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# FAO UGANDA

## Information Bulletin

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# Editorial

Dear Reader, Happy New Year and welcome to the first issue of the FAO Uganda Information Bulletin in 2013.

In March, the FAO Director-General, Jose Graziano Da Silva, was in Uganda to exchange ideas with policy-makers on ways to ensure food security and reduce poverty in Uganda by supporting rural smallholders in the country's agriculture sector. Find details of the discussions that he held with Government officials and the strategies that he proposes for Uganda in this bulletin.

A contingent of 22 Chinese agricultural experts and technicians were received by the Ministers of Agriculture, Animal Industry and Fisheries in October 2012. You will find information about the South to South Co-operation arrangement under which these experts and technicians operate and what they will do while in the country.

From the field, the Bulletin presents an analysis of FAO's and the communities' efforts to heal the Kagera Basin, whose resource base and ecosystems are facing increasing pressures as a result of rapid population growth, agricultural and livestock intensification and unsustainable land use and management practices.

Although the region is emerging from war, you will find interesting testimonies from northern Uganda on the communities resolve and determination to get back to their feet and regain the dignity of sustainably producing food and managing their livelihood.

In the international news section, FAO warns of a potential repeat of the disastrous 2006 bird flu outbreaks unless surveillance and control of this and other dangerous animal diseases is strengthened globally.

Also read about a new campaign that proposes simple actions for consumers and food retailers to cut the 1.3 billion tonnes of food lost or wasted each year.

The Bulletin also captures news and events for the period October 2012 to March 2013.

**Happy Reading!**

**Rachel Nandelenga**  
Information/Reporting/Communication Officer  
FAO Uganda



The Director-General (L-R – 7<sup>th</sup>) poses for a photo with FAO staff in Uganda. He was in the country on a one day official visit on 8 March 2013. Standing 5<sup>th</sup> (L-R) is Mrs. Victoria Sekitoleko, a former FAO Representative in China who retired in 2011.

## FAO's Director - General encourages Uganda to embrace commercial farming

The Director-General presents a set of books to the Vice President of Uganda. He discussed ways to ensure food security for all Ugandans and to reduce poverty by supporting rural smallholders in the country's agriculture sector with Government officials.



FAO Director-General Jose Graziano da Silva, met with Ugandan Vice-President Edward Sekandi, to discuss ways to ensure food security for all Ugandans and reduce poverty by supporting rural smallholders in the country's agriculture sector.

Sekandi met with Graziano da Silva on behalf of President Yoweri Kaguta Museveni, during the FAO chief's one-day visit to Uganda on 8 March 2013.

Graziano da Silva commended the Government of Uganda for its leadership in the country's efforts in improving agricultural development and climate change mitigation. He also pointed out that Uganda needs a major boost in agriculture to accelerate development. The agriculture sector employs more than 80 percent of Uganda's population.

"We agreed that for the agriculture sector to grow, Ugandans need to support small scale rural subsistence farmers and build a bridge for small scale farmers who want to go into commercial farming," said the Director-General, who pledged FAO's support in transforming the country's agriculture sector.

Although Uganda generally has food, its food security and nutrition situation continues to face challenges, such as unequal food distribution and pockets of food insecurity in areas like Karamoja, in the north-east. Efforts, therefore, need to be made to ensure that nutritious food is well distributed and consumed in all parts of Uganda.

### Priority areas and activities

Since 1981, FAO has been working with the Government of Uganda to design and implement policies and programmes aimed at eradicating the root causes of hunger, malnutrition and poverty, developing farmer organizations and improving integrated water management systems.

FAO is currently implementing the Country Programming Framework (2010-2014), which outlines priority areas and activities for FAO's assistance to Uganda, in support of the Government's national development policy objectives in the fields of agriculture, fisheries, forestry, natural resources, and rural development.

### Women and food security

As the world community observed International Women's Day, Graziano da Silva lamented that, in spite of the major role played by women in producing food and feeding their families, little attention has been paid to the key role rural women play in ensuring decent livelihood for their households.

"We will continue to support FAO member governments, including Uganda, in helping cooperatives and producer organizations to thrive, by developing adequate policies, legal frameworks, economic incentives, capacity building and forums for dialogue on policy making," the FAO Director-General declared in a press conference.

In fulfilling its mandate to eradicate hunger and reduce poverty in sustainable ways,

*"We will continue to support FAO member governments, including Uganda, in helping cooperatives and producer organizations to thrive, by developing adequate policies, legal frameworks, economic incentives, capacity building and forums for dialogue on policy making,"*

**FAO Director-General**





FAO generates evidence, knowledge and good practices which support the emergence of more self-reliant, inclusive, gender-equitable, and market oriented producer organizations and cooperatives.

While in Uganda, Graziano da Silva met government officials and representatives of the private sector, academia, farmers' organizations, and civil society, with whom he discussed the status of Uganda's agricultural sector, their respective contributions and the need for further assistance, especially through FAO.

In discussions with ministers, he underscored the importance of multi-sectoral and inter-ministerial

coordination in tackling obstacles to agricultural development.

In order to improve the performance of small-scale and commercial farmers in the agriculture sector, Graziano da Silva emphasized the importance of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security, and said the country needs to urgently start a process of implementing the Voluntary Guidelines. This process would involve civil society and the private sector. They agreed they should start this process with FAO's support. ■

## Pictorial



The Director General greets Uganda's Minister of Trade, Industry and Cooperatives, Honorable Amelia Kyambadde. He pledged FAO's support in cooperatives training.



The Director General presents books to the Minister of State for Agriculture, Professor Zerubabel Nyira. They agreed that for the agriculture sector to grow, Ugandans need to support small scale rural subsistence farmers and build a bridge for small scale farmers who want to go into commercial farming



The Director General meets representatives of the civil society, private sector and academia. They discussed the status of Uganda's agricultural sector, their respective contributions and the need for further assistance, especially through FAO.

**José Graziano da Silva, Director-General of the Food and Agriculture Organization of the United Nations (FAO) was in Uganda recently to exchange ideas with policy-makers on ways to ensure food security and reduce poverty in Uganda by supporting rural smallholders in the country's agriculture sector. He shares some of his thoughts on the topic in this interview:**



**Q: What issues have you agreed with the Government that FAO should prioritize in Uganda?**

**A:** I had very interesting and constructive meetings with Vice-President Edward Sekandi, as well as the Ministers of Water and Environment; Trade, Industry and Cooperatives, and Agriculture. One thing on which we all agreed was that, for the agriculture sector to grow, there is a need to support small scale rural subsistence farmers as well as build bridges for those who want to go into commercial farming.

