



FAO UGANDA

Information Bulletin

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World Water Day 2012

22nd March

Theme: Water and Food Security

“How can you change your diet and reduce your water footprint?”

Editorial

Dear Reader,

Do you know how much water you actually consume every day? Statistics say that each of us drinks from two to four liters of water every day, however most of the water we “drink” is embedded in the food we eat. With the increasing population and demand for food, the World Water Day theme for this year – “Water and Food Security” presents an opportunity to reflect on the relationship between water and food. This issue therefore has a specific focus on World Water Day that will be celebrated on 22nd March 2012.

Between November 2011 and January 2012, FAO convened a number of workshops to discuss emerging issues and launch new projects including volatile food prices, banana diseases and effects of climatic changes in mountain regions. You will find key messages and outputs of these workshops in this bulletin.

You will also read about the devastating cassava diseases that are rampaging livelihoods in eastern and central African countries and FAO’s contribution to eradicating these diseases.

World Food Day was celebrated on 16 October 2011 in Arua district. In this issue, we highlight activities of the day and key messages from Government and development partners.

A recent food security assessment in Karamoja found that the number of livestock, an important livelihood in the region was declining. Find preliminary results of this assessment and recommendations that were put forward to rectify this situation.

Last, but not least, we welcome the new FAO Representative in Uganda, Mr. Alhaji Jallow who joined the team in November 2011. Mr. Jallow replaces Mr. Percy Misika who went to China in April 2011.

Happy reading and Happy New Year!



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Mountain experts

meet in Uganda to discuss climatic challenges in mountain regions **pg. 22**



New FAO Representative for Uganda

Mr. Alhaji Jallow

In November, we welcomed the new FAO Representative in Uganda - Mr. Alhaji Jallow. Mr. Jallow replaced Mr. Percy Misika who left Uganda for China in April 2011.

Mr. Jallow, a national of The Gambia, holds a First Class Certificate in Fisheries Studies from the Nyegezi Fisheries Institute, Mwanza, Tanzania, a Diploma in Aquaculture from the African Regional Aquaculture Centre, Port Harcourt, Nigeria, a B.Sc. in Fisheries Studies with Honours from the University of Humber, Hull, U.K., a Certificate on Project Implementation and Supervision, from the Management Development Institute, Kanifing, The Gambia, and an M. Sc. in Fisheries Economics from the University of

Portsmouth, U.K. Mr Jallow started his career in 1974 in the Fisheries Department, Ministry of Natural Resources, of The Gambia, where he worked in several positions, including Fisheries Officer and Senior Fisheries Officer. In 1995, he joined FAO as Socio-economist for the Programme for Integrated Development of Artisanal Fisheries in West Africa (IDAF), Cotonou, Benin. In 1999, he was appointed Fisheries Planning Officer in the FAO Regional Office for Africa, Accra, Ghana. In 2002, he became Senior Fisheries Officer, and in July 2008, in addition to his duties as Senior Fisheries Officer, he was appointed Technical Team Coordinator, Natural Resources, Fisheries and Forestry in the same office in Accra, Ghana.



R. NANDELENGA

Cassava virus on verge of epidemic in East Africa Experts urge funding, swift action to protect staple food crop

A new variant of a cassava disease is affecting large parts of East Africa, especially in the area's Great Lakes Region, putting a crucial source of food and income at risk, according to FAO.

FAO experts say Cassava Brown Streak Disease (CBSD) is on the verge of becoming an epidemic, and have called for an urgent increase in funding, research, training, surveillance and other measures to help farmers and breeders.

The appearance of the disease in previously unaffected areas, and the lack of continued funding for research and development work to address CBSD in the region, have added to the threat already presented by Cassava Mosaic Disease (CMD).

The CMD has been having a significant impact on cassava production with an estimated reduction in yield of 15 to 25 percent reduction in the Great Lakes Region affecting up to 80 percent of the small holders. Thanks to concerted efforts by a number of stakeholders in the region, survey evidence suggests that although CMD is still prevalent, the rate of spread in most of the region seems to be gradually reducing. CBSD, on the other hand, is rapidly spreading and may cause root production losses up to 100 percent if no adequate response mechanisms are introduced.

One of the challenges facing those who are trying to stem the spread of CBSD is timely detection of the disease.

"The disease manifests itself in different ways depending on local conditions. In some cases it shows symptoms only on the roots. An apparently healthy plant may be found to have spoiled roots only when harvested, with obvious consequences for food security," Helsen explained.

Short-term measures needed to tackle CBSD include stepping up disease surveillance and conducting regular inspections; increasing the sensitization of communities to the threat of CBSD; and using hands-on training for farmers, like FAO's farmer field schools, to introduce community-based practices to prevent the introduction or spread of the disease, such as the removal of infected plants.

Recommended measures also include banning the distribution of infected plants between districts and zones, and, in the event of infection, using coping strategies such as the early harvest of cassava, before symptoms appear and significant damage can be done.





Cassava – potential cash crop

Although first and foremost a food security crop for most of Africa's farming systems in general and Uganda in particular, there is significant unmet local and global demand for cassava in the form of starch, dry chips and other industrial uses including ethanol among others. Africa and Uganda in particular have yet to tap in to this global market or at least develop its own secondary value addition and processing sector. While targeting production of these markets may not be appropriate for all, the Government of Uganda has the potential to decide on what their priorities should be,

including developing responses to such market opportunities. A value chain analysis could help in this; however there is also a need to convert such analysis into a real country/regional investment strategy in business education, provision of access to financial capital and the creation of suitable supporting the requisite infrastructure an enabling environment for developing the cassava sector. The overall approach for the country and the region could be to establish national priorities beyond food security in addressing issues of variety, seed selection, production practices and post harvest processing and marketing.

Cassava – an important food security crop

Cassava is a vitally important food security crop in the Great Lakes Region. The cassava production in the region has been estimated at 50 million metric tonnes (FAOSTAT, 2009) with Democratic Republic of Congo (DRC) (15 million tonnes), Tanzania (5.9 million) and Uganda (5.2 million) being the largest producers. Total African production of cassava has quadrupled in the last five decades and is now estimated at 118 million tonnes per year. The roots provide 25–75 percent of caloric intake, but this is much higher where cassava is a major crop. Key attributes of cassava as a food security crop are its capacity to grow in adverse soils, in drought prone

areas, its ability to produce even with limited crop management and its continuous piece-meal harvesting during the dry season.

These attributes make cassava very useful to small holder farmers particularly those with limited resources, including land to invest and populations that may have been suffering from civil unrest such as in northern Uganda. In areas where cassava consumption accounts for more than 50 percent of all kilocalories, a 30 percent reduction in cassava yields is believed to cause population movement often across national borders, the accompanying social upheaval, and potentially create a basis for civil unrest.



FAO joins efforts to fight cassava diseases

The rapid spread of CBSD threatening production has already mobilized an international community of experts in cassava virology, which has resulted in important breakthroughs over the last few years. With financial support from the European Commission, FAO has embarked on a regional campaign to boost the capacity of individual countries in the Great Lakes Region. In Uganda, eastern Democratic Republic of Congo and Burundi more than 4000 hectares of disease-free cassava have so far been established. In Uganda specifically, many farmers who were returning from displacement in the north were

enabled to quickly recover from a long period of food aid dependency.

