Dear reader,

2019 started off as a busy year, introducing new projects and continue implementation of ongoing projects while celebrating achievements of those projects that ended this year.

Some of those projects, include; “Bioenergy and Food Security Assessment and Capacity Building for Rwanda” to identify which bioenergy options can be environmentally sustainable and contribute to the targets set within the Nationally Determined Contributions (NDCs); and “Knowing water better: Towards fairer and more sustainable access to natural resources for greater food security (KnoWat)” aimed to strengthen water governance for greater food security, so that Rwanda is better prepared to adapt agriculture to climate change, water scarcity and increased competition for water resources in an equitable and sustainable manner. In this newsletter we give you a glimpse of how the projects have impacted the lives of the farmers through building their resilience, increasing their incomes as well as improving their nutrition and food security.

The rapid intervention by FAO and the government of Rwanda has helped to restore cassava farming in the country following the outbreak of the devastating Cassava Brown Streak Disease (CBSD) locally known as ‘Kabore’. The disease affected farmers, cassava processing plants, and had threatened food and nutrition security.

FAO commit to continue working with the government of Rwanda and the people of Rwanda ensuring that our interventions leave no one behind.

We thank the FAO staff for their dedication either in the field with farmers or at the office.

Enjoy reading!

Gualbert Gbehounou, FAO Representative
Connecting Rwandan potato farmers to markets and financial institutions

Rwanda’s agriculture sector remains the largest employer with about 67.6% of the population relying on it, according to the Integrated Household Living Conditions Survey (EICV4) report. The biggest percentage of those working in the sector are farmers.

However, farmers face a lot of challenges ranging from climate change effects to low investment in their activity due to little capital.

Most financial institutions in Rwanda are still dragging their feet when it comes to providing loans to farmers making access to financing a bit difficult, yet the capacity of farmers to save and invest is sometimes very low.

The hesitance stems from the fact that agricultural production suffers from weather risks such as drought and floods. “Banks fear agriculture because of climate change. Secondly, financial institutions don’t regard agriculture as a profitable business,” says Remy Ndagijimana of Vision Fund Rwanda.

Farmers need loans to purchase inputs (fertilizer, seeds, pesticides) to raise agricultural productivity, and to better manage risks (prices, weather).

Charles Nsabimana is a potatoes farmer in Burera District.

“In 2015 we lost about eight tons of potatoes because of the rains – the potatoes rot in the ground. The following year, 2016, we lost about 5 tons because the rains washed away the crops. We needed financing to restart our activities,” says Charles.

With financial support from the EU, FAO in 2015 implemented the project “Strengthening linkages between small actors and buyers in the roots and tubers sector in Africa” to increase the sector’s output and link farmers to markets.

The project trained farmers in modern farming techniques, how to mitigate disasters and linked them with financial institutions while presenting to them opportunities in working with farmers through a joint farmer-bankers training. Many farmer groups have since acquired loans.

HIGHLIGHTS

- Farmers have collectively secured from microfinance providers and commercial banks, a total of USD 430,000 from 375 small loans during the project implementation.
- To date, 248 contract farming agreements have been signed and farmers have supplied 9,400 tonnes of improved seed varieties.
- March 2019, Rwanda launched the Agriculture Insurance Scheme to mitigate risks and losses incurred by farmers.
- In 2019 Season A (September to February), Irish potato production was 468,931 MT. The average yield of Irish potato was estimated at 10 tonnes per hectare.
- Rwanda is the sixth largest producer of potatoes in Africa

FAO develops Rwanda’s livestock masterplan

FAO has developed the first ever livestock master plan for Rwanda which will run from 2017–2022. The road map highlights investment and production in the four value chains, namely; Poultry, Pork, Dairy and red meat.

Rwanda’s agriculture contributes about 31% to the Gross Domestic Product (NISR, 2017), 10% of which comes from the livestock subsector.