**Q: And how can you do that?**

**A:** FAO already has a long history of cooperation with Uganda. We helped introduce Farmer Field Schools (FFS) in the country. In collaboration with Government's research organizations we are promoting the use of new and disease-free, high-yielding seed varieties and planting materials

In our discussions with the Vice-President and other ministers, FAO agreed to further strengthen collaboration with the Ugandan Government in increasing productivity of small-scale rural subsistence farmers as well as building the bridge for small-scale farmers who want to go into commercial farming; improving integrated watershed management, including small-scale irrigation, water harvesting and training in aqua crops; and supporting the building of viable cooperatives and producer organizations.

In order to improve the performance of small-scale and commercial farmers in the agriculture sector, FAO highlighted the importance of urgently starting the process of implementing the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. This process will involve both civil society and the private sector, because everyone needs to be in this together.

With these types of actions, I am confident that we can advance towards a food-secure Uganda. I look forward to coming back to Uganda and seeing the results of these efforts.

**Q: How do you rate Uganda in the area of food security?**

**A:** This is not my first visit to Uganda. I have been here twice in the past and I am happy to note that Uganda's agricultural performance has improved.

The main challenge ahead is making sure that men, women and children have access to what they need to be food secure: natural resources, technologies, decent jobs, and access to nutritious food that is already being produced. The unequal dis-

tribution of food presents pockets of food insecurity in some areas. Whereas some regions record sufficient quantities of food, other regions such as the Karamoja region are chronically under stress. Efforts therefore need to be made to ensure that nutritious food is well distributed and consumed in all the regions.

**Q: There are concerns that despite agriculture being a backbone of Uganda's economy, the sector is underfunded. What is your view?**

**A:** In a developing country like Uganda where most people derive their livelihoods from agriculture, investment in the sector should be a priority in national planning and spending. This will not only improve access to nutritious

food, but it will also reduce rural poverty more than investment in any other single sector. It is important that Uganda continues its efforts to reach the 10% investment target in agriculture established in the Maputo Declaration.

**Q: Ten percent may seem like a lot in these tough economic times.**

**A:** I know that like other developing countries Uganda has many needs. What is most important right now is the willingness and the effort being made to progressively increase the budgetary allocation because there is recognition that agriculture is very important to this country. The political commitment that the Government of Uganda has already shown is essential for that.

**Q: Do you think Genetically Modified Organisms (GMOs) are a solution to challenges of low productivity in Uganda?**

**A:** FAO welcomes scientific and technological research that can help to improve or increase food production. GMOs are an option that needs to be explored and can contribute to food security. FAO supports a science-based evaluation system that would help to weigh the benefits and the risks of each GMO before it is incorporated into a food production system. At the global level, it is important that countries agree to standards and norms on GMOs, for instance with regards to food labeling for consumers.

But the decision of whether a country should adopt or not GMOs is not a decision that FAO can make, it is the responsibility of each government. FAO's role is to support them, as requested, so they can make sound decisions and build capacities so that they are in position to regulate the use of GMOs if they decide to use it. We have worked with the Government of Uganda on this issue.

**Q: But are GMOs necessary?**

**A:** As things stand now, there are many other technologies - conventional technologies - that have already been successful, but which poor farmers don't even have access to. These are technologies that could lead to significant increases in food production.

But we cannot afford not to explore this possibility. Generally speaking, in the future, we will need all the resources we can make use of, and this may include GMOs, because we cannot be sure at this point in time what will happen with increasing temperatures and climate change. ■



## Food factory launched in Western Uganda

*Will demonstrate zone based agro processing at community-level*



The Omukama of Bunyoro Kitara Kingdom, Solomon Gabafusa Iguru (in white tunic) and the FAO Country Representative inspect a food factory that was set up in the Kingdom. The factory is meant to demonstrate zone based agro processing at community-level and help to address the prevailing challenge of post harvest losses especially during the bumper harvest.

A mini food processing factory under the project - *Support to Agribusiness Mini-estates to promote the Commercialization Strategy of the Agricultural Sector in Uganda* was commissioned on 24th November 2012 by the King of Bunyoro Kitara Kingdom – Omukama Solomon, Gabafusa Iguru I in the presence of the FAO Representative and the Commissioner for crop resources, Mr. Okassai Opolot who represented the Minister of Agriculture, Animal Industry and Fisheries.

The factory that is located in Kagadi district in the premises of the Uganda Rural Development and Training Organisation (URDT) is meant to demonstrate zone based agro processing at community-level and help to address the prevailing challenge of post harvest losses, especially during the bumper harvest.

It will benefit about 1,000 farmers who can now

sell their maize at better prices and also produce fortified feeds for domestic animals and well-branded and packed foods for human consumption.

Speaking at the launch, the King of Bunyoro appreciated the initiative for not only contributing to improvement of food security in the kingdom but also providing a source of livelihood and employment to the youth.

The equipment included one complete animal feed mill (mills 4 metric tonnes of feed per hour), two complete maize mills, two grain dryers (dries 1 metric tonnes per hour), a combined separator and de-stoner, a set of starch processing equipment and rice cleaning and grading equipment and a seed oil extractor. Others are maize shellers, pellet machines, weighing scales and packaging equipment. ■

# Uganda reminisce significance of Cooperatives on World Food Day

The heavy downpour at the Mbarara Zonal Agriculture, Research and Development Institute (MBAZARDI), the venue of the national world food day celebrations on the afternoon of 16 October 2012 did not affect the cheer in Mbarara district. There was a colourful display of agricultural technologies, information and commodities in stalls that had been neatly set up in white tents. A multitude of people intermittently entered the grounds as early as 8:00am and quickly spread out to visit stall after stall in search of knowledge, skills, contacts, market or to just witness the events of the day.

