

# BAOBAB



## Family Farmers Feeding the World





## Ushering the International Year of Family Farming

Family farming, which involves all family members working and earning their living and producing their food on a family farm, will be the key focus of the UN Food and Agriculture Organisation (FAO) throughout 2014. FAO launched the International Year of Family Farming (IYFF) on November 22, 2013 in New York. The aim of the IYFF, which is the theme of this issue of *Baobab*, is to reposition family farming at the centre of agricultural, environmental and social policies in the national agendas, by identifying gaps and opportunities to promote a shift towards a more equal and balanced development.

According to FAO, family farming is a means of organizing agricultural, forestry, fisheries, pastoral and aquaculture production which is managed and operated by a family and predominantly reliant on family labour, including both women's and men's.

In the "Theme Overview", Jan Douwe van der Ploeg identifies ten qualities that distinguish family farming from small scale farming and other types of farming enterprises that have become the norm in most of the developed world. He particularly notes that family farming is much more than is implied by the two words: "family" and "farming." According to him, it is a multi-layered phenomenon that enables productivity of food and perpetuation of family traditions and community cultures to be in harmony with the natural environment. He identifies indigenous knowledge accumulated over generations as one of the most essential ingredient that enables family farming to thrive.

We have included examples of the role that family farming is playing in supporting agricultural production, conservation of biodiversity and enhancing resilience of rural communities in various African countries including Kenya, Uganda and Cameroon.

In an interview with the Director of Kenya Institute of Organic Farming (KIOF) John Njoroge, it emerges that organic farming is actually the original form of family farming where all farm inputs are derived from the farm itself. Traditional agriculture promoted practices that facilitate efficient circulation of plant and animal nutrients to create farming systems that remain productive indefinitely.

As ALIN, we plan to remain at the centre of activities around IYFF particularly using *Baobab* as the primary platform for disseminating key IYFF messages throughout 2014. In this issue, we have carried the announcement of the IYFF Photo Competition. We invite our readers to participate and help to achieve the competition's aim, which is: to visualize the potential and contributions of family farmers worldwide. It is an initiative of the AgriCultures Network, of which ALIN is a member and the World Rural Forum, in close collaboration with the Asian Farmers Association, CLOC/La Via Campesina and the More and Better Network.

We welcome comments and opinions about what needs to be done to make family farming better recognized and more rewarding. Finally, we take this opportunity to wish our readers a Happy 2014 and a meaningful IYFF.

James Nguo  
Regional Director

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### About ALIN

Arid Lands Information Network (ALIN) is an NGO that facilitates information and knowledge exchange to and between extension workers or infomediaries and arid lands communities in the East Africa region. The information exchange activities focus on small-scale sustainable agriculture, climate change adaptation, natural resources management and other livelihood issues.



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My firm is engaged in providing capacity building services to local small farmers in Tanzania, East Africa. I believe that, by subscribing to your publication, I shall get access to knowledge and exposure about sustainable agriculture in the East Africa Region.

I heard about your publication from a friend who was studying in Kenya. I shall be glad to receive copies of the magazine.

Lucas P. Kusare, Tanzania. East Africa

Thank you for the interest in our publication. *Baobab* is only available in electronic format for now. Visit <http://alin.net/Baobab%20Magazine> to download a copy and also to access past issues.

Editor

Thank you very much for the last issue of *Baobab* which featured the work of FADECO Radio in Tanzania. The radio has helped us bridge the gap of agricultural extension, bringing timely information to the farmers on market prices, weather updates and technical notes from extension workers. We hope to continue offering same services integrating with new media tools on social networking like Facebook.

Joseph Sekiku, Tanzania

I am an aspiring rabbit farmer living in Kisumu County with a lot of interest in doing rabbit keeping as a business. I would like to request your advice on the best rabbit breeds that can do well in this part of the country, rabbit feeds, rabbit housing, disease and parasites control. I hope this venture will empower me as a youth and I will be able to influence other youths in my area to start farming.

Paul Awiti, Kenya

Thank you for your inquiry. *Baobab* issue 67 featured an article on rabbit keeping on Pg 8 <http://alin.net/i/Issue%20067--Alternative%20markets%20for%20improved%20livelihoods>, please read through to get some tips on rabbit farming. More information on rabbit keeping can be found at <http://sokopepe.co.ke/>

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Editor

Centre for Literacy & Community Development is a national NGO operating in Western Kenya. Could you please subscribe us to the following magazines: *Baobab*, *KEA* and *Joto Afrika*. We would like to use the information from your very informative publications.

F.H. Ngesso, Kisumu

Thanks for the interest in our publications we hope you will find them useful. *Baobab* is only available in electronic format for now. Visit <http://alin.net/Baobab%20Magazine> to download a copy and also to access past issues. For *Joto Afrika* visit <http://alin.net/Joto%20Afrika>. We no longer produce *KEA*.

Editor

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# BAOBAB

*Baobab*: The Respected, Cutting Edge Agriculture Magazine

Published by Arid Lands Information Network (ALIN), an international NGO based in Nairobi, *Baobab* is well established magazine that focuses of small scale sustainable agriculture. It has been published since 1988. It covers Kenya, Uganda and Tanzania and all aspects of the agriculture value chain. It is also disseminated to a range of local, regional and global agriculture networks.

### Attractive, modern feel

Articles are simplified and well illustrated. It is published in glossy high quality paper with a catchy modern layout.

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# Ten Qualities of Family Farming

**E**ven in the International Year of Family Farming there is confusion about family farming: what is it actually, what makes it unique, and what distinguishes it from entrepreneurial farming or family agribusiness? Confusion tends to be highest in places where modernisation of agriculture has led society further away from farming. At the start of the International Year of Family Farming, Farming Matters aims to create some conceptual clarity. Jan Douwe van der Ploeg takes us into the world of family farming, which is considered “both archaic and anarchic, and attractive and seductive”.

By Jan Douwe van der Ploeg

**What is family farming?** Family farming is one of those phenomena that Western societies find increasingly difficult to understand. This is due to many reasons. One of these is that family farming is at odds with the bureaucratic logic, formalised protocols and industrial rationale that increasingly dominate our societies. This makes family farming into something that is seen, on the one hand, as both archaic and anarchic, whilst at the same time it emerges as something attractive and seductive.





Family farming is also difficult to grasp and understand because it is, essentially, a complex, multi-layered and multi-dimensional phenomenon. Below, I identify ten qualities of family farming. These qualities are not always present at the same time in each singular situation. The most important thing to remember is that the reality of family farms is far richer than the two single aspects that are most commonly used to describe them: that the farm is owned by the family and that the work is done by family members.

Family farming is not just about the size of the farm, as when we talk about small scale farming, it is more about the way people farm and live. This is why family farming is *a way of life*.

### **A balance of farm and family**

Let's start take a closer look at the ten qualities. Indeed, the *farming family has control over the main resources (1)* that are used in the farm. This includes the land, but also the animals, the crops, the

genetic material, the house, buildings, machinery and, in a more general sense, the know-how that specifies how to combine and use all these resources. Access to networks and markets, as well as co-ownership of co-operatives, equally represent important resources.

Family farmers use these resources not to make a profit, but to make a living; to acquire an income that provides them with a decent life and, if possible, allows for investments in order to develop the farm further. This applies even if the farm uses expensive machinery or irrigation systems and terraces that the farmers themselves have constructed.

Then indeed the family farm is the place where *the family provides the main part of the labour force (2)*. This makes the farm into a place of self-employment and of progress for the family. It is through their dedication, passion and hard work that the farm is developed further and the *livelihood* of the family is improved.





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The farm meets the many needs of the family, whilst the family provides the possibilities, the means and also the limits for the farm. This **nexus between the family and the farm** (3) is at the core of many decisions about the development of the farm. Each particular farm has its own specific balances, for instance between the mouths to be fed and the arms to do the work. These balances tie family and farm together and make each family farm into a unique constellation.

**Linking past, present and future** But there is more than ownership and labour. *Family farms provide the farming family with a part (or all) of its income and food* (4). Having control over the quality of self-produced food (and being sure that it is not contaminated) is becoming increasingly important for farmers around the world. However, *the family farm is not only a place of production* (5). It is home to the farming family. It is the place they belong to, as much as it is the place that gives them shelter. It is the place where the family lives and where children grow up.

*The farming family is part of a flow that links past, present and future* (6). This means that every farm has a history, it is full of memories. It also means that parents are working for their children. They want to give the next generation a solid starting point within or outside agriculture. And since the farm is the outcome of the work and dedication of this and previous generations, there often is pride. And anger when others try to damage or even destroy the jointly constructed farm.

*The family farm is the place where experience accumulates* (7), learning takes place and knowledge is handed over, in a subtle but strong way, to the next generation. The family farm often is a node in wider networks that make new insights, practices, seeds among other assets circulate.

### Tied to its environment

The family farm is not just an economic enterprise that focuses mainly, or only, on profits, but a place where continuity and culture are important. The farming family is part of a wider rural community, and sometimes part of networks that extend into cities. As such, *the family farm is a place where culture is applied and preserved* (8), just as the farm can be a place of cultural heritage.