Since early 2010, FAO is implementing a project - “*Regional Cassava Initiative in support of vulnerable smallholders in Central and Eastern Africa*”, also funded by the European Union to a tune of Euros 4.6 million. The project is enabling the multiplication and distribution of virus-free planting material to an estimated 500 000 farmers in Burundi, Democratic Republic of Congo, Rwanda and Uganda, Tanzania, Gabon and Central Africa. The project also aims to build the capacity in preparedness and in



***“Farmer
Field Schools
in Support
of Improved
Cassava
Management
in Burundi,
Kenya and
Uganda”***

strengthening resilience of the most vulnerable communities to outbreaks of CMD and CBSD and, in improving coordination and putting in place regulatory mechanisms to control the movement of diseases material within countries and across borders.

Northern Uganda - In northern Uganda, FAO in collaboration with NARO, district local governments in the Acholi sub region and implementing partners are establishing 300 hectares of nuclei multiplication gardens with cassava varieties resistant to CMD and tolerant to CBSD for distribution to vulnerable small-holder farmers in northern Uganda. The project covers Kitgum, Lamwo, Gulu, Agago and Pader districts.

In addition to meeting the farmers' food needs, cassava is an important cash crop that is gaining prominence both within and outside the country. One farmer group that has already started to reap benefits is Rwot Omiyo Farmer Field School in Labong Amida Sub County, Kitgum district. The group sold cassava worth USD 300 last year and as their savings accumulate they hope to purchase oxen and ox ploughs- and maybe even a tractor in future to expand their acreage.

A farmer - Odeke in Kitgum district bought a bull after selling the improved Akena cassava variety that he planted with support from FAO's multiplication programme. Odeke established one and a half acre farm. He was so impressed by the results of his harvest that he decided to name his bull after the high yielding disease resistant cassava strain. After the next cassava harvest his family was able to buy a second bull and now they have a pair of oxen with which they use to plough the garden.

Eastern Uganda - Busia district that lies along the Kenya-Uganda border in eastern Uganda has had cassava production drastically reduced due to cassava diseases, especially Cassava Mosaic Disease (CMD)

and Cassava Brown Streak Disease (CBSD) over the past three years. This is compounded with lack of awareness among the farming communities on the cassava diseases.

In partnership with Africa 2000 Network (A2N), NARO and Busia District Local Government, FAO has been engaged in building the capacity of farmers to manage the diseases and pests. These initiatives are being undertaken under a project – *“Farmer Field Schools in Support of Improved Cassava Management in Burundi, Kenya and Uganda”* that is funded by the Government of Italy to a tune of USD 500000. Its implementation runs from March 2011 to August 2012.

One of the key activities being implemented under this project includes comprehensive farmer group training using the FFS approach that involved groups of farmers numbering 30 who meet regularly to study about the whole growth cycle of a crop in the field under the guidance of a trained facilitator. A total of 40 FFS groups regrouping 1,200 farmers are participating in the project.

The farmer groups have so far established 90 out of the targeted 120 acres with the cassava variety: MM/96/4271 (NASE 14) that is known to be relatively tolerant to CBSD and resistant to CMD. In addition, 30 acres of buffer multiplication site managed by the NARO and the Busia District Local Government was established. The buffer multiplication site and the farmer fields are expected to provide cuttings to support further multiplication by farmers over the subsequent years. It is expected that about 1,000 acres of NASE 14 will have been established by farmers in Busia district by the year 2012.

FAO is also engaged in community-based awareness campaign on cassava related diseases and mapping multiplication fields with CMD resistant and CBSD tolerant varieties.

Combating illegal harvesting and trade in timber and charcoal

European Commission funds FAO's USD \$ 200,000 initiative for Uganda

In pursuit of combating illegal harvesting and trade in timber and charcoal, FAO has signed two letters of agreement worth USD \$ 200,000 (470 million Uganda shillings) with CARE International and World Wide Fund for Nature (WWF). Each organization will receive USD \$ 100,000 to implement designated activities in 12 months.

Speaking at the signing ceremony on 21st February 2012 at Protea Hotel, the FAO Representative in Uganda, Mr. Alhaji Jallow said the implementation of the two letters of agreement is part of a continuing effort to support member countries to develop strategies to improve their ability to address governance and forestry law compliance issues.

CARE International will aim at strengthening stakeholder cooperation to reduce illegal harvesting of and trade in timber and charcoal in selected districts in the Albertine Rift districts in Uganda while WWF will assess the extent of illegal timber trade in Uganda and provide valuable information and concrete recommendations to decision makers and forest sector stakeholders on which to build a better domestic and trans-shipment management system.

Activities under this project have been funded by the European Commission through the "Forest Law Enforcement Governance and Trade Support Programme for African, Caribbean and Pacific Countries" (ACP-FLEGT Support Programme), a four year initiative worth Euro 10 million that is being implemented by FAO.

The ACP-FLEGT Support Programme has two main components: providing assistance to African, Car-



Country Director, World Wide Fund for Nature - David Duli, the Commissioner for Forestry - Rachel Musoke, the FAO Representative in Uganda - Mr. Alhaji M. Jallow and the Country Director, Care International in Uganda - Mr. James Bot at the signing ceremony

ibbean and Pacific Island countries in putting the European Union (EU) Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan into practice, and supporting the collection, analysis and dissemination of FLEGT-related information and lessons learned among stakeholder groups in ACP countries.

Although illegal use of forests is one of the greatest challenges affecting forest management in Uganda, information about the extent of these illegalities has been lacking, in some instances under-estimated or where it is available, it covers a few sites and lacks national coverage. Illegal use of forests has been associated with deforestation, illegal timber trade, evasion of taxes and other forest crimes.

It is estimated that between 1990 and 2005, Uganda lost 27 percent of her forest cover, equivalent to 1,329,570 hectares due to a high population growth

rate, high demand for agriculture and wood fuel and illegal logging and encroachment. The fastest loss is taking place in private forests (33.5%), with Mubende district (one of the proposed districts to benefit from this project) recording the highest original forest cover loss of as much as 79 percent.

This project is consistent with the overall National Forest and Tree Planting Act 2003. It will support decentralized forest service delivery, promote community partnerships in forest management and governance and will contribute to the realization of the forestry sector objectives in the National Development Plan (2010-2015)

It comes at a time when government of Uganda and FAO are implementing a project under the FAO Technical Cooperation Programme. This ongoing project, with funding of about USD 500,000 and whose operations commenced last year (2011) seeks to support the finalization and production of the National Forest Plan and forestry handbooks. This is besides building the capacity of district local governments and communities in Northern Uganda on forest rehabilitation and sustainable management.

World Food Day

marked with a call for increased agricultural production to avert food price volatility



Hon. Moses Ali; the third Deputy Prime Minister hands out prizes to outstanding farmers in Arua during the celebrations

R. NANDELENGA

The 2011 World Food Day celebrations in Uganda were marked with a call to increase agricultural production and productivity in order to mitigate the challenges of food price volatility.