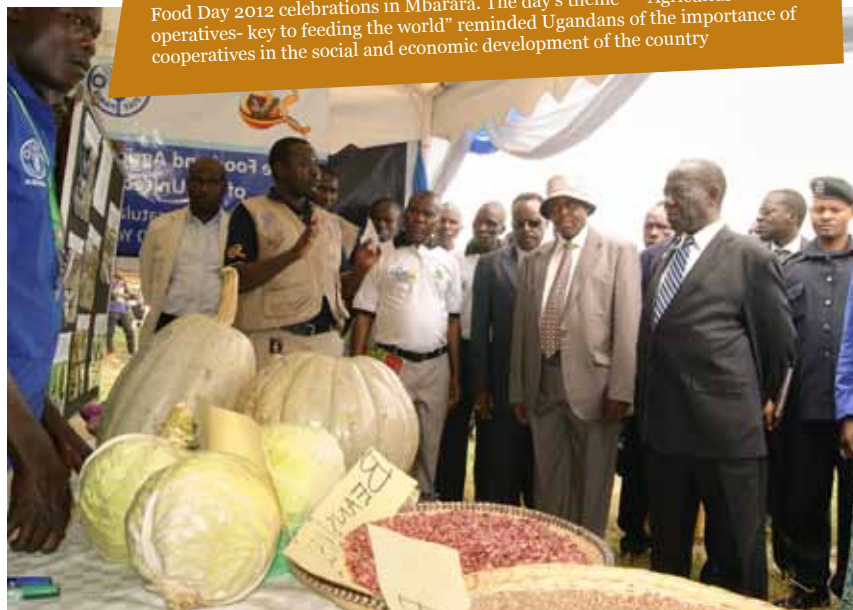
Guests were seated strategically at the top most centres of the grounds to view the stalls. They included central Government officials, district leaders, United Nations officials, ambassadors, development partners, farmers, traders, students and the local community. Uganda was joining about 150 other countries around the world to mark the 2012 world food day, whose theme was “Agricultural cooperatives – key to feeding the world”.

This theme couldn't have come at a better time than in the year when Uganda was marking 50 years of independence. Vibrant at the attainment of independence in 1962, the performance of cooperatives was impressive, significantly contributing to the social and economic development of the country but short-lived as interference and political instability affected their performance leading to the collapse of most of them in 1970s and 1980s.

Numerous success stories around the world have shown that rural institutions like producer organizations and cooperatives contribute to food security by helping small farmers, fisher folk, livestock keepers, forest holders and other producers to access the information, tools and services they need. This allows them to increase food production, market their goods and create jobs, improving their own livelihoods and increasing food security in the world.

Realizing the potential of cooperatives, the Minister of Agriculture, Animal Industry and Fisheries, Tress Bucyanayandi, said the Government had shown keen interest in reviving the cooperative sector. There are now over 20 000 National Agricultural Advisory Services (NAADS) farmer groups, 10 641 primary cooperatives with 3.9 million members, 41 cooperative unions, four cooperative federations and one cooperative confederation. Agricultural cooperatives form the bulk of these associations at 55 percent, Savings and Credit Cooperatives (SACCOs) 23 percent, multipurpose cooperatives at six percent and

The Vice President, Edward Kiwanuka Sekandi talks to FAO staff at the World Food Day 2012 celebrations in Mbarara. The day's theme – “Agricultural Cooperatives- key to feeding the world” reminded Ugandans of the importance of cooperatives in the social and economic development of the country



service cooperatives (housing, transport, handcrafts, and consumer) at 16 percent.

The FAO Director-General José Graziano da Silva's world food day message emphasized the need to work for the total eradication of hunger, adding that many countries, in South America, Africa and Asia, are proving that it is possible. He threw his weight behind cooperatives as a major way to lift small-scale farmers out of poverty and hunger. Although they produce most of the food in many countries, he said small-scale farmers had poor access to markets to sell their products; lack bargaining power to buy inputs at better prices and did not have access to financial services.

“Agricultural cooperatives can help smallholders overcome these constraints,” he said. “Cooperatives play a crucial role in generating employment, reducing poverty, improving food security and contributing to the gross domestic product in many countries.” The FAO chief urged governments to do their part and “create conditions that allow producer organizations and cooperatives to thrive”.

UN Secretary-General Ban Ki-moon said agricultural cooperatives would be crucial in meeting the Zero Hunger Challenge that he launched at the Rio+20 UN Conference on Sustainable Development in June 2012.

“The great expertise of agricultural cooperatives will be invaluable in achieving one of the initiative's primary aims: doubling the income and productivity of smallholder farmers,” he said.

The Guest of Honour at the national celebrations was the Vice President, Hon. Edward Kiwanuka Sekandi, who represented His Excellency the President of the Republic of Uganda, Yoweri Kaguta Museveni. ■





## Four TeleFood Projects for Uganda

FAO has approved four TeleFood projects worth about USD 40 000 for Uganda. The funds will be used to finance school farming, irrigation and mushroom production. The school farming project aims to develop students' interest in agricultural education through vocational training and restore the productive capacity of the beneficiary schools by providing basic farm inputs to enhance training and increased food production.

The Tele-Food programme was set up in 1997 to finance grassroots-level micro-projects not exceeding USD 10,000 in developing countries and transition countries. They are for one year and intended to improve the recipients' means of production, enabling them to produce more food and to generate cash income, thereby allowing them better access to food. Each member state is eligible for up to USD 50,000 per annum to fund on average 5 - 7 projects based on requests through and priorities of Government.

The following projects were approved in 2012 for Uganda:

- Vegetable growing - Nabisunsa Girls School (USD 10,000);
- Mushroom production - Nyeihanga Abarihamwe Women's Group in Mbarara district (USD 9,000);
- Vegetable production and piggery - Gayaza High School (USD 10,000); and
- Irrigation to enhance crop productivity – Amorata Development Association in Serere District (USD 10,000) ■

## South to South Cooperation (SSC) Chinese experts and technicians received in Uganda



The Chinese experts and technicians pose for a group photo with Ministers of Agriculture, Animal Industry and Fisheries. The Chinese are here on a two – year assignment during which they will work with their counterparts in the Ministry of Agriculture to support the development of the aquaculture, horticulture, cereals, livestock and agri-business sectors.

A contingent of 22 Chinese agricultural experts and technicians were received by the Minister of Agriculture, Animal Industry and Fisheries Tress Bucyanayandi in October 2012. The Chinese are here on a two – year assignment during which they will work with their counterparts in the Ministry of Agriculture to support the development of the aquaculture, horticulture, cereals, livestock and agri-business sectors. They have been posted to different districts, institutes and departments where they will provide their technical expertise and offer hands – on training and guidance in their respective fields.

