-law marriages fail, women have no legally-protected rights to land. Moreover, children born under common-law unions, especially girls, are frequently labelled as illegitimate, which also disqualifies them from legally-protected inheritance rights.

Women's strategies to claim land

Women in post-genocide Rwanda have devised many strategies to increase their access to land. Some female genocide survivors have returned to their families, where they feel safer and where their brothers can protect them. This strategy works well for those with few family members left, as there is then a relative abundance of land. When families are large, however, women's claims to land often remain very weak.

Returning from Tanzania in 1994, Hope, a widow with five children, moved to the capital Kigali. On visiting her brother in another part of the country, she learned that an international NGO had recently made a swamp suitable for rice cultivation and was now distributing rice fields to farmer associations willing to join the rice cooperative. The NGO was sensitive to the plight of widows and actively tried to reach them. Meanwhile, Hope found a house in the village adjoining the rice fields. Together with a female neighbour, she formed an association. To reach the minimum required number of members, the two women registered their under-aged children as well. Subsequently, she was given access to the rice fields. As her children were still at school, Hope needed to employ labourers to help cultivate her fields. The income she generated from rice was sufficient to pay them and save money for the purchase of fields located elsewhere in the village. Hope can now cultivate a variety of crops, including bananas, beans, maize, sweet potatoes, cabbages, and tomatoes. She was able to start her own shop.

Other strategies include women joining farm co-operatives or women's associations. Many of these co-operatives and associations have been allocated state-owned land, while others are able to rent land with membership dues. At the beginning of this century, a large marsh near the Akegera National Park in the Eastern Province of Rwanda was converted into rice fields by the Adventist Development and Relief Agency (ADRA).



Photo: Marian Koster

Women gained access to new land by forming a group.

Before, this marsh –which officially belonged to the government– had been used by cattle-owners and farmers. Farmers were re-allowed access to the rice fields on condition that they formed farmers' groups; cattle-owners had to find new grazing fields for their cattle. Other people in the area were also allowed access to the new rice fields, on the same condition.

ADRA was concerned with the position of women. They encouraged women to get organised and claim access to the rice fields, which many women indeed did. Unfortunately, the poorest of the poor did not profit – simply because they could not afford the membership fees for the farmers' groups. This was especially problematic for divorced women, who are among the poorest. Another problem was that farmers were obliged to grow rice. Before the rice project, farmers used the swamp to cultivate vegetables and sweet potatoes. ADRA has educated people on appropriate cultivation techniques for rice but many farmers complain that they would prefer to grow other (food) crops.

New opportunities and new constraints

The war and genocide in Rwanda have opened up new ways for women to gain access to land. The relief industry is sensitive to the plight of women, offering women new and important opportunities, as shown in the case of Hope. Also, the Rwandan government has introduced important measures to promote gender equality, such as the establishment of a Ministry of Gender and Social Affairs and the revision of the Matrimonial Code. However, more needs to be done. Legislation needs further revision, and financial barriers for women to make use of their legal rights need to be addressed. This is all the more

important as women's traditional claims to land are increasingly disputed by their male relatives.

It is also important to ensure that women have full control over their land. Shortage of land is a problem for all Rwandans, but now that the government has embarked on a policy of regional crop specialisation, people's food security is once again at risk, because crop specialisation undermines poor people's risk-reducing strategy of crop diversification. People fear that if they are not allowed to grow sufficient and varied food crops, they will not be able to feed their families should harvests of specified crops fail, as they regularly do because of weather or pests. This is especially problematic for poor farmer families, including many female-headed households, who have little to no reserves to help them overcome such difficulties.

A final word of caution: there is ample evidence that Tutsi women, and especially genocide survivors, have benefited more from governmental policies and NGO programmes than Hutu women. This may result in increased tension between the two groups. In a country where trust is scarce, measures need to be taken to ensure that Hutu women are just as likely to gain access to land as Tutsi women. If not, the seeds of future violence may once again sprout. ■

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Women farmers on food sovereignty: Nepal



of Nepal gives a special discount to men who buy land in their wives' names. But we are not satisfied with this. We want to be the owners of the land, as well as of the food.