In his address, His Excellency, the President of the Republic of Uganda, Yoweri Kaguta Museveni said the sustainable way to stabilize food prices was to increase production and value addition. He called for increased investment in appropriate technology generation and dissemination, weather indexing to provide farmers with timely and accurate information, formation of farmer groups to facilitate access to services and credit and public-private partnership for value addition.

The President's message was contained in a speech that was read by the third Deputy Prime Minister, Hon. Moses Ali, at the national world food day celebrations in Arua district on 16 October 2011.

He pointed out that high food prices were not only negative phenomena but also a driving force for farmers to grow more to maximize income.

"I urge the leadership in this country, Members of Parliament, Chairper-

sons Local Council 1 – 5, technocrats, chiefs, opinion leaders and religious leaders and citizens to rise up to this challenge", he said.

Delivering the official World Food Day message of the FAO Director General, the FAO Representative in Uganda (a.i), Mr. Mario Samaja said "Food Prices – from Crisis to stability" had been chosen as the World Food Day theme to shed some light on the trend and what can be done to mitigate its impact on the most vulnerable".

He called for increased investment in infrastructure, marketing systems, extension and communication services, education as well as research and development in order to increase food supply.

Mr. Samaja warned that while speculation might not trigger price movements, it could exaggerate their size and duration. He said more and better information was needed to allow greater transparency in trade on futures markets.

"This would help ensure that governments and traders make informed decisions and avoid panic or irrational reactions", he said.

World Food Day 2011 Pictorial

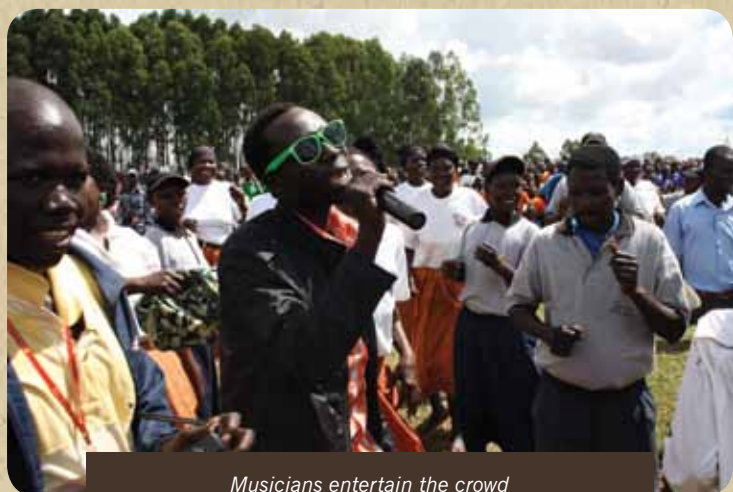
Pictures by: FAO/2011/R. NANDELENGA



Mr. Okassai Opolot (The Director for crop production) and Mr. Vincent Rubarema, (The Permanent Secretary) from the Ministry of Agriculture, Animal Industry and Fisheries and Mr. Mario Samaja (The FAO Representative in Uganda , a,i) at the celebrations



The Guest of Honour presents a gift to one of the pupils who excelled in the art competition about the World Food Day theme



Musicians entertain the crowd



The Guest of Honour delivers his speech. Looking on in yellow dress is the state Minister for fisheries, Hon. Ruth Nankabirwa



Guests at the FAO stall



Members of Parliament at the celebrations



Demonstration of technologies



Dorcus Inzikuru the former Steeplechase gold medallist is welcomed to the FAO stall



The Chief of Defense Forces, General Aronda Nyakairima looks at the demonstration gardens



walking past the FAO stall



Some guest take it to the floor

Stakeholders consult on food prices

The Government of Uganda in conjunction with FAO organized a national consultative meeting on policy and programmatic actions to address the concerns of food shortages and the high and volatile food prices in the country from 17th to 19th December 2011.

The high-level meeting that took place in Botanical Hotel in Entebbe had objectives of: creating awareness on the need to take action on rising food prices; developing an action plan to mitigate the effects of high food prices in Uganda; and agreeing on the modalities for implementation of the action plan.

Attending the meeting were Hon. Ministers in stakeholder sectors, Members of Parliament, development partners, District Government representatives, farmer organizations, academia, civil society organizations, private sector, former Members of Parliament, Government agencies and the media.

It was part of a series of meetings that FAO is convening at regional, sub regional and country levels to ensure that high-level government officials are aware of the “Guide for policy and programmatic actions at country level to address high food prices” that FAO published and distributed widely in 2011. The Guide covers the pros and cons of three types of measures: macroeconomic and trade related; meas-

ures in favor of producers; and measures in favor of consumers.

Speaking at the opening ceremony of the meeting, the Prime Minister of Uganda, Hon. John Patrick Amama Mbabazi called upon the meeting participants to come up with clearly defined options for short, medium and longer term as well as intermediate actions that Governments could undertake to address the challenges of high and volatile food prices.

The Prime Minister decried the dismal performance of the agricultural sector which, he said, registered a decline in real growth from 7.9 percent in 2000/2001 to 0.1 percent in 2008/2009 in spite of being the most important sector employing more than 75 percent of the population.

“This rate of growth has been below the population growth rate of 3.2 percent, implying that per capita agricultural production has been declining”, he said.

As a solution, the Prime Minister called for increased investment in the agricultural sector.

“The current food price crisis has reinforced the need to improve agricultural production and productivity and calls for increased investment in the sector by both the government and developing partners”, he said.

Mr. Chimimba David Phiri, the Chief, Policy Assistance Support Services at FAO Headquarters in Rome said government officials

that were invited to the meeting were expected to exchange on their experiences during the 2007/2008 food crisis and be exposed to the pros and cons of the various measures reviewed in the FAO Guide. He added that some governments took some rushed decisions during the 2007/2008 crisis, such as export bans and speculative purchases and hoarding of food commodities that contributed to worsening of price volatility globally and domestically.

“We now have time to examine how some countries responded in 2007/2008 food price crisis and evaluate the lessons to inform immediate and future actions that may be taken to respond to increases in food prices”, he said.

The FAO Representative in Uganda, Mr. Alhaji Jallow appreciated the diversity of the participants at the meeting, saying too often, well conceived policies and strategies were wasted because essential stakeholders from other ministries were not brought on board early enough, nor with enough engagement for them to feel part of the outcomes.

“Important partnerships between ministries of agriculture, health, trade, public works, finance and others should become the rule, rather than the exception if significant and sustained results to address food insecurity and agricultural sector stagnation are to be realized”, he said.

The meeting came up with the following recommendations:

- Parliament and the Ministry of Agriculture, Animal Industry and Fisheries should have regular interface to create consistence in strategies
- The agricultural sector should ensure equitable distribution of resources and affirmative action for the disadvantaged communities
- In future, implementation of plans should be effected like is the case for developing economies in Asia – wide spread adoption of modern technology, mechanization, irrigation and availability of improved seeds, planting and stocking materials
- The sector should come up with the financial figures in the Development Sector and Investment Plan (DSIP) that reflect the 10 percent as agreed by the African Heads of State through the Maputo Declaration 2003.
- On the National Agricultural Advisory Services (NAADS), it was recommended that Members of parliament should start planning with their constituents on National Vision and plans e.g. National Development Plan, DSIP and Prosperity for All (PFA)
- The agricultural sector should invest in communication strategy that enhances information flow

Young people discuss Food Prices

Topic: Food prices: from crisis to stability

Sserunjogi Joseph, S.6 - Mengo Senior School

Food is a material usually of plant or animal origin that contains essential body nutrients such as carbohydrates, fats, proteins and vitamins.

