

RDO Quarterly Bulletin

Issue N° 2 October - December 2020











Official launch of Season 2021A in Bugesera conducted at Rugandara site in Nyarugenge Sector, Bugesera District. The site is supported by Hinga Weze project implemented RDO

Contents

Foreword	3
Green technologies introduced at Kagitumba irrigation scheme	4
Bugesera District: RDO facilitates launch of agricultural season 2021A	7
HIV prevention outreach target adolescent women in Eastern Province	8
Protecting River Muvumba for sustainable agriculture intensification	11
Raising awareness on Fall Army Worm control	13
RDO distribute plastic water tanks to improve livelihoods	14



FOREWORD

The civil society remains a strategic partner for the Government of Rwanda to achieve its development goals through interventions carried out by a multi-diversity of both national and international organizations in order to support the citizens' socioeconomic advancement.

Rwanda Development Organization (RDO) is among the Civil Societies Organizations that have been accompanying and contributing significantly to the development of Rwanda. For the last 25 years, RDO actively played a big role in changing lives of thousands of Rwandan on various socio economic aspects.

The success that RDO has made has been built on a profound understanding of its mandate. RDO understands that success is based on a continuous, compelling strategy that leads to sustainable value creation and the ability to change and adapt.

We strongly believe that people driven development is sustainable and inclusive. It is this kind of development that reduces the inequality gap between the rich and poor. We are well aware of the natural phenomena where the rich and the poor coexist. We however strive to reduce the gap in between them through empowering communities to build self-sustaining social economic development initiatives that move them away from vulnerability.

The year 2020 will go down in history as one of the most challenging years of our times. COVID-19 has created a significant strain on our food systems, disrupting markets and putting immense strain on our small holder farmers. At the same time, this crisis has offered an opportunity to stop, to reflect and to work towards changing what is broken.

RDO will continue to strive to raise resources to support communities, based on the felt-needs and priorities of the beneficiaries. We shall empower communities with the required expertise and skills needed to identify and prioritise their needs in the planning, implementing and monitoring of activities.

We express our appreciation to all those that have contributed and supported RDO's efforts. We appreciate the contributions made by government ministries and institutions, UN agencies and other development partners that have supported RDO since its establishment and continue to give technical, moral and financial support to this end.

Eugene RWIBASIRA Executive Secretary Rwanda Development Organisation (RDO)

Green technologies introduced at Kagitumba irrigation scheme

Real time crop water requirement from irrigation and trapping pests to reduce the use of pesticides, are some of the latest smart green technologies that Rwanda Development Organisation (RDO) introduced to farmers in Kagitumba, Nyagatare District on Friday, December 11, 2020.

The new green technologies introduced were BazaFarm and RindaFarm devices to be used by farmers save and raise productivity. BazaFarm device has moisture and temperature monitoring sensors for crop water requirement linked to telephone to provide real-time data for irrigation decision-making while RindaFarm is a device with a special mechanism to attract and trap pests thus reducing use of pesticides.

The project which aims at efficient use of water in irrigation and reducing pesticide use was launched by RDO with funding from National Fund for Environment (FONERWA). It will operate at Kagitumba Irrigation scheme with a target 100 small holder farmers on 70 ha of irrigated land.





Diana Mugwaneza, RDO Programs Officer told farmers under KABOKU cooperative who will be the first to benefit under this project that the smart irrigation technology will reduce water used for irrigation, power and pesticides leading to an increase in productivity and savings of small holder farmers. The benefits are greater, she said that as a green technology it will also lead to environmental protection and mitigate the effects of climate change.



The Vice Mayor of Nyagatare District, Stephen Rurangwa applauded RDO for the initiative which is directed at benefiting farmers while increasing productivity and was happy it was primarily introduced at Kagitumba Irrigation Scheme in his district.

He called on farmers to professionalize agriculture as the only it will benefit them. He said farmers should know how much they are investing right from the time the put in, water, and all other agricultural inputs they are using to calculate value of their harvest.

Thedeo Gashumba, representing FONERWA underlined the importance of the project which will help farmers as well as the country while advancing his organisation's objectives directed at green initiatives.

Gashumba assured farmers that this project maybe for one year but as stakeholders will continue to work together and was glad that all the involved parties were citizens trying to create innovations to develop the country.

These new technologies were developed by a local company STES Group (Seed Technology Engineering and Science), a private company based in Kigali, Rwanda that target the use of innovation, research and development.