*The family and the farm are also part of the wider rural economy* (9), they are tied to the locality, carrying the cultural codes of the local community. Thus, family farms can strengthen the local rural economy: it is where they buy, spend and engage in other activities.

Similarly, *the family farm is part of a wider rural landscape* (10). It may work with, rather than against nature, using ecological processes and balances instead of disrupting them, preserving the beauty of landscapes. When family farming works with nature, it also contributes to conserving biodiversity and strengthening resilience against climate change.

**Freedom and autonomy** The family farm is an institution that carries attraction, as it allows for relative autonomy. It embodies a “double freedom”: there is freedom *from* direct external exploitation and there is freedom *to* do things in your own way. Along this, the work implies an ongoing interaction with living nature – a feature that is highly esteemed by the actors involved.

Family farming represents a direct unity of manual and mental labour, of work and life, and of production and development. It is an institution that can continue to produce in an adverse capitalist environment, just as anaerobic bacteria are able to survive in an environment without oxygen (I derive this nice metaphor from the work of Raúl Paz from Argentina).

**Why is it important?** Family farming carries the promise to create agricultural practices that are highly productive, sustainable, receptive, responsive, innovative and dynamic. Given all these features, family farming may strongly contribute to food security and food sovereignty. In a variety of ways, it can strengthen economic development, creating employment and generating income. It offers large parts of society attractive jobs and may contribute considerably to the emancipation of downtrodden groups in society. Family farming may also consistently contribute to the maintenance of beautiful landscapes and biodiversity.

**External threats** However, it may turn out to be impossible to effectively realize all these promises. This is the case especially today, when family farming is squeezed and impoverished to the bones. When prices are low, costs are high and volatility excludes any possibility for long term planning, and when access to markets is increasingly blocked and agricultural policies neglect family farmers, and when land and water are increasingly grabbed by large capital groups – yes, in these circumstances we see that it turns out to be impossible for family farmers to render positive contributions to the wider society. This is why we have now ended up in the dramatic situation that land of family farmers is laying idle. Or, to use a macro indicator, that 70% of the poor in this world today, are rural people.

**Internal threats** There are internal threats as well. Nowadays it is *en vogue* to talk about the ‘need to make family farming more business-like’. It should be oriented ‘towards making profits’. Some even argue that this would be the only way to ‘keep young people in agriculture’. In short: family farming should become less ‘peasant-like’ and more ‘entrepreneurial’. According to this viewpoint, family farming in the Global South should be subject to a similar process of modernisation as occurred in the North.

Indeed, part of European agriculture has changed towards entrepreneurial farming. This turns the family farm into a mere supplier of labour, forgetting about all other features mentioned above. Formally these entrepreneurial farms are still family farms, but substantially they are quite different. One major difference is that ‘real’ family farms especially grow and develop through clever management of natural, economic and human resources, and through (intergenerational) learning. Entrepreneurial farms especially grow through *taking over* other family

farms. This tendency to enter into entrepreneurial trajectories is a major internal threat to the continuity and dominance of family farms. And we see it nearly everywhere.

**Re-peasantisation** There are important counter-tendencies as well. Many family farms strengthen their position and their income, for example by following agro-ecological principles, by engaging in new activities, and by producing new products and new services – often distributed through new, nested markets. Analytically these new strategies are defined as forms of re-peasantisation. They make farming more peasant-like again, but at the same time they strengthen the family farm. Re-peasantisation equals defending and strengthening family farming.

**What is to be done?** Policy can be, and is, extremely important for the fate of family farming. Although family farming can survive highly adverse conditions, positive conditions can help family farming reach its full potential. Precisely here resides the enormous responsibility of policy, that is, of state apparatuses, multinational forums (like the FAO, IFAD and other UN organisations), but also of political parties, social movements and civil society as a whole.

By securing rights and by investing in infrastructure, research and extension, education, market channels, social security, health and many other aspects, investments of family farmers themselves can be triggered. This was recently confirmed again by the prestigious *High Level Panel of Experts* on Food Security and Nutrition.

Strengthening rural organisations and movements is equally of utmost importance. We have to keep in mind that family farmers, wherever in this world, are trying to find and unfold new responses to difficult situations. Thus, identifying successful responses, building on novel practices, communicating them to other places and other family farmers and interlinking them into strong processes of change must be important items on our agenda. In short: a lot is to be done. The good news, though, is that including every little step, is helpful. ■

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# The Role of Education in Enhancing Seed Security for Family Farmers

Agricultural growth and development is crucial for Kenya's overall economic and social development. 80 per cent of the rural population in Kenya relies on agriculture as the primary source of livelihood. The Government acknowledges that increased agricultural productivity is dependent on the adoption of appropriate practices and technologies, including access to improved seeds. According to the National Seed Policy (2010), appropriate seeds need to be available for all agro-ecological zones including the arid and semi-arid lands (ASALs).

By Mutetei Mutisya

Seed availability is a crucial element in the livelihoods of agricultural communities especially in rural Kenya. Seed security - availability in sufficient quantities at the right quality and at affordable prices - is a key determinant of agricultural output. Unfortunately, Kenya still experiences shortage of quality seeds especially for legumes and other crops more suited for ASALs. In addition, these seeds remain inaccessible to the majority smallholder farming communities who depend on farmer-saved seed of local indigenous/traditional varieties characterized by high adaptability and acceptability but also low yields and susceptibility to pests and diseases.

Given the prevailing weather patterns brought about by climate change, there is an increasing demand for drought tolerant crops (DTCs) to meet food security challenges. This presents an opportunity for smallholder farmers to engage in market-led commercial seed production of selected DTCs varieties.

Kitui Development Centre (KDC) was partly established to respond to this opportunity and to support farmers to access quality seeds in sufficient quantities. KDC's broad aim is to improve household and food security in Kitui. It supports grassroots-based groups to implement activities aimed at improving food security. Already four seed producer groups for green grams in Thitani and Nguutani locations of Migwani District have been identified and mobilized

with an average membership of 25 individuals per group. A demonstration plot of 0.5 acres has been established by the Seed Producer Groups (SPGs) where 8kgs of green grams have been planted in the demonstration plot owned by Wendo Farmers SPG in Kakululo, Migwani District. It acts as a seed supply and learning centre.

The project is also supporting households in production and bulking of cassava, green grams and pigeon peas while developing sustainable seed distribution channels that are community led. Green grams are described as a food security crop. It is more suitable in the ASAL regions of Eastern Kenya owing to its capacity to flourish in zones that receive minimal rainfall throughout the year.

The Ministry of Agriculture, Livestock and Fisheries' technical expertise has been very crucial in building the capacity of the farmer groups. Extension agents from the District Headquarters make constant visits, training and carrying out monitoring together with project officers from KDC. Their interaction with farmers is bearing fruit. They use informal adult education approaches such as use of posters, local languages and illustrations to pass information about improved technologies. The Ministry provides relevant information material including pamphlets and booklets with some translated into the local dialects.







© Kitui Development Centre

The Divisional Agricultural Extension Officer of Nguutani Division, Mr. Joseph Nthenge, acknowledges the importance of educating farmers. He explains that Ministry is advocating for commercial villages mode of farming and farming as a business. This is to ensure that all smallholder farmers are food secure and that they produce enough food for their consumption and for sale. The Project is encouraging farmers to market their produce collectively to avoid exploitation by middlemen. Farmers are taken through the entire value chain process - from the seed selection to planting, tending and harvesting using demonstration plots.

Farmer training is undertaken through locally organised farmer field days and exchange visits across the two locations. This is combined with onsite training during the actual demonstration and “classroom informal discussions” are carried out. Classroom discussions are customized learning programs that happen once every month for a period of 2-3 days to deal with topical issues concerning drought tolerant crops.

So far, 80 farmers from the participating SPGs have been trained on good agricultural practices including: seed selection and bulking techniques; drought tolerant crops that are viable in the area; land preparation; weeding; pest and disease control; and post-harvest techniques. Issues of farming as a business have been introduced. Other areas have included gender mainstreaming and HIV/AIDS which have been discussed as cross cutting issues.