Food price is the relative exchange value of food stuff in monetary form, while high food prices is a situation where prices of food stuff are not affordable by the average people.

Food crop inflation increased to 29.1 percent up from 6.9 percent and 1.5 percent in February 2011 and January 2011 respectively in Uganda.

High food prices have been caused by a number of factors: political, social and economic as seen below.

Natural disasters – food shortages today are as a result of unfavourable natural factors for example prolonged drought and heavy rainfall that have affected food provision for instance in Northern Uganda.

Poor state of infrastructure – with the poor transport system in Uganda, which is only limited to road transport system is in a poor state. Transportation of food crops from cultivation areas is difficult as high transport costs are incurred, which in the long run leads to a hike in food prices in the markets.

Population explosion – the world population has reached 7 billion with Uganda's population at over 30 million, yet the rate at which food is demanded is higher than the supply rate, inevitably increasing food prices.

Rigidity and high levels of conservation – many rural farmers do not want to change to advanced methods of production for instance using hand hoes, subsistence production,

rearing poor quality breeds of animals hence lowering output and increasing food prices.

Urbanization – growth of towns like Kampala, Mukono and Mbarara has influenced many people especially the youth to migrate to urban centres to look for better job opportunities. This has led to abandonment of cultivation in rural areas because few people carry out food production yet demand is high.

Political instability – Northern Uganda was faced with war for over 20 years that forced people into camps, hence dependence on food aid from World Food Programme. This reduced supply of food from northern Uganda, thus shortages, which led to high food prices.

Laziness – most people especially the youth despise agriculture and often prefer white collar jobs. This has increased rural – urban migration, causing reduction in food production hence scarcity leading to food crisis.

Poor state of technology – food production in Uganda is more labour intensive than capital intensive, which yields limited output.

In conclusion, food prices can be transformed from crisis to stability through different ways:

- Develop emergency food reserves system to store food for the future in cases of food shortages;
- Scale up social safety nets such as mother and child nutrition and school meals programmes;
- Support smallholder farmers;
- Infrastructural rehabilitation by improving roads and introduction of railway transport.

Cont'd next page

Sozi Josiah Emma - Mengo Senior School, Kampala

The world is made up of approximately six billion people, and currently 1.02 billion people in the world are short of food. Looking at Uganda, the causes of the prevailing high food prices are discussed below:

The exportation of food into neighbouring countries like the newly independent state of South Sudan, Kenya among other nations in order to stabilize the economy in form of foreign exchange (revenue) earned from the sales has made more food to be exported than internally circulated.

Secondly, natural disasters in form of floods, mudslides, drought and others make supply of food in the disaster-stricken areas rather complicated. For example, floods in the northern regions of Acholi and West Nile destroyed crops and farms; mudslides in Bududa (2010) and Bulambuli (2011) in Eastern Uganda destroyed many plantations, hence limiting food production and sale in the areas, culminating into high food prices.

Another cause of high food prices is a poor transport network from places of food production which are mostly situated in villages to points of sale especially in towns. For example, the transportation of matooke (bunches of bananas) - a staple food of most Ugandans from most rural areas to Kampala city where there is a wider market for it has become difficult because of the poor state of roads. The traders therefore pass on the high transport costs to consumers of the food hence raise the prices.

Unstable fuel prices have also worsened the situation because traders and farmers are paying more to transport their food or farm inputs. This has made costs of production, transportation and supply more expensive.

Low production levels due to subsistence nature of the farmers means that supply of food does not match

demand. With more people requiring food than is available, prices inevitably increase, especially in a free market economy like Uganda.

This has been worsened by the laziness of the youth who have abandoned agricultural activities opting instead for white collar jobs.

The nature of government expenditure has also affected the food production sector. Only a small percentage of the national budget is allocated to agriculture and yet it is the sector that produces the food.

Some government aided programmes for example the National Agricultural Advisory Services (NAADS) have not performed to their expectations in supporting farmers to produce more. There have been cases of corruption and misuse of funds that should have been used to support food production.

There is also a problem of food distribution whereby some areas produce a lot of food and yet others do not have enough. For example, more food should be transported from rich soil areas of Kibale and Mbarama in Western Uganda to Kampala and northern Uganda for sale to balance prices in the areas.

Students should be encouraged to embrace agriculture.

Expedite the process of oil mining in the Albertine Region (Western Uganda) to stabilize fuel prices through more export of oil products.

More research into better and fast maturing crop varieties to enable higher sales is needed.

If such measures are considered, we shall see food prices as history from a period of crisis to stability in Uganda.

For God and my country

Longest serving **FAO** Uganda staff retires

“Retain, love your jobs and support your colleagues” was the key message that Josephine Oyee, the longest serving staff of FAO in Uganda passed on to FAO staff at a dinner organized to congratulate her upon her retirement. Josephine was there when the FAO started operations in Uganda in 1979, when the office was opened in 1981 and when the office celebrated 30 years of existence in 2009. She has seen staff members come and go. Having worked in the same position as Secretary to the FAO Representative, Josephine has acquired invaluable experience and organizational memory. At the dinner, staff members praised her for being dedicated, professional and upholding the organizational values. She retired in August 2011.



R. NANDELENGA

High food prices push more 700,000 into poverty

Food insecure now 11 million

According to the ministry of Agriculture, Animal Industry and Fisheries (MAAIF), 700,000 more people in Uganda have been pushed below the poverty line due to the 2011 food crisis that was characterized by high food prices and drought.

“This has pushed the total number of food insecure people in Uganda to 11,000,000 (eleven million)”, said the Minister of Agriculture Animal Industry and Fisheries, Hon. Tress Bucyanayandi.

The message was contained in a speech that was read on his behalf during the World Food Day celebrations in Arua District on 16 October 2011 by the State Minister for Fisheries, Hon. Ruth Nankabirwa.

The Minister said many economies had experienced a rising cost of living due to shocks of extreme weather conditions such as floods, drought, earthquakes, rising cost of fuel, increasing demand of commodities and hoarding by some traders and speculators.

FAO commissions study on the functionality of veterinary supplies shops

As part of revitalizing the Community Animal Health Worker's (CAHW) system in Karamoja and the just concluded comprehensive exercise to map out all the CAHWs and veterinary supplies shops in the region, FAO in collaboration with the District Veterinary Offices and Vétérinaires Sans Frontières Belgium (VSF-B) has commissioned a study on the functionality of veterinary drug shops and animal health supplies in Karamoja.

The purpose of the study is to carry out an in-depth assessment with more emphasis on the overall operations, unique constraints and opportunities for im-

proving the supply chain in the region and enhancing the role of the CAHW's system as key end domestic market. The study will therefore focus on veterinary drugs business as an important ingredient of the livestock value chain development.