The President of KABOKU cooperative, Murwanashyaka Rudandaza thanked RDO for the initiative saying they are hopeful for the new devices that will help reduce water they have been using which takes power that eats into their profits and pests that often destroy plants causing losses to farmers.

KABOKU cooperative brings together farmers working at Kagitumba irrigation scheme, it has 1,083 farmers, 364 are women. Irrigated land totals to over 900 hectares and various crops are produced here for both the local market and for export. ic, economical and eco-friendly device.









BazaFarm

This' a solar powered device that is put in the farm to measure water level, soil temperature and the fertility of the soil in real time where a farmer can access the data on their mobile phone, tablet or PC via Internet and make decisions accordingly. The device helps farmers achieve high yields of crops and also provides data of what the soil needs for the best growing environment of crops.

BazaFarm devices use IoT technology and work in a network of sensor nodes to send data to the master which pushes data to the Internet. In a farm less than 5 hectares, one standalone device which is capable to measure and send data to the Internet can be used.

Benefits of BazaFarm

- BazaFarm helps in optimising the use of water and fertilizers
- Improve production in quality
- Allow to collect and store big data
- Farmers can access weather forecast.

RindaFarm

This device is a solar powered insect trap which is an effective solution for insect control in crop fields. The device identifies pests and insect patterns and develops a pest management and control plan accordingly. The solar powered insect trap offered by STES Group is completely an automatic, economical and eco-friendly device.

RindaFarm controls a variety of pests including Fall Armyworm (FAW), flying nymphs and adults of leaf folder, stem borer moths, fruit borers moths, hoppers, aphids, white flies, fruit weevil and different crop beetles ...etc.

The devices are installed in one hectare to ensure proper control of pests, RindaFarm light attracts adult pests which are trapped in the fluid contained in the yellow basin.

Benefits of RindaFarm

- Controlling one adult insect reduces 300-400 insect populations and subsequent progenies in the field.
- Helps identify pests and insects patterns to develop pest management and control plan. It is economical and reduces the use of chemical pesticides.
- Helps in monitoring and controlling pests and insects that are harmful.
- The produced output has less chemical impact which protects the health of people and the ecosystem.
- No electricity nor manpower required to operate the device.

• RindaFarm avoids the possibility of trapping beneficial insects

The Smart Irrigation Project involving BazaFarm and RindaFarm is unique and will require an elaborate and demonstration on how the green technologies will work to the beneficiary farmers. Target focus to be trained are the youth in the sector who will be trained by the experts while beneficiary representatives have been trained to clearly understand the project, get involved and own it.





Rwanda Development Organisation (RDO) through its Hinga Weze project in collaboration with Bugesera District on October 10 launched the agricultural Season 2021A at Rugandara irrigation site in Nyarugenge sector, Bugesera.

The launch attended by Hinga Weze project under RDO, officials from Bugesera District, Rwanda Agriculture Board (RAB) and other partners planted beans high in iron at an irrigation site operated by a cooperative near Lake Cyohoha.



Madamu Angelique Umwali, the Vice Mayor in-charge of economic development in Bugesera District encouraged farmers to utilize the irrigation facility built by Hinga Weze project to increase their agricultural productivity.

The vice mayor revealed that a massive investment of over 60 million francs was made to install the irrigation scheme at Rugandara site so that farmers can irrigate their crops all year around and increase productivity.

The site of the launch activity was at Rugandara irrigation site that is supported by Hinga Weze project and cultivated by Terimbere Muhinzi Cooperative in Murambi, Nyarugenge Sector.

The ten hectare Rugandara irrigation site launched the agricultural season by planting beans high in iron as a demonstration that the cooperative is shifting focus to high nutrient and high productivity crop.

She told farmers at Rungandara site to mobilize their fellow farmers about the planting season that was launched, so that no one misses the opportunity to plant on time for high yields.



David Kiiza, the Project Manager Hinga Weze at RDO overseeing agricultural projects in Bugesera underlined that the cooperative managing the site was selected to plant beans high in iron and will also become multipliers because they have been given good seeds and all the required inputs with the supervision of experts from the project. Kiiza advised farmers on how to improve their agricultural ventures and applauded how Terimbere Muhinzi Cooperative was undertaking to improve agriculture at the site.

He informed farmers that they stand to earn more than three-fold with the new bean variety they had been given to plant.

Augustine Manibaho, a farmer and member of the cooperative is very optimistic with the new bean variety and becoming a multiplier of beans.