In Sindhuli, our women's movement has some agricultural land. We used chemical fertilizers on this land until a few years ago. But then production decreased, because of the acidity of the land, we were told. Now we use organic fertilizers and the production of rice, wheat and maize is much better, as is the soil health. I can even sell food and earn some money with it on the market. I earned almost 2000 dollars last year by selling food products that I did not need for my family. Now I do not have to depend upon others for paying my children's school fees, and I do not depend upon my husband for my daily household work: this is true sovereignty! By increasing food production on our land, we were also rewarded by society. We have been asked to participate in various farmer trainings and talk about our success. We teach poor farmers how they can produce the food they need for their families, especially now that food is so expensive. I am proud to be the leader of this women's movement in Sindhuli.

Interview and photo: **Niraj Prasad Koirala**.

In an additional note, Niraj Prasad Koirala mentioned how the global economic crisis is pushing countries that depend on other countries for feeding its citizens to introduce newly developed but less expensive farming techniques. As living conditions of many farmers are poor, cheaper techniques could be used to produce various types of food commodities. Governments should be aware that no development is possible until there is food security for their people, so new techniques and skilled technicians are imperative and should be provided free of cost. In Nepal this is very important, as the majority of food products is imported from India. Occasionally India places a ban on exports, bringing people in Nepal to the brink of starvation.

The government of Nepal tries to help small farmers by organising training programmes focussing on the small-scale farmer. They also provide some skilled technicians to help farmers in remote areas.

Mrs. Koirala's women's group is playing a leading role in these programmes. There are various projects providing organic fertilizers and seeds and seedlings. But what would really mean something in Nepal, is the transfer of cultivable land that is now bare, to people who do not own land to grow their own food. Countries can only have food sovereignty when landless people can obtain land. The government of Nepal is taking positive action and has established a steering committee to work on this.

My name is Niru Koirala, I am married and have four children. We have a small farm of 15 ropanies (0.75 ha) in Sindhuli, in Nepal. I think everyone should have the right to have enough food. It is not only about having enough food, but also being able to take decisions. Here in Nepal, women are still considered "second-class citizens": we may only take few decisions ourselves. Although women are engaged in farming more than the men, we do not have land in our own name, and so we feel ignored. There are some signs of improvement in conditions for Nepalese women; for example, the government

Shea can contribute to food sovereignty

Shea butter (or *karité*) is used in pomades and other cosmetic and pharmaceutical products worldwide. In Ghana, women use it as a cooking oil, for moistening their babies' skins and for their hair. Children love the fruits. Shea is a wonder product, also for the household economy.

Samuel Apiiga remembers well how his mother and her friends used to go into the bush around Bolgatanga to collect shea fruits. They always went together, as they were too afraid of snakes. As a boy, he loved to eat the pulp of the ripe fruits. The nuts inside were cracked, grounded and the oil extracted to process shea butter. The product was highly appreciated in rural areas, for harvesting of the fruits coincided with the hunger period, when food stocks were depleted after a long dry season and new crops were still not harvested. Actually, this situation is much the same today. In his work as agrarian advisor for the Ghanaian Ministry of Food and Agriculture, Apiiga now supports widows' groups in the Upper East region of northern Ghana, who collect and process shea nuts.



Photo: Kenneth Yussif

From nut to paste to butter.

the trees. Because of the long period it takes before flowering, women do not actively plant shea trees on their own fields.

A woman can harvest on average about 200-500 fruits a day. Shea butter is sold by women in the region to get cash to buy food and clothes, and pay school fees and medical bills. The butter is also used as a cooking oil and pomade, as well as for medical and spiritual purposes. Most rural women earn much of their annual income from picking the fruit, processing the nuts and selling the butter. There is huge export potential for the butter to the European Union, America and other African countries, where it is used in pharmaceuticals and cosmetics. The only known exporter of shea butter in Ghana is Kasaghan Industries in Tamale.

The shea tree is a very important tree, particularly for poor rural women. The monopolistic Kasaghan Industries, however, puts women in a vulnerable position. Traders come and buy shea nuts from the women just at the time they most need money to buy food, just before the time to harvest new crops. Moreover, shea trees are declining in number due to bush fires and tree felling for firewood and making charcoal. To safeguard the role of the shea tree in reducing poverty among poor rural women, marketing of the butter should be improved and women's capacities for organisation and negotiation strengthened. (MV)

Profit for all

Oxfam Novib and SNV-Ghana organised a multi-stakeholder meeting on 10 July 2009 in Wa, to set the pace for co-ordinated action in the Ghanaian shea industry. More than 50 participants in the sector esteemed shea to be a high-potential cash crop, considering that already 95 percent of the rural families (or 600 000 women) in northern Ghana derive their livelihoods from it. Shea contributes to the Ghanaian economy with an annual export worth 33 million dollars. Participants urged the government to give the shea sector the same level of support (for research, extension services and farmers' organisations) as other sectors have received, such as cocoa (www.ghanabusinessnews.com).