This exercise will inform the planned setting up of the envisaged 10 veterinary supply points under the project - "Improving Food Security and Diversification of Livelihood Opportunities" that is funded by the European Union through the Government of Uganda under the Karamoja Livelihood Programme (KALIP).

R. NANDELENGA





22nd March

Theme: Water and Food Security

There are 7 billion people to feed on the planet today and another 2 billion are expected to join by 2050. Statistics say that each of us drinks from 2 to 4 litres of water every day, however most of the water we 'drink' is embedded in the food we eat: producing 1 kilo of beef for example consumes 15,000 litres of water while 1 kilo of wheat 'drinks up' 1,500 litres.

When a billion people in the world already live in chronic hunger and water resources are under pressure we cannot pretend the problem is 'elsewhere'. Coping with population growth and ensuring access to nutritious food to everyone call for a series of actions we can all help with:

- consume less water-intensive products;
- reduce the scandalous food wastage: 30% of the food produced worldwide is never eaten and the water used to produce it is definitively lost!
- produce more food, of better quality, with less water;
- follow a healthier diet.

At all steps of the supply chain, from producers to consumers, actions can be taken to save water and ensure food for all.

And you? Do you know how much water you actually consume every day? How can you change your diet and reduce your water footprint? Join the World Water Day 2012 campaign "Water and Food Security" and find out more!

Facts about water and food

During the second half of the 20th century, world population had a twofold increase. **Today we are 6.5 billion people on the planet.** Expanded irrigated agriculture and agronomic advances has boosted the food production and the agricultural sector. Food production at the turn of this century has more than doubled compared to the situation at the beginning of the 1960s.

There is enough food today to feed the world. Yet, despite of this, 15 percent of the world population (854 million people) is undernourished, and with continuing population growth, rising incomes and urbanization, food demand will roughly double in the next fifty years. Over this period the world's water will have to support the agricultural systems that will feed and create livelihoods for an additional 2.7 billion people.

Today agriculture, farming and growing, accounts for 70 percent of the total water used on the planet. Agriculture is thereby the largest human use of water. Clearly, agricultural practices need to be

targeted on reducing waste of water and so this has been the centre of attention for water saving practices for years.

But there are additional ways to save water. Huge losses and waste of food occur throughout the supply chain i.e. from the produce leave the farmers' fields until it reaches its final destination; in food storage, transportation, food processing, wholesale and retail. Furthermore, vast amounts of food are then wasted in households and restaurants.

Every loss or waste of food is equivalent to loss and misuse of water.

Further, since water is part of every food production process, and hence an ever-present building block in everything we consume. Whether we are biting into a banana or a slice of pizza, we are biting into something that has used water for its growth or production. With regards to this, it's worth bearing in mind that animal-based food require a larger amount of water per kilo ready-to-eat product than fruits and vegetables do. A lower animal protein diet will need less water to be sustained.

VIRTUAL
WATER

HOW MUCH

Water is part of any production process.

We need it to grow apples, as well as produce a packet of crisps.

The amount of water needed in this process depends where we are because climate and agricultural practices will be the most important players.

1 cup of tea



35
litres

1 cup of coffee



140
litres

1 glass of wine



120
litres

1 glass of beer



75
litres

1 glass of apple juice



190
litres

Global average virtual water content of some selected products, per unit of product (Source: Hoekstra and Chapagain, 2007)

WATER IS NEEDED

1 glass of orange juice



170
litres

1 apple



70
litres

1 egg



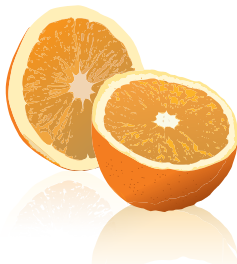
135
litres

1 glass of milk



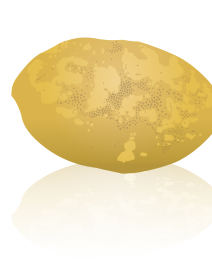
200
litres

1 orange



50
litres

1 potato



25
litres

Water is key to food security

Q&A with FAO Assistant Director-General for Natural Resources, Alexander Mueller

The vulnerability of rain-dependent food production systems and the people who depend on them has been brought into stark relief by the situation in East Africa. While the challenges of finding stable water supplies for growing crops and raising animals are many -- and vary from place to place -- investing in irrigation where it is possible, improving the efficiency of agriculture's use of water, and adopting water-smart farming practices can all help. In this Q&A interview, FAO Assistant Director-General for Natural Resources, Alexander Muller talks about these and related issues.

Everybody understands that water is crucial for growing food - but often in an abstract way. Can you give more details on how water helps feed the world?

First of all, it's important to make the distinction between rainfed agriculture - farming that depends on natural rainfall - and irrigated agriculture. Irrigating land changes everything - it concentrates inputs and forces changes in agronomy and marketing.

While many people in the Horn of Africa are pastoralists, not crop farmers, the current situation there makes it painfully clear the risks and vulnerability associated with rainfed food production systems, especially as the impacts of a changing climate are now making themselves felt. It's not that rainfed agriculture is a problem per se, but it is more vulnerable, and tends to be less productive.

As regards irrigation, one can't understate the contribution it has made

to feeding the world. Over the last 50 years, the Earth's population doubled and the global food system responded remarkably to the increase in food demand. This was done through just a modest increase in total cropland -- not more than 12 percent. The achievement occurred mainly through intensification of agricultural production, i.e. an increase in yield and cropping intensity, which in turn would not have been possible without irrigation.

Irrigated land has increased proportionally much faster than land under rainfed agriculture. In fact, while the world's cultivated area has grown only by 12 percent over the last fifty years, irrigated area has doubled over the same period, accounting for most of the net increase in cultivated land. Meanwhile, agricultural production has grown between 2.5 and 3 times, thanks to significant increase in the yield of major crops.

[Hasn't the world's capacity to irrigate](#)



farmland been reached?

In some places, yes, in others, no.

Globally, some 300 million hectares of farmland is irrigated, accounting for 70 percent of all freshwater appropriations. That is happening on only 20 percent of the world's cultivated land -- yet at the same time, that irrigated land accounts for 40 percent of all agricultural production and 60 percent of cereal production.

Why isn't more farmland irrigated? In some places it may not be necessary. In others, water resources may not be available. Elsewhere, financing for irrigation and market linkage is the problem - and here I'm thinking of Africa in particular. We have not seen the wholesale commitment to modernize irrigated production and marketing into changing local and global markets - even when land and water resources have been available

But aren't other world regions running out of water?

Increasing regions of the world are indeed facing water scarcity and face the risk of progressive breakdown of their productive capacity under a combination of demographic pressure and unsustainable agricultural practices. The physical limits to land and water availability within these systems may be further exacerbated in places by external factors, including climate change, competition with other sectors and socio-economic changes.

Toward 2050, rising population and incomes are expected to require 70 percent more food production globally, and up to 100 percent more in developing countries. But some regions are coming very close to their potential to intensify food production, which is already leading to tension on access to natural resources, in particular water. East Asia and The Middle East are operating very close to their limits and will not be able to extend their agriculture much further, while substantial potential is still available in Latin America and in sub-Saharan Africa.