The arrangement is part of a USD 1.5 million South-South Cooperation (SSC) Tripartite Agreement that was signed between the Governments of Uganda, the People's Republic of China and FAO in support of the National Programme for Food Security in Uganda.

The SSC programmes aim to enhance solidarity among developing countries, allowing recipient countries to benefit from the experience of more advanced developing countries.

The initiative was launched by FAO in 1996 within the framework of the Special Programme for Food Security (SPFS) and later extended to National and Regional Programmes for Food Security.

Based on the specific development needs and the potential of the host countries, experts and technicians from the cooperating countries provide technical assistance to farming communities for a period of two to three years.

While receiving the team, Honourable Tress Bucyanayandi, who was flanked by the Ministers of State for Agriculture, Livestock and Fisheries, respectively, said whereas China has the same agricultural background as Uganda, the country was performing better than Uganda because the Chinese Government embraced better methods of farming such as the use of improved seeds and fertilizers and irrigation. He said the experts and technicians would support Uganda to develop the sectors that have been prioritised in the Development Sector and Investment Plan (DSIP).

The Minister of State for Livestock production, Bright Rwamirama, challenged the Chinese experts and technicians to not only pass on knowledge to their Ugandan counterparts and farmers but to also learn from them. ■



### Healing the Kagera Basin



Bizuri Johnson shows off his tree plantation. FAO is implementing a project that supports the adoption of an integrated ecosystems approach for the management of land resources in the Kagera Basin.

“Resurrected” is the word that Bizuri Johnson finds most appropriate to describe the current status of his farm. “The leaves on my bananas had turned yellow and the yield was miserable”, he says. Because Bizuri’s farm is on a very steep hill in Rubagano village in Mwizi Sub County in Mbarara district, runoff water washed away the soil leading to loss of fertility. He concluded that his land was unproductive. Out of 15 acres, he previously only cultivated on five acres.

In 2011, Bizuri started attending practical training sessions in sustainable land management that were organized by FAO under the Kagera transboundary agro-ecosystem project. “We learnt about the nature and composition of our soil, how to improve its fertility, agro forestry, integrating livestock and crop production and the techniques of capturing runoff water and soil.

The project is meant to support the adoption of an integrated ecosystems approach for the management of land resources in the Kagera Basin, in which Mwizi Sub County falls. This is expected to restore degraded lands, sequester carbon and mitigate climate change, conserve agro-biodiversity and sustainably use and improve agricultural production, food security and rural livelihoods.

From the time Bizuri started attending training, he dug trenches, put up grass stripes, applied mulch, rotated his crops, planted trees and applied manure to his garden. “I was willing to do anything that would improve the productivity of my land”, he says.

And, the results have not disappointed. Within only three months, he noticed a change in the bananas and other crops. “The stems and banana fingers were bigger and the yellow leaves turned green”, he said. From harvesting about 50 bunches of bananas before the project, Bizuri now harvests over 100 bunches per month worth about Ush. 1,000,000 (USD 370).

He has dug manure pits (4x2 meters) in which he put composted manure at a ratio of four banana stems per pit. Once the manure rots and gets absorbed in the soil, the pit develops a depression that also acts as a trap for runoff water that eventually gets absorbed by the banana trees. These pits, that Bizuri calls “lusaniya” (large shared plate) can supply nutrients to the bananas for up to three years.

Because he needed a lot of manure throughout the year for his big farm, Bizuri now collects goat droppings, cow dung and urine. “After training, I built a shelter for my goats in order to collect the droppings and urine”, he says. In the past, he let the goats out to graze openly. “I lost a lot of manure and urine that would have been useful in my garden”, he says.

“Since I put my goats under zero grazing, I have realized many benefits”, he says.

The grass stripes and leguminous plants such as calliandra and lab lab that Bizuri planted to strengthen the trenches capture runoff water and add nutrients to the soil, are also fed to the goats and cows.

“The goats and cows are healthier because they are eating a balanced diet that includes Napier grass and legumes”, he says.

Because Bizuri no longer hires labour to graze his goats and cows, he saves Ugsh 100,000 (USD 37) per month that he previously paid to the herdsmen.







Bizuri now keeps his goats under zero grazing so that he collects the dung and urine



Before Bizuri adopted the taught practices, the leaves of his banana plants were yellow

In addition, he has planted trees including fruits such as mangoes, jack fruits and oranges. “They do not only contribute to environmental protection but will in future provide timber, mulching material (leaves) and fruits.

Encouraged by the results of his efforts, Bizuri has opened up all his 15 acre piece of land that is blossoming with a variety of crops, pasture, vegetables and trees. Because his income is increasing, he plans to build a permanent house soon and enroll all his six children in good boarding schools.

Taking a watershed approach, the project is targeting the whole community (up and downstream) in the village leading to the identification of Rubagano watershed. A watershed is the entire land area that ultimately drains into a particular watercourse or body of water, which in this case is the Kagera River. The river has suffered pollution, affecting the quality of water due to nutrients and sediment which typically enter stream systems after rainfall washes them off poorly managed agricultural fields, called surface runoff, or flushes

them out of the soil through leaching.

Wilson Bamwerinde, the Project Manager, says the watershed approach is meant to collectively identify and prioritize water quality problems in the area, develop increased public involvement, and measure success through increased and more efficient monitoring and other data gathering.

In Rubagano, the community has come up with bye laws to ensure adherence to the sustainable land management practices. For example, if one did not put grass stripes in their garden, they pay a fine of Ush 50,000 (USD 20). Those who do not turn up for training are expelled from other community groups and are never invited to functions and parties. If soil from one’s garden moves to another garden, they are charged with trespass by the community courts and the fine varies with the level of damage.

These efforts, according to Bamwerinde are meant to enhance appreciation of collective efforts in addressing environmental challenges.



The Kagera River basin’s resource base and ecosystems are facing increasing pressures as a result of rapid population growth, agricultural and livestock intensification





Kamanda John shows off his orange trees. With support from FAO, the community in Sanga town council in Kiruhura district has embraced tree planting and sustainable land management practices.

“Sustainable land management in hilly areas such as Mwizi or in any watershed cannot be achieved if recommended practices are isolated and fragmented because actions in one area can affect the other”, he says.

In addition to training, FAO has provided the community with tree seedlings and farm tools.

### Greening Kiruhura

Because the change in weather patterns in Kiruhura district was open for everyone to see, it did not take long for Kamanda John to mobilize some people from the community in Sanga town council to take action.