Manibaho notes that he joined the cooperative six months ago and is already earning from the site. He says that the previous harvest was good because of the irrigation and plans to increase his cultivable land every time he can get an opportunity.

Kiiza explained that starting this season, RDO has embarked on a new approach to support farmers putting focus on consolidated land sites where farmers are provided with practical skills through demonstration plots and ensure they can ripe high yields.

HIIV prevention outreach target adolescent women in Eastern Province

To curb the spread of HIV/AIDS, Rwanda Development Organization (RDO) in collaboration with Gatsibo, Kayonza, Kirehe and Ngoma districts in the Eastern Province organized outreach activities targeting adolescent women on HIV prevention. The outreach activities focused and were intended to equip adolescent women with basic knowledge and skills for peer education on Sexual and Reproductive Health (SRH), HIV & Sexually Transmitted Infections (STIs), Gender Based Violence (GBV), life skills, psychosocial support, mentorship, social integration, resilience and positive parenting.

These adolescents and parents have been mobilized and sensitized on HIV prevention using peer education approach especially prevention of new infections. Have received enhanced life skills, psychosocial support, mentorship, social integration, resilience and positive parenting especially those having adolescent children.

The capacity of adolescent women and the community at large was improved on HIV prevention and control as well as HIV prevalence by preventing new infections among targeted communities.

Although trainings of peer educators in schools temporarily closed due to COVID-19 pandemic, targeted beneficiaries were reached through collaboration with local leaders (districts, sectors, cells and villages leaders) assisted by the project manager from RDO. 127 young women and adolescent girls aged between 14 - 24 years were mobilized and trained in this regard.



Outreach session targeting adolescent mothers peer educators in Kirehe District



Group discussion of Adolescent Women during Outreach activities in Ngoma district



Training of Adolescent girls peer educators in school in Gatsibo District

Table 1: HIV prevalence in Rwanda

Province	Population in 2012	HIV Prevalence
Rwanda	10,537,222	3 %
North	1,729,927	2.5 %
South	2,594,110	2.4 %
East	2,600,814	2.1 %
West	2,476,943	2.7%
Kigali City	1,135,428	7.3%

"We are were very happy and excited about the topics of training that are very crucial and useful for our life as teenagers, youth and future parents," said of the participants. They recommended that the same trainings should be given to parents for them to be able to educate their teen children.

Different officials representing different units such as Health, HIV prevention, Gender and Family promotion participated in these trainings and outreach activities in each of the targeted districts. Reports from the field indicated that the awareness strengthened capacity to mobilize, sensitize

and educate peers on sexual and reproductive health, HIV and STIs, GBV and life skills including basic skills in entrepreneurship; psychosocial support; mentorship; social integration and resilience, and more especially equipped them with positive parenting knowledge and skills.



AGACIRO KANJYE

For interactive youth education, IEC materials developed and printed for youth in and out of school was disseminated. 107 booklets titled 'AGACIRO KANJYE' were distributed in Gatsibo, Kirehe and Ngoma to youth in and out of school during outreach activities targeting mostly young women and adolescent girls peer educators on sexual and reproductive health and life skills. The dissemination was also done through the supervision of HIV activities at provincial level.

RDO supervised HIV activities in the targeted districts of the Eastern Province through formal and informal meetings conducted at district and sector levels. During the supervision, it was noted that different stakeholders and partners were involved in HIV related activities particularly prevention and promotion of access to HIV related services by all in general especially young women and adolescent girls including adolescent mothers. Local leaders are actively involved in addressing issues affecting adolescent mothers namely family and community reintegration, school reintegration, GBV, paternity of their children, etc.

The project recorded successful execution during this period thanks to the good collaboration with different partners and stakeholders including local leaders, districts health and education units, health facilities, Youth clubs and Councils, schools, Women Councils, Rwanda



Investigation Board (RIB) and Isange Stop Center.

Although no major constraints were encountered throughout the execution of quarterly activities, adolescent mothers revealed the main causes of their unwanted pregnancies and premature motherhood as sexual violence and rape, ignorance or limited education on sexual and reproductive health, peer pressure and influence, poverty and some negative societal norms among others.

Family and community harassments, rejection and violence are among other issues they faced. Many of the adolescent mothers also face shelter, psychosocial problems, food and nutrition security issues and are psychosocially affected and are in need of justice, counseling, psychosocial support and mentorship for social rehabilitation and reintegration.