So what can be done?

Despite the challenges, the prospect does exist for further increases in productivity, both in rainfed and irrigated agriculture, but we'll need to make changes in how we farm and use water.

Irrigation, where possible, will continue to grow in response to demand for more and more diversified production. While in some regions there is no scope for further increase in water supply for agriculture, in others there will still be opportunities. Most large scale water storages have probably been constructed already, and it is likely that more diffuse and distributed systems of water storage will continue to be developed. The combined use of groundwater and surface water will also become more widespread, and, near cities, agriculture will likely take more systematic advantage of treated waste water.

A lot needs to happen in terms of how we irrigate, as well. Old, rigid systems of water distribution in large irrigation schemes will need to be replaced by much more flexible systems, allowing for more reliability in the supply of water and therefore progressive diversification towards higher value crops. In such modernized systems, localized irrigation will play an important role in boosting productivity while reducing non beneficial uses of water, therefore increasing on-farm water use efficiency and productivity.

We'll also need to focus on getting "more crop per drop," by adopting farming techniques that harvest more rainfall, conserve soil moisture, reduce waste in irrigation and in some cases by making changes in dietary and cropping choices to focus on crops and foods that use less water.

Finally, much more needs to be done to reduce wastages between farm gates and the consumer. It is estimated that only about 50 percent of the food that is produced is actually consumed, the rest being lost in storage, distribution and at the level of end users.

That's not just food waste -- it's water waste too if production is irrigated. The production of 1 calorie of food requires 1 liter of water. With the world's average daily caloric requirement at about 2800 per person, the water needed to satisfy the daily food requirements of each individual on the planet is about 2 800 liters. Or to put it another way, to produce one hamburger it takes 2 400 liters of water. A glass of milk? 200 liters. One egg - 135 liters. A slice of bread takes 40 liters. So reducing food waste is key to improving the efficiency of agriculture's use of water.



Mountain experts

meet in Uganda to discuss climatic challenges in mountain regions

Lorna Silkei might be only 21 but she can testify to the changing conditions on the slopes of Mount Elgon in Kapchorwa district.

“Sometimes, the rain is very heavy, affecting our crops. When there is strong sunshine, the seeds do not germinate”, she says.

Now a farmer after dropping out of school, Lorna says it was different when she was younger.

“My parents knew when to plant crops because the weather was predictable”, she says. Even the soils are less fertile now. “If you want a good harvest, you have to apply fertilizers”, she says.

These among others such as the fear of landslides, shrinking water bodies, infestation by malaria carrying mosquitoes are some of the challenges that people who stay on the slopes of Mt Elgon and probably many other mountains around the world face every day.

But given the diverse nature of mountains and the fragility of their ecosystems that have many functions, it is high time, issues of mountains are brought to the top agenda, most importantly because their benefits extend well beyond the highland regions down to cities, towns and rural areas in the surrounding lowland regions.

Mountains are often an agricultural landscape, a



R. NANDELENGA

good site for towns and ongoing urbanization, support subsistence farming for households and water for local and downstream communities and resources for pastoral peoples.

According to Bob Nakileza, Chair of the International Conference on Eastern African Mountains 2011, based at the Mountain Resource Centre of Makerere University in Uganda, “Mountains in Uganda are a very important store of wealth.

But they are facing major challenges especially due to population pressure and resource degradation exacerbated by climate change impacts”.

It is the aforementioned issues that brought a cross section of stakeholders and experts to a three day meeting to discuss increasing challenges and opportunities related to the sustainable development of mountain regions as part of the “Strategic Initiative for Climate Change Impacts, Adaptation and Development in Mountain Regions” from 16th – 19th November 2011 in Mbale district.

The meeting was jointly organized by the Mountain Partnership Secretariat and the United Nations Environment Programme (UNEP) and FAO with support from the World Bank.



The main objective of the meeting was to strengthen knowledge about the climate change impact on mountain areas, discuss adaptation options in mountain ecosystems and promote better alliances and cooperation amongst countries with mountain territories to reinforce their understanding of the issues.

In attendance were international experts, researchers and journalists from Cameroon, the Democratic Republic of the Congo, Ethiopia, Guinea, Kenya, Lesotho, Madagascar, Rwanda, South Africa, Uganda and Zimbabwe.

This was the third regional meeting organized by the Mountain Partnership Secretariat in the framework of the World Bank's Development Grant Facility on "Strategic Initiative for Climate Change Impacts, Adaptation and Development in Mountain Regions". Each meeting has brought together government delegates, policy makers, journalists, scientists, mountain and climate change experts, to boost knowledge on the impact of climate change in mountain areas, discuss adaptation options in mountain ecosystems and promote better partnerships and cooperation

amongst countries with mountain territories.

"Several groups are working with mountains. However, given the multi-sectoral nature of their projects, they neglect to capitalize on any advances," said Olman Serrano, Mountain Partnership Secretariat Coordinator, who went on to add: "Very few mountain-specific issues have been highlighted because projects are not labeled as mountain-related or mountain-specific. This needs to be brought to the attention of those setting the international agenda."

The first of these regional meetings – for Latin America – was held Santiago de Chile from 26 to 28 October 2011. The second – for Central Asia – was held in Dushanbe from 9 to 11 November 2011.

"Without a clear understanding of the relatively fragile environments that mountain areas represent, and the political will to redefine national development in terms of a sustainable development framework, continued severe degradation is almost inevitable", concluded Serrano.

Adding mountain-related language to Rio+20

Zero-draft for Rio+20 - paragraph n. 94 on mountains

The zero-draft of the outcome document for Rio+20 Conference has been prepared with a paragraph (n. 94) dedicated to mountains. The United Nations Conference on Sustainable Development (UNCSD) Conference will take place on 20-22 June 2012 in Rio de Janeiro, Brazil to mark the 20th anniversary of the 1992 United Nations Conference on Environment and Development (UNCED). This zero-draft document has been prepared based on inputs submitted by countries, major groups, United Nations and other intergovernmental agencies. With 71 of the 677 submissions related to mountains, the benefits provided by vulnerable mountain ecosystems

have been recognized together with the important role played by local communities in the appropriate management of these landscapes. This zero-draft document will form the basis for further discussions and for the outcome document which will result from the Rio+20 Conference.



M. MUGISHA

New FAO Chief moves on global eradication of hunger

Support to poorest countries to be scaled up



Soon after taking over in January 2012, FAO's new Director-General José Graziano da Silva said the total elimination of hunger and undernourishment from the world will be his top priority.

He said with a term in office of only three and a half years, there was no time to lose. FAO would begin by scaling up its support to a number of low-income, food deficit countries, especially those facing prolonged crises.

"Ending hunger requires the commitment of everyone: neither FAO nor any other agency or government will win this war alone", said Graziano da Silva, adding that he wanted to work "in the most transparent and democratic way" with member countries, United Nations agencies the private sector, civil society and other stakeholders.