Good climate for the tree

Shea trees in this area are native trees, which have not been intentionally planted or cultivated by farmers, like the baobab and tamarindus. Some grow on cultivated farmlands and are owned by the farmers. The shea tree thrives best in the Sahelian Guinea savanna and in the transitional ecological zones of the Upper East, Upper West, Northern and some parts of Brong Ahafo regions of Ghana. It can survive on a minimal annual rainfall of about 400-500 mm, with temperatures of about 30 to 45 °C and a relative humidity of less than 10 percent. The tree is therefore drought tolerant, which explains its abundance in northern Ghana. The tree also does well in poor soil, where there is less than 5 percent organic matter.

The shea tree needs a long period (about 15 years after planting) before it starts flowering and giving fruits. Attempts to reduce this growing period by budding or grafting have not been successful. The tree flowers around January-April and fruits are ready for picking or harvesting between May and July.

Good product for the household

In the area where Apiiga works, each district has five women's groups who pick and harvest the shea fruits. Usually, they collect the fruit from trees on communal land and do not own

How to make butter in the bush

1. Sort and pick the sheanuts
2. Wash the sheanuts and dry them
3. Pound them roughly in a mortar
4. Roast the pieces
5. Pound them again
6. Grind the chocolate-coloured sludge on a stone
7. Gradually add cold water to the smooth paste and cool
8. Add small quantities of hot water
9. Add cold water in greater quantities as the mixtures lightens
10. Remove the gray mass (butter) that rises to the surface and heat this up
11. Skim off the white foam. The butter will be left at the bottom

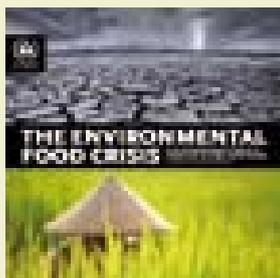
Samuel Y. Apiiga is an agricultural scientist working at the Ghanaian Ministry of Food and Agriculture in Bolgatanga. E-mail: syapiiga@yahoo.com

See our blog, where we highlight an interesting film on shea butter production in Burkina Faso. More information can also found be found at www.sheabutter.com

The environmental food crisis: The environment's role in averting future food crises

by Christian Nelleman et al., 2009. United Nations Environment Programme, Nairobi, Kenya. Downloadable at www.unep.org/pdf/foodcrisis_lores.pdf

The food crises of 2007 and 2008 resulted in 50 to 200 percent increases in food commodity prices, which have driven 110 million people into poverty and added 44 million more malnourished people in the world. As a result of population growth, increased incomes and growing consumption of meat, the demand for food will keep rising and will require a 50 percent increase



in food production in 2050. According to this report, the increased contribution will partly come from greater outputs per hectare. However, food energy efficiency also needs to be optimised, which translates into minimising losses between harvesting

and actual consumption of food as much as possible. The report presents seven points to achieve this, for instance removing subsidies on biofuels, regulating food prices, reducing use of cereals in animal feed and supporting diversified and resilient eco-agricultural systems and ecosystem services.

Women Feeding Cities: Mainstreaming gender in urban agriculture and food security

by Alice Hovorka, Henk De Zeeuw and Mary Njenga (eds.), 2009. Practical Action Publishing, Warwickshire, U.K.

Downloadable at www.database.ruaf.org/gender/index.htm

Women play a crucial role in household food production in many cities around the world. They grow vegetables in gardens and vacant urban spaces, raise animals, and trade in fresh and cooked foods. They boost household nutrition as well as generating income and building social inclusion among the urban poor. Women's vital contribution, however, has largely been neglected by city officials, economic planners and development practitioners, who have tended to concentrate on the industrialisation of food production. This book analyses the roles of women and men in urban food production and, through case studies from three developing regions, and suggests how to maximise women's contributions. In the second part, detailed guidelines and tools show how to bring women into the mainstream of urban agricultural research and development.