The subsector will target to attract investments from the private sector which will total to 53% (RWF 125,388 billion) while about 47% (RWF 112,580 billion) is expected to come from the public sector.

Successful implementation of the strategy would contribute to food and nutrition security at household and increasing the incomes for the population whose 60 percent is employed in agriculture (NISR 2016). The 5 year strategy will require a budget of RWF 238 billion (USD 287 million) to boost livestock production.

Solange Uwituze, Deputy Director General for Animal Research and technological transfer at Rwanda Agriculture Board (RAB) said the master plan would contribute to reducing malnutrition and improving farmers’ incomes.

“Rwanda is the least consumer of meat in East Africa and below FAO recommendation of 50 kg of meat per person per annum. Consumption of eggs and milk is still low also. An average Rwandan consumes 68 liters of milk per annum,” Solange said.
The FAO Representative in Rwanda, Gualbert Gbehounou, said: “Developing a comprehensive livestock master plan that pulls together all of the existing and guiding policy documents within the sector into one focused plan, helps to establish a competitive and more efficient livestock industry that will significantly contribute to food security and nutrition as well as improve the well-being of people.”

**Rwanda gets the second One Health Strategic Plan**

The new Rwanda One Health Strategic Plan II (2019-2024) was validated by all institutions that form the Rwanda One Health (OH) platform, marking a milestone towards the improvement of the management of zoonotic and other epidemic diseases.

This six-year strategy comes on the heels of the first strategic plan that ended in 2018.

FAO, under the project “Provision of technical support for the One Health platform in Rwanda,” and supported financially by USAID, formulated the second phase of the OH Strategic Plan.

The strategy outlines interventions by government institutions and other OH partners to enhance existing structures, and pool together additional resources to prevent and control zoonotic diseases and other events with public health ramifications.

The new plan envisions to promote and strengthen interdisciplinary collaboration and partnerships in OH approach and strengthen surveillance, early detection, rapid response, prevention and control of zoonosis, antimicrobial resistance and other public health threats. Furthermore, the OH Strategic plan will build development and promote applied research at the human-animal-ecosystem interface.

Phaedra Henly, Director of the Division of OH at the University of Global Health Equity said that the new strategy defines the future of One Health in Rwanda.

The new plan will seek to address current public health concerns like Aflatoxin, Antimicrobial resistance as well as food safety and food security through the OH approach. Its governance has been elevated to the level of Director-General of implementing ministries rather than heads of units as it was previously the case.

**Role of nutrition-sensitive agriculture in reducing malnutrition in Rwanda**

Chronic malnutrition or stunting remains a national challenge for Rwanda. In 2015, about 38 percent of children under the age of five were chronically undernourished (Rwanda Demographic and Health Survey, 2015).

According to FAO, nutrition-sensitive agriculture is an approach that seeks to ensure the production of a variety of affordable, nutritious, culturally appropriate and safe foods in adequate quantity and quality to meet the dietary requirements of populations in a sustainable way.

With financial support from Swiss Agency for Development and Cooperation, FAO is working with the government of Rwanda to implement a joint nutrition project “Effectively fighting chronic malnutrition in Rwanda”, to strengthen institutional capacities to address malnutrition. To that end, some 40 national level specialists and officers have been trained on how to maximize the contribution of agriculture sector and food systems to addressing nutrition related challenges.

Ufitinema Adeline Food and Nutrition Specialist at NECDP said: “Sometimes farmers grow crops with selling in mind. They have to eat what they grow. More efforts and knowledge is needed to sensitize them to maximize the food they grow to improve nutrition at household level.”
Rwanda has embarked on a multi-sectoral approach in addressing all issues related to food and nutrition.

The National Food and Nutrition Strategic Policy and Strategy (2013-2018) focusing on improving household food security was established and the National Early Child Development Programme (NECDP) to coordinate and implement community-based nutrition interventions addressing stunting.

**New project to identify bioenergy options in Rwanda**

Rwanda and FAO launched new a project to support the country in assessing sustainable bioenergy options to reduce reliance on wood fuel.