Hunger eradication was the first of five strategic priorities he intended to pursue at FAO, Graziano da Silva said. The others were: move towards more sustainable systems of food production and consumption; achieve great-

er fairness in the global management of food; complete FAO's reform and decentralization; and expand South-South cooperation and other partnerships.

Rebuilding trust

"We need to rebuild trust between the Secretariat and Member States to move forward, and I plan to do so by promoting a transparent and constructive relationship with Member States and FAO Governing Bodies", he said.

The Director-General also emphasized that he would strive to make FAO more effective and responsive by administrative cost-cutting and efficiency gains. He stressed that efficiency savings would not cut into FAO's technical work and he would try to use them to strengthen the Organization's direct assistance to countries.

"I am convinced that the Organization can make a significant and growing contribution to food security and sustainable food production and consumption in the world," he concluded.



Seasonal assessment points to declining number of livestock in Karamoja

Crop harvest improves



Preliminary results of the Karamoja seasonal food security assessment that was carried out in November 2011 point a declining number of herd sizes in the agropastoral and pastoral areas compared with the reference year (2008) and 2010. This is despite the good rains received in the last two years that created favourable conditions for livestock

production in terms of pasture and browse availability. Overall, normal to above normal rainfall was received in all zones of Karamoja

The decline is attributed to reduced herd reproduction due to diseases (such as Peste des Petits Ruminants, Contagious Bovine Pleuropneumonia and Brucellosis), poor



M. MUGISHA

feeding under a restricted grazing system and commercialization of livestock.

Brucellosis which causes foetal abortions has reached epidemic levels, especially in south Karamoja according to a Livestock Disease Surveillance report by the Institute for International Cooperation and Development (C&D).

These rampant abortions coupled with the high rate of sale of livestock are contributing to the reduction in herd sizes among other factors.

The markets in Karamoja have been largely open to the surrounding sub regions due to improved security. Empirical statistics show that 250 to 300 livestock are sold in Kanawat market in Kotido alone, every week. The number of livestock sold in Kanawat market combined with the number of livestock sold in other markets across Karamoja could be in excess of 500 livestock every week. This therefore could imply that the rate of sale is higher than the rate of reproduction, resulting into overall reduction in herd sizes.

However, decreases in herd sizes were not reported from all agropastoral and pastoral areas. The agropastoral areas of Napak and Moroto and the pastoral areas of Moroto seem to have maintained stable herd sizes compared with the reference year and the year 2010.

Better crop harvest

The performance of crops in 2011, depicted by the amount of grain harvest realised, was better than that of 2010 in most of the livelihood zones save for the Nakapiripirit agricultural zone and the Amudat pastoral zone where heavy rains washed away crops that were planted in low-lying areas and along river banks during harvest time. The heavy rains also led to rotting of some crops that were not yet physiologically mature. Maize, the staple cereal in these two zones was affected by these conditions, thus, the smaller quantity of crop harvests in 2011 compared with 2010.

Recommendations

The report recommends that the downward spiral in livestock ownership needs to be contained since livestock is still an important livelihood option for households in the event of crop failure. It recommends restocking for the very poor, enhancing livestock

[Cont'd next page](#) ➤

health interventions to control endemic, sporadic and emerging diseases and to regulate livestock sales. The report also recommends promotion of feed preservation, particularly hay making and improvement in livestock breeds in order to increase livestock productivity.

The report further recommends that an increment in crop production to cover an additional two to three months, especially for the very poor and the poor would eliminate all deficits. It recommends increasing the land area cultivated by the poor wealth group to enable them obtain crop harvests sufficient to meet their food needs for example by providing ploughs and oxen. Others are crop diversification to reduce dependence on sorghum and proper harvest and post harvest handling.

“There is need for the extension staff to sensitise the communities in the agropastoral zones, especially in Kaabong, who traditionally thresh their cereals in the gardens to adopt better harvesting and post harvest handling methods such as harvesting their cereals as soon as they reach physiological maturity (i.e. the seed does not exude “milk” when crushed) and carryout the drying and threshing thereafter in order to minimise harvest and postharvest losses”, the report reads in part.

On the escalating rate of deforestation and harvesting of wood for firewood and charcoal, the reports recommends that measures are required to regenerate the environment and to promote sustainable firewood and charcoal off-take.

Because there are very few income generating alternatives for the very poor and poor households, there is also a need for investment in other income generating activities to diversify their sources of income and reduce overdependence on the exploitation of natural resources.

Lastly, the report recognises that the long-term future of Karamoja requires investment in sustainable alternatives in water for production (especially for crops). Retention of run-off water would ensure that sufficient moisture is maintained in the gardens to mitigate the effects of erratic rains or short dry spells which sometimes result into loss of harvest for an entire season, thus exacerbating the food insecurity obtaining.

The assessment was carried out in response to requests emerging out of various Food Security and Agricultural Livelihood (FSAL) cluster meetings in Karamoja.

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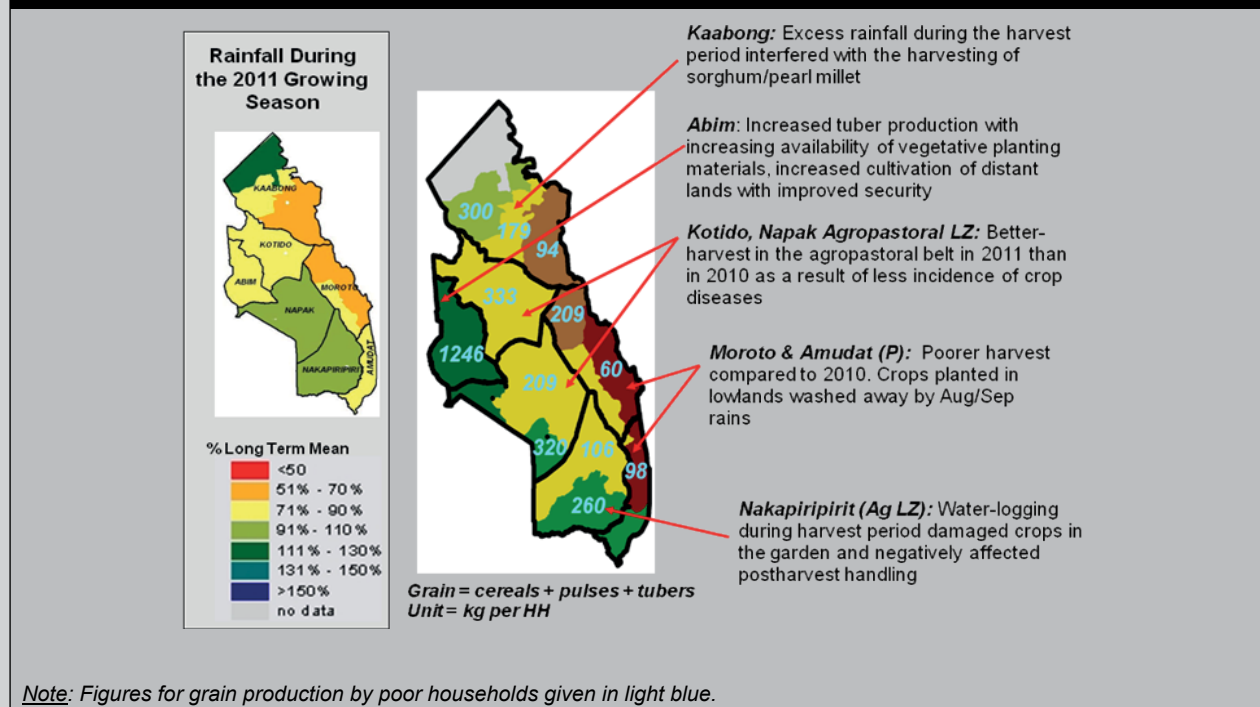
...there are very few income generating alternatives for the very poor and poor households, there is also a need for investment in other income generating activities to diversify their sources of income and reduce overdependence on the exploitation of natural resources.