From poverty to power: How active citizens and effective states can change the World

by Duncan Green, 2008. Oxfam International, Oxford, U.K. Downloadable at www.fp2p.org

Food sovereignty is about the right to food. This book argues that for all to have this right, the world needs a new global deal on power, economy and global institutions. It implies a complete redistribution of power, opportunities

and assets. This is not an illusion and can become a reality through the right combination of active citizens and effective states. Active citizens determine the course of their own lives, fighting for rights and justice in their own societies. But they will be able to induce a development process that can only be fostered in an effective nation state. Human security and development based on rights and human wellbeing are more essential for countries than simple economic growth to find a way out of poverty. Rich countries must also take responsibility, by adopting an agenda that stops causing harm, and show active solidarity with the struggles of the poor.

Gender and water. Securing water for improved rural livelihoods: the multiple-uses systems approach

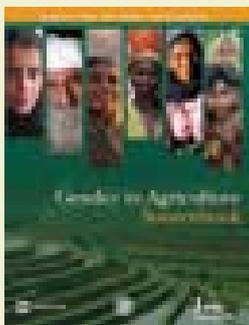
by Robina Wahaj and Maria Hartl, 2007. International Fund for Agricultural Development (IFAD), Rome, Italy.

Securing water is critical to achieving food sovereignty and improving livelihoods. Women manage water resources for domestic and productive uses, and they are getting more attention in the planning of water projects: the projects are becoming more multi-purpose, multi-use and multi-user oriented. The involvement of communities, men and women, is the key to successful gender mainstreaming. But much can be improved. As this book shows, projects must be based on the understanding that land and water are closely linked: secure access to land is essential for secure access to water. Every water or land programme should be preceded by an analysis and thorough understanding of rights and how labour is divided in production and household activities. Multi-purpose water systems address women's concerns better than single-use projects. But further gender-sensitive planning and monitoring is necessary throughout the whole project cycle, as is participation of women in decision-making.

Monthly Review, volume 61 no 3, July-August 2009

Available at www.monthlyreview.org

Two interesting articles about the potential of small-scale farming are found in this issue of Monthly Review. In "Fixing our global food system: Food sovereignty and redistributive land reform", Peter Rosset analyses the state of the world's food and agriculture system after the 2007-2008 food price crisis. He finds a clash of two models of agricultural production: on the one hand, agribusiness with an export vocation and heavy use of technology and petroleum; and on the other hand, small-scale family farming with a food-production vocation. Rosset makes a plea for more funds in the rural sector, price guarantees, credit, a focus on local markets and a redistributive agrarian land reform, as he is convinced that these result in higher yields, more food and better food sovereignty. Miguel A. Altieri argues in his article "Agroecology, Small Farms, and Food Sovereignty" that global developments limit the ability of developing countries to feed themselves. But the majority of farmers are still small-scale family farmers and this is the moment to present their way of life as an alternative to industrial agriculture. By managing fewer resources more intensively, small farmers are able to make more profit per unit of output and with lower negative impact on the environment.



Gender in agriculture sourcebook

Various authors, 2009. World Bank (WB), International Fund for Agricultural Development (IFAD) and Food and Agriculture Organization of the United Nations (FAO), Washington, DC, U.S.A./Rome, Italy.

Downloadable from www.worldbank.org/genderinag Empirical evidence on women's role in agriculture worldwide is presented, to inform policy formulation and programme design. This sourcebook shows how to avoid pitfalls of gender-neutral planning and how to support women in their potential to raise agricultural productivity and

reduce poverty. It contains information from more than 100 contributors based on 15 years of evidence of good practices in the field in terms of agricultural markets, rural finance, livestock, forestry, among others. Agricultural growth and increased income among women are two priority areas of economic development in developing countries. For small-scale farmers especially, these two priorities may be the only way out of poverty.

