

# HORTINVEST PROJECT

---

## IMPACT REPORT Life Changing Stories

---

2018-2022



# TABLE OF CONTENTS

Acknowledgements	-----	1
Project Summary	-----	2
1. Business Impact		
1.1 Christian Irakoze, CEO Eza Neza	-----	4
1.2 Emmanuel Mporwiki, MD COOPEDUSH	-----	5
1.3 Rachel Uwayo, Founder and MD, Nezerwa Plus Ltd	-----	6
1.4 Enode Nduwayezu, CEO ZEAN	-----	7
1.5 Jean d'Amour Ntamabyariro, President IABM	-----	8
1.6 Ntanezayino Jean Bosco, Supplier ZEAN	-----	9
1.7 Holland Greentech, Partner	-----	10
1.8 Mvuyekure Celestin, President, Kigali farms Nyabihu Site	-----	11
1.9 Ayinkamiye Marie Chantal, Member Kigali Farms	-----	12
2. GAP Adaptation		
2.1 Samson Kubwimana, President icyerekezo Farmer Group	-----	13
2.2 Christine Sinibagiwe, KOKUMUJE	-----	14
2.3 Irene Nyirabarigira, CODFEM Cooperative	-----	15
2.4 Mujawamariya Therese, Farmer	-----	16
2.5 Munyakazi Bonaventure, KAIDU Cooperative/INSHUTI	-----	17
2.6 Ndungutse Emmanuel, Farmer	-----	18
2.7 Uwamariya Jeanne d'Arc, Farmer	-----	19
2.8 Uwokunda Julienne, Farmer	-----	20
2.9 Eugenie Uwamwezi, Farmer	-----	21
2.10 Beatrice Tuyisenge, Farmer	-----	22
2.11 Nyiramatabaro Consolee, KOGIMUIN	-----	23
2.12 Mukashyaka Therese, TUZAMURANE	-----	24
2.13 Mukamunyana Faila Francine, Farmer	-----	25
2.14 Nyiransabima Angelique, Farmer	-----	26
2.15 Safari Faustin, Farmer	-----	27
2.16 Felicien Sebahire, Farmer	-----	28
2.17 Emmanuel Munyedamutsa, KOAISO	-----	29
2.18 Bagoramenshi Clement, Farmer	-----	30
2.19 Alphonse Ndagijimana, Farmer	-----	31
2.20 Jonathan Bizimana, Farmer	-----	32
2.21 Enock Hitimana, Farmer	-----	33

# TABLE OF CONTENTS

2.22 Marishekomme Bernard, Farmer	34
2.23 Uwayisaba Gilbert, IABM	35
2.24 Beatha Mukankusi, Founder and MD, Farmer	36
2.25 Sekibibi Jean Damascene, Farmer	37
<b>3. Impact on Cooperatives</b>	
3.1 KTB Cooperative	38
3.2 TUBUSEZERERE	39
3.3 Constance, KOHAMA	40
3.4 Ndagijimana, Umurimo w'Umwuga	41
3.5 FlevoBerry, KOABUNYA	42
3.6 UMURIMO W'UMWUGA	43
3.7 Angelique Umutoni , KAIDU	44
3.8 Beatha, HUMU	45
<b>4. Nutrition</b>	
4.1 Mutuyimana Nadine, Bubazi Health Center	46
4.2 BINOME/ASM	47
4.3 Scholastique Ngizwenayo, Farmer	48
4.4 Pierre Celestin Mahane, Farmer	49
4.5 Muhorakeye Clementine, Farmer	50
4.6 Nyirakanyana Antoinette, Farmer	51
4.7 Providence Nyiransengimana, Farmer	52
4.8 Uwimbabazi Claudine, Farmer	53
4.9 Uwayezu Pascal, Farmer	54
4.10 HortInvest Fruit Tree Project, Nutrition Action Groups	55
<b>5. Impact on Export</b>	
5.1 Best in Rwanda Group (BRG), Nzuri Beans	56
5.2 IABM - HortInvest - Garden Fresh , Export Partnership	57
5.3 KOTEMII, Export	58
5.4 UMURIMO W'UMWUGA, Export	59
<b>6. Enabling Environment</b>	
6.1 Angelique Umutoni , Trainee - Financial Literacy & Record Keeping	60
6.2 Mukabaziga Victoire, SPEM committee	61
6.3 Gabriel Habimana, SPEM committee	62
6.4 Emmanuel, KAIDU	63

## ACKNOWLEDGEMENTS

Investing in Horticultural Development in Rwanda Project, known as HortInvest is a pioneer horticulture value chain development project in Rwanda which aimed to contribute to sustainable poverty reduction in the six districts of Western Rwanda through increased production and marketing of fruits and vegetables. It was implemented by SNV as a lead together with Sustainable Trade Initiative IDH, Wageningen University and Research (WUR), Agriterra and Holland Greentech. The five-year project (December 2017 – December 2022) was funded by the Embassy of the Kingdom of Netherlands. The project worked with the farmers, cooperatives, small and medium entrepreneurs and the Government of Rwanda both at the national and local levels.

Through these ‘changing lives’ stories, we have attempted to highlight information on the project’s interventions and how people have succeeded. These stories were collected by HortInvest staff through their insights gained from field observations, multiple meetings with beneficiaries and impact assessments. All facts and figures mentioned in the document have been validated by the project’s monitoring and result measurement unit.

Our thanks to the staff who have contributed to these stories, namely, Phocas Agaba Gahamanyi, Anathalie Ingabire, Josiane Kamariza, Christian Kayonga, Isaie Mvuyekure, Dativa Niyomufasha, Venuste Nsamiryayo, Desire Rimenyande, Emmanuel Ruzindana Shyaka, Seraphine Twikirize, Seraphine Uzamushaka, Therese Uwamahoro, Eric Ruzigamanzi, Assumpta Uzamukunda, Janvier Ahimanishyize, Daniel Sahinkuye, Edith Uwamahoro, Albert Rukebesha, Nadege Muhorakeye, Nicole Ihirwe, Polycarpe Nshimirimana, Joseph Rwabuneza and Sylvie Nirere.

Our thanks to Eleanor Hartzell, SNV Country Director for encouraging us to publish this compilation of case stories and Rik van Keulen, Simone van Vugt, Monique Beun and Edwin van der Maden for their guidance in preparing this storybook. We appreciate the tireless effort of Etienne Ndayambaje, HortInvest Monitoring and Evaluation Advisor who coordinated with team members while preparing and finalising these stories. Our special thanks go to Illume communications team Dominique Alonga and Joan Mazimhaka for undertaking the challenging task of shaping the stories in a short one-pager format and preparing the layout design.

We are grateful to all the participants featured in this booklet who accepted to share their testimonies and gave consent to the collection and publication of these stories.

We hope that the readers will find it interesting and useful in utilising the learnings of HortInvest Project in their projects and organisations.



GB Banjara

Project Manager, HortInvest

20/12/2022

---

© SNV Rwanda, 2022

For more information on the HortInvest Project or any other programmes please contact us:

Email: [rwanda@snv.org](mailto:rwanda@snv.org)

Website: [www.snv.org](http://www.snv.org) | [www.hortinvest.org](http://www.hortinvest.org)

# HORTINVEST PROJECT



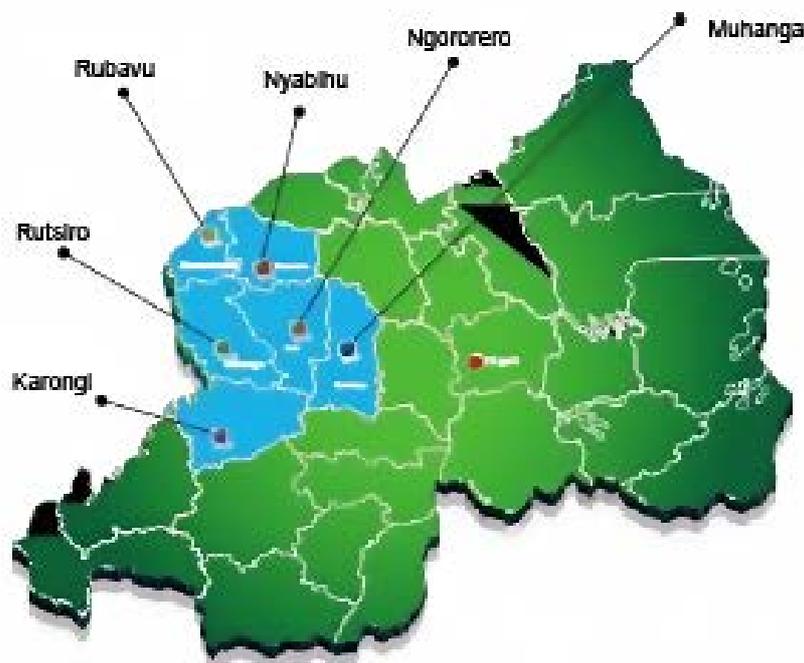
## Key HortInvest Impact figures

- 45,000 farmers have directly benefitted from HortInvest project by increasing yield and income
- 49% HortInvest beneficiaries were women, 19 % are youth
- 50 SMEs benefitted, of which 21 received Investment and Innovation Funding
- 4 Horticulture export companies were trained and equipped to strengthen the link to international markets
- 22,881 Food insecure people received nutritional support

## What is HortInvest Project?

Investing in Horticultural Development in Rwanda, 'HortInvest' strengthens value chains for the benefit of farmers, SMEs and people who are food insecure. It is funded by the Embassy of the Kingdom of The Netherlands in Rwanda, in line with the values and goals of the Rwandan Horticulture Policy - fast economic growth and rapid reduction in poverty and malnutrition in Rwanda, through development of the horticulture sector.

From December 2017 - December 2022, the project has focused its activities in six western districts: Muhanga, Karongi, Rutsiro, Rubavu, Nyabihu and Ngororero. This project is implemented by SNV (lead partner), Sustainable Trade Initiative IDH, Wageningen University and research (WUR), Agriterra and Holland Greentech. The project budget is Eur 16.5 million.





## What We Do

The HortInvest project focuses on supporting horticulture growers, their producer organisations and private sector partners. Overall HortInvest aimed to benefit 44,000 smallholder farmers and over 30 SMEs through strategic interventions:



## Key Achievements

By November 2022, HortInvest had benefitted 45,000 small and medium scale horticultural farmers in Rwanda for sustainable and climate resilient productivity and improved incomes.

49 percent of beneficiaries were women and 19 % were youth (under 30).

352 horticultural co-operatives and farmer groups were strengthened to support local farmers in the six districts.

50 SME companies in the Horticulture sector have benefitted from HortInvest. 21 were recipients of the Investment and Innovation Fund (IIF) allowing them to expand their businesses. IIF is a powerful tool to mobilize private sector investment and promote vital innovations in horticultural practice.

HortInvest is actively engaged in facilitating the export of Horticulture products to European and Middle Eastern markets from Rwanda. Currently, four exporting companies (Garden Fresh, Proxy Fresh, Best in Rwanda and Virunga biotech) are engaged in HortInvest's IIF window. They received capacity building (e.g., technical and managerial training, introduction of improved production, packhouse development and certification) and market engagement support.



### ***Strawberry production in Eza Neza***

Over 21,881 food-insecure people received nutritional support, activities and 1.29 million people were reached through an urban consumer campaign for consumption of fruits and vegetables in the six districts.

HortInvest has worked closely with the national government and district mayors' offices to promote the horticulture sector in Rwanda. Specifically, HortInvest has supported the Government of Rwanda's pest products control strategy, and contributed to the Rwanda Horticulture Working Group (RHWG) and Rwanda Potato Sector Platform (RPSP), as well as district level horticulture platforms in Rubavu and Karongi district. In partnership with district GoR offices, HortInvest has also set up selling points in each of its working districts and washing centers which enable women traders to market their produce more easily.



***A women group managed selling point supported by HortInvest in Rutsiro***

**Christian Irakoze**  
CEO of Eza Neza

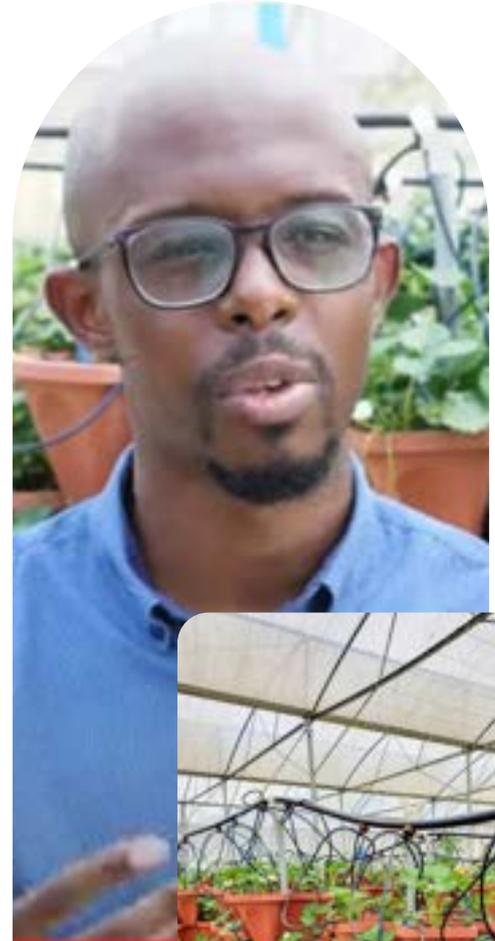
## **FROM NO AGRICULTURAL BACKGROUND, I AM NOW INTRODUCING NEW TECHNOLOGY TO THE COUNTRY**

Right after graduating from a university in the US, I started looking for opportunities in my country. I wished to advance my home nation with the knowledge and experience I had gained in the USA. I learned about HortInvest's project to invest in horticulture production through its investment and innovation fund. With my ICT background, I knew I had to come up with a concept that combined IT with agriculture, leading to the creation of Eza Neza, a business that cultivates plants in greenhouses using a hydroponic technology.