The project has drawn some recommendations in light of the experiences found on ground like promoting, support and strengthening of positive parenting, family dialogue, sexual and reproductive health education at family level to prevent unwanted pregnancies, premature motherhood, HIV & STIs and other blood borne diseases.

Planning sensitization campaigns for parents and families to raise awareness, strengthen their capacity to discuss related issues have been also recommended. Socio-economic support programs for adolescent mothers to address issues related to poverty, education and schooling, shelter, food and nutrition security for their full social rehabilitation and integration are required to be put in place.

Protecting River Muvumba for sustainable agriculture intensification

Kagitumba-Muvumba valley has had environmental protection issues, the lower end of the valley that falls into Musheri and Matimba sectors in Nyagatare District often experience flooding and erosion downstream. These challenges called for interventions to hold back the overflowing of rain water that cause flooding and erosion.

Rwanda Development Organization (RDO) in partnership with Rwanda Governance Board (RGB) developed responses to check on the land degradation and soil erosion that has

long been generally recognized as a major problem in the country and particularly in this valley.

Although environmental protection and sustainable use of natural resources endeavours were previously made through protecting the hills surrounding this valley, they were not adequate. This called for more work to attain and sustain full protection of the irrigation infrastructure built by government at a tune of Rwf 7 billion covering 400 ha in the Kagitumba-Muvumba valley.

Beneficiaries were mobilised on their role and all the activities to be undertaken like tree planting and other soil erosion control technics while excavation of dam sheet will continue to take place during

seedlings to be planted on the

adjacent hills.

Umuganda activities.

Mobilization meetings conducted informed beneficiaries about the project, its goals and objectives, giving them a detailed description of each activity, underlining activities which require their contribution like digging for the damsheet placement to which many welcomed.

Beneficiaries became optimistic about reducing soil erosion in their fields as the runoff water from the hills of Kiyovu and Kabeza that will no longer damage their crops. During the first three mobilization meetings, an average of 420 people attended; 250 women and 170 men. Recently, the last 3 mobilization meeting, a total of 340 people attended: 180 women and 160 men. The forestry and agroforestry trees raised in Cyembogo included 150,000 eucalyptus seedlings and species like Grevillea (30,000), Caliandra (10,000) and 10,000 seedlings for Leucaena and Tephrosia.

This project has also created jobs for the people who were working in the nursery and gained money to earn a living. They will be ready for planting in the end of February. The potting and planting activities were both done by the beneficiaries. They



Mobilization meeting after contour digging activities on KIYOVU and KABEZA hills overlooking KAGITUMBA irrigation scheme

The focus area of the RDO project is Cyembogo cell of Matimba Sector which has four Villages with three huge hills namely; Kabeza Hill with 55Ha, Kiyovu Hill with 65Ha and Byimana Hill with 50Ha. In a previous RDO project erosion was effectively fought on Byimana Hill. Kabeza and Kiyovu located around Kagitumba irrigation schemes are the main sources of floods of the irrigation schemes as well as the sedimentation of Umuvumba River

during the rain Seasons. Efforts have been systemically made to reduce the floods by introducing draining channels around the irrigation schemes as a tentative solution, but a lot needs to be done to halt the runoff water from the hills.

RDO successfully mobilised residents and farmers in Matimba Sector as well as established nursery beds for both forestry and agroforestry totalling to 200,000

were eager to learn how to do a nursery bed from the potting activity to the planting.

The sloppy hills of Kiyovu and Kabeza villages which adjacent to the irrigation scheme have been covered with anti- erosive measures. Contours and canals were dug on these steep hills with almost 2000 contours that are 15m long and 40cm wide. Fodder grass like penicetum will be planted along the canals.

Discussions were held to explain to the beneficiaries how the canals and the contours are dug so that they



Mobilization meeting in Cyembogo



Laying off the damsheet

can reduce the runoff water intensity across the hills and beneficiaries also suggested areas that are more prone to heavy run-off water.

A damsheet with capacity of 250m3 to collect run off water coming from Kiyovu and Kabeza villages was installed and fenced for safety and security, it came with petrol engine for pumping water, a flexible suction pipe with inside wire and a layflat pipe for delivery. The water in the dam sheet will also irrigate the surrounding field of farmers.

RDO continued calls for accelerated efforts to mobilise the population to protect these catchment areas by holding back the overflowing rain water that cause flooding and erosion downstream and support plant trees as well as other protective measures on the irrigated site through establishment of water retention canals around the site and planting of trees and sensitization of beneficiary members in the scheme.