Organic agriculture and womens' empowerment

by Cathy Farnworth and Jessica Hutchings, 2009. IFOAM. Downloadable at www.ifoam.org
Gender relationships are fundamental worldwide to the organisation of farm work and to farm decision-making. Surprisingly, there is not enough attention given to gender issues within the organic and sustainable farming movements. However, both could benefit, according to the authors of this book: women can gain empowerment by participating in the movement and organic organisations gain from the knowledge and insights of these women. In this book, people from the South suggest a range of measures to increase women's voice, for example by encouraging women to take up community leadership. Women need to participate in all decision-making aspects of sustainable and organic agriculture; as farmers, as researchers and as leaders. Positive support of men, training in organic methods, women-friendly spaces and women's presence in organic research institutions will help. The authors stress that food security as a priority for organics may also enable empowerment, since women hold a central role in improving nutrition in the household.



African women and ICTs: Investigating technology, gender and empowerment

by Ineke Buskens and Anne Webb (eds.), 2009. Zed Books, London, U.K.
The potential of information and communication technologies (ICTs) as a development tool for women in Africa is the focus of this book. ICTs seem promising, but the editors of the book question if there is enough political will among decision-makers to do something useful with it. For reality shows that development can also enlarge gender inequalities and that women benefit less from development. The impact of ICTs on women varies. Some women do not use them at all, others create women-only spaces. Finally, there are some women who use ICTs to advance their lives to their own design. The articles show that women in rural areas use mobile telephones and radios. Despite being a favourite among women, the mobile phone is very expensive and low-cost sms services are usually not accessible to African women.

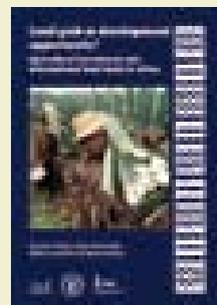
a reality in the Netherlands, as indicated by the increasing presence of food banks in the country. To counterbalance this omission, an alternative Dutch celebration, called World Hunger Day, was organised. The book is a further elaboration of that event, focusing on human rights.

Cassava and soil fertility in intensifying smallholder farming systems of East Africa

by Anneke Fermont, 2009. Ph.D. Thesis, Wageningen University, Wageningen, the Netherlands.
Cassava is an important crop in Africa, not only as a subsistence food security crop for the poor, but as a cash and food crop for all socioeconomic classes. NEPAD has pointed to drought-resistant cassava as a strategic crop to diminish dependency on maize. Production of cassava has already quadrupled in the last five decades. Cassava can have an important beneficial effect on soil and is often intercropped with beans and vegetables; further production increases, however, require more labour and other inputs such as fertilizer. Moreover, focus on improving marketing conditions alone will not be sufficient to secure the intended role of cassava in food sovereignty for households.

Land grab or development opportunity? Agricultural investment and international land deals in Africa

by Lorenzo Cotula, Sonja Vermeulen, Rebecca Leonard and James Keeley, 2009. FAO/IIED/IFAD, Rome, Italy.
Land grabs have become "hot news" over the past twelve months, but little is understood of international land deals and their impact. This report discusses key trends in land acquisitions in sub-Saharan Africa: the contractual arrangements and negotiations. The report tries to make clear what it means to local people. The interest for land acquisition lays in food security concerns and need for bio-fuels in recipient countries. The report points to the risks and opportunities for people in recipient countries, for it may lead to macro level benefits, but also to local people losing access to communal resources they need for their food sovereignty. (See "Sustainable agriculture in the news" on page 44 for more information.)



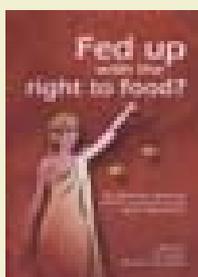
Hope not hype: The future of agriculture guided by the International Assessment of Agricultural Knowledge, Science and Technology for Development

by Jack Heineman, 2009. Third World Network, Penang, Malaysia.
Can we feed the world in the year 2050? Despite global food surpluses, many countries currently face malnutrition, hunger and starvation. At the same time and in the same countries, mass obesity exists as well. These are two sides emerging from industrial agriculture and global trade in agricultural food commodities. This book takes a hard look at traditional, modern (genetic

engineering) and emerging (agroecological) biotechnologies and sorts them on the basis of delivering food without undermining the capacity to produce more food. The case is made for a different approach to biotechnology rather than the "one size fits all" biotechnology on offer.

