

HORTINVEST PROJECT

SNV SUPPORTS POVERTY REDUCTION AND NUTRITION IMPROVEMENT THROUGH HORTICULTURE

Investing in Horticulture Development in Rwanda project (HortInvest) is working towards strengthening fruit and vegetable value chains (including potato) from production to consumption in Rwanda, targeting six districts of Karongi, Muhanga, Ngororero, Nyabihu, Rubavu, and Rutsiro where it aims to benefit 44,000 farmers.

Funded by the Embassy of the Kingdom of the Netherlands (EKN) in Kigali, HortInvest supports the mission of the Rwanda National Horticulture Policy to accelerate economic growth and to rapidly reduce poverty and malnutrition in Rwanda.

It is implemented by a consortium of five organisations; The Sustainable Trade Initiative (IDH), Wageningen University and Research (WUR), Agriterro, Holland Greentech (HGT), and Netherlands Development Organization (SNV) as the lead consortium.

The project is supporting horticulture development in Rwanda through four main impact areas; improving market-led fruit and vegetable value chains for domestic and regional markets, enhancing food and nutrition security of households with fruits and vegetables, developing supply chain for export of high value fruits and vegetables, and

creating an enabling environment for commercial horticulture sector development.

In the implementation of these activities, HortInvest stimulates the inclusion of farmers, cooperatives and companies in fruit and vegetables value chains that target domestic and export markets.

Over the last 3 years, the project has benefited more than a hundred cooperatives and thousands of farmers in the 6 districts, directly working with more than 30 SMEs involved in horticulture through its grants and advisory support. To increase availability of fruits and vegetables to poorer households, more than 500 kitchen gardens have been successfully established in the program districts. Also, the project has created numerous inspiring examples of success in terms of increasing productivity and income of farmers.

Specifically, these are about introducing innovative practices among SMEs and increasing the quality and diversity of exportable horticulture products.

These are some of the exciting stories created by HortInvest's work in Rwanda. And are representative of more such cases across the six districts:





Stanislaus harvesting pineapple at his farm

STORY OF STANISLAUS: PINEAPPLE FARMER AND PRESIDENT OF HUMU COOPERATIVE FROM RUTSIRO

"Pineapple farming brings me great delight. I spend a good part of my weekdays in the field harvesting, weeding, watering or covering soil. Not only does it add nutritional value to my diet, but it has also earned me income and has improved my standards of living.

As a cooperative, HortInvest came as a blessing to realise the goals that we were trying to achieve. We have a vision to modernise pineapple farming and access to better markets. It made me extremely

happy.

With improved skills and knowledge about pineapple farming, we are optimistic that we will attract many more partners. As a cooperative, we also aspire to acquiring own juice-processing plant, and we believe with hard this is achievable.

Ever since we started working with HortInvest things have much improved. I am confident and hopeful for a better future".

STORY OF JULIENNE: VEGETABLE FARMER FROM MUHANGA

Being a member of a local cooperative called IABM in my district of Muhanga has significantly helped me especially when it comes to market access for my produce.

Through our cooperative and HortInvest, I have gained a wealth of knowledge and skills about vegetable farming. We have been able to learn and incorporate crop diversification techniques, and introduced to modern vegetable farming.

I grow a variety of vegetables such as yellow and red pepper, cauliflower, broccoli and cucumber that I was not familiar with before. I was amazed to be able to earn an income three times higher than I previously earned."



Julienne in her vegetables shed net



Trial field of Koabunya cooperative in Rutsiro

PROMOTION OF HIGH-QUALITY STRAWBERRY VARIETIES IN RWANDA

HortInvest partnered with FlevoBerry, a Dutch strawberry breeding company to introduce two new varieties of strawberry (Bravura and Furore) for the first time in Rwanda. In February 2020, a total of 5,000 plantlets were distributed to two cooperatives; KOABUNYA and CODFM in districts of Rutsiro and Muhanga respectively.

The cooperatives established trial fields for the varieties and members of the cooperatives received trainings through a Dutch strawberry expert and RAB extension officers on strawberry cultivation, production and post-harvest handling.