As I began in 2020, I was faced with a whole new set of challenges, given the fact that I had no agriculture background and I was introducing a new technology to the country. Without HortInvest's technical and advisory support, I would have failed. Luckily, I thrived and succeeded.

After trying several crops like peppers, tomatoes, and cherry tomatoes that yielded 25Kg, 30Kg, and 12Kg per square meter, I settled on strawberries because they gave much better yields. As a result, we have been harvesting 100Kg/week on 900 square meters since May 2021, earning 2,750 Euros each month. As part of our expansion plans, we plan on making it possible to harvest 300Kg/week in order to meet the everyday demand within the Kinshasa and Brazzaville markets.

This journey has been a success, as Eza Neza has gained visibility in Kigali city, where we supply most of our products. With an expansion plan of 1,000 sqm to 10,000 sqm, we will be able to grow and produce 300Kg of strawberries per square meter, meeting all the demand as our clients keep growing, from the domestic market to the regional market where Kinshasa and Brazzaville have expressed interest. Additionally, we are seeking GAP certification for future exports.



## **IMPACT SNAPSHOT**

**100Kg/week**

Production of strawberry crops

**2,750 Euros**

Earnings per month

## **INCREASED INCOME, A MODERN FACTORY, AND A GROWING TEAM**

My partners and I wanted to become entrepreneurs since we were university students. So in 2007, we decided to grow passion fruits as a way of starting our own business.

We sold passion fruits to different markets of Kigali but experienced losses as there weren't many buyers. Our produce often rotted so we attended a few training courses to sharpen our skills and better our work. We came to the conclusion that using blenders and other low-cost machinery to manufacture and sell passion juice was the best course of action. We quickly started to grow and sought opportunities to expand our business.

In 2018, through Agriterra, we were introduced to the HortInvest/SNV opportunity of investing in horticultural cooperatives. With the investment, our processing capacity rose from 1200L to 2760L per month as a result of the cooperative's acquisition of a new facility and equipment. Our clientele went from 9 to 47 selling points in just two years and our income went from 4000 Euros to 5000-9000 Euros. Coopedush started to supply passion juice to Goma/DRC, a new market opportunity we were eager to explore alongside the continued expansion across the country. We have built a modern factory, hired new employees, increased the quantity of processed juice, met all our demands and increased our income which guarantees the sustainability of our business.

In addition, we established farmer field schools in Karongi district and mobilized individual farmers into groups in order to train them on sound agricultural practice of passion fruits and buy their produce at a fair price (we went from 300 to 600 Rwf/Kg). The demand for passion fruits on the market increased which helps us support our farmers. Moving forward we plan to strengthen and expand our market linkages in the Goma region and all districts of Rwanda.



## **IMPACT SNAPSHOT**

**1,200-2,760 L/mo**

Increased processing capacity

**300 - 600 Rwf**

Increase in price value for product

**Rachel Uwayo**  
Nezerwa Plus Ltd, Founder and MD

## **HOPES OF SALES INCREASE BY AVAILING PRODUCTS ACROSS THE COUNTRY**

After serving for 12 years as the accountant for the Anglican church in Muhanga, Shyogwe Parish, I founded Nezerwa Plus Ltd. Although I've always wanted to process juice, I was unable to launch my business at the ideal time. Most of my children were in secondary school when I finally made the decision to start my business in May 2018. In February 2019, after registering our company with the Rwanda Development Board (RDB), we began processing 600L of passion and pineapple juice per month, equal to 40 boxes of 15L each. We weren't yet Safety Mark Certified (S-mark) at the time, making it difficult to market our items.

Our processing capacity was still limited due to a lack of equipment, and our sales started to decline due to Covid-19. Still, in 2020 we obtained the S-mark accreditation and began to sell our products in various supermarkets around the nation. We had the good fortune to get funding from the HortInvest project in August 2020, which transformed our company. With the help of the funding, we upgraded our processing machinery, bought a car for transporting, and connected to HortInvest cooperatives from where we obtained our fruit and vegetables (carrots and passion fruits). We processed 600L to 3,886L of passion juice, 3,791L of pineapple juice, 133L of carrot juice, and 323 packs of jam. Our sales and revenues increased from 600,000 Rwf to a 1.5 million Rwf/ month in 2021.

Through HortInvest, we were also able to train KOGIMUIN, KOAISO and Twitabirumurimo cooperatives on good agricultural practices. Our clientele grew to 145, who we supply regularly. Moving forward, we aim to increase our sales by availing our products across the country and expanding the factory to increase our processing capacity and sales up to 5 million Rwf per month in 2025. We are aware that all our achievements are attributed to HortInvest funding that came at a critical time when the pandemic had affected all businesses, including ours. Thank you, HortInvest project, for investing in our company.



## **IMPACT SNAPSHOT**

**600L to 3,886L**

Increased processing capacity

**600K to 1.5M**

Increase in sales per month

**Enode Nduwayezu**  
ZEAN, CEO

## **DEVELOPING A PLAN TO SELL OUR CHIPS IN NEW MARKETS**

Before working with the HortInvest project, I was an agribusiness owner supplying a variety of foods, primarily bananas and plantains, to the Musanze, Kigali, and Rubavu areas. After years of experience, I observed a significant problem with banana plantain wastage whenever we would not sell them. This is where the concept of processing banana plantain into banana bread and eventually into banana chips emerged. Banana bread only lasted five days before going bad. In contrast, banana chips can be stored for up to five months, so processing bananas into banana bread was not a successful and sustainable business idea. I had the opportunity to be chosen for the HortInvest project in 2019 and obtain the funds that launched the ZEAN factory. ZEAN was able to construct a cutting-edge processing facility with the help of the HortInvest fund. The company was also able to purchase processing machinery and acquire technical expertise from the Inkomoko group, including business development abilities.

ZEAN increased their earnings from processing 400 Kg of bananas into 600 Kg of banana chips, or 2,400,000 Rwf to 4,800,000 Rwf each month.

We are developing a marketing plan to enable us to sell our chips and explore new markets, like the local market in Goma, while also allowing us to apply for the global GAP certificate.



## **IMPACT SNAPSHOT**

**400 to 600 Kg**

Increased processing capacity

**2.4M to 4.8M Rwf**

Increase in sales

**Jean d'Amour Ntamabyariro**  
IABM, President

## **SIGNIFICANT REVENUE INCREASE DUE TO MARKET LINKAGE AND EXPORT**

I became a member of the IABM cooperative in 2007 before rising to the position of president. I thought it was a great opportunity for IABM to rotate maize with vegetables when it was chosen to be the HortInvest project beneficiary. It was surprising that IABM, which had 35 hectares of marshland and was well-known as a cooperative for growing maize, wasn't also engaged in the production of vegetables.

The HortInvest project has had many benefits, starting with connecting us to Garden Fresh, an exporter of French beans to Europe. Our members received training in GAP and financial literacy as a result of this market connection, and the cooperative also acquired a cold room facility, a new technology that advanced the cooperative to a higher business level as it is currently looking into new opportunities to rent the cold room to additional farmers in the area.

After being introduced to HortInvest prospects, we now produce 67.528T of vegetables with 20,250,400 Rwf in sales in 2021, up from our previous production of 12.213T worth 3,663,900 Rwf in 2019.

In addition to the growth in production and income, cooperative members benefited from training opportunities that made them more business-oriented. Many farmers have established successful farms using this cooperative framework. Their personal lives have changed, the IABM cooperative has gained prominence, and with the new cold room facilities, we look forward to exploring new business opportunities. Members are getting paid significantly from the market connection of the cooperative and export enterprise.



## **IMPACT SNAPSHOT**

**3.6M - 20.2M Rwf**

461% Increase in sales

## **I AM NOW A FARMER THAT CAN SUSTAIN HIS FAMILY**

I grew up growing a variety of crops in accordance with the seasons, but the primary crop produced in this area was the banana.

I was pleasantly surprised when I learned that a new factory will turn banana plantains into banana chips since that would solve the problem with our banana plantain market. I decided to attend training on good agricultural practice after Zean approached me and hired me as one of its suppliers. I put more focus on FHIA which produces more fruit than other varieties.

The first time, I sent ZEAN 400 kg of banana which they purchased for 150 rwf/kg. Since then, demand has grown, and now I give them 700 kg, which they are purchasing for 200 rwf/kg. I increased my 1kg sales to 200 rwf from 100 rwf. I am extremely grateful that ZEAN decided to construct the plant in our neighbourhood since it has given me access to a market for my goods, enabled me to cover my family's expenses and pay for my children's schooling. I now have a savings account because ZEAN pays us through a bank. I am able to put some money aside every month.



## **IMPACT SNAPSHOT**

**400 Kg - 700 Kg**

Growth in production

**100-200 Rwf**

Increase in per Kg sales

## **COOPERATIVES AND PRIVATE FARMERS ACHIEVED REMARKABLE PRODUCTION**

In order to raise farmers' earnings, expand the sector's relative contribution to the local economy, and enhance the food and nutrition security of the targeted households, the HortInvest initiative began by targeting 44,000 farmer households in six districts in North and West Rwanda. The Rwandan National Horticulture Policy implemented with the aid of HortInvest in order to boost economic growth quickly and combat hunger and poverty. As a consortium partner in the project, Holland Greentech (HGT) provided a full range of horticultural necessities, along with trainings and other related services known as agro-support.

Vegetable demonstration approaches have been introduced in the 6 districts with the goal of introducing different good agricultural practices, sharing knowledge, and availing the opportunity to access improved inputs and good markets for the produce. Since then, there have been about 18 new vegetable introduced, of which 4 were new crops in the districts; and vegetable hybrid varieties have a high degree of uniformity. All six districts have grown these new crops that were introduced.

Following the introduction of Good Agricultural Practices in vegetable production via a demonstration approach, we also introduced several vegetable types, nursery preparation and management, pest and disease management, and spacing.

As a result of the better inputs, Good Agricultural Practices' introduction along with agro support, vegetable producers from various cooperatives and private farmers achieved remarkable production. A few farmers spoke about an increased in revenue, and the significant improvement in their quality of life that came from introducing new varieties and putting what they had learned in training into practice.



## **IMPACT SNAPSHOT**

**18**

New varieties adopted

**Mvuyekure Celestin**  
President, Kigali farms Nyabihu Site

## **OYSTER MUSHROOMS OUTPERFORMED MY OTHER AGRICULTURAL VENTURES**

In September 2021, I began growing oyster mushrooms. Prior to that, I grew a variety of subsidiary crops for my household and the local farmer's market.

When the sector agronomist proposed that I join the Kigali farms farmer group, I agreed right away because of the advantages it would bring to my business.

It is a guarantee that you will profit in many ways from investing 105,000 Rwf in one grow house for three months of a full cycle, including financial gain, time savings, and the production of nutritious food.

I benefited much from my oyster mushroom farming. As opposed to other farmers who wait three to six months before harvesting and selling their produce, I can now get paid every other week, if not every other day, for people who have more than two grow houses.

Due to the geographic location of our growing village and potential customers from Goma in the DRC, the oyster mushroom market is guaranteed. In addition, it takes less time to water crops in the morning, requires no fertilizers despite the decrease in costs, requires no labor, and can be run concurrently with other businesses. Finally, you get to eat nutrient-rich food that is high in proteins for free.

I currently own three grow houses, and despite any changes in tube pricing, I intend to keep producing oyster mushrooms because it outperforms other agricultural ventures.



## **IMPACT SNAPSHOT**

**6 Months - 2 Weeks**

Reduction in harvest and payment time

**Ayinkamiye Marie Chantal**  
Kigali Farms

## **INCREASING PRODUCTIVITY FROM ONE TO TWO GROW HOUSES**

I am one of the first members of Kigali Farms in the Karago section of the Ngororero district. When I first began growing oyster mushrooms, the company was still in its infancy. Our success was related to our proximity to the Goma/DRC market. We began farming in August 2021, but by November a disease had spread to our tubers, reducing output and discouraging other growers.

Each grow house had a capacity for 300 oyster tubers and cost 75,000 Rwf. It was anticipated that it would yield 120-150 kg per cycle. Our production fell from 120-150 kg every cycle due to diseases to 35-50 kg per cycle, a loss that at the time led to the failure of several firms.

Fortunately, the price per kilogram increased from 1500 to 1700 Rwf, but many farmers left the business. Since I did not see a bright future for the company, I was also considering quitting.