Raising awareness on Fall Army Worm control

To create awareness of the deadly Fall Army Worm (FAW) pest attacking maize, increasing farmer's knowledge on its potential effects on yield is fundamental. Rwanda Development Organisation (RDO) through Hinga Weze in Ngoma District and other partners organized a three-day awareness campaign.

The campaign was conducted from 16 to 19 November 2020 on three consolidated sites in Ngoma in the sectors of Rukumberi, Mugesera and Rukira. The FAW control campaign was organized to raise awareness, coach farmers in control of pests and disease but specifically the FAW.

David Kiiza, the Provincial Manager of Hinga Weze Activity at RDO said, "Increasing farmer's knowledge was intended to boost production, quality of farm produce and its impacts to household and national economy. This was also to teach the adoption of pest and diseases management techniques as well as reduce effects of FAW to maize cultivation in Hinga Weze Districts of intervention."

Farmers need the knowledge about the early warnings of the pest markings before it multiplies and RDO moved rapidly to work with stakeholders on ground and farmers to combat FAW to reduce its destruction of yields.

The campaign also helped increase collaboration with local authorities in mobilization which will ultimately lead to better production with high quality







produce. Hinga weze office in Ngoma organized the events with Ngoma District officials, Rwanda Agriculture Board (RAB), lead farmers and the cooperatives that were more affected than others. During the campaign, Hinga Weze provided pesticides (lambdex), training materials/guide and transportation of the district team as well as mobilized farmers. Farmers were trained on dilution of Pesticides (dosage) and frequency of spraying, identification of FAW in the field and when to start spraying pesticides. They were also linked to input sellers in their proximity.

On the first day of the campaign conducted in Rukumberi sector, the teams worked on consolidated site of 300ha attendance of 52 famers, the District Agronomist, sector Agronomist and RAB staff.

The second day in Inunga village in Mugesera it attracted 60 farmers at 200ha land operated by one of the cooperative in the area. The final day of the campaign was conducted in Rukira, Ruhama site with 230ha, was attended by 85 farmers together with the Executive Secretory of Rukira sector, Director of Agriculture Ngoma district, Sector Agronomists, other staff from RAB and Hinga Weze

According to Kiiza, generally the campaign was done well, farmers' participation was good, which trigered the mind of the farmers to continue the excerise of controlling Amy warm also the caimpaign was really necessary to raise a wareness on farmers to start buying chemicals to control the pest as most of them were waiting for RAB and other partners to buy pestcides for them which left their fields much exposed to the pests.

In the bid to increase production and productivity, RDO through Hinga Weze works with farmers in their farming activities to promote different techniques including land husbandly, Crop management, pest and diseases management and Post-Harvest handling techniques among others.

RDO distribute plastic water tanks to improve livelihoods

Rwanda Development Organisation (RDO) distributed 44 plastic water tanks to households in Rukomo and Rwimiyaga sectors of Nyagatare District. The beneficiaries included 25 female-headed households, 18 male-headed households and one child-headed household.

The plastic water tanks will serve to harvest rain water from roof-tops of the beneficiaries' houses and be used to irrigate vegetable gardens in their households.

The distributed plastic water tanks have capacity to store 5,000 litres which quantity is enough to irrigate at least a 10*10 m mulched vegetable garden throughout the dry season. This activity is ongoing where beneficiaries will continue to benefit water tanks.



To protect the villagers of Isangano, Nyendo Cell in Rwimiyaga Sector against runoff water from the village that often destroyed their fields, a damsheet was built that will also be used to collect water for the community.

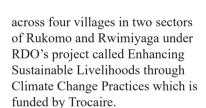
The damsheet with 250 m3 capacity is intended to harvest run- off water which will be used to irrigate high value crops mostly vegetables like onions, spinach and beetroots on the adjacent fields to the damsheet.

The Head of Isangano village expressed joy that this runoff water which would cause erosion in the fields will now be collected to the benefit of the community.

These activities were conducted







The project aims at empowering partner communities especially the vulnerable to improve their human capital, achieve food and nutrition security, and establish market linkages in a sustainable natural environment. Among activities includes the distribution of plastic water tanks, underground water tanks and Damsheets for rainwater harvesting, distribution of fruit and vegetable seeds, establishment of kitchen gardens and nutrientrich seeds as well as supporting communities in off-farm income generating activities and supporting them with start-up capital.