The two varieties gave bigger and sweeter products compared to traditional ones and productivity was comparatively higher as well.

Since the introduction of the two varieties, the two cooperatives have received more orders from supermarkets, hotels, bakeries, and individual customers.

Currently, the cooperatives are selling 1 kilogram of strawberries at 2,000 FRW and the buyers directly visit the farm to purchase the produce due to high demand.



Florence in front of her kitchen garden

STORY OF FLORENCE: KITCHEN GARDEN

“Kitchen garden provided me with a great opportunity to have a year-round production of different vegetables. Only during rainy seasons when dodo had grown in the compound that the family ate vegetables. compound that I and my family could eat vegetables.

After being trained by HortInvest project on how to establish and maintain kitchen gardens for a year-round, vegetable production has changed my family's eating habits of the better.

Eating vegetables is no longer an opportunity brought by rains but the greens are available to be added on our diet even during the dry season.

Also, having vegetables like dodo on a meal was an improvised alternative during food shortage period of the year and could cease immediately when

harvest time set. That is when there are enough beans, Irish potatoes and other staple food crops.

Ever since I received training through HortInvest project on the importance of vegetable consumption particularly for women of Reproductive Age and Children, I now know that fruits and vegetables make a balanced diet when eaten complementing staples and animal food sources.

That has changed my family's eating pattern, in a way that in almost every prepared meal I include vegetables.

HortInvest also brought to us other type of vegetables called swiss chard that are more nutritious, and are resistant to droughts. It is worthy to have a kitchen garden as they do not need much space and are easy to maintain”

INVESTMENT AND INNOVATION FUND (IIF)

The Investment and Innovation Fund (IIF) is an important instrument of HortInvest in attracting private sector investment and promotion of innovations in the production and marketing of vegetables.

Here, HortInvest works with private companies to develop business cases that support farmers to overcome the challenges they face to access markets, increase production, improve food safety, and reduce post-harvest losses.

HortInvest leverages private sector investments by co-investing up to 50% of the necessary costs in those business cases. It also supports innovation projects that with time could result in new business cases that support inclusive horticulture sector development in Rwanda.

The project has so far supported 19 agribusiness companies.

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of the necessary costs in those business cases.



MD of Garden Fresh LTD, Aimable GAKIRAGE at NAEB Pack house

EXAMPLES OF BUSINESS CASE SUPPORTED BY HORTINVEST: GARDEN FRESH

Garden Fresh is one of few Rwandan companies, which have obtained Global GAP and SMETA/ETI certifications. The company is providing its customers with safe, reliable and quality products.

Garden Fresh specializes in the export of fresh produce from Rwanda including vegetables and fruits into the European markets, it manages own farms and works with a network of more than 600 out growers to deliver safe and nutritious produce to high end markets in the Netherlands and UK.

The company exports on average 20 MT of fruits and vegetables per week with its main products being French beans, Tender stem broccoli, passion fruits, baby corn, chili, and avocados.

HortInvest partnered with Garden fresh in 2019 to increase production volumes, quality of export products and engage with the out-grower farmers in HortInvest target districts.

“Garden Fresh project with HortInvest has been a success story. Sales value increased from Euro 1,200,000 in 2018 to Euro 2,000,000 in 2019 and volumes from 385 MT to 665 MT during this period. We have been able to invest in infrastructure development such as irrigation and mechanization equipment and our own pack house,” says Aimable Gakirage, the Managing Director of Garden Fresh

HORTINVEST IN PROMOTING INNOVATION: STORY OF CHRISTIAN IRAKOZE, THE CO-FOUNDER OF EZA NEZA

Christian is a 27-year old Rwandan agripreneur with a background in IT & business development.

Soon after he graduated from a University in United States in 2015, he moved back to Rwanda in order to explore opportunities in his homeland. It wasn't long before he realized that the same growth and innovations, he had been witnessing in the tech space in the US was lacking in the Rwandan Agricultural sector.

He therefore decided to cofound Eza Neza Company which specializes in greenhouse and hydroponic technologies. The advantage of this technology is that; it uses up to 90% less water, 80% less space brings better climate resilience thus reducing the risk of loss due to draught and flood.