Mr. Nthenge says that NDC is able to link with other key stakeholders from other sectors to ensure that Vision 2030 and other key government policies concerning agriculture are fulfilled within Kitui County and the country as a whole. “The farmers now plant with more prudence as opposed to how they used to do it before” says Mr. Nthenge adding that farmers are gaining better produce from their farms and that some even act as trainers of trainers to neighboring farmers. ■

Mutetei Mutisya works for Kitui Development Centre as a Monitoring, Evaluation and Communications Officer, he can be reached through; [muteteimut@yahoo.com](mailto:muteteimut@yahoo.com)



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# Seasonal Climate Forecasts Help Improve Productivity of Family Farms

According to the International Fund for Agricultural Development (IFAD), productivity of principal staple foods in Sub Saharan African countries over the past 20 to 30 years is only delivering about one third to a half of its potential yield. This has been attributed to poor farm management practices, such as application of inappropriate farm inputs, poorly informed planting times and use of ill-chosen seeds. These are all linked to limited access to relevant climate information. However, in Kenya; the situation is set to change over the coming seasons because farmers will get tailored and locally relevant seasonal forecasts from the Kenya Meteorological Services (KMS) through the recently appointed County Directors of Meteorological Services (CDMSs)

By Jessica Aywa Omukuti





**The training** The training was financed jointly by CARE and the Kenya Meteorological Department (KMD). It was geared towards enhancing the participants' capacities to:

- a. Better communicate seasonal forecasts and sub seasonal updates to end users.
- b. Build on indigenous climate knowledge to jointly create information that can be useful and used by the communities.
- c. Understand and respond to the climate information needs of users, especially farmers at county level.

**The Participatory Scenario Planning workshops** The workshops are held at the beginning of each of the two rainfall seasons. According to Mr. Joseph Machaka of CARE's Adaptation Learning Program (ALP), the workshops bring together meteorological officers, community members, government department representatives, civil society actors at the community level and the private sector. The meteorological and community forecasts are presented, interpreted and discussed in the context of each possible occurrence and its implications on livelihoods and activities in the county. Action plans are made in preparation for any of the possibilities. The plans, known as advisories, are then disseminated to the other county members for implementation during the season.

### **Planning and innovation**

Collaborative planning occurs when stakeholders make plans that are in line with the needs of the communities. For example, in Garissa, plans were made collectively with agro-pastoralists and pastoralists. If the season is forecasted to have below normal to normal rainfall, the farmers, with the help of the extension service providers discuss options of what crops would do well under the forecasted climate while keeping in mind the uncertainty of the forecasts.

The Ministry of Agriculture, Livestock and Fisheries then makes available the agreed seeds and inputs. The ability to plan ahead enables the family farmers to be prepared for any of the occurrences in the season, which in turn reduces their risk of losses.

The dissemination of climate information in a probabilistic form promotes innovation since it enables the farmers to understand the uncertainty that is contained in forecasts. They therefore make plans with the understanding that the forecast events have

**W**ith the posting of the 47 CDMSs in the new devolved system of administration in Kenya, coupled with the current need and opportunity to improve the quality of climate information available within the counties, KMS seeks to improve its role as a key service provider for locally applicable climate information and forecast products which can inform local development and economic decision making.

The KMS Assistant Director, Mr. Ayub Shaka, observed that despite each season's forecast being produced, the information has been underutilized by the target users, most of whom are family farmers. They were unable to fully understand the forecasts, due to the technical language used; broadcast method and limited consultation on the community needs. This had resulted into farmers making misguided decisions leading to losses and low productivity.

Before they were deployed to counties, the CDMSs were trained on disseminating weather information in better formats to facilitate its use. The CDMSs training should contribute to the improved utility of weather information because they have better communication skills.



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a certain likelihood of occurring. This encourages flexibility since the users are open to a wide range of options, including new agricultural practices.

**Climate information in use** Noor Jelle, an agro-pastoralist from Garissa is among the beneficiaries from these workshops. “We have been receiving information on rainfall and temperature forecasts for the coming seasons. The information is communicated in our local language, which is easier to understand. As a result, we have had minimal losses during harvesting periods since we know how better to store and preserve our produce during extreme climate events such as floods and droughts,” he says.

The CDMSs have collectively organised and facilitated three other workshops in Kakamega, Machakos and Embu. In all these workshops, the CDMSs disseminated climate information that was relevant to each of the county’s livelihood activities. Participants obtained technical advice from various government departments. They also met providers of agro-veterinary services and seed suppliers. The farmer-to-farmer sharing of farming experiences that occurred during and after the workshops, together with the information acquired from the CDMSs and extension officers, has encouraged informed agricultural decision making, which contribute towards improved farm productivity.

Although such concrete measures are essential, climate change is continuous and unpredictable. Adaptive capacity to make informed and flexible decisions for action is becoming even more important to ensure resilience to climate change impacts. Communicating climate information, in ways that users can understand and apply is therefore a critical resource to support effective adaptation to climate change. ■

CARE’s Adaptation Learning Program has been operational in Kenya since 2010 with the project communities being in Garissa. It aims at increasing the ability of communities to adapt through processes that are focused on the communities that are most vulnerable to climate change, based on the premise of understanding how climate change will affect the local environment and the community’s assets and capacities. One of the approaches used is climate information communication

Jessica Aywa Omukuti works with CARE International Adaptation Learning Program (ALP). She can be reached through [alp@careclimatechange.org](mailto:alp@careclimatechange.org)



# Wild Living Resources

## A community approach to sustainable use of trees and livelihood diversification

An expanding and increasingly land-hungry human population is driving the continued settlement (and clearing) of Kenya's semi-arid and agriculturally marginal lands where livelihoods are becoming less resilient. Frequent droughts and inadequate government infrastructure exacerbate the problem.

By Robert Wagner





© R Wagner

The World Bank classifies the majority of rural Kenyans as living below the poverty line. Without greater investment from both public and private sectors to support creating dependable employment and incomes the situation will only worsen with rural subsistence farmers and herders facing a continuing cycle of poverty and dependence on aid.

Kenya's semi-arid range lands, however, host a remarkable diversity of natural resources. If they are integrally linked to people's livelihoods, habitat and wildlife will be conserved, not only safeguarding biodiversity for future generations but also protecting water catchments and combating soil erosion and desertification – essential for the continued viability of agriculture and livestock production in these areas.

**Wild Living Resources Business Park** is a practical and commercially viable working model of integrated land use that has realistic potential to create tangible livelihood opportunities whilst conserving the natural resource base. The Business Park provides demonstration, the first of its kind in Eastern Africa, and a practical in-situ training facility for the capacity building of rural communities, and public and private sector support agencies. Located on 130 acres of indigenous forest shrub (donated by Kilifi Plantations Ltd, Kenya for the establishment of a community based natural resource management initiative) the business park acts as a model for the fully working integrated demonstration of six (soon to be eleven) natural resource use and livelihood options. These are Eco charcoal processing, East African Wild Leafy Vegetables, East African Wild Mushrooms, East African Aloe, East African Herbals and Good Woods.

**East African Medicinal:** The demand for medicinal and traditional herbal medicine continues throughout East Africa, particularly in areas with little or no access to medical care. However, the continued use exerts extraneous pressure on natural resources as

medicinal harvesters compete for material sourced mainly from the wild. Such intense harvesting of material has not only increased the prices of raw medicinal material but has also resulted in the increasing use of unsustainable harvesting techniques. This has led to declining populations of medicinal tree and shrub species, further diminishing natural resources, deforestation and a threat to preserving valuable indigenous knowledge related to the use of medicinal as a primary health care source.

Wild Living Resources is providing the **first sustainable harvesting model for livelihoods, healthcare and biodiversity conservation in East Africa**. Located on the Wild Living Resources business park, some 160 species of medicinal species are being sustainably harvested, processed and supplied into the Kenyan commercial herbal clinic market. The Ufanisi Herbal Community Based Organisation is a partner of Wild Living Resources to disseminate practical skills and knowledge for sustainable use of medicinal. Harvesters of medicinal material are provided with training through practical demonstrations on sustainable harvesting techniques, improving the quality of material harvested and in value addition (processing) for end products for the herbal market. Certified single species herbals are purchased and marketed into the local commercial herbal clinic sector.

This initiative now provides herbalists (traditional medicine practitioners) access to a sustainable supply of raw medicinal product - safeguarding not only the conservation of the natural resource it relies upon but also the continued viability of an important source of healthcare in Kenya, with potential to improve the income generated and livelihoods derived from these activities. ■

Contact info: Wild Living Resources; P.O Box 974, Kilifi, 80108, Kenya; Mobile: 0728608618/0736484317; Web: <http://www.wildlivingresources.org>



# PHOTO COMPETITION



## Visualizing the potential and contributions of family farmers worldwide

The International Year of Family Farming (IYFF) highlights the decisive role of family farming in the sustainable production of 80% of the world's food and in the conservation of ecosystems and biodiversity. The IYFF-2014 **Photo Competition** collects visual expressions to build stronger recognition and support for family farming, and encourage broad participation in the IYFF.

The IYFF-2014 **Photo Competition** is calling for photos that represent the motto: Family Farming: Feeding the world, caring for the earth.

Entries must visualize the strength, potential and challenges of sustainable, multifunctional family farmers worldwide, in all their diversity and contexts.

A jury consisting of Angèle Etoundi, Bernward Geier, S. Jayaraj, Tomás Munita, Deo Sumaj and Jun Virola will choose the winning photos. The deadline for entries is 1 May 2014, but we appreciate receiving photos earlier. The winning photos will be announced in October 2014.

The photo competition is an initiative of the AgriCultures Network and the World Rural Forum, in close collaboration with the Asian Farmers Association, CLOC/ La Via Campesina and the More and Better Network.