When the HortInvest team visited the location in January 2022, they were made aware of our worries by the Kigali farms that supply us with tubers. It turned out that Kigali farms were already aware of the problem and had begun to produce quality, fresh tubers. After a few weeks, we were able to increase our productivity and move from one to two grow homes thanks to some new oyster tubes.

This organization is ideal for me because I don't have to put in a lot of work as an elderly woman, either physically or financially. I appreciate HortInvest's concern for elderly farmers like me. I am still able to provide for my family by paying for their health insurance, the children's schooling, and ensuring we always have access to nutritious meals.



## **IMPACT SNAPSHOT**

**1,500 - 1,700 Rwf**

Increase in price per kilogram

**Samson Kubwimana**  
President of Icyerekezo Farmer Group

## **OUR LIVES HAVE IMPROVED AFTER BEING PART OF THE FARMER GROUP.**

I became a farmer to grow subsidiary food for personal consumption. In January 2020, I started farming passion fruits and noticed the crop brought me substantial profits. At the time, I was unaware of the existence of the cooperative in Rubengera that processes passion juice, Coopedush. In March of the same year, Coopedush established demo sites in my sector and inspired individual farmers to form groups through which we could receive training on good agricultural practices and collectively sell our produce. This is how Icyerekezo Farmer Group was formed.

Since then, Icyerekezo members have enjoyed a number of advantages, including an increase in the quality of our produce, a transition from 90 kilograms to 150 kilograms. As the quality of the fruit improved, our price went from 300 Rwf to 600 Rwf.

Our lives have improved after being part of the farmer group. I joined the Coopedush farmer field schools, gained knowledge on passion fruit farming and increased my production and income. This allowed me to better support my family. I can pay my children's school fees and health insurance. My family is much healthier now that fruits and vegetables are more accessible to us, and we eat a balanced diet every day.

For very long, horticulture farmers were left behind with little to no training, market opportunities or guidance. With the support of the HortInvest project, I am planning my expansion towards owning two passion fruit farms and increasing the quantity of produce I supply to Coopedush.



## **IMPACT SNAPSHOT**

**90kg - 150Kg**

Growth in production

**300 - 600 Rwf/Kg**

Increase in price value for product

## I NEVER GAVE UP ON AGRICULTURE, NOW I SEE THE RESULTS

When she first began cultivating potatoes, she recalled, many people used to talk badly about agriculture because it consumes so much yet offers little in return. "It was true that crops are labour-intensive, require a lot of time in the field, and are only cultivated twice a year."

Christine started cultivating potatoes and carrots in on a rented 18 Are plot, but her system was disorganised because she had no land and no farming experience. She received 64,000 Rwf from 800 Kgs of potatoes and 42,000 Rwf from carrots. People in her community said agriculture was not worth the effort, and she was disturbed by market prices, but she did not give up. To help herself feel more confident at the time, she joined a cooperative named KOKUMUJE.

Christine was a member of the cooperative when it was chosen as one of the SNV/HortInvest beneficiaries in 2019. She agreed to host a demonstration vegetable farm that acted as a school for her, the neighbours, and other cooperative members. She attended training on good agricultural practices (GAP) offered by the HortInvest project in October 2019 "I wanted to develop further, but I also needed the relevant skills. In addition, the project introduced me to input vendors, particularly Holland Greentech, a seller of enhanced seeds." Christine used her training knowledge to expand her products, and began to train others.

She connected to several shops when harvesting began, which quadrupled her income. "I grow 1500 Kg on the same property and receive 270,000 Rwf from potatoes, 300,000 Rwf from 20 sacs of carrots, and 500,000 Rwf from 2,500 heads of broccoli . I came to the realization that I would never be able to meet the growing demand for broccoli," she added. She trained more farmers to grow broccoli because finding a market wasn't difficult. She subsequently expanded into a 40 Are vegetable production area, where she is currently cultivating 4,000 heads of broccoli and earning about 800,000 Rwf. She has instructed 50 farmers and is proud of her impact and the work her trainees are doing to support their families and keep the broccoli markets running.



## IMPACT SNAPSHOT

**500k - 800K**

Increase in earning

**2,500 to 4,000  
heads of broccoli**

Increased harvesting capacity

## GREAT SUPPORT LEADS TO GREAT GAINS IN INCOME

The 22-member CODFEM farmer's cooperative was founded by women and is centred in Kamazuru Village, Gahogo Cell, Nyamabuye Sector, Muhanga District of Southern Province.

CODFEM was growing strawberries at 40 Ares, but the price per unit (kilogram) was too low compared to what it would be if the strawberries were of acceptable quality. This was because they were utilizing low-yielding varieties, which generated poor-quality fruits. Irene Nyirabarigira, the cooperative representative, stated, "We were generating an income of 250,000 Rwf each year as one kilogram of strawberry was sold at 500 Rwf." Due to their low income from strawberry cultivation, the cooperative members could not meet their families' needs.

The Cooperative received support from the HortInvest Project in 2021 and 15,000 strawberry seedlings of the high-yielding variety Bravura from the Netherlands. These seedlings were planted on 40 acres, and the variety produced good-quality fruit that allowed the cooperative to earn 7,500,000 Rwf annually from strawberry production.

"This increase in income happened because the yield was increased, and the price per unit (Kg) was also increased to the point where it reached 3,000 Rwf per Kg, indicating that there was a great gain in income after being supported by the HortInvest Project," Irene Nyirabarigira, mentioned. The cooperative's members have been able to meet their families basic necessities thanks to their improved revenue.

She continued on to say that because of the aforementioned income, the cooperative was able to import the 2,000 seedlings of strawberries from the Netherlands on their own without any support, to increase strawberry production. After recognizing that strawberries are one of Rwanda's high-value crops that produce high income, they are hoping to keep extending strawberry production in the Muhanga District.



## IMPACT SNAPSHOT

**500 to 3,000 Rwf**

Increase in selling price

**250,000 to  
7,500,000 Rwf**

Increase in annual earnings

**2,000 seedlings**

Imported (self funded)

**Mujawamariya Therese**  
Farmer

## DEVELOPING SKILLS IN VEGETABLE PRODUCTION

Mujawamariya Therese, a 55-year-old woman, resides with her family in the Gitarama cell of the Nyarusiza village in the Muhanga area. She primarily relies on her farming endeavours to survive. Therese began cultivating various crops when she was young and although most of her crops were produced for domestic consumption, she occasionally sold a few cabbages and a few maize to raise money for the family's survival.

Therese became a member of an agricultural cooperative eight years ago. "I attended a meeting at the cooperative one day in 2018, and I heard my representative announce that our cooperative has a collaboration with the project called HortInvest."

Therese was one of 90 farmers from various cooperatives who received training on producing vegetables and fruits and Good Agricultural Practices (GAP) . She says, "I felt blessed and highly excited the day my cooperative leader informed me that I would attend the training because I thought it was an opportunity to develop my skills in vegetable production."

Following her training, she used all the techniques and technology on her own farms, and noticed a noticeably higher yield. She received record-keeping and financial literacy training in addition to GAP. Therese is currently growing various vegetables, primarily cabbages, French beans, sweet peppers, and African eggplants, both for her own use and for markets.

She is currently utilizing hybrid seeds, putting the agricultural practices she learned into action, and her productivity has risen. As a result, she is seeing significant growth in her income thanks to her regular supply of vegetables to the Muhanga market and restaurants. Therese said that before HortInvest's intervention, she had been hesitant to create a bank account since she lacked savings; today she has an active bank account. She also made adjustments at home, including purchasing a healthy cow, timely payment of the family health insurance, and has plans to purchase land for 800,000 Rwf and extend the land for vegetable farming.



## IMPACT SNAPSHOT

Increase in  
income

**4**  
Crop varieties

Stable market to  
supply vegetables

**Munyakazi Bonaventure**  
KAIDU Cooperative/INSHUTI

**EXPANSION IN VEGETABLE PRODUCTION AND DISTRIBUTION AMONG VARIOUS STORES**

Munyakazi Bonaventure is a KAIDU cooperative member and the leader of the INSHUTI farmer organization. He started cultivating Irish potatoes, maize, beans, and other crops when he was 18 years old, but he did so in a disorganized manner and without any training, so he only had enough food for himself. Nevertheless, he used to obtain roughly 10,000 Rwf from planted crops over an area of 18 acres. He recalled that at the time, his family used many of the products he was cultivating for home cooking. "At harvest time," he continued, "no one cared whether we gained or lost; we were merely content to have food at home."

Munyakazi Bonaventure was a member of KAIDU in 2019, the year the cooperative was chosen as one of the SNV/HortInvest project's beneficiaries. They received training from HortInvest on good agricultural practices for producing vegetables under shade nets. Despite not having a shade net, he attempted to improve his work using the knowledge he learned from the training. "Even if the project supplied us with one," he continued, "it was not simple to buy a shade net at that time." Munyakazi grew the same crops (cabbages and carrots) that year on the same 18 acres. At this point, the average monetary output from both crops rose to 120,000 Rwf. Additionally, KAIDU was able to export a variety of vegetable goods to markets in the DRC-Goma.

Later, there was the potential to set up demonstration sites in an open area so that anyone who couldn't afford a shade net could still grow in an open field. Munyakazi, the head of the farmer group, agreed to host the demo site. Many farmers from the community received training in good agricultural practices to produce vegetables.

Munyakazi was able to train other farmers along the way, and he is now pleased with how they grow. "I was farming on 18 Ares, but after growing broccoli for two seasons, I could purchase extra land with the money I made. Instead of 1/4ha, I am now farming on 1/2ha. I'm expanding my crop production and am content that several stores recognise me as a vegetable grower."



**IMPACT SNAPSHOT**

**10,000 - 120,000 Rwf**

Increase in revenue

**1/4 ha to 1/2 ha**

Increase in farming land

## IMPROVED FARMING METHOD LEADS TO REVENUE AND LIFESTYLE IMPROVEMENT

Ndungutse Emmanuel, lives in the village of Mukaka in the Ngororero District, Kageyo Sector, and Kageshi Cell. Before the Hortinvest initiative in Ngororero District, he had grown onions for five years. Although he was growing onions, he saw that his yields and income were low during that time. This was primarily because he was using low-yielding varieties (which produce an average of 5T/ha for onions), poor crop management techniques (lack of knowledge regarding the application of necessary fertilizer and disregard for recommended spacing), and a lack of potential markets as a result of his low yields. However, since the HortInvest project's launch, improvements have been made to farming methods and the revenue from vegetable value chains.

Emmanuel received training in record keeping, financial literacy, and good agricultural practices (GAP) for vegetables. He observed that many customers from beyond the Ngororero District came to buy his onions due to the increase in onion production in the Kageyo area, and HortInvest's interventions. Emmanuel has access to high-yielding onion varieties through Hortinvest that generate 15T/ha as opposed to 5T/ha for the present types. Introducing these hybrid onion seeds with GAP training has increased onion productivity threefold.

Emmanuel has spent 3,200,000 Rwf to acquire two motorcycles, which he also uses to provide transportation services. He has also renovated his 9,000,000 Rwf home, makes timely payments for his family's health insurance, and the tuition for his two children enrolled in secondary school. He opened an account with the government of Rwanda's newly formed long-term savings program, EJO HEZA, where he also contributes money each year. Emmanuel also paid a total of 3,000,000 Rwf to purchase some fertile land in the Kageyo region to increase the amount of land that could be farmed. Last but not least, he paid 2,300,000 Frw to purchase land because he lives in an area with trees and appreciates their value. He plans to invest between 17,000,000 and 20,000,000 Rwf on a transport vehicle (truck) to grow his onion-collection and sales business.



## IMPACT SNAPSHOT

**17.5M**

Acquired Assets

**5T/ ha to 15T/ ha**

Increase in yield

**Uwamariya Jeanne d’Arc**  
Farmer

## I FEEL PROUD OF MYSELF FOR TEACHING MY CHILDREN HOW TO GROW BROCCOLI

Uwamariya Jeanne d’Arc, a mother of five children, resides in the Kora cell of the Bigogwe sector of the Nyabihu district. Jeanne d’Arc has long grown crops like Irish potatoes, beans, and some cabbages, even before she got married. She discovered, after getting married, that her husband was more involved in agriculture than she was. "We faced difficulties because of low production. From 18 Acre, we used to receive 200,000 Rwf. For this reason, we kept an eye out for any opportunity that would help us increase our production. It is simple to access the neighborhood markets because we live close to the main road," she said. Carrots and potatoes were among the vegetables her neighbors were raising. She understood that maturation took the same period of time. "We lacked agronomists to provide us guidance on what to grow quickly. My neighbor contacted me about a workshop on good agricultural practices that KOGIMUIN and HortInvest had put together. I had never heard of that initiative before. My husband was also looking forward to such an opportunity. We went together." They learned a lot about the various vegetable crops' maturity times during the trainings. "Our issue has been resolved. "We encountered various agronomists who were selling various vegetable seeds in our neighborhood. I was pleased when I heard that some vegetables mature in less than three months."