“In the last ten years, we have witnessed longer and recurrent droughts that affected our agricultural production. Between 2007 and 2009, the drought was so bad that many livestock died and some people migrated to other areas.

Being a semi arid area, majority of the people in the community keep cattle. However, the area is losing grazing land to unpalatable grass.

With support from the project, the community has embraced tree planting and sustainable land management practices.

A nursery bed has been established in Kamanda John’s compound from which

farmers pick seedlings to plant in their individual gardens. Many have also planted Napier grass and legumes to feed their livestock. They have padlocked their farms to control overgrazing.

Tumuhairwe Benon says ever since he partitioned his farm into paddocks and started feeding his cows on Napier and leguminous plants, milk production has increased. “From two litres, I now get averagely 10 litres of milk per cow per day and I expect an improvement”, he says.

George Kashokye in Nyakiganda village is confronting his biggest challenge of soil erosion on his 200 acre piece of land by planting 30 000 pine trees and 2 000 fruit trees including oranges, mangoes and jack fruit. But besides controlling soil erosion, the fruits are providing a daily income of about Ush 30 000 (USD 11) with the first harvest. George has also dedicated 15 acres of his land to bananas. “Because I now dig trenches and apply manure to the garden, the yield has improved. “I earn about Ugsh 500,000 per month from almost nothing three years ago”, he says.

According to George, the project has “opened his eyes” to discover the wealth in his land. “I did not know that I was a rich man until I realized that every part of my land can be productive”, he says. ■

The Kagera River Basin falls is shared by Burundi, Rwanda, the United Republic of Tanzania and Uganda. The natural resources of the river basin support the livelihoods of some 16.5 million people, the majority rural and depending directly on farming, herding and fishing activities. However, the resource base and the ecosystems are facing increasing pressures as a result of rapid population growth, agricultural and livestock intensification due to progressive reduction in farm sizes and unsustainable land use and management practices. The basin’s land and freshwater resource base, associated biodiversity and populations whose livelihoods and food security depend on those resources are threatened by land degradation, declining productive capacity of croplands and rangelands and deforestation and encroachment into wetlands.



## Kasese farmers embrace fruit growing



**T**he FAO Country Representative in Uganda admires Mukasa Steven's mangoes in Kigoro Parish, Rukoki Sub County in Kasese. Mukasa has been supported by FAO to operate a fruit tree nursery. In addition to supplying seedlings to farmers, Mukasa has expanded his nursery to tap a bigger market. Recently, he got an order for about 1 000 mango tree seedlings that he will supply at Sh. 3 000 each to a local NGO.

FAO is supporting over 650 farmers who belong to 21 functional groups and four associations to improve production, storage, processing and marketing of pineapples and mangoes in the Sub Counties of Kitwamba, Rukooki, Mukunyu and Bwera in Kasese district.

*Under the project – Improvement of food security in cross-border districts of Burundi, the Democratic Repub-*

*lic of the Congo, Rwanda and Uganda, in support of the modernization of agriculture under the NEPAD-CAADP framework, funded by the Government of Italy, FAO has trained the farmers and provided them with high yielding seedlings and farm inputs including fertilizers, fruit traps, farm gear and solar driers.*

They have signed contracts with vendors from Kampala and "Fruits of the Nile", a company that will buy their produce for export.

In anticipation of the increased production, FAO has commenced the construction of a warehouse in Rukooki Sub County to enable farmers bulk their produce before it is picked up by buyers or transported to the market.

The FAO Country Representative was monitoring project activities in Kasese. He met district leaders, farmers and implementing partners. ■



## Storage facilities boost Gulu farmers' lives



In the searing mid-morning heat, Simon Peter Oola sweats profusely as he wheels three bags of rice into a large compound where his produce must be weighed and certified before being stored for future sale.

"This is half of my harvest so far this season," says Oola, a smallholder farmer in Gulu district's Awach sub county.

After a bumper harvest, Oola 32, who cares for a family of four primary school-going children and his wife, decided to carry their surplus produce to the community store.

"I have kept the remainder in the house for home use," Oola says.

As chairperson of Awach Farmer Field School (FFS) network, Oola leads by example, taking advantage of the community's storage facility.

On this Monday morning, another 120 smallholder farmers from Acutomergem and surrounding villages flocked into the store's compound with their produce for inspection.

There is a variety of produce ranging from rice, beans, soybean, sesame, maize and ground nuts.

The brick-walled store (measuring 10 metres in width by 20 metres in length) has a cemented floor and is roofed with asbestos sheets. It can store up to 50 tonnes of produce.

Here, officials carry out quality tests before the produce is weighed and put inside.

"We measure the moisture levels in the produce and ensure it is not contaminated," explains Okello, one of the farmers trained by the district agricultural experts to conduct the quality tests at the store.



## Storage facilities boost Gulu farmers' lives

Recommended moisture content (gauged by crushing a sample of the produce seeds into a moisture detecting device) is between 10 and 13 percent. Moisture levels above these levels lead to fungal and pest attacks.

After ensuring the quality, each farmer's produce is recorded (in kilograms) against their names for future reference once sold.

The store facility, says Oola, has come in handy for many farmers in the sub county. Many families have enough food.

"We used to lose a lot of food during the planting season because of lack of recommended storage facilities," Oola says. "But these days we don't worry about that. We can store our produce until it fetches a better price."

He says his income has doubled as a result. He used to earn Shs 1.2m annually before the store was constructed but last year, he earned over Shs 2m after selling 2 tonnes of rice alone.

"I'll earn more than that amount this year because I planted more rice that I sold at higher prices," he says.

Oola represents the new breed of farmers that are change agents and role models in Acholi sub region, where people lived on handouts from humanitarian and relief supply agencies during the two decades of the Lord's Resistance Army (LRA) civil war.

With funding from the United Nations Development Programme, FAO built 26 stores in Acholi sub region alone.

Now, farmers that are benefiting from a new Government of Uganda's Agricultural Livelihood Recover Programme (ALREP) project funded by the European Union and implemented by FAO have embraced the store facilities.

A total of Euro 3.9 million is being injected into the project that aims at improving food security and agricultural livelihoods of war affected communities in Acholi and Teso sub regions.

Joseph Egabu, head of FAO's Gulu sub region office, says the construction of storage facilities has stimulated production per household. Egabu notes that farmers have been encouraged to produce not only for home consumption, but also for sale because they are assured that there is a stable market for their produce.