Read more and submit your photo at [www.agriculturesnetwork.org/photocompetition](http://www.agriculturesnetwork.org/photocompetition)



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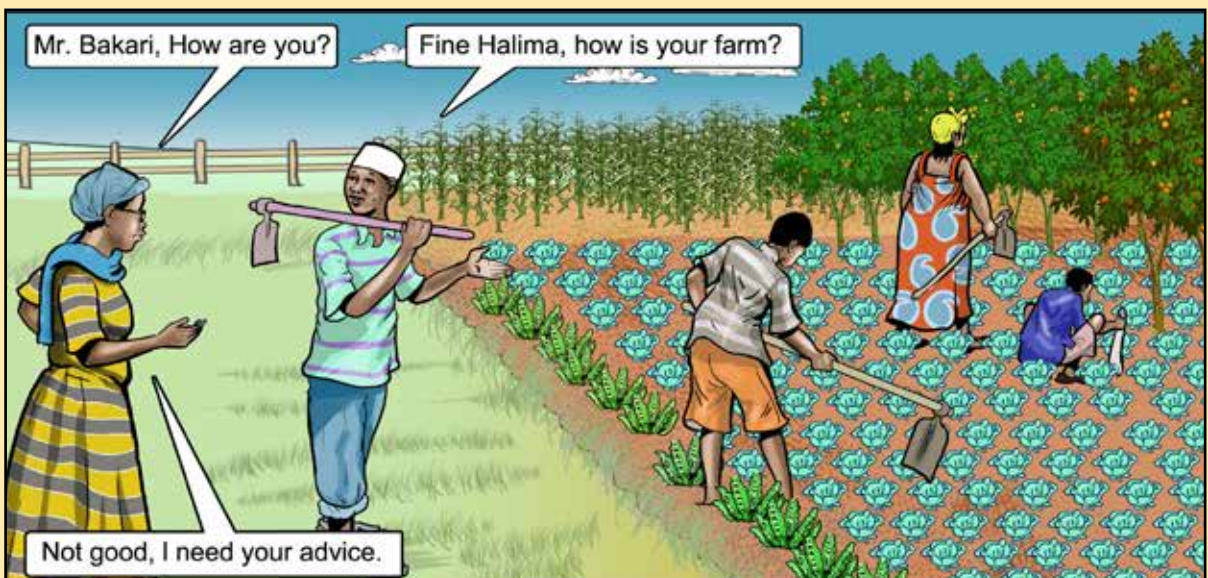
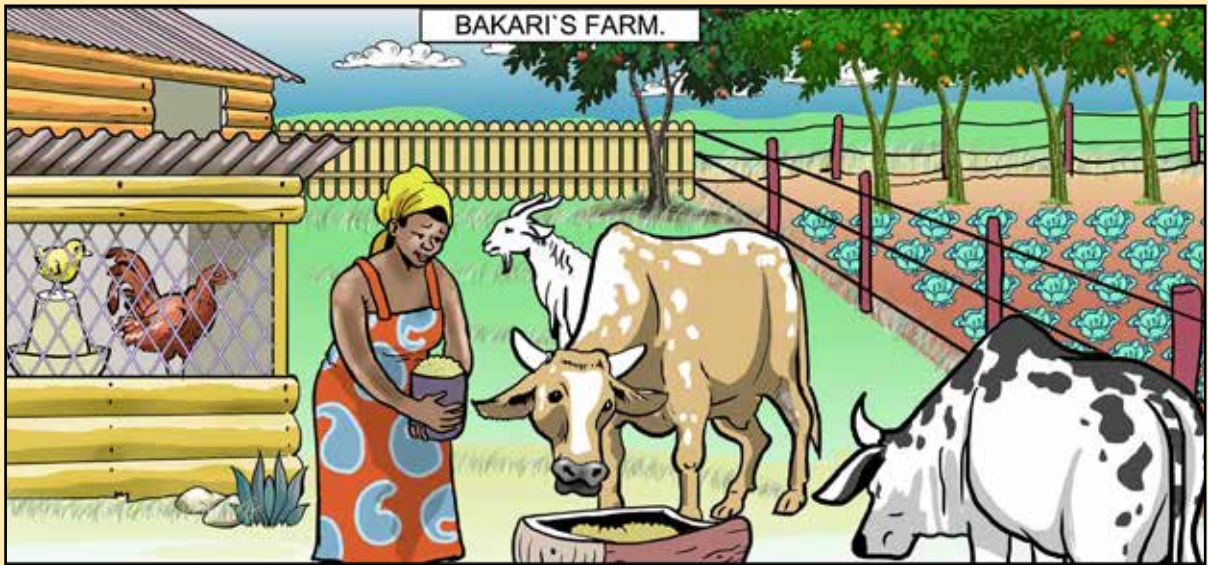
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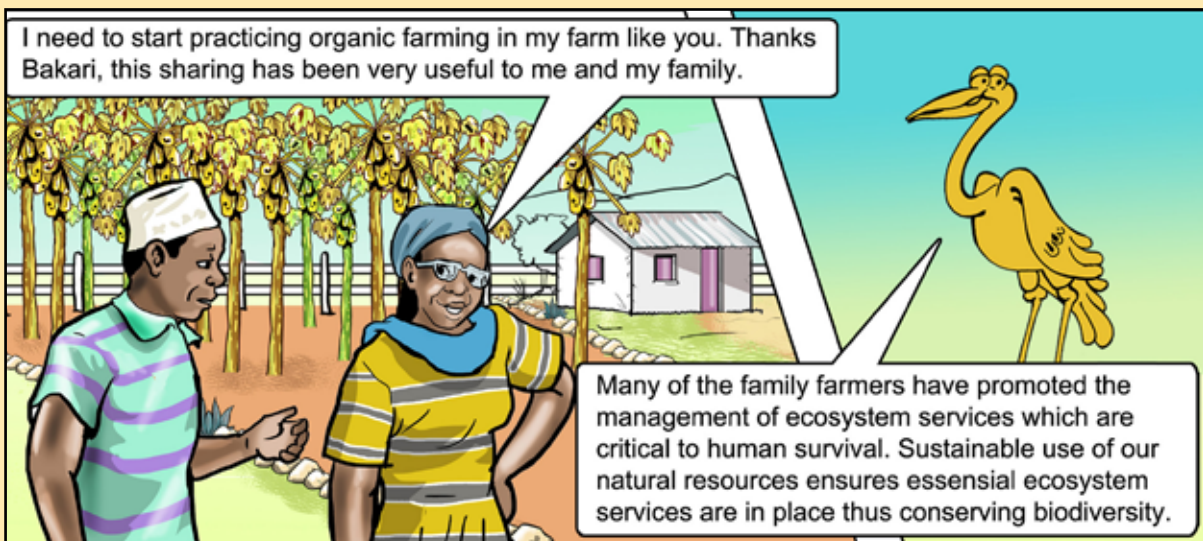
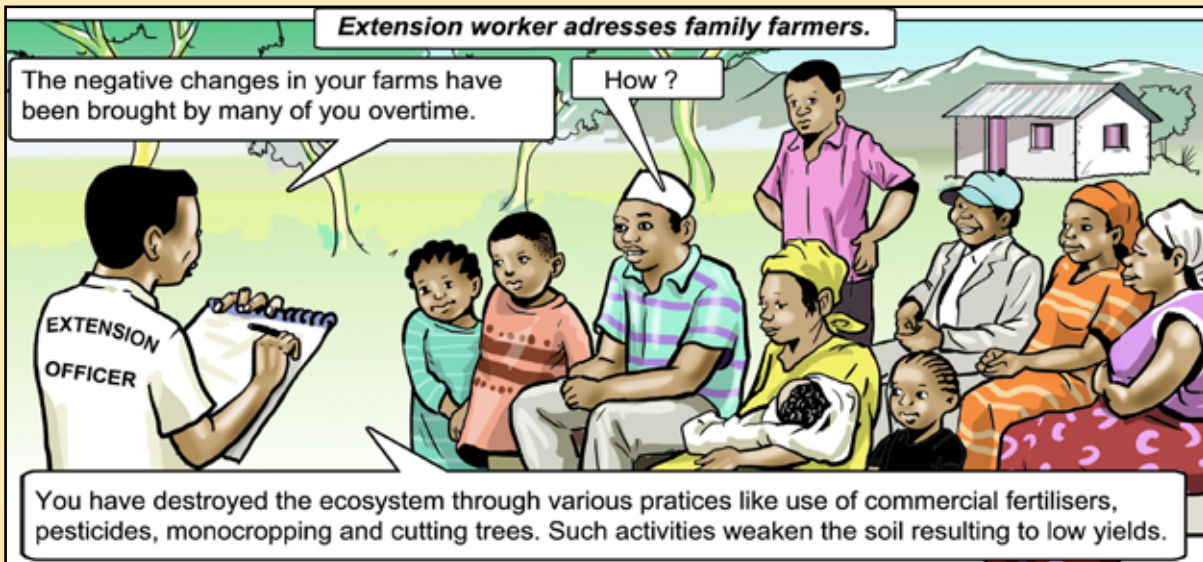
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# FAMILY FARMING









# Organic Farming:





# A Preferred Approach



Anthony Mugo interviewed John Njoroge, Director, Kenya Institute of Organic Farming (KIOF), on the benefits family farmers derive from adopting organic farming.