Jeanne d’Arc and her husband wished to examine the ones that were grown in the demonstration plot. They returned home with some of the mature broccoli and cauliflower after their final training session. "Since 2019, we have stopped cultivating several of the crops we were growing in favor of broccoli. We gather large broccoli heads in the terraces because of the nice soil there," the woman stated. They began growing broccoli because of its long maturation period, high market price, and delicious cooked flavor. They were successful in purchasing a 36-acre plot that perfectly matched the crop they were collecting on a yearly average for 700,000 Rwf and used the money to pay their children' tuition on time.

"I feel proud of myself for teaching two of my children how to grow broccoli. They are capable of growing them from a nursery setting to maturation. I appreciate that."



## IMPACT SNAPSHOT

**200K to 700K Rwf**

Increase in sales

**18 to 36 Acres**

Increased farming

## **HARD WORK AND SELF MOTIVATION LEAD TO PROFIT**

UWONKUNDA Julienne is a 38-year-old farmer from Nete Village in the Remera Cell of the Nyamabuye Sector of Muhanga District. She has a hectare of land, of which 0.8 ha were used for staple food crops and 0.2 ha for vegetables.

Before receiving assistance from the HortInvest Project, Julienne was mostly farming staple food crops like maize, bush beans, and cassava as well as some vegetables. "I am a hard worker who is self-motivated to start a new initiative for profitable agriculture, but I was unable to earn much money from the staple food crops I was growing for a variety of reasons, including a lack of a market, a low price, and a lack of technical knowledge regarding good agricultural practices for producing vegetables," Julienne stated. Her vegetable crops generated an annual revenue of 100,000 Rwf, but this was insufficient to meet her family's basic necessities.

"As a lead farmer on the Muhanga District's main vegetable demonstration plot, where numerous crops such bell peppers, tomatoes, cucumbers, white cabbage, cauliflower, broccoli, beetroot, carrots, and French beans were planted, I became one of HortInvest's project beneficiaries in 2019. Before being supported by HortInvest Project, I used to cultivate vegetables in a traditional manner using low yielding varieties, and after the intervention of the project, I have been able to use high yielding varieties, to practice good agricultural practices such use of balanced fertilizers, management of weeds and water, and integrated pest and disease management," Julienne said.

Due to these factors, she is currently getting a good yield and has seen an increase in income as she increased the area of vegetable production from 0.2ha to 0.5ha, which generated 2,500,000 Rwf of annual income from vegetables. With the help of the HortInvest Project, she is now able to meet the basic needs of her family.

She claims that the secret to improving income is to use high yielding vegetable types and good agricultural practices while producing crops. As a result, she has plans to increase the area of vegetable production to 0.7 ha and to produce vegetables throughout the entire agricultural year because she has realized that vegetables have the ability to enhance income.



## **IMPACT SNAPSHOT**

**0.2ha to 0.5ha**

Increased area of production

**100K to 2.5M**

Increased in annual revenues

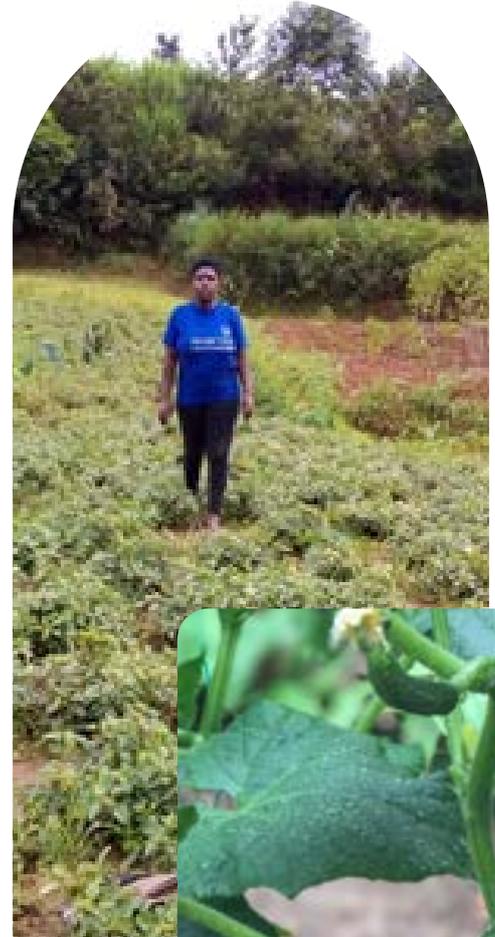
**Eugenie Uwamwezi**  
Farmer

## SUPPORTING FELLOW FARMERS AS MARKET DEMAND INCREASES

Eugenie Uwamwezi, 43, is a mother of two children. She lives in Gatare Village's Ngororero District, Ngororero Sector, and Nyange Cell. She is involved in the production and marketing of cucumbers and amaranthus. Prior to the start of the HortInvest Project, she used poor agronomic practices (poor nursery establishment, poor planting method, failure to use recommended spacing, failure to apply mineral fertilizer, etc.) and lacked high yielding vegetable seeds, which led to low vegetable production and income. The low production and earnings of the agricultural vegetable sector have been a result of all these factors. Eugenie is among the farmers who received training on good agricultural practices for vegetables (GAP), financial literacy and record keeping.

Now that she is having good yields, she is also buying vegetables from other farmers and selling them to the neighborhood market, the army camp in Ngororero District, and the secondary schools nearby. Eugenie has seen firsthand how the HortInvest initiative gave her access to high yielding cucumber and sweet pepper cultivars, enabling her to boost both production and income.

In addition to providing vegetables to the secondary school (ESCOME-Ngororero) where her children are enrolled, Eugenie is able to pay their tuition. Using the money from the vegetable farming business, she recently bought a plot of land worth 400,000 Rwf. She is contractually delivering vegetables like amaranthus, carrots, eggplant, and cabbage to schools. Eugenie is finishing up construction on her 4,000,000 Rwf home. Her long-term goals include building a business house in the nearby city center and purchasing a vehicle that would help her reduce transaction costs in her vegetable selling business.



## IMPACT SNAPSHOT

**GAP, Financial Literacy,  
Record Keeping**

Training received

**3**

Supply contracts

**Beatrice Tuyisenge**  
Farmer

## STEADY GROWTH OF THE FRUIT VALUE CHAIN IN KARONGI DISTRICT

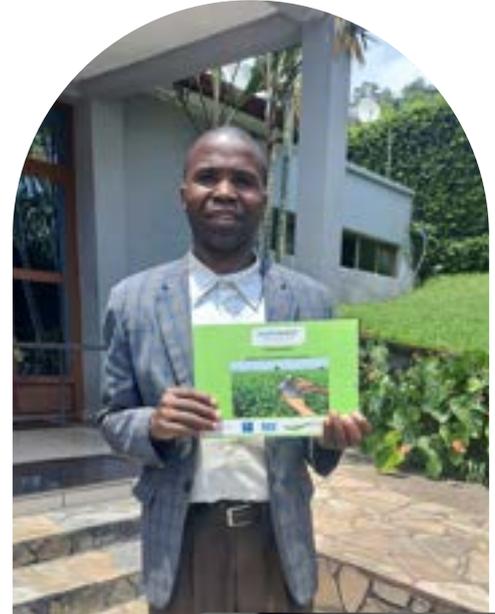
HortInvest, a project focused on the creation of various horticulture value chains, opened doors for farmers cooperatives and businesses in the creation of sustainable fruit value chains, as the latter can provide significant avenues out of poverty for the thousands of households in north-western Rwanda. In order to specifically transfer information and skills on good agricultural practices to more than 25,000 various beneficiaries and stakeholders, HortInvest has created hundreds of fruit demo farms, including strawberries, pineapple, passion fruits, tree tomatoes, and passion fruits.

This in turn, serves to showcase new varieties/technologies and promote a wider uptake of economically viable and environmentally sustainable innovations. More farmers are now joining the industry after demo trainings realising that there's a steady demand for fruits.

Emmanuel from Karongi District and Beatrice Tuyisenge from Nyabihu district are witnessing the importance of growing fruits for their families income.

"We began cultivating fruits for domestic consumption. We never considered it to be a business," Beatrice said. Emmanuel claimed that having access to a market for his fresh produce as a member of the cooperative under the passion fruit value chain allowed him to expand his acreage. "We appreciate HortInvest's organization and support of the growth of the fruit value chain."

In order to connect farmers who have implemented various technologies with the key players in the value chain, including input suppliers, financial institutions, buyers, and processors, HortInvest organizes a business-to-business session on a quarterly basis.



## IMPACT SNAPSHOT

**Demo Farm**

Trainings

**Fruit value chain**

Area of Focus

## I WENT FROM WORKING FOR OTHERS UNTIL I HAD MY OWN LAND, AND NOW I AM ABLE TO HIRE PEOPLE

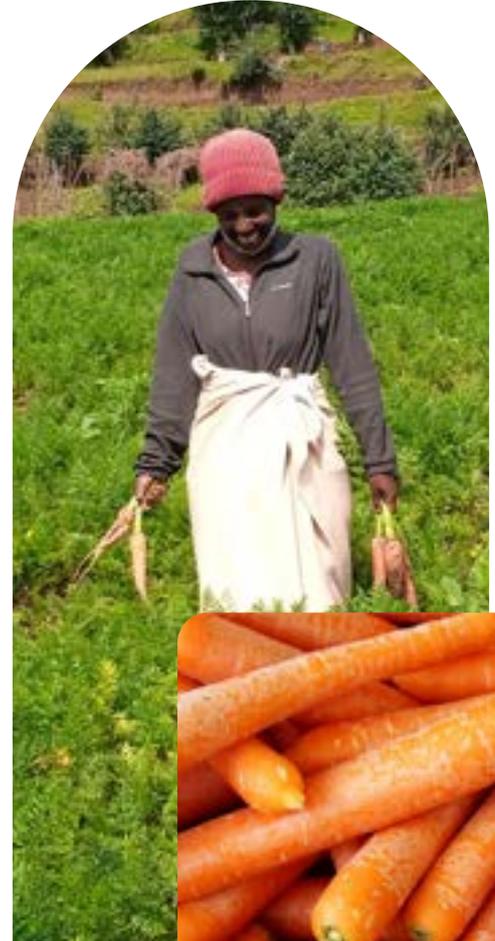
Nyiramatabaro Consolee was born in Rwanda's Southern Province. Consolee and her family were struggling to make ends meet. She was inspired to leave her home and start looking for work, "I began by working part-time jobs that paid 200 Rwf per day. I began renting a plot of land and cultivating Irish potatoes and beans the next year, in 2009. This provided sustenance for my family for approximately three months after harvest."

She registered as the 38th member of the KOGIMUIN Cooperative right after her family purchased a 1Ha piece of land. She particularly wanted to produce carrots. "I was cultivating cabbage and carrots before I was admitted into the cooperative. I was unaware that cabbages could also be sold in markets as successfully as carrots. I exclusively used the cabbages from my own home for meals or for animal feed," she claimed. We had our own land, so I went to KOGIMUIN to gain the knowledge and abilities I needed to accomplish the labor I was willing to do. I also wanted to be able to sell whatever vegetables I wanted to cultivate.

Before I entered KOGIMUIN, I used to reap 200,000 Rwf in terms of financial gain from carrots cultivated on the 1/2ha field. The motivation rose as we began receiving training from HortInvest, particularly on the more advanced methods for growing vegetables, and as they connected us to Holland Greentech for hybrid seeds.

When compared to other crops, vegetables mature quickly. "The same piece of land provided me with an average of 500,000 Rwf in carrot income," Consolee stated, "I started selling cabbages where the first season I harvested 300,000 Rwf." She farmed for only two years, prior to Covid, to get the funds to purchase the house where her family currently resides.

"The thing that surprised me was how I went from working for others until I had my own land and now I'm also hiring people. I intend to keep growing carrots in the future, especially since I now understand every step of the process, from arranging my sowing time to determining whether I won or lost in the end. With the information and talents I possess, I am confident in the bright future of my family."



## IMPACT SNAPSHOT

**200K - 500K**

Increased income

**Skills development**

Increased job creation

## **SAME LAND, BUT GAINING HIGHER PRODUCTIVITY AND YIELDS**

Mukashyaka Therese resides in Muhanga district's Gasovu village, Nyarunyinya cell, and Cyeza sector. She is 48 years old. Prior to the HortInvest project's participation, Mukashyaka only produced maize, beans, and potatoes; she did not grow any vegetables. Mukashyaka started to change her viewpoint when the HortInvest initiative arrived at her place of employment via the cooperative TUZAMURANE, where she is a member. Since then, she has gained more knowledge about vegetable production. She has received training from the HortInvest project in good agricultural practices and post-harvest handling.

"Before, I used to farm potatoes throughout the entire year; I had no knowledge of season impact; however, today, thanks to technical assistance from HortInvest, I grow vegetables in the two seasons and even three seasons," stated Mukashyaka. Mukashyaka's productivity and income have increased since she began utilizing better seeds and hybrid seeds. Before that, her production was only for domestic use and her income was insufficient. Mukashyaka stated, "The land that I used previously was 7 Ares, and it's the same land that I'm using right now, but the productivity has significantly changed." She used to produce potatoes on a 1 hectare plot of land and earn 1,500,000 Rwf; however, now that she grows cabbages there, she makes 7,000,000 Rwf. She grows sweet peppers, cabbages, carrots, beetroot, and other produce, and she sells them at Muhanga market.