"I got an amazing opportunity to work with HortInvest project and thanks to the partnership with HortInvest, I have now been able to establish a commercial hydroponics and a vertical farm in Muhanga District and I am expecting production worth 50 Million Rwandan Francs from sweet paper, straw berry and tomatoes on just 900sqM of space over the next one year and we are likely to break even with the next two years," Says Mr. Irakoze.

Eza Neza is also contributing to national employment program as it employs both casual workers and long-term workers. "We have so far provided short-term employment to 20 people and employed 5 on a long-term basis, and we are planning to increase the number of workers both for short term and long-term employment in the near future," he adds.

Christian Irakoze's hydroponic farm in Muhanga



A selling point at Crette Congo Nil, Rutsiro



SELLING POINTS FOR FRUITS AND VEGETABLES

HortInvest Project in partnership with the 6 districts of project area has invested in construction of selling points to increase the commercialization and consumption of fruits and vegetables at local markets.

Access to market infrastructure is aligned with the local governments' priorities to set up fruits and vegetables selling points for the local products. This is expected to increase the volume of sales and farmers' income as well as affording them a nutritious and balanced diet.

Access to the market will strengthen producers' voice and negotiation power whereas young males and females from farmers' cooperatives are given priorities in the marketplace.



AGRA SUPPORTS CREATION OF A VIBRANT SEED SYSTEM IN RWANDA



To this end, in Rwanda, since 2018, AGRA has invested USD 10.8 Million in availing in creating a functional and strong seed system.

AGRA EXISTS TO FULFILL THE VISION THAT AFRICA CAN FEED ITSELF AND THE WORLD, TRANSFORMING AGRICULTURE FROM A SOLITARY STRUGGLE TO SURVIVE TO A BUSINESS THAT THRIVES.

Agriculture is the economic mainstay of the majority of households in Rwanda and makes a significant contribution to the Rwanda's economy. It accounts for approximately 30% of the GDP and is the biggest employer.

In all development blueprints, agriculture is billed to play a significant role to the structural transformation of the economy, contributing to economic growth, exports, job creation, increased land and labour productivity.

However, the sector is still developing in most of all aspects including its seed system and product market. Yet, the national ambition is to shift agriculture from its current predominantly subsistence nature to a market-led sector.

The seed system and product market is one of those critical factors still developing for sustainability to support sector transformation that has to be private sector led as envisioned in The Strategic Plan for Agriculture Transformation 4 (PSTA 4).

Thanks to the fact that AGRA approach in Rwanda centers on investing technical and financial resources to create a functional and strong seed system in Rwanda and extension services to raise farmer

awareness on use of improved seeds.

Founded in 2006, AGRA is a farmer-centered, African-led, partnerships-driven institution that is working to transforming smallholder farming from a solitary struggle to survive to a business that thrives.

It aspires to modernize agriculture sector on the African continent by mainly making it market-driven and a data-based sector which will play an important role in the development of the countries on the continent, Rwanda inclusive.

This way, AGRA is committed to catalyze the economic development, wealth creation, hunger reduction and nutrition through inclusive agriculture transformation. And, its goals are aligned very well with Strategic Development Goals, Malabo Declaration, African Agenda 2063, and fall under Rwanda priorities to transform agriculture as stated in PSTA4.

AGRA INVESTS IN CREATING A SEED SYSTEM IN RWANDA

To this end, in Rwanda, since 2018, AGRA has invested USD 10.8 Million in availing in creating a functional and strong seed system. With this investment, 463,500

farmers reached out of which 239,0055 farmers have adopted skills in Yield-Raising Technologies 11 705 MT Blended Fertilisers have been processed and sold by local blenders and 4513.6 MT Certified hybrid maize, bean, potato and Soya bean Seeds have been produced and proceed Locally.

AGRA roots for a vibrant and functional seed system because of its significant role among other intervening factors in the transformation of agriculture. High quality seed of improved varieties is frequently the central carrier for new technology to be applied in crop production for agricultural development.