**What is KIOF?** Kenya Institute of Organic Farming (KIOF) emerged from an initiative began by myself and some of my peers back in 1986. We had worked with farmers and realised that conventional farming was becoming very expensive because of increasing cost of external inputs. At the same time, use of chemical inputs was compromising both the food and nutritional security of farmers. We began posing two questions to farmers we would meet through churches and farmers' groups. The first one was: *Are you aware that chemical inputs you buy from the shop have harmful effects on your farm and on you?* The second was: *Are you aware that there are good alternatives?* Answers to both questions were almost always in the negative. This pointed to a need for a sustained initiative to raise awareness among farmers about the benefits organic farming. That became the genesis of KIOF.

**What is organic farming?** Farming that relies on natural inputs and excludes synthetic inputs. It sustains crops and animals the way nature does, ensuring the conservation of organic matter, encouraging its natural decomposition to release plants' nutrients and creating sustainable nutrient cycling systems that remain productive indefinitely. It relies solely on crop residue and animal waste. It is made more efficient by use of modern methods of increasing the quality of humus (decaying plant matter) through composting.

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## Why should family farmers use the organic approach?

When family farmers use conventional agriculture that relies on chemical inputs: fertilizer, pesticides, herbicides and preservatives, these chemical form residues that have harmful effects on the soil. They also poison other living things that are necessary in ensuring a good balance in the farming ecosystem. Among these are pollinators such as bees and butterflies and other creatures which prey on plant pests such as bats and chameleons. Farmers soon realise that the soil cannot produce as much as it did before the use of chemicals was introduced. Yet the cost of chemical inputs is very high. In the end, many family farmers cannot afford them leading to a situation where they are trapped in a poverty cycle. Organic farming on the other hand relies on inputs already present on the farm hence the cost of production is very low. By eliminating use of chemicals, soil health is restored resulting in healthier crops and animal products.

## Which approaches should be used to ensure that the organic farming system is sustainable?

There are two practices that are recommended in order to ensure the sustainability of an organic farming system namely: crop rotation and mixed cropping. Crop rotation involves growing different crops in each season. Changing the crop seasonally brings in new predators which eliminate pests that may have accumulated during the previous cropping season. It also leads to accumulation of nutrients in the soil while enriching the variety of natural predators for common pests.

Mixed cropping on the other hand increases the diversity of plants on the farm improving the nutrition status of the soil. A recommended practice is to mix nitrogen fixing legumes with cereal crops. The result is a wider range of nutritious crops for the family farmer ensuring that the family's nutritional needs are met in terms of carbohydrates, proteins, vitamins and even medicinal crops. The variety of crops on an organic farm is good measure of the sustainability of the farming system. You might recall that this was always the case in many traditional communities. A visitor to a farm was always given something harvested from the farm irrespective of the season. With conventional agriculture, many family farms go for months without crops due to mono-cropping. The rearing of farm animals is also encouraged on

organic farms because their waste forms a rich source of organic fertiliser. Animal waste is a good source of clean energy such as biogas.

## Is it possible to convert a farm from the conventional to the organic approach?

It is possible and many farmers have managed convert from conventional to organic farming. However, the process requires a minimum of three years. The starting point is to ensure that the farmer familiarises themselves with the existing standards for the market where they plan to sell their organic produce. In Kenya, the standards are set by the Kenya Bureau of Standard (KEBS). Although different countries have their own standards, most of them conform to the standards set by the international Federation of Organic Agriculture Movement (IFOAM).

The next step is to apply for certification in order to be able to sell the produce in the preferred market. Upon application, the farm has to be inspected by certifying agents or their representatives. Inspectors are independent and they often do random inspection mainly to ensure that the farm cannot be contaminated by neighbouring conventional farm. This requires establishment of buffer zones around the perimeter of the organic farm. Buffering involves the establishment of cut-off drains, hedges and strips of bush to isolate the farm. It is an expensive process both in terms of time and financial resources. Because of this, certified organic products are always sold at a premium. Once full conversion has been achieved, the produce should be labelled and a copy of the certificate attached giving the contact details of the farm.

## What would you say have been the achievements of KIOF?

The organisation pioneered the education of organic farmers in Kenya in 1986. Another milestone was to help in the establishment of the Kenya Organic Agriculture Network (KOAN) in 2004. KOAN is the national coordinating body for marketing agents involved in organic farming in Kenya. KOAN subsequently became the reference point for the establishment of organic farming networks in Uganda, Ethiopia, Somalia, Rwanda and Burundi. Many organic farmers from those countries have been trained at KIOF. ■

John Njoroge is the Director of Kenya Institute of Organic Farmers (KIOF) he can be reached through [info@kiof.net](mailto:info@kiof.net) Anthony Mugo is the Deputy Director of ALIN. E-mail: [amugo@alin.net](mailto:amugo@alin.net).



# Small-scale farmers, BIG-SCALE CHANGE

The organisations working together in the Agricultural Biodiversity Knowledge Programme (agrobiodiversity@knowledged) initiated by Oxfam Novib and Hivos all work with family farmers who make a living by using, conserving and regenerating the agricultural biodiversity they have as a base. The possibility of reversing high dependence on agrichemical inputs on a large scale, particularly among family farmers who work in close-knit networks, is illustrated by the experiences of the Centre for Sustainable Agriculture (CSA) in Andhra Pradesh, India.

Zakir Hussain, G.V. Ramanjaneyulu, G. Rajashekar and G. Chandra Sekhar

**S**mall-scale family farmers in Andhra Pradesh constitute the vast majority of farmers in the state, and are facing a deep and protracted crisis. Over the past eighteen years, more than 35,000 farmers have committed suicide – many because of enormous debts due to heavy dependencies on expensive chemicals. Pests are an issue, all farmers agree on that. However, CSA realised that for many farmers, the main problem was not pests but their addiction to pesticides. Pesticides are expensive, are harmful to the health of farmers and their families, create ecological problems and, most importantly, do not solve the problem. The more pesticides you use, the more you disturb the ecosystem, and the worse the pest problem gets. Many family farmers in Andhra Pradesh have experienced this firsthand. It became clear that there was a pressing need for a solution to

this problem. Farmers, NGOs and government jointly rolled out an effective strategy to widely spread the use of Non-Pesticidal Management (NPM).

## Non-Pesticidal Management

A radical change was needed: the first step in stopping pests is to stop using pesticides and adopt integrated cropping systems and local resource-based practices. CSA works with family farmers, building on their knowledge, to make this change happen. NPM was developed during the early 1980s and has proven to be effective in different parts of the state. The basic philosophy behind NPM is to train farmers to better understand insect biology and behaviour and the crop ecosystem, building on their own knowledge and skills.

For family farmers, who live on their land and have a close relationship with all the crops they cultivate, NPM is a logical strategy. Their physical proximity to

the land means that family farmers often have an intimate understanding of it and its workings. In addition farming families are well aware of the hazards posed by exposure to these chemicals which can immediately affect all family members, through the air, their skin and their food.

In 2004, CSA set up Farmer Field Schools in twelve villages in Andhra Pradesh to help farmers develop their knowledge about pest management. Family farmers learnt to understand their agro-ecosystems and plan their crop cycles accordingly. Today the programme covers about 11,000 villages.

Andhra Pradesh used to have the highest pesticide consumption rate in India, but today it has one of the lowest. The villages that have given up chemical pesticides have not seen a pest outbreak in the last six years, and their yields have not decreased.

### Different paths for scaling up

In development circles, one of the major questions that continuously arises is how to scale up best practices. The enormous change in attitudes towards pesticides in Andhra Pradesh provides a good illustration on how this can be done. By expanding, adapting or sustaining successful initiatives and the underlying philosophies, CSA has been able to reach many people in different places and over time. Instead of *re-inventing* the wheel, we *re-use* the wheel and learn from the practice of inventing. Without this process, a number of valuable experiences would remain scattered as “islands of success”.



For family farmers, Non-Pesticidal Management is a logical strategy. Photo: Mr Adinarayana

Success stories can be scaled up in different ways. They can spread spontaneously, or projects can be directly replicated by NGOs or government, or be propelled by grassroots movements spreading particular ideas and methods wider. In CSA's experience, two successful strategies for scaling up took place: collaboration between NGOs and the government, and scaling up by farmers themselves, as they adopt the concept of NPM and adapt it to their local conditions.

**From farmer to farmer** Pudukula is a small tribal village in Andhra Pradesh's Khammam district, which has acted as a beacon of hope for all the distressed farmers in the state. Pudukula formally declared itself pesticide free in 2003. All of its farmers adopted alternative pest management strategies and became the navigators for a new development paradigm. They developed a simple and affordable method of preventing pests, based on understanding the pest's life cycles, and have since become experts in disseminating this technology in their region. Their success was widely recorded in the media and convinced the state Minister of Agriculture to scale up the approach.