Mukashyaka took part in a Business to Business (B2B) event hosted by the HortInvest project, where she had the chance to meet the clients she is now supplying with carrots, cabbage, and sweet peppers. With her earnings, Mukashyaka purchased a pig, two goats, and a cow. She can also afford to pay for her family's health insurance, and she actively participates in the EJO HEZA program. Mukashyaka intends to expand her vegetable farming operations while also expanding vegetable production in order to get into farming partnerships with several Muhanga and Kigali hotels and restaurants.



## **IMPACT SNAPSHOT**

**1.5M - 7M**

Increased income

**Business to Business**

Training

## **TRAINING IMPROVES CROP MANAGEMENT PRACTICES, INCREASES PRODUCTION AND INCOME**

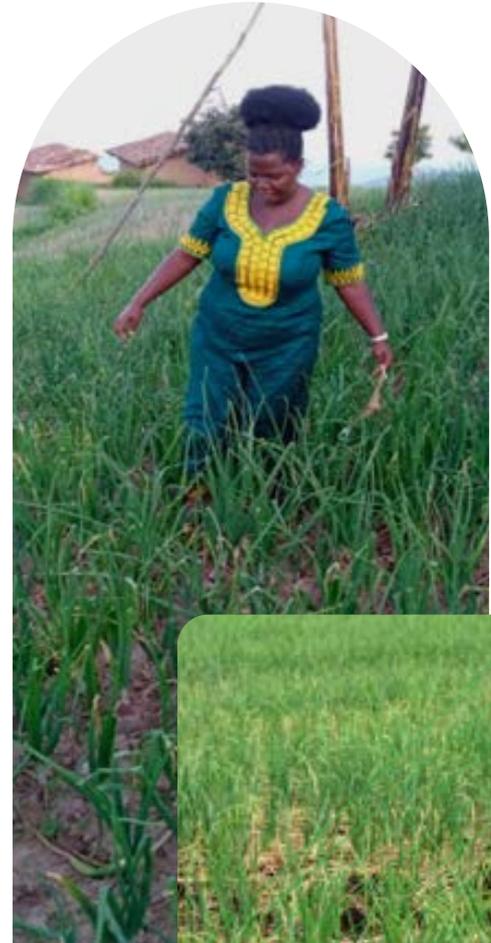
MUKAMUNYANA Faila Francine is a woman who works in the onion industry, both growing and selling onions. She is a 38-year-old woman who resides in Ngororero Sector. Before Hortinvest's intervention in the Ngororero District began eight years ago, she began an onion farming operation. She faced a number of difficulties, including a lack of knowledge of farming as a business due to a lack of financial literacy and record keeping, low working capital used owing to lack of confidence and lack of business management skills, which causes the fear of working with financial institutions in order to expand the business, and low productivity (5T/1ha) as a result of the use of low yielding varieties and other inputs.

Faila Francine received training in good agricultural practices for vegetables (GAP), financial literacy and record keeping, business plan training, and nutrition-related topics. She observed that all the skills gained had increased vegetable production, and the training had helped her to improve crop management practices, which resulted in increased production and income using adequate inputs.

She attended the business-to-business event hosted in the Rubavu District, and has seen how speaking with financial institutions changed her perspective on getting a loan.

Faila Francine was connected to the suppliers of high-yielding seeds with the aid of Hortinvest, and productivity rose from 5 tons per hectare to 10 tons per hectare. These hybrid onion seeds have increased her production and income from the sale of onions, along with her knowledge and the application of GAP on vegetables. Her onion crop now covers 3 ha instead of just 1 ha, and her production has improved from 5 tons per hectare to 10 tons per hectare.

She has since invested in a truck worth 15,000,000 Rwf, a plot of land worth 800,000 Rwf, and the construction of a home worth 8,000,000 Rwf and is covering her childrens' tuition costs. She consistently saves 18,000 Rwf in the EJO HEZA Savings Scheme. She has 5,000,000 Rwf in operating capital that is being invested in the company. She also works with 35 farmers (out-growers), providing them with the necessary fertilizer and onion seeds, allowing them to grow onions before she returns to purchase their harvests, collect them, and sell them in the Kigali market.



## **IMPACT SNAPSHOT**

**5 tons - 10 tons**

Increased production

**23.8 M**

Acquired Assets

## FROM 20 ARES TO 1 HECTARE: BENEFITS OF CHOOSING THE RIGHT CROP

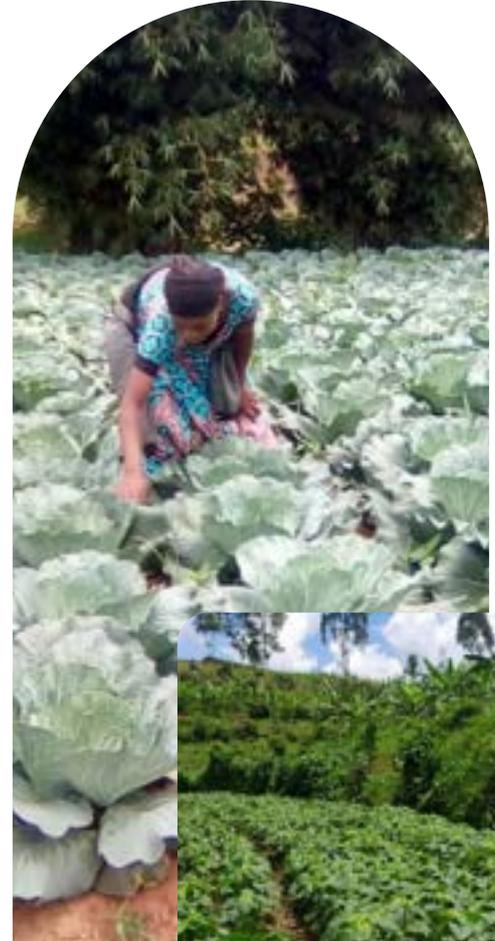
Nyiransabima Angelique was one of the farmers who initially joined the Hortinvest Project when it began and has benefited from a range of Hortinvest support. She received training in good agricultural practices for vegetables (GAP), financial literacy, and record-keeping, all of which were intended to raise vegetable production. The training helped her to improve crop management techniques, which resulted in higher production and income.

Through the B2B session, Angelique was connected to several buyers, and their interactions helped broaden her perspective on accessing markets for her vegetable production. She now has access to high-producing vegetable types (Hybrids) of cabbages previously inaccessible thanks to Hortinvest Project involvement. Combining these hybrid cabbage seeds with GAP increased cabbage yield by a factor of three or four.

By switching from growing some food crops like beans, cassava, and colocasia to increasing the area of vegetables, Angelique has increased the area covered by vegetable crops. Vegetable growing space has expanded from 20 Ares to 100 Ares (1Ha). Based on the quantities specified in the executed contracts, they have raised her production by six tones for cabbages and 1 tone for amaranths, respectively. She anticipates increasing vegetable sales by nine tones for cabbages and two for amaranths.

With four secondary schools in her portfolio, Angelique has expanded her market for vegetables by negotiating a farming agreement for 1,700,000 Frw, under which she will sell carrots, cabbage, and amaranths. Her revenue from farming vegetables (cabbages and amaranths) was reported as 650,000 Rwf in 2017, increased to 1,400,000 Rwf in 2020, and is anticipated to rise to 1,700,000 Rwf, according to the signed contract.

She purchased a parcel of land for one million Rwandan Francs (1,000,000 Rwf) and an irrigation pump worth 360,000 Rwf, of which she paid 50% and received the remaining 50% from the government. She intends to collaborate with the Hortinvest project-trained farmers and will collect and purchase their produce to provide them to the market by the signed contract to uphold its terms.



## IMPACT SNAPSHOT

**650K- 1.4M**

Increased income

**20 Ares - 100 Ares**

Increase in farming land

## I NOW UNDERSTAND THE KEY TO HYBRID SEEDS' HIGH PRODUCTIVITY AND DISEASE RESISTANCE

Before the HortInvest project's intervention, Safari was growing various vegetables. Still, their income was low due to his many difficulties and inability to manage due to a lack of knowledge and expertise regarding vegetable production. At that time, the income was 50,000 Rwf per season. According to Safari, significant improvements have been made to his everyday agricultural activities due to the HortInvest project's support. " Because I now understand the key to hybrid seeds' high productivity and disease resistance, I can select the appropriate type for my land and exclusively use them."

The new skills he acquired via the training offered by the HortInvest project encouraged him to cultivate vegetables even during the off-season, which he has discovered to be a remedy for market competitiveness and earns him a commendable income. Safari uses a high-yield variety (hybrid seeds) to grow high-value crops, primarily cucumbers and cauliflowers. His income from these products is more significant than he received before the project's engagement. For instance, Safari said, "At the market, I sell 1kg of cucumbers for 600Rwf, 200Rwf for a cabbage, and 350Rwf for a cauliflower, when earlier, one cabbage was sold for 50Rwf." The season's earnings have climbed to 480,000 Rwf. He now realizes the need to properly prepare the ground, apply fertilizer, and do other required steps to increase production so that he can achieve an exceptional profit.

Safari's cucumbers, cauliflowers, beets, carrots, and cabbages are purchased from the Nyabugogo/Kigali and Muhanga markets. After adopting proven techniques for three years, Safari could purchase land in the Muhanga district for one million five hundred thousand Rwandan francs (1,500,000Rwf). Safari has also finished building his home and the building for his business due to the increased money.

Additionally, he bought six piglets, which he is raising at home. Safari said that he no longer belongs to the people who struggle to provide health insurance for their families and that he can now feed his family and afford to send his children to school. Safari intends to purchase a second plot to expand his agricultural operations and produce at least 1.5 Ha of vegetables.



## IMPACT SNAPSHOT

**50K - 480K**

Increase in earnings

**50 Rwf - 200 Rwf**

Increase in cabbage selling price

**Felicien SEBAHIRE**  
Farmer

**HORTINVEST**  
PROJECT

GAP  
ADAPTATION

## INCREASE OF HIGH-QUALITY VEGETABLES, DECREASE OF PRODUCTION COST

In 2018, Felicien Sebahire acquired the necessary information and abilities to launch his own agricultural company through HortInvest trainings on the horticultural value chain, Farmer Field Days, Business to Business events, and through practices and experience on the demonstration site. "I am extremely grateful to the HortInvest project for giving me a knowledge package that included a choice of high-quality and improved seeds and seedlings as well as integrated pest management. This allowed me to gather a lot more high-quality vegetables, which in turn decreased the cost of production," he continued.

Currently, Sebahire is cultivating passion fruit on 0.17 hectares, cucumbers on 0.13 hectares, tomatoes on 0.4 hectares, yellow and red sweet peppers on 0.1 hectares, onions on 0.8 hectares, carrots on 0.3 hectares, beetroot on 0.1 hectares, and broccoli on 0.2 hectares. Growing horticulture crops has improved the family's standard of living for Sebahire. He produced 16,250 kilograms of cucumbers, 3,174 kilograms of passion fruit, 24,000 kilograms of onions, 220 kilograms of beetroot, and 900 kilograms of carrots last season, yielding him almost 6 million Rwf at the end of the growing period.

Sebahire is now inspired to make horticulture investments. He has begun using improved seeds and has rented a 3-hectare parcel of land for 1 million Rwf over 2 years to expand his farming operation. "I have spent 404,400 Rwf to purchase 52 cucumber seeds, 0.5 kg of carrot seeds, ten packages of sweet pepper seeds, and beetroot seeds from Holland Greentech. I only use enhanced seeds." In addition to this investment, he has promised to utilize the proper chemical and organic fertilizers ratio to ensure his farm's success in the next growing season. "I also spent 1,200,000 Rwf on a solar panel to power my home, and this electricity allows my neighbours to charge their phones for free. In addition, I helped the district office by donating 1,743 kg of cucumbers to aid needy and vulnerable families during the COVID-19 pandemic."

Sebahire established himself as a leader in the neighbourhood and now mentors a team of 34 farmers. Sebahire connected the farmers with several hotels in Karongi and Muhanga where they sell their combined produce.



## IMPACT SNAPSHOT

**0 - 6M Rwf**

Increase in earnings

**34**

Number of farmers mentored

## **MY PRODUCTION HAS DOUBLED: THE FRUITS ARE HEALTHY AND DISEASE-FREE**

Emmanuel Munyendamutsa is a member of the KOAISO (Koperative y' Abahinzi b'Imbutu Sovu) cooperative, a group of farmers who produce fruits, particularly passion fruits and tree tomatoes. Through the HortInvest project, this cooperative has set up passion fruit and tree tomato demonstration plots so that other farmers can see the high technology employed in contemporary fruit production.

Emmanuel used to grow passion fruits and tree tomatoes on 15 Ares prior to the HortInvest project, but during that time he had a bad habit of not using different fertilizers properly, there was no pest and disease control, and the use of pesticides and other measures to control diseases was ineffective, which had a significant negative impact on his production and his income. However, thanks to HortInvest's assistance and support, Emmanuel has received training in sound agricultural methods -- the creation of liquid fertilizers from compost, the application of inorganic fertilizers to fruit trees, financial literacy, and record keeping.