Fed up with the right to food? Dutch policies and practices regarding the human right to adequate food

by Otto Hospes and Bernd van der Meulen (eds.), 2009. Wageningen Academic Publishers, Wageningen, the Netherlands.
This book deals with Dutch policies and practices regarding the human right to adequate food, as laid down in Article 11 of the International Covenant of Economic, Social and Cultural Right (which came into effect in the Netherlands in 1979). The celebration of World Food Day on the 16th of October 2007 showed that the Dutch government does not consider this right as a relevant concern in the Netherlands. The editors of the book think this attitude is wrong, for hunger and poverty are also



Siyanda

www.siyanda.org

Named after a Zulu word meaning “we are growing”, this is an online database of gender and development materials from around the world. These materials include reports and documents (many of them submitted or suggested by visitors), and also a large database of experts and consultants. This site is meant to serve as an interactive space, where visitors can share ideas, experiences and resources. Siyanda is hosted by BRIDGE, the gender and development research and information service of the Institute of Development Studies (IDS).

Institute for Food and Development Policy

www.foodfirst.org

One of the major objectives of the Institute for Food and Development Policy (or “Food First”) is to shape how people think, by analysing the root causes of global hunger, poverty, and ecological degradation and developing solutions in partnership with movements working for social change. Its work “both informs and amplifies the voices of social movements fighting for food sovereignty”. This is all organised according to three programmes (building local agri-food systems; farmers forging food sovereignty; and democratising development: land, resources and markets), which are carried out in different countries. The Food First website includes a wealth of information about food issues, with blog postings, press releases, policy briefs, fact sheets, and also what they call “backgrounders”. It also has a section inviting visitors to “get involved”.

International NGO/CSO Planning Committee

www.foodsovereignty.org

The International NGO/CSO Planning Committee (or IPC) is a global network of organisations concerned with food sovereignty issues and programmes. It includes social organisations representing small farmers, fisherfolk, indigenous peoples, agricultural workers’ trade unions, as well as important lobbying and advocacy networks. The IPC aims to serve as a facilitation mechanism for diffusion of information on, and capacity building for, food sovereignty and food security issues. Their site includes many documents which are grouped according to region or constituency (sadly, not updated), together with information on its working groups and its “focal points”. At the moment it also includes an invitation to participate in the People’s Food Sovereignty Forum, which is going to take place in Rome in November.

Slow Food International

www.slowfood.com

Founded in 1989, this organisation grew from the desire to “counteract fast food and fast life, the disappearance of local food traditions” and that fact that people are now less interested in where their food comes from, how it tastes, and to raise awareness on how food choices affect the rest of the world. It now counts 100 000 members in 132 countries. Slow Food has also created a network of “food communities” including consumers, educational institutions, cooks, researchers, etc. in order to support small producers. Called Terra Madre, this project sets out to give voice and visibility to rural food producers around the world,

and to show the value of their work. Terra Madre also has its own website (see www.terramadre.info). A jointly produced newsletter in eight languages is digitally accessible from either site.

ActionAid HungerFREE

www.hungerfereplanet.org

This is the site of the five-year campaign launched by ActionAid, by which they are trying to get all governments to honour their promise to halve global hunger by 2015. This campaign wants governments to introduce and implement specific laws – in particular laws that guarantee that women have the right to own land. Its website includes detailed “updates” on issues such as biofuels, rising food prices or climate change. It also has up-to-date press releases (with detailed recommendations) and, together with a series of stories from the field, it has a beautiful photo exhibition where women “speak out”.

WOCAN, Women Organizing for Change in Agriculture and Natural Resource Management

www.wocan.org

Set up in 2004, WOCAN is a network of people which aims to contribute to processes of organisational change for gender equality and environmentally sustainable development. Working with partners in countries such as Nepal, Zambia and Nigeria, WOCAN supports women through confidence-building, leadership and communication training. Among its major activities, it organises detailed courses, such as “gender-sensitive participatory research for plant breeding”.

The Gender and Water Alliance

www.gendrandwater.org

Established during the second World Water Forum (WWF) in March 2000, this is a global network set up to promote equitable access to and management of safe and adequate water. Its programme and activities include recording and sharing of knowledge and information on gender mainstreaming policies, and reinforcing the profile of gender equity issues at international water-related conferences. Their website includes many documents and resources, all of them grouped according to the different “water sectors”: agriculture and food, drinking water, environment, sanitation, and integrated water resource management.