In this case, the state government became motivated to scale up alternative farming practices after observing that they were being successfully adopted by farmers. Yet it is also an illustration of a bottom-up scaling up strategy. The wide spread of NPM in the state can be attributed to horizontal expansion from farmer to farmer. As people live and work on the land, farmers readily share new knowledge within and between communities. They understand other farmers' situations and can explain concepts and ideas in their own language. CSA enabled farmers to teach others in their communities and beyond. The small and labour-intensive scale of most operations, the closely knit social networks and the proximity to each others' farms means that this method works well in family farming communities.

Women played a particularly important role in this process, contributing to rapid change in hundreds of

The Agricultural Biodiversity Knowledge Programme ([agrobiodiversity@knowledged](mailto:agrobiodiversity@knowledged)) aims to generate and share evidence and insights that will be of value for enhancing agricultural biodiversity. It aims to contribute to a change from mainstream high-input agricultural systems to biodiverse systems that serve farmers and nature; that ensure food and nutrition security; and that respect people and their knowledge and choices. For more information contact Sarah Doornbos ([s.doornbos@hivos.nl](mailto:s.doornbos@hivos.nl)).





Scaling up initiatives like NPM can take place with government assistance, and from farmer to farmer.  
Photo: Mr Adinarayana

villages. Women's self-help groups were at the forefront of the grassroots movement that took charge of their farming, built their own capacities and found a way out of the agrarian distress they had been experiencing. Women clearly understood the benefits of non-chemical farming, which brought them economic, social and health benefits. As more and more women's groups heard about this programme they began to demand that it be initiated in their villages too, and convinced their men that chemicals are not needed for farming.

**Rolling out NPM** Often governments claim that farmers are not interested in shifting away from pesticide use. Yet the successful farmer-to-farmer spread of NPM in Andhra Pradesh provided hands-on experience about the feasibility of scaling up NPM. Family farmers are ready to change, whether or not the government is ready. Farmers take up new approaches when they see and experience the lasting benefits, even if such an approach is not supported by government extension programmes. Fortunately in the case of Andhra Pradesh, government departments were willing to support CSA's approach and eventually established a scaling-up programme called "Community Managed Sustainable Agriculture".

The roll-out began with CSA piloting the programme with partner NGOs, after which the State Department for Rural Development helped to further replicate it. The success of this collaboration depends on the actors sharing similar or complementary objectives: CSA's goal to mainstream an alternative solution to pesticide use overlapped well with government's aim to improve livelihoods through cost reduction in farming. Based on the lessons in Andhra Pradesh, the national level "Women Farmers Empowerment Programme" has subsequently been implemented in several states across the country.

Joint ownership with the government has given the programme the potential for becoming more than an

island of success. The partnership with the state government has expanded the programme's reach and has influenced policy at a state and national level. The state government has also benefitted from tapping into the expertise of NGOs, who act as innovators, developing and testing solutions, whereas governments are often tied to established procedures and often unwilling to take risks or adopt innovative approaches. Such collaboration requires trust and mutual acknowledgement between the partners involved, in order to dispel fears of being co-opted or one party having exclusive control.

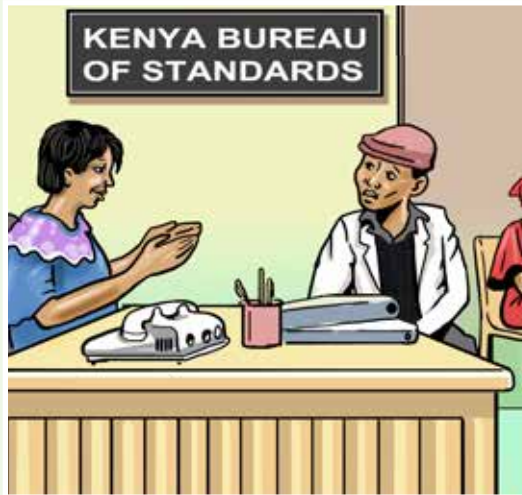
### **Effective upscaling: the clue to sustainability**

The sustainability of any farming practice or innovation might be judged based on the potential for scaling up of that practice. Many thousands of farmers have reported that ecological practices for managing pests, diseases and soil productivity are effective and successful. There is a wealth of evidence about how this model is economically viable and increases farmers' self confidence. Reportedly, farmers who had mortgaged their lands to meet their debts are now able to reclaim ownership over their land. Out-migration has reduced and farming is once again a dignified occupation. Finally, women farmers have proven again that when they are in the driver's seat, their development approaches are more eco-sensitive, equitable, sustainable and have a longer term perspective.

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## Steps in Establishing an Organic Farm

1



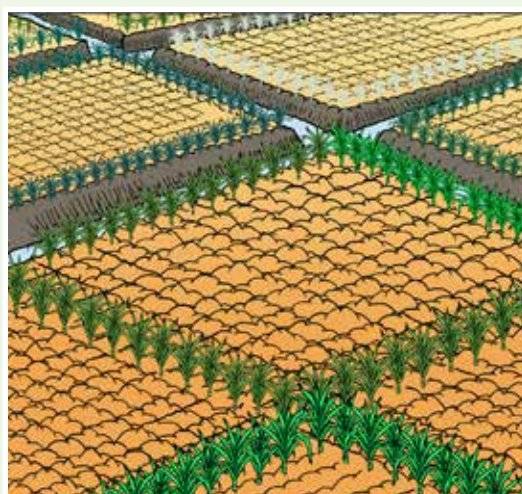
The farmer familiarizes himself with the standards of the market where he intends to sell his organic products. In Kenya this is the Kenya Bureau of Standard. Other standards conform to the International Federation of Organic Agriculture Movement (IFOAM)

2



Establish the certifying agent in the destination country and make an application for certification of the farm.

3



Prepare your farm for inspection ensuring that a buffer zone has been created between the farm and neighbouring conventional farms. Buffering includes digging cut-off drains, growing hedges and strips of bushes to ensure contaminated water does not get into the farm.



4



Independent inspectors from the certifying agency or its representative visit the farm to ensure that it conforms with the standards for that market and issues an inspection certificate.

5



Once certified, products from the farm can be sold as "certified organic". They should carry a label showing the identity of the certifying agent and the contacts of the farm

6



The farmer should ensure that they adhere to the set standards for organic produce for their preferred market and be prepared for periodic random inspection. The firm can henceforth produce organically indefinitely.

# Pollinators' Benefits for Agriculture and Nature



Pollination is the transfer of pollen from the male part to the female part of a flower for seed and fruit development. This activity can be by abiotic (non-living) and biotic (living organisms) factors. The main pollinators are: insects (bees, flies, beetles, moths, and butterflies among others); vertebrates such as bats, non-flying mammals which include several species of monkeys, rodents, lemur, tree squirrels and birds. Although pollination is vital for survival of both plants and animals, it is ignored and unappreciated because it is provided free by nature.

By Wanja Kinuthia

Two thirds of the world's food production and therefore humanity's food and nutritional security, depends on pollinators. It is important to note that honey bees are just one among many bee and insect pollinators. Honey bees are in fact not the most efficient pollinators for most plants but are the most relied upon in commercial farming due to the ease managing them. They are more popular with family farmers due to production of honey and other products such as beeswax, pollen, royal jelly, propolis, bee venom, bee brood.

Pollinators visit flowering plants (angiosperms) to gather food for themselves and their young and in the process perform pollination without which plants would not reproduce. Man, his livestock and wildlife would not get food, feed, browse, nesting sites and good habitat to live in if it were not for pollinators.

**Harmful practices** Man-made (anthropogenic) activities that contribute to pollinator decline include: destruction of natural ecosystems; detrimental farming practices like slash-and-burn; misuse/overuse of farm inputs (insecticides, fungicides, herbicides, fertilizers); monoculture; and clean farming (removal of all vegetation) in an agriculture setting. Overgrazing is another cause of pollinator destruction. It leads to compacting of the soil and destruction of ground-nesting sites for bees and other pollinators. Other human practices such as collection of firewood destroy nests for pollinators since some bee species nest in dry twigs and wood.

**Pollinators in farms** Pollinators in farming areas can be conserved by changing farming practices. These include: adapting minimal tillage; avoid slash and burn activities; minimal or non-use of pesticides; and leaving uncultivated areas around farmland to allow for growth of alternative pollinator-host plants.



**Policy responses** On-farm practices that conserve pollinators can be enhanced by relevant authorities incorporating conservation activities, education and public awareness programmes and pollinator-friendly policies in all sectors. It is imperative that pollination research and its economic benefits be mainstreamed in public and private learning institutions and among policy makers.

This is more urgent in the advent of the implementation of Kenya's new system of government where the 47 counties will be opening up new areas for development. If caution is not exercised, these will most likely be at the expense of biodiversity-rich habitats.