Emmanuel is currently increasing production on a half hectare (0.5Ha) of land where he grows tree tomatoes and passion fruit. "I used to harvest 12 kg of tomatoes from a single tree, but now I harvest 30 kg," said Emmanuel. "I used to collect 25 kg of passion fruit from a single tree, but now I get 48 kg per tree. My production has doubled, and the fruits are healthy and disease-free." Emmanuel sells the majority of the fruits he grows to Kigali and the remainder to the markets in Muhanga and Ngororero. Although he currently counts the 500,000 Rwf annual income, the annual income was roughly 80,000 Rwf. Since Emmanuel benefited from the HortInvest initiative, he has accomplished a lot in the past four years, including paying his school fees on time, purchasing three cows, increasing the size of his property from one hectare to three, and preparing to grow more vegetables and fruit on his farms.



## **IMPACT SNAPSHOT**

**80k -500k**

Increase in earnings

**37- 78kg**

Total yield increase

## GOOD AGRICULTURAL PRACTICES LEAD TO RWF 17 MILLION ON 4 HECTARES

56-year-old Bagiramenshi Clement lives in Nyamatanga Village's Ngororero District, Kageyo Sector, and Mukore Cell. Many years ago, before Hortinvest's interventions in the Ngororero District began, he was growing onions. Despite this, he faced many difficulties, such as very low production and low income due to the use of substandard crop management techniques (poor nursery establishment, poor planting method with non-use of recommended spacing, non-use of mineral fertilizer application, etc.), as well as a lack of high yielding vegetables.

Following his introduction to Hortinvest, Clement was one of the farmers who initially joined the Hortinvest Project and has benefited from various Hortinvest support. He has received training in good agricultural practices for vegetables (GAP), financial literacy, and record keeping, all of which have enabled him to use appropriate fertilizer, and to complete other crop management tasks in a timely manner, significantly increasing his output.

Clement has seen that through the Hortinvest project, he has access to high-yielding cucumber and sweet pepper cultivars, helping him boost production and income. After deducting the 7,000,000 Rwf he invested, his profit on the 4 ha of onion was 10,000,000 Rwf. He had been earning 17,000,000 Rwf per season on the 4 ha. He has three children in secondary schools and one child enrolled in a university program; all of his children receive the necessary supplies and tuition.



## IMPACT SNAPSHOT

**4 Hectares**

Land under GAP

**10m Rwf**

Profit from 4 Ha onion farming

# Alphonse NDAGIJIMANA

Farmer

**HORTINVEST**  
PROJECT

GAP  
ADAPTATION

## TEACHING FELLOW FARMERS HOW TO TRANSITION FROM SUBSISTENCE TO PROFIT-ORIENTED FARMING.

Alphonse Ndagijimana is a horticulture production model farmer in Rutsiro District: "I'm 36 years old, and as of 2014, I belonged to Ubudehe's first category (lowest living standards). Finding enough money to feed my family and contribute to my savings group was challenging. It was difficult to rent property to grow food for my family because I didn't own land. In 2016, I borrowed 6,000 Rwf from my savings group to rent a plot measuring 5 Ares and started cultivating tomatoes and green peppers.

Even though it wasn't great, it was my first step into farming. The profit was never high, in addition to the low yield from bad farming practices, inadequate local seeds, and poor marketing tactics.

Since I began receiving training from HortInvest projects in 2018, the trajectory of my life has sharply risen. I began utilizing hybrid seeds with the practical application of herbicides and fertilizers made available by the HortInvest project. My current customers are wholesalers from Rubavu to GOMA in the DRC, Kigali, Muhanga, and Karongi. I currently grow cucumbers, broccoli, carrots, sweet peppers, eggplants, tomatoes, onions, and French beans on my property of 3 Ha.

Additionally, the HortInvest project connected my cooperative Umu with VIRUNGA biotech, and I now supply the business with okra, bitter gourds, luffa, or cylindrical gourds on a weekly basis. I am now producing 1,200 kg of cucumbers per 100 sq m and increasing carrot production from 120 kg to 300 kg and onion production from 150 kg to 350 kg per 100 sqm. Red and yellow sweet peppers, onions, tomatoes, broccoli, tomatoes, and eggplants all generate substantial cash for me. I have now moved from category 1 to category 3, renovated my home from one room to four, increased my land ownership from zero to three hectares, and purchased two cows. Additionally, I've purchased a commercial building worth 2,000,000 Rwf in our neighbourhood.

I have 10 employees that work on my farm. Instead of working with savings groups, I now work with banks to continue growing my agricultural operations. I am now a model farmer in the Gihango area, I am teaching the 40 farmers on how to transition from subsistence to profit-oriented farming.



## IMPACT SNAPSHOT

**120Kg -300Kg**

Increase in carrot  
production

**150Kg -350Kg**

Increase in onion production

## Jonathan Bizimana

Farmer

**HORTINVEST**  
PROJECT

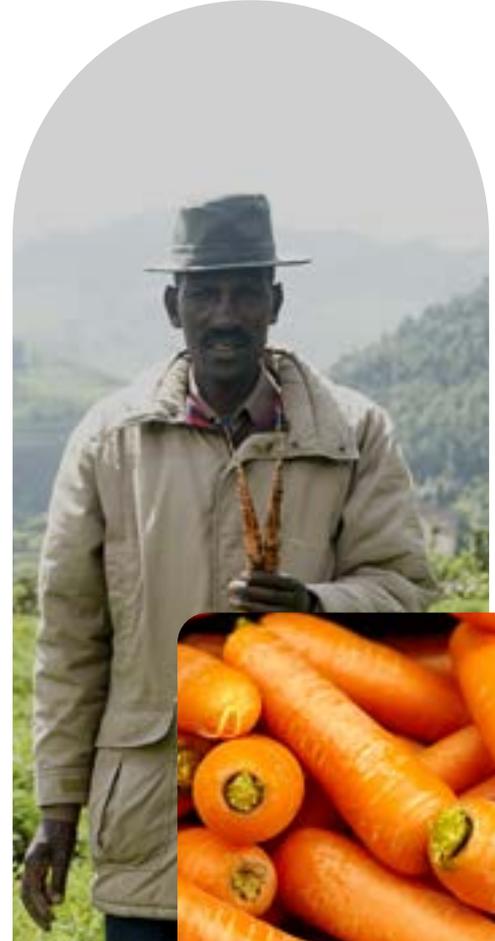
GAP  
ADAPTATION

### I OBSERVED A DOUBLED INCREASE IN MY PRODUCTIVITY

It was clear to me from an early age that I would inherit the same vocation because I come from a farming family. I began using CBX organic fertilizer on Irish potatoes a year ago, and after the harvest I observed that my production had doubled compared to before I had begun using CBX. I then made the decision to try the fertilizer on carrots as well. My carrots are larger and more fresh than those grown without the usage of CBX.

Two months have passed since I planted them, and I have already noticed a decrease in the amount of spraying I did. With CBX, I now spray twice a month whereas I used to spray four times. I have also noticed a decrease in the amount of money I spent on fertilizer purchases, and my carrots now look fresher, bigger, and have deeper roots despite their quick germination and growth. If everything goes according to plan, I hope to harvest twice as much vegetables on a half hectare as I normally would. Instead of 150 bags of 100 Kg each, I am anticipating harvesting 300 bags of carrots after using CBX as a fertilizer (1 bag weighing 100 kg).

Although I am considering utilizing CBX organic fertilizers on every crop variety I will produce, I have so far noticed an increase in productivity with their use, which is why I advise other farmers to give them a try. No matter if they apply it to the leaves or the roots, I'm certain they won't be dissatisfied. CBX achieves outstanding outcomes. I can only advise other farmers to use CBX since it will enhance the quality of their crops, reduce the amount of money spent on fertilizers, and their output would undoubtedly draw buyers due to their freshness and high quality, which will undoubtedly raise their income.



## IMPACT SNAPSHOT

**150 - 300 bags (100Kg)**

Increase in production

**Increased production**

Through use of CBX

**Enock Hitimana**

Farmer

**CBX FERTILIZERS IMPROVED SOIL'S NATURAL NUTRIENTS AND BOOSTED CROP PRODUCTION**

My name is Enock Hitimana and I am an Irish potato farmer. I finally decided to try out Envirom's CBX organic fertilizer on a tiny plot of land while comparing the outcomes between the control and treated fields after repeatedly rejecting their advances from agronomists from the company. After a few months, I began to observe that there was a difference; the Irish potato tubers in the treatment field were bigger, fresher, and growing more quickly than those in the control field.

I made the decision to apply CBX on the remaining 4 Hectares of the Irish potato farm's field. Irish potatoes were harvested at a rate of 15 Tons per Hectare prior to the adoption of CBX, but with CBX, I anticipate 20 Tons per Hectare and, if the market is favorable, I will make more money than I did previously. Since I started using CBX, I've noticed that I only spray two times per month instead of four, which has obviously reduced the amount of money I spend on fertilizers. As a result, I've decided to use 70% of CBX fertilizers on Irish potatoes going forward because they are the best fertilizers for restoring the soil's natural nutrients and boosting crop production.



**IMPACT SNAPSHOT**

**15 - 20 tons**

Increase in production with CBX

**70%**

Use of CBX fertilizers

**Marishekomme Bernard**

Farmer

**USING ORGANIC FERTILIZER FOR INCREASED GROWTH**

I cultivate Irish potatoes in the Gatwa sector of Nyabihu district. I extended the use of CBX on tree tomato fruits after trying it on Irish potatoes and being impressed by the remarkable results I obtained.

I usually grow tree tomatoes, but this is the first time I've used CBX organic fertilizer, and I've already seen some improvements. Prior to using CBX, I applied fertilizers 4 times per month; today, just twice per month, which has lowered the quantity/amount of fertilizer I required. The fruits also grow more rapidly; the time it takes for germination to occur has decreased from 13 to 9 months. Since I used to be the one to hunt for buyers, I have started to receive several bids for my tree tomatoes at a good price.

Due to Covid-19, the price had reduced from 800 to 500 RWF/kg, which is the price I am being offered by the customers, and I plan to harvest 400 to 500 kg on a 900 sq m of land. I am expecting to earn 250,000 RWF every two weeks during the harvesting period.

I will continue to use CBX organic fertilizer because it is of good quality and has numerous advantages for both the soil and crops. In fact, I intend to use it on all of the crops I will cultivate.



**IMPACT SNAPSHOT**

**4x - 2x per month**

Reduction in fertilizer spraying

**Increased production**

Through use of CBX

## **WE NOW HAVE A COOL ROOM FACILITY, WHICH I THINK WILL HELP US BECOME MORE BUSINESS-ORIENTED.**

Prior to receiving training from the HortInvest project, my fellow farmers and I experienced a significant loss as a result of the absence of effective agricultural techniques. Due to a lack of understanding of agricultural practices, we used to plant a lot of seedlings on a large field but got little production. Lack of financial literacy and record keeping for the next season's planning in accordance with market demand was another problem we faced as we tried to make our lives more sustainable.

I noticed a change in my production and income after receiving training from HortInvest. Previously, I would grow vegetables because it was time to rotate crops, but now, rather than growing a variety of crops, I chose to concentrate only on cauliflower and cucumber because of their high demand and high income. Due to HortInvest, I am one of the well-known farmers in Muhanga who produces high-quality cauliflowers and cucumbers. As a result, I am able to enter into contracts with Muhanga market vendors and Kabgayi Center for Hospitality for the sale of my products. The price of one cauliflower on the market ranges from 300 to 600 Rwf depending on its quality.

HortInvest connected our cooperative with the export business Garden Fresh, a connection that valued farmers and helped them improve their farming practices. In addition, we now have a cool room facility, which I think will help us become more business-oriented now that the production perishability issue has been overcome. Due to the HortInvest project, I no longer struggle to save money for my children's tuition, health insurance, or investments in other family needs.



## **IMPACT SNAPSHOT**

**Increased market**

Secured business contracts

**Increased production**

Focused crop production

**Beatha Mukankusi**  
Farmer

## **GOOD AGRICULTURAL PRACTICES IMPROVE NUTRITIONAL STATUS AND WELLBEING OF OUR HOME**

Beatha Mukankusi first learned about the HortInvest project at the end of 2019. Since then, she has received a variety of interventions, including training on horticulture, particularly good agricultural practices (GAP), the establishment of kitchen gardens, the significance of eating fruits and vegetables, food diversification, and maternal, infant, and young child nutrition. She has also received various workshops and site visits, fruit tree seedlings, and vegetable seeds.

"Prior to receiving interventions from HortInvest, I found it challenging to obtain vegetables on a regular basis. I didn't have the resources to buy them, and didn't understand the nutritional benefits of fruits and vegetables. Both the nutritional status and wellbeing in our home have improved since receiving HortInvest's GAP training and other interventions.