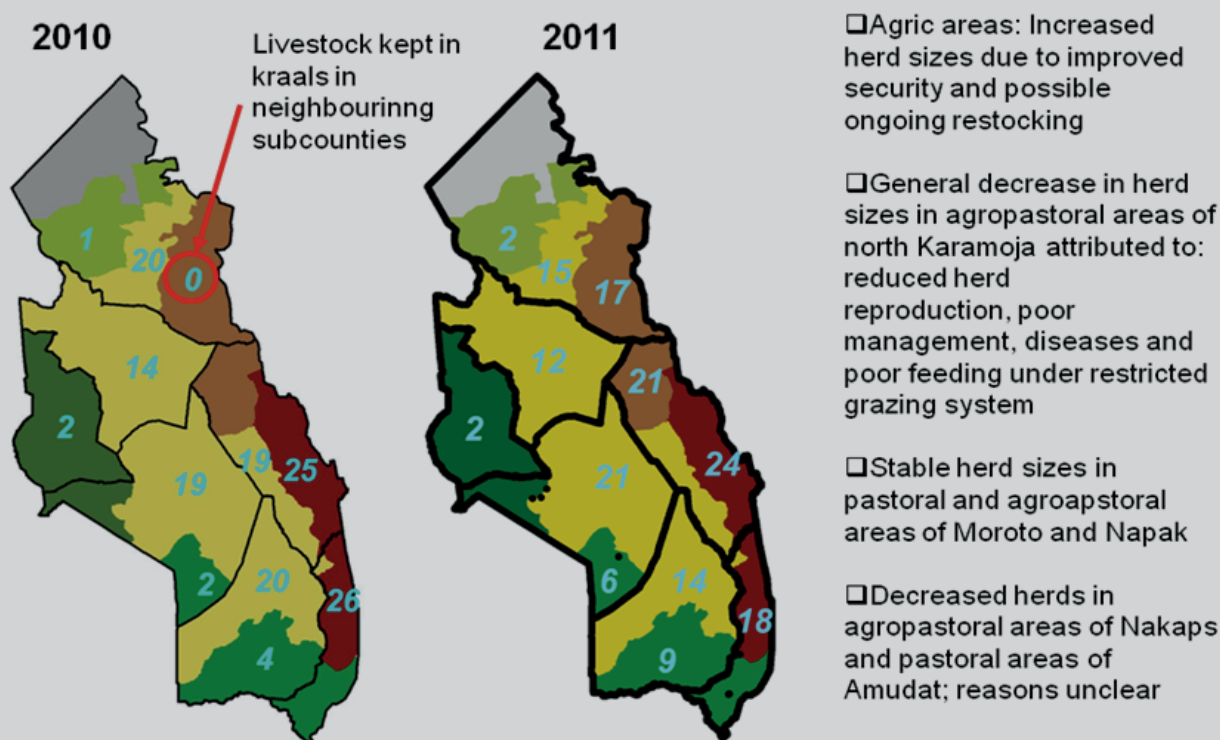
The key objective was to determine the current food security and livelihood situation in Karamoja in terms of seasonal performance, trends and constraints. It was funded by the Government of Belgium and jointly carried out by FAO, the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF), Office of the Prime Minister (OPM), the Famine Early Warning System Network (FEWSNET), World Food Programme, respective District Local Governments of Karamoja and the FSAL stakeholders.

ture, Animal Industry and Fisheries (MAAIF), Office of the Prime Minister (OPM), the Famine Early Warning System Network (FEWSNET), World Food Programme, respective District Local Governments of Karamoja and the FSAL stakeholders.

Figure A-1 Total Grain Production by Poor Households



Average number of livestock per household – weighted by wealth group



Banana diseases

FAO renews fight in the Great Lakes Region

With funding from the Belgian Development Cooperation FAO has launched a project “*Disaster Preparedness for Food Security Risks in the Great Lakes Region – Improving responses to the threat of banana diseases*” aimed at reducing the severity of impact of banana based diseases on food security and reduce their likelihood of occurrence over time. The project will be implemented in Uganda, Rwanda, Burundi, Democratic Republic of Congo (DRC) and Tanzania.

Speaking at the launch on 23rd January 2012, the FAO Representative in Uganda, Mr. Alhaji Jallow said banana based production systems were essential in providing *year-round food* because the banana is one of the im-

portant staple crops both for rural and urban populations.

In Uganda alone, he said the production of banana and plantain was estimated in 2009 at about 10 million metric tons. Despite such relatively high figures, the production level had been reduced over the past decade by a new bacterial disease, Banana *Xanthomonas* Wilt which appeared in the region in 2001.

In the past, FAO implemented a project through 100 Farmer Field Schools (FFS) comprising of over 300 households to control the spread of Banana Bacterial Wilt. The project contributed to the eradication of the disease in some five districts between 2006 and 2008.

Workshop participants at the project launch

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Katalina discovers new livelihood in vegetable production

Despite the looming dry weather conditions in December, Katalina Namer does not worry about where and how she will get vegetables to feed her family until the next planting season. She has produced and dried four big bags of cowpeas leaves and one bucket-full of seeds. In October, she produced so much that she sold the surplus for 45,000/=.

Even if it is the first time she has engaged in vegetable production, Katalina is more than happy with the results and plans to upscale the production from her four acre piece of land to about 10 acres. She has been trained how to grow the vegetables, to prevent pests and disease, to add manure to the field, to irrigate, harvest, dry and store. The training was carried out by Caritas Moroto staff who were contracted by FAO. The training is supplemented by FAO's technical staff monitoring visits to the field to check on her progress.

Katalina belongs to a Farmer Field School (FFS) group that engaged in season-long practical training



Katalina (L), showing off her vegetables

last year with their major focus being on vegetable and fruit production. According to her, the FFS has opened opportunities for her to improve her livelihood.

“I have learnt to produce vegetables that can feed my family but also bring me quick income when I need it,” she said.

The programme to implement FFS in Moroto district was funded by the Belgium Government to a tune of Euro 700,000. The project has provided agricultural training and farm inputs to 5,000 households who belong to 175 FFS groups.

FAO publishes country-level guide Addressing High Food Prices

In 2011, FAO published an updated “Guide for policy and programmatic actions at country level to address high food prices”. It has been circulated to all FAO offices world-wide, widely in-country as well as to all members of the United Nations High Level Task Force on Food Prices. Copies can be obtained from the FAO website or the library at FAO offices in Kampala.



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