Indeed, Oola and his group members in Awach have contracts with a private company – Victoria Seed Ltd – to supply up to 100 tons of rice this year. According to the deal, the price (per kilogram) was fixed at Shs 1,800, representing an increment of Sh 500 from the last season.

But Oola expects the FFS network to produce at least 200 tonnes of rice this season. After fulfilling their contractual quota, the remaining rice will be kept in the store until farmers get other competitive buyers. ■







"A Government of Uganda Peace Recovery and Development Plan (PRDP) project funded by the European Union"

## Bumper groundnut harvest propels farmers to plan bigger

By Francis OtimOkello

FAO Uganda Programme Officer and Head of Office - Kitgum

Like any other place in northern Uganda, Kitgum was affected by the Lord's Resistance Army (LRA) insurgency between 1986 and 2007. The community lost their means of livelihood, the seed systems collapsed and agricultural production and productivity decreased. For about two decades, the district and the entire Acholi sub region heavily relied on food aid despite being regarded as a food basket for the country before the insurgency.

FAO has over the years implemented a variety of projects that are aimed at assisting the communities in northern Uganda to sustainably revive food production. With the return of peace and resettlement of most of the people in Kitgum, FAO is pursuing longer-term development focused interventions in the district.

These interventions were boosted with funding support from the European Union through the Government of Uganda in 2011. Based on FAO's experience and technical expertise, the organization was contracted by the Government of Uganda to implement one component of its Agricultural Livelihood Development Programme (ALREP), titled *"Improving Food Security and Agricultural Livelihoods of the War Affected Communities in Acholi and Teso"*.

One of the key objectives of the project was to increase crop production by providing and multiplying selected quick maturing seed crops. A seed survey in 2011 revealed that groundnuts was one of the most popular crops in the district. With technical guidance from the National Agricultural Research Organization (NARO) on the most suitable varieties for multiplication in Kitgum district, Serenut 2, 3 and 4 were recommended. Resultantly, FAO procured and distributed 250 bags in shell of groundnuts which benefited over 80 farmer groups. Averagely, each group established about 3 acres of groundnuts as foundation seed.

Despite the receding of rains earlier than usual in some areas such as Orom and Namokora Sub Counties, the groundnuts did very well, with majority of the groups recording a bumper harvest.

Plants had between 60 to 80 pods of groundnuts. Dicwinyi Womens' Group in Ocet Toke Parish Layamo Sub County received three bags of groundnuts (2 bags for Serenut 2 and 1 bag for Serenut 4) for multiplication and harvested 42 bags. Next door are Bedi Kinok Farmer

Field School and Tem Gumi Farmer Field School also in Ocet Toke Parish Layamo Sub County with 44 and 34 bags respectively.

During the locally organized ceremony to share the groundnut harvest by Dicwinyi Womens' Group, Bedi Kinok and Tem Gumi group members in November 2012, the Kitgum District Vice Chairperson Hon Oryema Tito who represented the District Chairperson hailed FAO and the implementing partner - Coopi for the job well done in supporting the farmers. He commended the model used in supporting the community, saying the intervention was directly contributing to the rehabilitation of northern Uganda and improvement of food and income security.

After distributing the harvested groundnut seeds at a ratio of one bag per farmer for subsequent planting at household level, the farmer groups set aside some seeds for group multiplication in the first planting season of 2013 and the rest is up for sale.

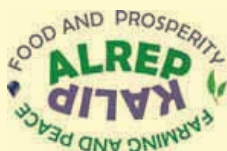
Having worked with these farmers for about two years, it was fulfilling to me as it became evident that the project objective of increasing seed availability in the community was becoming real. For the farmers, it was like taking a report card back to the household with the results of all training sessions that they attended over the season.

Most importantly for the groups is their resolve to move from producing for home consumption to tapping the market, especially in Southern Sudan. Most of the groups have already developed plans to that effect and I am ready to walk down or up this road with them. ■



Farmers share groundnut seeds in northern Uganda. FAO is promoting the multiplication of seed crops in the region.





"A Government of Uganda Peace Recovery and Development Plan (PRDP) project funded by the European Union"

## Savings and credit schemes enhance livelihood sustainability in northern Uganda



Farmers in Acholi Bur attend a savings and credit association meeting. Savings and credit schemes are enhancing development initiatives in northern Uganda



**O**n a hot Thursday afternoon, members of Ageno Cinga Farmer Field School are sitting around their small box that many refer to as a "bank" under a big tree that offers some protection from the harsh sun. Name after name is called out and members announce (for everybody to hear) how much money they are saving that day before they hand it over to the treasurer who sits in the middle of the circle.

Today, the savings are higher than usual because earlier in the day, the group members shared proceeds from the sale of their onions. They are all excited and cheer upon hearing the secretary's announcement at the end of the meeting that their total cumulative savings had hit Sh 6 million (USD 2300).

Rising out of the effects of war, many farmers in northern Uganda have embraced agriculture as a livelihood.

In Acholi Bur, where Ageno Cinga Farmer Field School is located, farmers are being supported under the project – *"Improving food security and agricultural livelihoods of war affected communities"* that fall under the Agricultural Livelihood Recovery Programme (ALREP), a Government of Uganda programme funded by the European Union.

Now in its second year of operation, the Euro 3.9 million project is supporting 960 farmer groups across the Acholi and Teso sub regions. Having been provided with an assortment of seed, oxen and ox ploughs, coupled with training earlier in the year (2012), the farmers' agricultural production and income has tremendously improved.

With increased incomes, they have been encouraged to form Village Savings and Loans (VSL) schemes at group level to prepare for sustainability once the concurrent donor programmes end. They can use the savings to

either purchase agricultural inputs or solve household problems.

Already, there are some success stories about VSLAs and their impact. For instance, Charles Odong, 33, who joined Opoo Lacen Women's Group in Ongako Sub County last year, has no regrets.

By saving Shs 5,000 (USD 1 850) a week, Odong is a relieved man – he can pay his daughters' school fees. The group has 36 members and they have saved Shs 7 million (USD 2600) so far.

At the beginning of the year, Odong applied for a loan of Shs 105,000 (USD 39) - (with an interest of 10 percent every three months) and paid school fees for his girls in advance for the three terms.

"Before (joining the VSLA), it was difficult for me to pay that money at once," Odong remarks.