My business of growing vegetables has allowed me to move out of a high-risk area, build a new home, and buy seeds on my own without seeking outside assistance. Before, I couldn't produce vegetables for more than 10,000 RWF per season, but now I can produce vegetables for 40,000 RWF per season. After learning about the significance of eating fruit and getting fruit trees from the HortInvest project, I made the decision to plant and care for fruit trees in order to easily access fruit for home use rather than purchasing them.

Through the cooking demonstration sessions held by the project and health center, HortInvest project staff come and educate us on various nutrition-related topics like a balanced diet, food diversification, and nutrition during the first 1000 days of life. We learn best by doing, and because it brings together a lot of people, some of us can learn from others."



**IMPACT SNAPSHOT**

**10K - 40K Rwf**

Increase in income per season

# Sekibibi Jean Damascene

Farmer

## INCREASE IN VEGETABLE DIVERSIFICATION COMPLEMENTS FARMING METHODS

I visited a friend who lived outside of his region because I wanted to learn how to introduce the production of fruit and vegetables. I learned about passion fruits but was also interested in other fruits and vegetables. I was a carpenter but I really wanted to become a farmer. I began to grow them, but I was disorganized, and had no knowledge. During the mobilization for kitchen gardening and the planting of fruit trees, I had the opportunity to be visited by the HortInvest Nutrition District Coordinator and members of the Nutrition action group. I told them about my desire to grow fruits and vegetables. My invitation to the horticulture training program hosted by the HortInvest project was made possible by their campaigning.

I gained a lot of knowledge, and today I continuously produce vegetables all year round. On my own initiative, I am cultivating a variety of vegetables, such as cabbage, spinach, carrots, amaranths, beetroot, onions, and cucumbers, and alternating them with other sorts of crops. In order to maintain my family's health, I've learned from the training that vegetables for domestic consumption should come first.

Together with other farmers, I received training in appropriate agricultural techniques, nutrition-related subjects like the many types of malnutrition, their causes, and effects, a balanced diet with various food categories, and the significance of consuming fruits and vegetables.

The HortInvest Project helped me understand and increase vegetable diversification for complementation in my farming methods. Priority is given to vegetables for domestic consumption, where every diet must include vegetables in every meal for my family to be healthy. The growth in my fruit and vegetable crop, which was not only for my family's consumption but also for the market, prompted me to open a savings account and find money for my children's school supplies and tuition.



## IMPACT SNAPSHOT

7

Variety of cultivated vegetables

## DEMO FARMS LEAD TO ENHANCED TECHNIQUES

KTB is a 109-member farmer's cooperative with 53 men, 56 women, and 10 adolescents situated in Nyaruhora Village, Mbiriri Cell, in the Nyarusange Sector of Muhanga District. This cooperative raises a variety of vegetables and pineapples.

Before receiving support from the HortInvest Project, KTB grew pineapple and vegetables on 0.4 ha and 0.3 ha, respectively. At the time, the cooperative's members lacked knowledge and skills regarding good agricultural practices for producing pineapple and vegetables because their yields were too low, and they were unaware of how to grow them for a living, according to Bernard, the cooperative's president.

HortInvest Project has been working with KTB Cooperative to create pineapple and vegetable demonstration plots since 2019. In addition to serving as a backdrop for demonstrating and teaching appropriate technologies to farmers, pineapple and vegetable demonstration plots also help the local economy by bringing in money from crop sales.

"Demonstrations have also been a crucial tool for helping our farmers learn first-hand about enhanced agricultural production techniques through HortInvest Project training on good agricultural practices for producing fruits and vegetables," Bernard, the Cooperative's president, said. With the help of the HortInvest Project, the KTB cooperative increased the size of its pineapple and vegetable production fields from the previously indicated areas to 2ha and 1.5ha, respectively.

In contrast to the situation before receiving funding from HortInvest Project, "We receive favourable markets for our pineapple and vegetables, we obtain money to sustain our family, and we can pay medical insurance on time." Bernard, the head of the cooperative, says.

By increasing the production areas for pineapple and vegetables to 4ha and 5ha, respectively, they intend to become one of the cooperatives producing pineapple and vegetables in significant quantities in the Muhanga district.



## IMPACT SNAPSHOT

### 0.3 - 5 Ha

Increase in vegetable farming land

### 0.4 - 4 Ha

Increase in pineapple farming land

## WE ARE BOTH FOOD SECURE AND FINANCIALLY SECURE

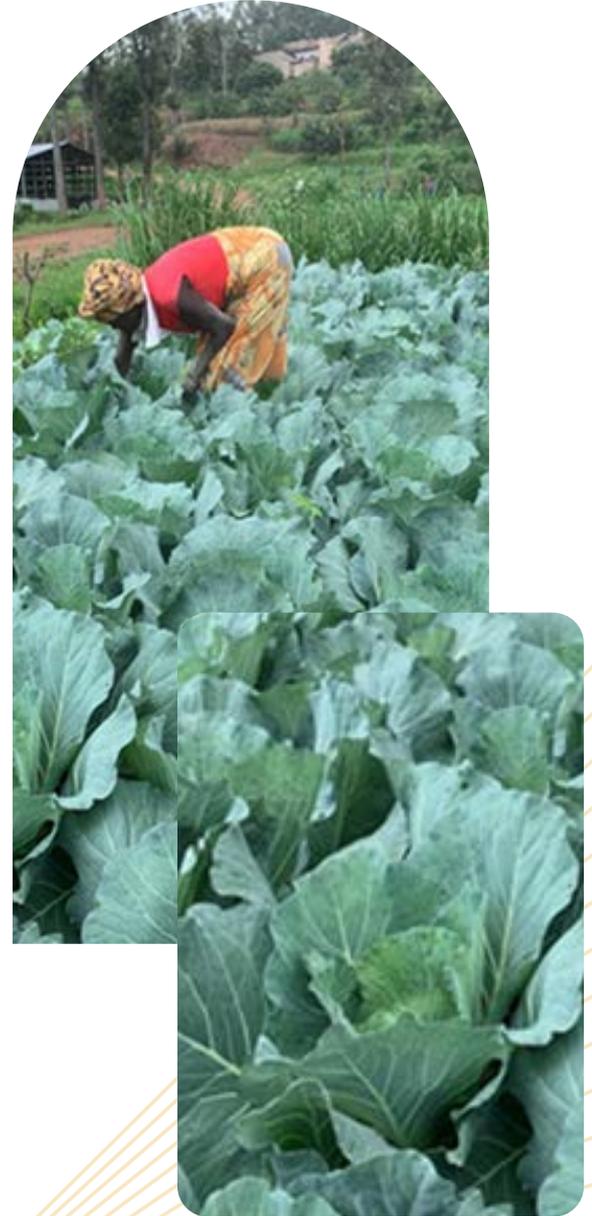
TUBUSEZERERE is a small-scale horticulture cooperative founded in 2010 by a group of primarily female residents of the Muhanga district's Shyogwe and Nyamabuye sectors. This cooperative's 1 Ha production area is where the vegetables are grown. While they initially had a value of 5,000 Rwf for each member, cooperative shares are now worth 50,000 Rwf each.

The cooperative's president, Murekatete, describes how it got its start: "Agriculture has traditionally been a subsistence activity for TUBUSEZERERE, we never thought we could transition to commercial farming. We began in 2010 as a group of 20 farmers cooperating on our 400 acre neighbouring farms. By the time we registered as a cooperative with the Rwanda Cooperative Agency (RCA) in 2012, we had grown from 20 to 50 members and our land area from 0.40 to 1 Ha. We engaged in subsistence farming, cultivating various crops on our property, including maize, carrots, cabbage, and Irish potatoes."

"Since we could not produce an adequate yield, the cooperative could not access the market, and once they did, the pricing was low due to the poor quality of our products." In 2019, HortInvest and TUBUSEZERERE began collaborating and setting up demonstration plots where they introduced the cooperative to hybrid seeds of various vegetables. HortInvest trained cooperative members on appropriate agriculture methods and marketing techniques for horticultural products. TUBUSEZERERE was able to transition from subsistence to commercial cultivation thanks to funding from HortInvest. "Both the yields and the quality of our products have significantly increased. Instead of harvesting just 40 heads of cabbage per area as we always did, we now harvest 500 heads of high-quality cabbage.

HortInvest also assisted with enhanced market access. "We met with different actors in the value chain to initiate business relationships with them. We no longer have a challenge of access to markets because we have been linked to new buyers."

Due to HortInvest's assistance, TUBUSEZERERE became a cooperative focused on the market, and the increased earnings allowed for the expansion of the vegetable production area. Murekatete declared, "We are both food secure and financially secure. We are confident in saying that we have earned lifelong skills and confidence as a result of the training and real-world experience we gained."



## IMPACT SNAPSHOT

**20-50**

Increased members

**40 - 500 heads of cabbage**

Increased production

**Constance  
KOHAMA**

## **DISCOVERING A NEW INTEREST IN VEGETABLE PRODUCTION OFFERING HOPE FOR THE FUTURE.**

Constance, a 59-year-old KOHAMA member, used to cultivate just bananas on her 0.3 hectare farm. The only way she could afford to utilize chemical fertilizers and pesticides was to prioritize the crop that would bring in the greatest money. Interestingly, these costly fertilizers were damaging the environment and reducing the diversity of beneficial bacteria and fungus as well as soil nutrients. As a result, the yields for Constance decreased over time and the land became less productive.

Constance now raises a variety of vegetables thanks to the HortInvest initiative in her cooperative (KOHAMA). She used to disregard the value of vegetables prior to the initiative, but with various interventions, she started growing vegetables on 0.1 hectare and has since expanded to 0.5 ha. She is now able to provide for her family and earn money by selling some of the products. The price she received increased from 3,000 Frw to 5,000 Frw per banana as a result of the usage of compost, which allowed her to produce 45 kg of bananas for the first time instead of just 35 kg.

"With the ability to make my own compost, bio-fertilizer, and ash solution from locally accessible items, the cost of organic fertilizers decreased by 46%. I used to buy 1Kg of organic manure at 30 Rwf but now when I make it myself, the cost of production is 16 Rwf/Kg. I am now practicing organic farming with a 20% cut into costs of fertilizers, improved production, and better income," says Constance.

When the HortInvest project first started, KOHAMA was chosen as one of the cooperatives to receive funding. Since then, they have increased membership by 50%, increased turnover seven times, and ensured the sustainability of activities.

KOHAMA received 2,250 Euro in annual funding through HortInvest. This increased their revenue from 500,000 to 3.5 million Rwf, and increased vegetable consumption. The cooperative was able to shift from 0.8 ha to 3.5 ha communal property and increased its membership from 23 farmers to 46.



## **IMPACT SNAPSHOT**

**500k-3.5M Rwf**

Increase in revenues

**0.8ha -3.5ha**

Increase in communal property

**Ndagijimana**  
Umurimo w'Umwuga

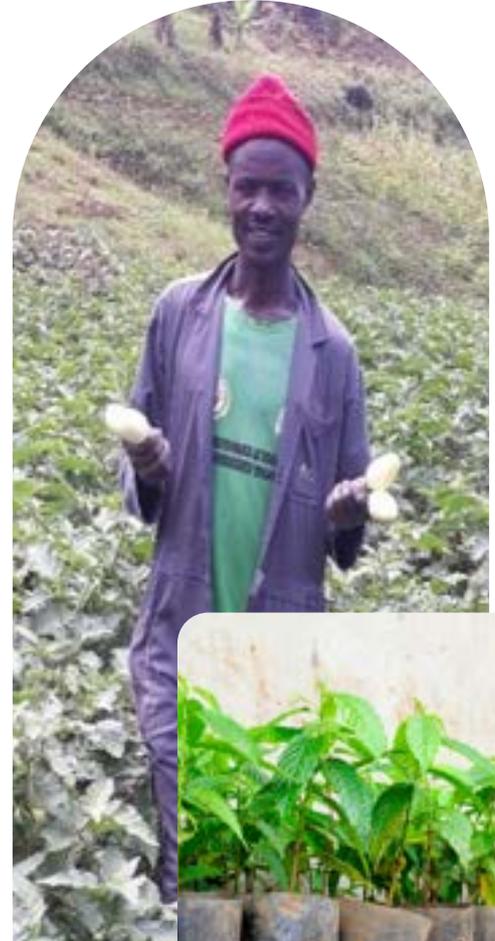
## PROFESSIONAL FARMING LEADS TO MOVING UP IN UBUDEHE CATEGORIES

In 2014, twelve farmers formed the Umurimo w'Umwuga cooperative. The group organized its formal registration in 2018 and was included to the HortInvest portfolio.

Along with providing software expertise, HortInvest helped the cooperative set up a common vegetable nursery so that its members and other nearby vegetable growers could purchase seedlings from the cooperative. According to Mr. Ndagijimana, the cooperative's chairman, 2019 was the best year in its history.

"We put up a shade net on our farm and got GAP training on several vegetable crops, among several other trainings. The good agricultural practices we employed and the market connections we acquired as a result of this relationship helped us achieve a net profit of 1,100,000 Frw that year, which was a record.

Our professional vegetable and fruit production has risen, from 2 acres in 2014 to 3 ha of leased land in 2021. Our items' quality has greatly increased to the point that we are currently working with an exporter. Things have greatly improved since we started working with HortInvest. There is no longer any malnutrition among us and all of our members have moved up to Ubudehe category 2 from category 1."