Natural areas tend to be looked at as "unutilized virgin land" fit for agriculture, livestock and industrial development and the setting up of new cities. Consideration is rarely given to preservation or gazetting of natural habitats within or in the proximity of cities for recreation, national parks or forests. Road reserves should be allowed to have indigenous vegetation to provide floral resources for local pollinators, which may from one region to another. If this can be done, then pollinator species will be conserved, even in the new governance dispensation.

**International attention to pollinators** The concept of preservation and increasing pollinator habitats has taken root in western countries in an effort to revive pollinator populations, which had declined in America and European countries to the point of threatening food security. The Urban Pollinator Project of the University of Bristol in the UK is a case in point. The project, which is undertaken in the context of the UK Insect Pollinators Initiative (IPI), aims to investigate the current status of insect pollinators found in UK urban areas by simultaneously sampling plant-pollinator communities in towns and cities in England, Scotland and Wales.

**Local research on pollinators** In Kenya, a series of projects such as the BIOTA pollination projects undertaken by the National Museum of Kenya in collaboration with German and Kenyan institutions and the Kenya Pollination Project have gone a long way in profiling pollination research in Kenya. The projects have carried out crop pollination research in western eastern and central Kenya with a strong farmer-driven capacity building component using Farmer Field Schools (FFS) and public awareness activities.

A methodology known as Study Train, Evaluate and Promote (STEP), which involves farmers and agriculture extension officers, has worked well in promoting



pollination studies and conservation awareness. The other effort is policy formulation for pollinator conservation which has been done in collaboration between National Museums of Kenya and Kenya Agriculture Research Institute (KARI). It is aimed at raising awareness with policy makers in order to mainstream pollination research, build capacity, and raise public awareness about pollinators' conservation.

**Economic ventures** Simple economic ventures by farmers, communities, schools/institutions, municipalities and homeowners to conserve pollinators can be undertaken. These include:

- Incorporating pollinator-friendly (indigenous) plants in the development of pollination gardens, botanical gardens, medicinal plants gardens, kitchen gardens, and pollinator friendly flower gardens in institutions, business premises and municipalities. A small entry fee for a well-developed and labeled pollination garden could raise funds for the owner.
- Photography, artwork on cloth and jewelry using the colourful pollinators.
- Cartoon/animation videos and storybooks

We urge you all to conserve pollinators that provide your food and nutritional requirements.

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[www.discoverpollinators.org](http://www.discoverpollinators.org)

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# STRENGTHENING FAMILY FARMERS

## From Farmer-pastoralist Conflicts to Profitable Alliances



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The area around Wum in the North-West Region of Cameroon is notorious as a conflict hotspot. As the available land is decreasing, conflicts occur between sedentary family farmers and pastoral communities. Both family farmers and pastoralists are left with too little land for crop and livestock production, seriously threatening their farming systems, animals and livelihoods. Farmer-pastoralist alliances help resolve the conflicts by transforming the relationships between these families.

By Charles Kacho Tah



# > DIALOGUE AND COLLABORATION



**B**oth the farming and pastoral families in Wum Central Sub-Division have used the land since time immemorial. The customary tenure system is increasingly overruled by the costly, cumbersome and corrupt land tenure law, making it difficult for poor farmers and pastoralists to secure their land rights legally. Farming and pastoralist families are evicted from what is suddenly referred to as “state land”. In the Wum area, the relatively recent introduction of a growing industrial tea estate has made land grabbing, exclusion and conflicts the new reality of family farmers and pastoralists.

**Two groups, one land** Arable farmers in this region generally cultivate a plot of land until low soil fertility forces them to move to a new plot. Pastoralists, in their attempts to cope with unreliable rainfall patterns, move their livestock seasonally from one grazing ground to another. While in the past these systems co-existed in harmony, more recently they have been breaking down with violent conflicts ensuing. Access to land for families of farmers and pastoralists was at the centre of these conflicts. Farmers’ perceptions on land entitlement and the pastoralists’ relative wealth and power made conflict difficult to resolve independently in the communities. Their increasingly extreme positions needed an external party to bring both parties to dialogue and as such stimulate a change process.

In 2007, SNV Netherlands Development Organisation started to work with farmers and pastoralists, developing an approach to conflict resolution based on dialogue at the community level. Involving local councils, nine “farmer-pastoralist platforms” in nine conflict-prone villages in the Wum area were created. These platforms bring together representatives of the farming community, the pastoralist community and traditional leaders. They discuss peaceful solutions and make annual plans that regulate which crop and livestock activities will occur where and when. In total, over 40 dialogue platforms were created in eleven subdivisions in Cameroon.

**Farming alliances** An SNV study showed a 65% reduction in conflicts between 2007 and 2010 in Wum. Instead of conflicts degenerating into uncontrollable situations, the farmer-pastoralist platforms foster the emergence of mutually beneficial farming alliances. These alliances constitute a farming partnership between a pastoralist family and one or more farm families whereby the pastoralists’ animals are permitted onto arable land after the harvest. The pastoralist family benefits because the animals feed freely off the crop residue. The farm family benefits from the animals’ manure: arable farms are continuously fertilized, allowing farmers to cultivate on the same land without losing fertility. In other times of the year, animals stay in jointly defined grazing areas.

## Better Crops and Healthier Animals

Farmer Delphine Fuh and pastoralist Sheffu Mohamadu of Naikom village, one of the villages in Wum Central Sub-Division, have been collaborating in a farming alliance since 2010. Delphine notes with much excitement that where her family used to fight to remove pastoralists from the land, today she and other farmers invite them to come onto their land. Delphine tells how her maize productivity has doubled, and her vegetable productivity tripled. At the same time she saves on the chemical fertilizer she now no longer needs to purchase because her land is fertilized by the livestock. And she sees the results in the quality of her produce. "Each time we harvest our vegetables my neighbours come and pay me in advance because of the exceptionally good quality and taste of my vegetables." Delphine points out that there are seven new initiatives for farming alliances emerged in her neighbourhood; all because of the successful alliance between her and Sheffu's families.

On his side, Sheffu recounts how his animals are now much healthier because they have access to the crop residue and fresh pasture that grows just after the harvest. He spends less money on buying food for his family and herdsman because Delphine gives him access to her maize and vegetables. Sheffu has secured his grazing land from encroachment by arable farmers who used to claim more and more rights, referring to themselves as "natives" and him and the other pastoralists as "strangers". "Although I have already lost part of my land to farmers, I am overwhelmed by the fact that ever since we started our farming alliance they are no longer demanding additional land. Not only can I bring my cattle to their farms, the farmers have also opened up tracks giving my cattle access to drinking points."

Based on settlement patterns and geographical parameters, variations of the basic farming alliance concept have evolved. Local organisations and leading farmers and pastoralists now promote the approach. Access and management of pastoral resources through farming alliances has also found its way into the new national legal texts such as the Pastoral Code of Cameroon.

**Stronger families** This experience of farmer-pastoralist alliances highlights three key areas to strengthen family farming: tenure security, conflict management and sustainable farming practices. It shows how both farming and pastoralist families can make a difference in the wider community. Dialogue creates an enabling environment for crop and livestock integration, to replace the isolation from before. The use of cow dung for the fertilization of arable farms is one of the ways in which alliance farming helps pastoralist and farm families practice

more sustainable approaches. Also, farmers no longer have to resort to shifting cultivation and slash-and-burn, helping them to improve soil fertility.

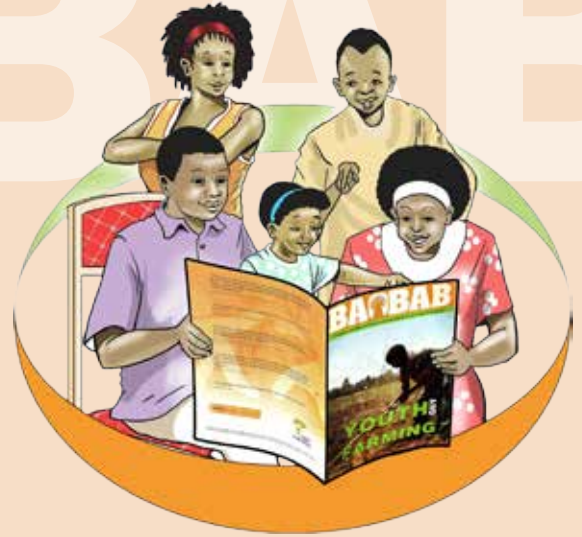
The farmer-pastoralist alliances not only avoid conflict, but also lead to tenure security between farmers and pastoralists and within communities. It also leads to tenure security as a whole: where dialogue platforms are stronger, the rural communities including both farmers and pastoralists are united and stand strong against activities of large investors. Development organisations in the North West such as the Mbororo Social and Cultural Development Association (MBOSCUDA) are currently promoting dialogue platforms in order to strengthen community land rights for pastoralists and arable farmers and protect them from land grabbing. ■

Charles Kacho Tah has been working with SNV since 2010 to improve pastoral livelihoods in the North West Region of Cameroon. E-mail: ckachotah@snvworld.org



# BAOBAB

## Watering Baobab



### Introduction

The *Baobab* is a quarterly magazine that is published in March, June, September and December. Every issue has a theme that guides the topic one can write on. Topic for March issue 2014: Agricultural biodiversity: Breaking the barriers

### How to Write

Know what you are writing about in advance and think clearly, carefully reflecting on:

- WHAT was the initial context and what were the difficulties faced?
- WHAT were the reasons for the approach taken to improve the situation?
- HOW did they go about it and who took the initiative?
- WHEN did all this happen, and to what extent was the timing important?
- WHAT happened as a result?
- WHY did it work out as it did? (We appreciate opinions/analysis/conclusions relevant to field level, as well as recommendations for policy makers).
- WHERE did the action take place?