Although the majority of the group's members are women, Odong finds the VSLA a social forum. "We meet at least once a week, and for me, that is a good chance to discuss other issues as well," Odong says.

Adoch Evaline 36, borrowed Sh 200,000 (USD 74) and bought merchandise for her retail shop and tailoring business. She says VSLA has changed her life because they can access money from the group at any time. "We can even borrow from the emergency fund that has been put aside for unexpected situations such as sickness or death", she says. Unlike before, Evaline says she now knows where she can run to in case she gets financial problems.

By November 2012, 2,200 farmer groups in Acholi had formed savings associations in which an estimated Shs 200 million (USD 75,000) had been saved. ■



# FAO urges stronger measures on global health threats

WORLD RISKS NEW BIRD FLU SURGE IF COUNTRIES DROP THEIR GUARD



**T**he world risks a repeat of the disastrous 2006 bird flu outbreaks unless surveillance and control of this and other dangerous animal diseases is strengthened globally, FAO warned.

"The continuing international economic downturn means less money is available for prevention of H5N1 bird flu and other threats of animal origin. This is not only true for international organizations but also countries themselves," says FAO Chief Veterinary Officer Juan Lubroth. "Even though everyone knows that prevention is better than cure, I am worried because in the current climate governments are unable to keep up their guard."

However, continued strict vigilance is required, given that large reservoirs of the H5N1 virus still exist in some countries in Asia and the Middle East, where the disease has become endemic. Without adequate controls, it could easily spread globally as it did at its peak in 2006, when 63 countries were affected.

Investing more in prevention makes economic sense given the huge toll inflicted by a full-scale pandemic. Between 2003 and 2011 the disease killed or forced the culling of more than 400 million domestic chickens and ducks and caused an estimated \$20 billion of economic damage.

Like several animal diseases, H5N1 can also be trans-

mitted to humans. Between 2003 and 2011, it infected over 500 people and killed more than 300, according to the World Health Organization.

Another growing threat is Peste des Petits Ruminants, or PPR, a highly contagious disease that can decimate flocks of sheep and goats. "It is currently expanding in sub-Saharan Africa - causing havoc in the Democratic Republic of Congo among other countries - and is just starting to spill over into southern Africa," Lubroth says. "The damage could well be huge".

"The irony is that a perfectly good vaccine exists for PPR, but few people are using it," he adds. Along with tight finances, lack of political will, and poor planning and coordination are other reasons why PPR and other animal diseases are often allowed to spread.

Investing in prevention means improving hygiene practices, market and border controls, and health security in farms and markets. It includes equipping laboratories and training staff to diagnose and respond to disease outbreaks, and in organizing efficient extension services to serve farmers' needs.

Despite tight budgets, international organizations should also try to do more through concerted action. "We need to come together to find ways to ensure the safety of the global food chain," Lubroth urges.

"The costs - and the dangers - of not acting are just too high." ■



21 March  
International Day of Forests

## FAO calls for 'Zero Illegal Deforestation' target

**O**n the first International Day of Forests celebrated by the United Nations on 21 March 2013, FAO Director-General Jose Graziano da Silva proposed that countries support a Zero Illegal Deforestation target in the context of the post-2015 debate.

"In many countries, illegal deforestation is degrading ecosystems, diminishing water availability and limiting the supply of fuelwood - all of which reduce food security, especially for the poor," Graziano da Silva said at a ceremony marking the International Day of

Forests. "Stopping illegal deforestation and forest degradation would do much to end hunger, extreme poverty and bring about sustainability."

"This is why, I would like to encourage countries to promote tree planting and to consider a Zero Illegal Deforestation target in the context of the post-2015 debate. These two goals should be closely linked. We can achieve positive results if countries, the international financial institutions, the UN, civil society and the private sector join forces to tackle these issues."

## DID YOU KNOW?

### Forests and air

- Over 40 percent of the world's oxygen is produced from the rainforests.
- Forests contribute to the balance of oxygen, carbon dioxide and humidity in the air.

### Forests and water

- A tree releases 8-10 times more moisture into the atmosphere than the equivalent area of the ocean.
- Forests protect watersheds which supply fresh water to rivers.
- Loss of forests could affect rainfall patterns globally, especially in food growing regions in Latin America, the American mid-West and Central Asia.
- Deforestation leads to soil erosion and rivers being silted, which reduces access to clean water.

### Forests and biodiversity

- Forests are home to over 80% of terrestrial biodiversity.
- In the Amazon basin alone, more than 1,300 species of forest plants are used for medicinal or cultural purposes.
- 12% of the world's forests are designated for the conservation of biological diversity (FRA 2010).
- Deforestation of closed tropical rainforests

could account for the loss of as many as 100 species a day.

### Forests build resilience to natural disasters

- Nearly 330 million hectares of forest are designated for soil and water conservation, avalanche control, sand dune stabilization, desertification control or coastal protection. (FRA 2010)
- Mangrove forests act as a barrier against tsunamis, cyclones and hurricanes.
- 'Green Wall for the Sahara' The European Union and African Union are implementing a project to build a 'green wall' of trees across the Sahara to push back desertification and to secure agriculture and livelihoods in the sahelian zone.

### Forests and land

- Forests cover 31% of global land area
- Forests and tree cover combat land degradation and desertification by stabilizing soils, reducing water and wind erosion and maintaining nutrient cycling in soils.

### Forests are a key part of the climate change solution

- The carbon in forests exceeds the amount of carbon currently in the atmosphere. FRA 2010 estimates that the world's forests store 289 gigatonnes (Gt) of carbon in their biomass alone.





- 17.4% of global greenhouse gas emission resulted from deforestation and forest degradation.
- Forests offer the quickest, most cost-effective and largest means of curbing global emissions. It would save the world approximately \$3.7 trillion between 2010 and 2200 if we halve greenhouse gas emissions (The Stern Review on the Economics of Climate Change, 2006).

#### **Healthy forests, healthy people**

- Tropical forests provide a vast array of medicinal plants used in healing and health-care, worth an estimated \$108 billion a year.
- More than a quarter of modern medicines originate from tropical forest plants.
- Forests curb infectious diseases. Undisturbed tropical forests can have a moderating effect on insect- and animal-borne disease:
- 40% of the world's population lives in malaria infested regions. Heavily deforested areas can see a 300 fold increase in the risk of malaria infection compared to areas

of intact forest.