It is also the basic tool for a secure food supply, income, nutrition as it helps obtaining acceptable crop yields in even less favourable production area. And, this is very appropriate to Rwanda where agricultural land is limited due to high population pressure and historical neglect of good agricultural practices such as terracing and proper marshland management by past governments.

AGRA IN CAPACITY BUILDING FOR A FUNCTIONAL SEED SYSTEM IN RWANDA

Interventions in components of seed system has seen 37 researchers trained at postgraduate level in key



different breeding programs at Rwanda Agricultural and Animal Resources development board (RAB).

Of the 37 trained scientists, 29 are Master of Science graduates while 8 were trained at PhD level. These trainings have radically changed the seed sector in Rwanda by creating a pool of local researchers that has to date participated in the development of 47 varieties of different seed crops, among them maize, beans, soybeans, Irish potatoes, sweet potatoes, bananas and more.

Most of these varieties are under production and some such as high on iron beans are boosting national programmes to promote better nutrition feeding in the smallholder farming community.

Rwanda that has been until recently a net importer of hybrid maize, soybeans and wheat seeds. For the first time in history, from season B 2020 the country is now self-sufficient in maize hybrid seed which have substituted importation from region, and kept surplus for next season.

Thanks to AGRA work, complementing the unwavering commitment of the Rwanda Government, in particular, MINAGRI for creating and sustaining an enabling environment to do business in agriculture. To date there are 38 varieties of hybrid maize, beans, soybeans and Irish potatoes, candidates for release in 2020 and 2021.

In the last 10 years, AGRA has also supported RAB in 19 research projects valued at USD 4.58 Million, 6 of which valued at USD 1.18 Million are ongoing with 1 of them focused on reinforcing seed companies in seed technology and good agricultural practices.

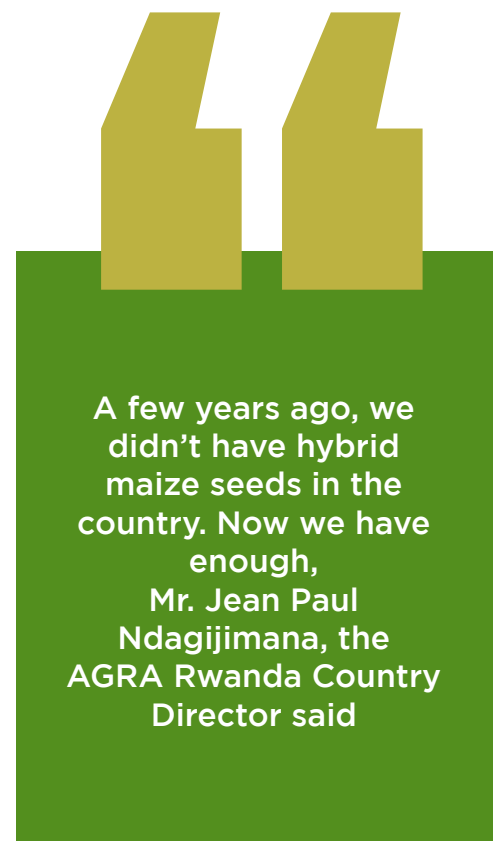
Thus, by creating a pool of researchers, among other interventions, AGRA is making a big sustainable and strategic response to the ills that traditionally inhibited the country's desire to develop sustainable seed breeding programmes.

Mr. Jean Paul Ndagijimana, the AGRA Rwanda Country Director sums it up:

"A few years ago, we didn't have hybrid maize seeds in the country produced locally. Now we have enough." And, RAB Deputy Director General Dr. Bucagu Charles expounds on the importance for this impressive development in Rwanda's agriculture sector saying the advantage of applying hybrid seed is 'that we know the parents of the breed and we are sure that the production will be huge.'

SUPPORT PRIVATE SECTOR LED SEED PRODUCTION

Rwanda's agenda to transform its agriculture is billed to private sector driven with government enacting policies to create an enabling environment. This, among other things explains AGRA's interest of building a vibrant seed sector.



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Mr. Jean Paul Ndagijimana, the AGRA Rwanda Country Director said**