### Please Ensure that You

1. Thoroughly read the call for articles and check that the article fits well with the theme being covered.

2. Explain any terms or ideas that may not be understood in every part of the world.
3. Acknowledge all sources and references used.
4. Explain any abbreviations used. Full editorial support is provided. As the articles go through a rigorous editorial process, authors are usually requested to provide additional information or clarifications. We would therefore rather have too much information than too little in the first draft!

### Format

1. Articles should be about 700 to 1000 words (one, two or three-page articles) and should be emailed to [baobab@alin.net](mailto:baobab@alin.net) or [info@alin.net](mailto:info@alin.net) as a word document attachment.
2. Include no more than five references. Each reference should include title, year of publication, name of author, and publisher.
3. Please provide a current contact address at the bottom of the article. This will also be published in the magazine. We would also appreciate a contact phone number for our own use.

The editor reserves the right to decide whether or not to publish an article or contribution after receipt of the first full draft. Articles that are accepted will be edited to the *Baobab* house style and shortened if necessary.

Contributions edited in this way will be returned to the authors for

approval before publication. Articles accepted for publication in the

*Baobab* may be chosen for translation in any of the six regional editions. We will endeavour to inform authors if their article appears in other editions.

### Photos

Pictures speak volumes. Two to four pictures relevant to what you have written must accompany your article.

Illustrations, drawings, or maps are also welcomed. Please provide the name of the photographer or artist. Please ensure the photos or illustrations are of suitable quality.

Send the pictures as attachments in jpeg format of at least 300kb and above. Also remember to include a caption outlining the people or activity in the picture.

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## Agricultural biodiversity: Breaking the barriers

Agricultural biodiversity plays a huge role in maintaining resilient local economies, balanced diets and balanced ecosystems. The rapid disappearance of agricultural biodiversity and the lack of measures to protect it are therefore great causes of concern. Mainstream agricultural policies, which generally promote monoculture agriculture, Genetically Modified Organisms (GMOs) and Intellectual Property Rights threaten such agricultural biodiversity, having an impact on agricultural landscapes, species, varieties, breeds, the wild relatives of crops and livestock, pollinators, micro-organisms and genes. These policies and practices lead to the disappearance of plant and animal species, and the knowledge embedded in their management and use.

There is some good news though: in recent years many promising initiatives have been launched around the world that aims to preserve and manage agricultural biodiversity. Small-scale family farmers often play a central role in these, acting as custodians of biodiversity. But other actors and institutions also play important roles. Producers, public and private institutions and consumers are reconnecting with each other through innovative market arrangements, many of them at local or regional level. Farmers and

researchers are taking up joint research initiatives, and farmers' organisations are engaging in dialogues with policymakers, pushing for policies that enhance agrobiodiversity.

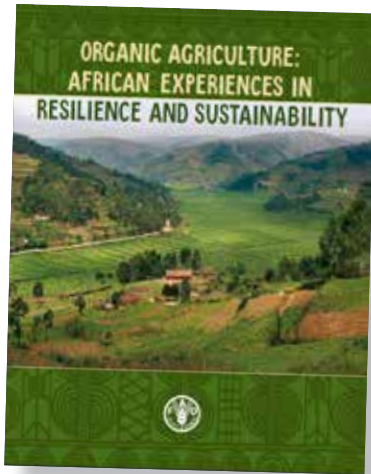
Issue 70 of *Baobab* will look at these emerging initiatives and at the insights gained from initiatives around east Africa to up-scale these experiences. We particularly aim to explore the factors that influence the transformation towards more sustainable and diverse production systems, and the factors that help break existing barriers: why have some experiences been more successfully spread and scaled up?

The topics we will look at will include the revitalisation of local seed systems and indigenous livestock breeds at a large scale; the market mechanisms and policies that support agrobiodiversity; farmers' innovations and the role of knowledge and information networks. As 2014 will be the *International Year of Family Farming* this edition will explore the close interconnection between agricultural biodiversity and family farming.

Articles should be sent to the editor, E.lungahi@alin.net, before **January 31<sup>st</sup>, 2014**. ■



## Organic Agriculture: African Experiences in Resilience and Sustainability



This publication by FAO, *Organic Agriculture: African Experiences in Resilience and Sustainability* demonstrates that organic management can benefit people, the economy and ecosystems and that this can be achieved in Africa, where hunger and degradation stubbornly persist, despite decades of

development efforts.

The work presented in this volume stems from the conference on *Mainstreaming Organic Agriculture in the African Development Agenda*, held in Lusaka, Zambia, from 2 to 4 May 2012. Participants of this Conference shared research results confirming that organic agricultural practices “increase yields, improve livelihoods and food security, conserve indigenous knowledge, plant varieties and animal breeds, as well as sociocultural development, and provide much greater resilience in times of climate extremes, such as drought and heavy rains.”

The different chapters document sustainability experiences, including: mainstreaming organic agriculture into African development approaches; community-based livestock systems combining holistic range management; indigenous ethno-veterinary practices and new understanding of customary systems of resource management; eco-functional intensification through management of legumes, systems of rice intensification and integrated farming; and smallholders’ knowledge harnessed through family farmers learning groups and customized information and communication technologies.

The studies from different Sub-Saharan countries demonstrate that successful organic farming is about whole farm management, where feeding the soil feeds the plant, where optimal nutrient cycling is achieved through plant and animals management in time (i.e. rotations) and space (i.e. associations) and where quality production goes hand-in-hand with market linkages. Sound agronomy is a recipe that needs to be owned by farmers who have specific cultures and by pastoralists who have specific environments: traditional knowledge and flexible management strategies are therefore critical for successful outcomes.

This review is the condensed Preface for the publication written by Alexander Mueller, Assistant Director-General Natural Resources Management and Environment Department, FAO.

## “Treesilience”: Rebuilding Livelihood and Ecosystem Resilience in East African Drylands Using Trees

A review by Robert Wagner

**Treesilience** is an outcome of a six-month consultative process on dryland forestry involving five dozen specialists from across the East African region and beyond. The book sets a hopeful, positive tone for revisiting, indeed revamping how dryland community development is defined and done.

Early chapters of **Treesilience** describe the unique characteristics of the East African region: geographical, agro-ecological and demographic. They assemble a wealth of detailed background material on trees and resilience (Chapter 4), Eastern African tree ecology (Chapter 5), and the ecosystem services approach to classifying tree benefits (Chapter 6). These early chapters provide readers with the tools needed to take on the challenges of using trees more effectively in dry land community development.

Readers preparing funding proposals, or developing training materials, will find much useful reference

material here. A stated objective of the consultative process was to assemble and make accessible the scattered knowledge, practice and experience of using trees in dry lands specifically to enhance livelihood resilience. The report does an excellent job of this and deserves wide use in training, educational courses at regional colleges and universities, and (perhaps in condensed form) as a guideline to forward-thinking planners in aid institutions.

**Available from:** World Agroforestry Centre (ICRAF)

Email: Jan de Leeuw <J.Leeuw@cgiar.org> or download the PDF at: [www.worldagroforestry.org/publications/Treesilience2013final.pdf](http://www.worldagroforestry.org/publications/Treesilience2013final.pdf) [7.3mb]

Note: the review author was a co-facilitator of the write-shop which led to this report and an editor of the draft text. He holds no vested interest in its circulation – other than encouraging a wide readership.

“By choosing to celebrate this year, we recognize that family farmers are leading figures in responding to the double urgency the world faces today: improving food security and preserving the natural resources, in line with the Millennium Development Goals, with the debate on the post-2015 development agenda and the Zero Hunger Challenge,”

*FAO Director-General José Graziano da Silva, during the launch of the International Year of Family Farming in New York on November 22, 2013*

“Cultivators of the earth are the most valuable citizens. They are the most vigorous, the most independent, the most virtuous, and they are tied to their country and wedded to its liberty and interests by the most lasting bands”

*Thomas Jefferson*

“When it is understood that one loses joy and happiness in the attempt to possess them, the essence of natural farming will be realized. The ultimate goal of farming is not the growing of crops, but the cultivation and perfection of human beings.”

*Masanobu Fukuoka, Author of The One-Straw Revolution*



Enabling Access. Creating Knowledge  
Empowering People