- 72% of emerging infectious diseases transmitted from animals to humans come from wildlife as opposed to domesticated animals. Deforested areas increase contact between wildlife and humans and affect pathogen transmission.

#### **Forests are our livelihoods/wealth**

- 1.6 billion people around the world depend on forests for their livelihoods and daily subsistence needs.
- The global gross value-added in the forestry sector is US\$ 468 billion.
- The global trade in primary wood products is US\$ 235 billion.
- Tropical forests provide pollination services to agriculture valued at US\$12 billion per year.
- Given that more than 1 billion hectares of degraded areas throughout the world are suitable for forest landscape restoration, community-based forest management could be woven into other existing rural economic activities. ■







## Consumers, industry, government can all help to reduce 1.3 billion tonnes of yearly waste and losses

Simple actions by consumers and food retailers can dramatically cut the 1.3 billion tonnes of food lost or wasted each year and help shape a sustainable future, according to a new global campaign to cut food waste launched by FAO, the UN Environment Programme (UNEP), and partners.

The Think.Eat.Save. Reduce Your Foodprint campaign is in support of the SAVE FOOD Initiative to reduce food loss and waste along the entire chain of food production and consumption - run by the FAO and trade fair organizer Messe Düsseldorf - and the UN Secretary General's Zero Hunger Initiatives. The new campaign specifically targets food wasted by consumers, retailers and the hospitality industry.

The campaign harnesses the expertise of organizations such as WRAP (Waste and Resources Action Programme), Feeding the 5,000 and other partners, including national governments, who have considerable experience targeting and changing wasteful practices.

Think.Eat.Save. aims to accelerate action and provide a global vision and information-sharing portal for the many and diverse initiatives currently underway around the world.

Worldwide, about one-third of all food produced, worth around \$1 trillion, gets lost or wasted in food production and consumption systems, according to data released by FAO. Food loss occurs mostly at the produc-

tion stages - harvesting, processing and distribution - while food waste typically takes place at the retailer and consumer end of the food-supply chain.

According to FAO, roughly 95 per cent of food loss and waste in developing countries are unintentional losses at early stages of the food supply chain due to financial, managerial and technical limitations in harvesting techniques; storage and cooling facilities in difficult climatic conditions; infrastructure; packaging and marketing systems.

However, in the developed world, the end of the chain is far more significant. At the food manufacturing and retail levels, large quantities of food are wasted due to inefficient practices, quality standards that over-emphasize appearance, confusion over date labels, and consumers being quick to throw away edible food due to over-buying, inappropriate storage and preparing meals that are too large.

Per-capita waste by consumers is between 95 and 115 kg a year in Europe and North America/Oceania, while consumers in sub-Saharan Africa, south and south-eastern Asia each throw away only 6 to 11 kg a year.

For the campaign to reach its huge potential, everyone has to be involved - families, supermarkets, hotel chains, schools, sports and social clubs, company CEOs, city Mayors, national and world leaders. ■



## WORKSHOPS CONVENED BY FAO

### **Shaping One Health: Towards integrated animal health-food safety surveillance in East Africa**

**23 – 25 January 2013 - Entebbe**

Animal diseases have wide ranging impacts on both animals and people, from decimating livestock and wildlife to threatening public health, compromising food safety, food security and crippling livelihoods. Drivers of the emergence and re-emergence of these diseases are just as varied as their impacts, with pathogens surfacing in domestic animals, wildlife, the environment and along the agri-food production and distribution chain.

Therefore, prevention and control activities must be just as wide reaching. Funded by the Government of Ireland under the “One Health” agenda for improved health of people, animals, plants and environment, the FAO held two workshops (one regional, one national) in Entebbe, Uganda.

The goal of the workshops was to promote the enhancement of disease surveillance in sub-Saharan Africa by strengthening connections between animal health - and food-safety-related disciplines.

### **4<sup>th</sup> Annual Meeting for Aquaculture Network in Africa (ANAF)**

**4 – 6 December 2012 – Kampala - Uganda**

Website for ANAF was launched

### **Use of smart phones for Banana Disease Surveillance**

**20 November 2012 – Kampala - Uganda**

The workshop enhanced understanding on how the banana disease surveillance system is working in Uganda.

Participants explored how Smartphone technology can make the banana disease surveillance more efficient.

Provided insights into the upcoming proposal on Banana Disease management

An action plan was formulated for the adoption of the technology for Banana Bacterial Wilt (BBW) surveillance

### **Logistics management in agro-food industries in Africa**

**27-28 November 2012 – Kampala - Uganda**

The workshop discussed and validated the main findings of the appraisal studies on the current state of logistics management in agro-food industries in Ghana, Cameroon, Uganda and Tanzania.

Participants exchanged and shared experiences on logistics management in agro-food industries in Africa focusing on the main challenges, and best practices that are necessary for enhancing the performance of agro-food industries in Africa.

The workshop recommended key areas that future logistics improvement activities and interventions should be targeting in order to improve the current situation

### **Forest tenure reform and governance**

**20-25 January 2013 - Mukono - Uganda**

Convened by Ministry of Water and Environment, Forestry Sector Support

Department with support from FAO  
Players were trained on forest tenure reform and governance while 30 high level persons informed of the policy implications of forest tenure reforms and governance.

### **Disaster Risk Reduction Training for Members of Parliament of Uganda**

**February 21st -22nd, 2013**

Protea Hotel Kampala-Uganda

A two day training workshop was convened for members of Uganda Parliamentary Forum on Disaster Risk Reduction. Funded by the European Commission - Humanitarian Aid and Civil Protection Office (ECHO), the training aimed at increasing awareness of Parliamentarians on Disaster Risk Reduction (DRR) concepts and practices.

It was co-facilitated by FAO, the International Institute of Rural Reconstruction (IIRR), the Office of the Prime Minister and the United Nations Office for Disaster Risk Reduction (UNISDR).

At the end of the training, the members of parliament resolved to among others develop a strategic plan to guide Uganda Parliamentary Forum on Disaster Risk Reduction, scale up sensitization on DRR including its inclusion in the school curriculum and to popularize the DRR policy

The initiative is in line with two of FAO's ongoing projects on disaster risk management and supporting communities to build resilience within the framework of the *Regional Drought Risk Reduction Action Plan for the Horn of Africa* (DRRAP), supported by ECHO and *Regional Initiative in Support of Vulnerable Agro Pastoralists in the Horn of Africa* funded by European Commission (EC).



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