The project “Bioenergy and Food Security Assessment and Capacity Building for Rwanda” will analyze and identify potential bioenergy feedstock and technologies that can be developed in Rwanda for both decentralized energy production and cooking purposes.

Expected to contribute to the Nationally Determined Contributions (NDCs) targets, the project will use FAOs’ Bioenergy and Food Security (BEFS) approach to assess the sustainable bioenergy options of the country.

The project will also build the capacity of key stakeholders in the bioenergy sector, in particular those involved in the development of the Biomass Energy Strategy, on how to use the BEFS tools.

Bioenergy is renewable energy from biomass which can be obtained from agriculture and forestry. And for bioenergy to be sustainable, the biomass should be acquired in a sustainable manner without negatively impacting agriculture and the forests.

“Biomass options can be sustainably derived from residues of crop, livestock, and sustainably managed forest resources,” said FAO Natural Resources officer, Irini Maltsoglou.

Increase in demand for cooking fuel has exerted immense pressure on forestry resource and the country aims to reach a potential net reduction in wood use to 5 770 000t by 2030 through a number of measures, including developing a modern and efficient charcoal value chain.

Rwanda heavily relies on traditional biomass, for instance, wood, charcoal, dung, with more than 83 percent of households using firewood.

Steven Bihinda, Renewable Energy Senior Engineer of the Ministry of Infrastructure, affirmed that the project will support the country’s efforts to look into viable bioenergy options that contribute to achieving its clean cooking target and reducing reliance on unsustainable use of wood fuel.”

Rwanda's total greenhouse gas emissions in 2014 were 7.59 million metric tons of carbon dioxide equivalent (MtCO2e), contributing to 0.4% of the global greenhouse gas emissions.

**Increasing banana production through clean seedlings**

Banana has carried significant importance to Rwanda’s dietary for a long time now. It is one of highly consumed staple crops in the country thanks to its multipurpose uses – culinary and wine brewing.

Currently, there are over 60 banana varieties in farmers’ fields, and 117 in RAB field collection. The commonly grown varieties being; Injagi, FHIA 17 and FHIA 25, Gros Michel, and Poyo. The proportions of banana types are: 45% beer type; 45% cooking type; and 10% dessert type.

Banana production averages at about 2.5 million metric tons per year. The crop is grown on about 165,000 ha and occupy 23% of all arable land in the country (NISR).

There are about 1.4 million smallholder banana growers, out of about 8 million people who rely on agriculture, concentrated mainly in five major banana farming districts, namely; Ngoma, Kirehe, Gatsibo, Kayonza and Rwamagana. Many farmers especially in rural area are making big businesses out of the banana trade.

Jean Marie Murangira from Gisagara District grows 1 000 banana trees on one hectare.

“From banana I was able to take my two children to school, built three rental houses and bought more land to expand
my farming. I also bought a motorbike that helps me to monitor my activities. Life is good,” he says.

An average Rwandan consumes about 227 kilogram per year. Apart from the increasing demand at the household level, demand has also been coming from processing factories.

Svetlana V. Gaidashova, Banana researcher at RAB said that the spread of the disease could undermine food security in the country and affect the incomes of banana farmers and dealers.

FAO, through the project “Support for enhancing the production and distribution of seeds and banana planting materials” implemented in collaboration with the Ministry of Agriculture and Animal Resources, distributed high yielding varieties and clean banana planting materials to farmers in five districts.

The project is also providing refresher training to farmers, district, sector agronomists and farmer promoters on proper banana farming techniques.

In Gisagara, farmers sell a kilo of banana at RWF100 to the processing factory in the district and RWF120 to the market in the neighboring Huye district.

FHIA banana can weigh between 45 to 80 kg depending on soil nutrients.

FAO’s support

Banana Xanthomonas Wilt locally known as Kirabiranya affected about 3 600 ha out of 170 000 ha of the total banana area.