AWID, Association for Women’s Rights in Development

www.awid.org

AWID is an international membership organisation committed to achieving gender equality, sustainable development and women’s human rights. Its main objectives include helping build alliances and influencing international institutions and actors. Its site provides access to a large database, with documents on poverty, peace-building, human rights, HIV/AIDS, and much more. Although not much attention is given to agricultural production, it is possible to find information on environmental issues and the right to land (in case studies, guides, etc.).

Work of Women, WOW!

www.workofwomen.org

Set up by World Neighbors, this programme aims to build on what women do (care for families, impart wisdom, or produce most of the world’s food) and change the situation in which they are found (work two-thirds of the world’s working hours but earn just one-tenth of the world’s income; suffer disproportionately from violence; are marginalised from leadership and decision making). This programme’s activities include building awareness of problems, advocating for policy and action, and supporting specific work financially. Its site has information about upcoming events, books and films; readers are invited to subscribe to their monthly electronic publication.

Also see the Theme Overview on page 6 for additional information on women and food sovereignty.



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Code of conduct needed to protect small-scale farmers from “land grabs”

The purchase of large areas of land overseas by foreign countries and companies, the so-called “land grabs”, have led to a call for a code of conduct. Will such a code help protect small-scale farmers’ rights to land and food? Ruth Meinzen-Dick from IFPRI, the International Food Policy Research Institute in Washington, thinks it will. But for it to be effective, it

will have to meet certain requirements.

“Land grabbing” has received a lot of attention in the media over the past few months. One of the first to report on the topic was Ruth Meinzen-Dick, senior-researcher at IFPRI. Together with Joachim von Braun, she published a paper in April that listed overseas land investments, and that identified opportunities and threats. One of the threats they mentioned is the unequal bargaining power of small-scale farmers, who are at risk of being displaced from their land.

How can a code of conduct stave off such a risk? As Ruth Meinzen-Dick points out, small-scale farmers cannot effectively negotiate terms when dealing with such powerful institutions like governments and large corporations. “They need to know their rights. Therefore, existing local landholders must be informed and involved in negotiations over land deals. Secretive deals only lead to insecurity. A code of conduct can help ensure this. But for it to work, it needs to be translated into regulations binding within a country. Those who do not adhere, can then get sanctioned in the international arena.”

What more does it take?

Countries buying land have to see that such a code is in their interest, says Meinzen-Dick. “If it is only the countries that have land to sell or lease that are in favour of a code, it will not work. Investors can then always look for a country without such regulations and strike a special deal.”



A map from the IFPRI report “Land grabbing’ by foreign investors in developing countries”.

How likely is it, though, that investing countries will support such a code? Very likely, says Ruth Meinzen-Dick. “I participated in a forum on land grabbing where there were two people from the investors’ side as well. They said it is in their interest to engage in fair trade. Because if local people feel their land is taken from them, there will be problems and investments are not going to yield returns. If investors have an eye for the needs of local people, it will reduce the risk of investment. Companies like Unilever have looked into buying produce from smallholders. We should get them together so they can share experiences and get comfortable with smallholder farming.”

Developments

At last July’s G8 meeting of rich countries, participants pledged to take further steps in arriving at a code of conduct. Was Meinzen-Dick disappointed to see that the pledge did not extend beyond a proposal for principles and best practices on land purchasing in developing countries? “It would have been nice to see more. But I was pleased to see the issue actually got raised. I just hope that that is not the end of it.”

A code of conduct is not likely to fall off the agenda. The African Union might be the first to come up with something concrete, as it is working on a Framework and Guidelines for Land Policies in Africa, together with the UN Economic Commission for Africa and the African Development Bank. This is assuring because, as Meinzen-Dick says: “Issues are most pressing in Africa. Communal land tenure is particularly prevalent there.” Perhaps the African Union can jumpstart the process. (PR)

Further reading

IFPRI (www.ifpri.org) invites people to share information on land deals on <http://ifpriblog.org>. The International Land Coalition (www.landcoalition.org) came out with a discussion paper last July, called “Increasing commercial pressure on land: Building a coordinated response”. It gives an overview of publications on land grabbing, including the report of the Special Rapporteur on the right to food, and a report on land deals in Africa by IIED, FAO and IFAD (see New Books, page 41). It also gives an overview of what elements a code of conduct could contain. Grain has relaunched the website www.farmlandgrab.org, devoted specifically to the topic. It keeps track of all the news, and lists over 180 reports of land-related investments for food production.