## IMPACT SNAPSHOT

**1,100,000 Rwf**

Net business profit

**2 Acres - 3 Ha**

Increase in fruit and vegetable production

## 600SQM TRIAL FIELD HARVESTING AN AVERAGE OF 25KG EVERY WEEK

KOABUNYA is situated in the Rutsiro district's Nyabirasi sector. It was founded in 2014 and now has 449 members with 1,261 more people interested in joining. The cooperative also produces maize, beans, and vegetables in addition to strawberries. The cooperative owns 3 hectares and the individual members own 490 ha.

Since June 2019, when KOABUNYA joined the Hortinvest project, the cooperative began growing and selling strawberries. Only two buyers dealt with members on an individual basis prior to the Hortinvest project and the cooperative was unable to keep track of all the goods produced by its members and sold.

From the start of its partnership with HortInvest, KOABUNYA was connected to COOPEDUSH (a cooperative situated in Karongi that is also working with HortInvest) to supply 200 kg per week, with the possibility of an increase as the cooperative continues to bring in more farmers to the strawberry industry. Additionally, KOABUNYA developed a 600m<sup>2</sup> trial field for Bravura and Furore, which is presently harvesting an average of 25kg each week. KOABUNYA is currently selling the products collectively to several purchasers in Kigali for 1500 Rwf per kg.

HortInvest supported the two cooperatives as part of its cooperative development program in order to expand the area planted in strawberry production and boost farmers' skills in profitable agricultural production. The project helped KOABUNYA obtain irrigation supplies and appropriate harvesting tools, which will lower post-harvest losses.



## IMPACT SNAPSHOT

**Bravura & Furore**

New High Value Varieties Introduced

**200 Kg/Week**

Increase in strawberry production

## **FROM A SMALL SAVING GROUP TO A COOPERATIVE OWNING 6 HECTARES OF LAND**

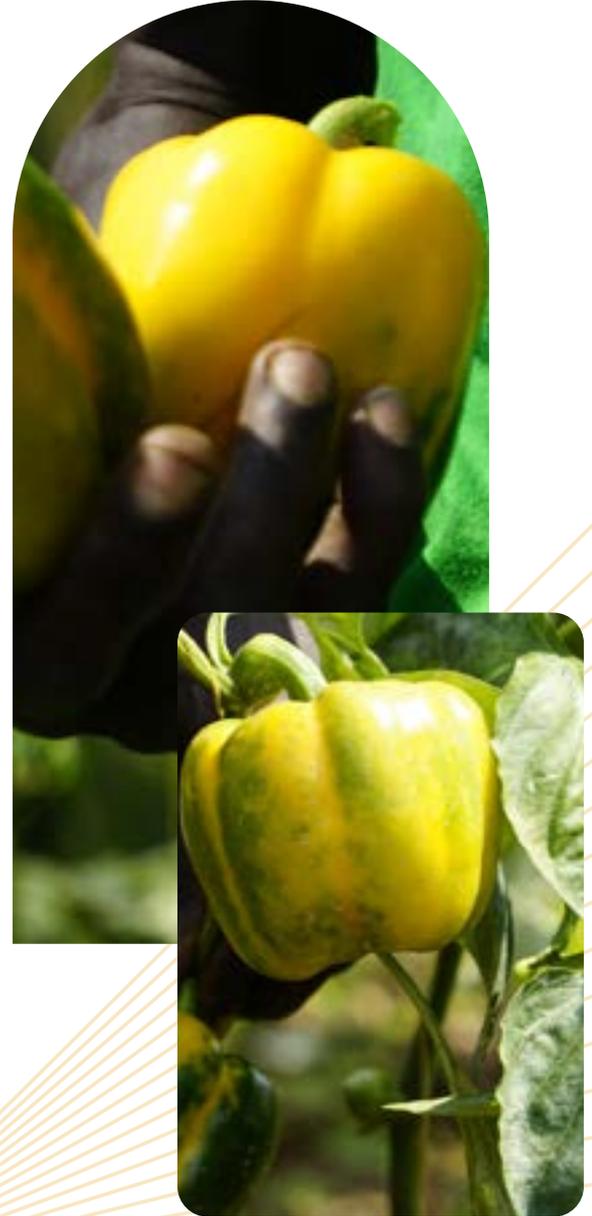
In 2014, residents of Gihango sector in Rutsiro district founded the exclusive horticulture cooperative known as UMURIMO W'UMWUGA. A 4 hectare plot of land owned by the cooperative is used to grow vegetables. The share's worth is 25,000 Rwf.

"We began as a savings group with 25 members in 2015, each contributing 100 rwf in personal savings and 50 rwf in social fund per meeting. We also introduced the notion of preventing malnutrition in our homes by cultivating certain vegetables and mushrooms. Our savings were used to rent a plot of land measuring six Ares, and the extra produce was used to sell on the neighbourhood market. We combined saving and farming when we joined in 2017. The production was poor when we first started and we were unaware about hybrid vegetable seeds.

Our journey to success began when HortInvest joined us in September 2018. We had just 16 members, only 6 Ares, poor farming practices, local varieties, and inadequate financial and cooperative management abilities. HortInvest project introduced hybrid vegetable seeds that were new to us and improved farming techniques.", according to Alphonse, the cooperative's chairman.

The cash generated at the end of the first production cycle allowed for an increase in land used for vegetable production from 6 Ares to 4 hectares.

UMU Cooperative co-invested with HortInvest to build an improved nursery covered by a net that helped the cooperative to produce good quality seedlings for its members and other neighboring communities, which increased their income.



## **IMPACT SNAPSHOT**

**6 Ares - 4 Hectares**

Increase in land used in vegetable  
production

## TAKING ON A MORE BUSINESS-ORIENTED APPROACH AND LEARNING STRATEGIC INVESTMENTS

I work as a farmer in the Rubavu district where I grow onions, beets, carrots, and occasionally fresh green beans. People in the rural areas, like me, farm so that their families have something to eat, but farming is often not considered a business.

As a member of the KAIDU cooperative, I took part in a financial literacy workshop organized by the HortInvest project. When I first heard about the training, I knew nothing about finances and investment. I used to select farm crops based on which had the highest demand and I would sell without knowing how much profit I was making.

After following the financial literacy and record keeping training, I started taking a more business-oriented approach, investing based on the expected returns. As a result, I started tracking my investments, family labor costs, and returns. My decisions about what crops to grow are now based on profitability, considering investment costs, demand, and market prices. Using the information and mindset I gained from the training, I have decided to continue producing onions, beets, carrots, and green beans.

Looking back, I have really benefited from this training, and I am proud to know what I have invested in, what it has resulted in, and how profitable it was.



## IMPACT SNAPSHOT

### Financial literacy and record keeping

## RECOGNIZING THE VALUE OF FAMILY LABOUR AND IN-KIND REMUNERATION.

I have two children and am a farmer in the HUMU cooperative. I grow a range of vegetables. I've benefited from many of HortInvest training programs, including those on good agricultural practices (GAP), high-quality seedlings, financial literacy, and the nutrition program. I now support my neighbours by giving away the excess vegetables to them. This has contributed to a general improvement in our region's nutrition.

The financial literacy course taught me how to calculate the value of family labour and in-kind remuneration. A critical calculation is the capital asset depreciation. The training helped me decide how much money to invest and how to choose the best credit source by weighing loan fees as I made preparations for the future farming season. Since I am now convinced that I can repay the loan with the profits from my agricultural business, I increased my loan amount from Inkunga Finance. I have learned a major issue with recording is the possibility of information loss if it is not done right away. Today, I vigorously record and track my expenses and revenues on time and consistently.

Following the HortInvest training classes, I increased the income from producing cabbage on 2 ares from 50,000 RWF to 90,000 RWF. I have also included tree tomatoes this season to compare the profitability of farming this crop to others. I've already trained ten individuals since I made money from it and continue to teach other farmers about financial literacy. In order to keep track of our farm and yields, we all maintain consistency in our recording practices.



IMPACT SNAPSHOT

**50k - 90k Rwf**

Increase in income

**Mutuyimana Nadine**  
Bubazi Health Center

## **DECREASED MALNUTRITION AS MORE FRUITS AND VEGETABLES BEING PRODUCED AND CONSUMED**

The Bubazi Health Center offers a variety of services to the neighborhood, including nutrition services and assistance. The health center's nutritionist, Mutuyimana Nadine, shared the experiences from their involvement with the HortInvest Project.

"I first learned about the HortInvest project at the end of 2019. The health center was invited to a training session that HortInvest had prepared on how to start a kitchen garden. HortInvest conducted work in three villages (Gaseke, Rusebeya, and Muremera), where knowledge and attitudes toward nutrition-related issues have improved as a result.

Prior to working on the HortInvest project, there were some topics about which I lacked sufficient knowledge, such as the five food groups approach, and prior to that, the community's awareness of and attitudes toward food diversification, vegetable production, family planning, etc. were really quite low. Prior to receiving project help, the rate of malnutrition was high due to a lack of understanding about food diversity.

Since the culinary demonstration, parents and, especially moms have learned how to make a balanced and healthy supper, and all families now have a kitchen garden with a variety of vegetables. Maternal Infant Young Child Nutrition interventions, community nutrition mobilization, and cooperating with the Sector Plan to Eliminate Malnutrition committee (SPEM) have been a priority. At the moment, community health workers are being instructed to organize cooking demonstration sessions in the villages supported by the project without the direct supervision of Health Centers.

As a result of collaborating with HortInvest on various interventions, there are now fewer malnourished children and more fruits and vegetables being produced and consumed. The whole community is aware of the value of kitchen gardens."



**IMPACT SNAPSHOT**  
**Balanced food production and consumption**  
Community training

## IMPROVED COOKING DEMONSTRATIONS AND ENHANCED HYGIENE IN COMMUNITIES

In order to address issues of food and nutrition security, the HortInvest project improved community cooking demonstration sessions, promoted crop diversification and fruit tree planting in kitchen gardens, and encouraged community mobilization for increased agrobiodiversity and food diversification in six Districts of Rwanda's northwest.

The HortInvest project Nutrition District Coordinators have been monitoring and providing direct or indirect assistance to community cooking demonstration sessions since 2019. Community health workers (BINOME/ASM) and village leaders in each village received cooking demonstration kits, under the supervision of the project's staff and local leaders. As an exit strategy, local leaders will be in charge of the materials' supervision at the project's conclusion. Before the HortInvest project arrived, Mukore cell organized culinary demonstrations at the cell level, requiring mothers and caregivers to travel from various villages and convene for the session. Because of this, some parents had to travel far to the cell office, and others were unable to attend the sessions."

During culinary demonstrations in the benefitted areas, the received cooking supplies enhanced hygiene and sanitation. Due to less travel, it facilitated and increased moms' attendance. The community was very appreciative of the project's generous support in the form of cooking kits that encouraged moms and caregivers and improved their habits, hygiene, and sanitation. The project's expertise and nutrition intervention are being used and put into practice for child and family care to combat stunting and ensure brain development for children over the age of two. A change in behavior was also made toward better dietary variety, hygiene, and sanitation.



## IMPACT SNAPSHOT

# 6

Number of Districts receiving training

**Scholastique Ngizwenayo**  
Farmer

**IF WE HADN'T RECEIVED THIS TRAINING AND THE DIFFERENT TOOLS, OUR CHILDREN WOULD HAVE BEEN SUFFERING.**

Malnutrition among children under five has decreased in Rwanda, dropping from 48% in 2000 to 33% in 2019-20. (RDHS, 2019-2020). To ensure that every kid has an equal opportunity to grow healthily, there is still much work to be done (UNICEF). There is a need for multi-partner initiatives to end child malnutrition in order to accomplish this goal. In this regard, the "HortInvest project," run by SNV, the Netherlands Development Organisation, is being funded by the Embassy of the Kingdom of the Netherlands in Rwanda. The initiative intends to improve the food and nutrition security of targeted households in six districts, primarily Muhanga, Ngororero, Nyabihu, Rubavu, Rutsiro, and Karongi in the Northwest of Rwanda, as well as the incomes of farmers in those districts.

Scholastique Ngizwenayo is a 28-year-old mother of three children, two of them are younger than five years old. She resides in the Busasamana sector of the Rubavu district. Since 2018, she has worked with the project with other mothers of small children and newborns. HortInvest provided them with a nutrition education program through the project's Nutrition Action Group (NAG), as well as various kinds of fruit trees and vegetable seeds and basic agronomic techniques to help them establish kitchen gardens to supplement their own and their children's diets. Especially immune-fragile mothers who are pregnant and lactating.

"We are really grateful for the HortInvest project's contribution to the reduction of malnutrition in the Busasamana sector and the entire Rubuvu district. If we hadn't received this training and the different tools the project gave us to conduct correct cooking demonstrations, our kids would have been suffering from Kwashiorkor," Scholastic said.



**IMPACT SNAPSHOT**

Nutrition education through cooking demonstration for pregnant and lactating mothers

Access to nutritious food through kitchen garden establishment with GAP

- Reduction of malnutrition and stunting

## Pierre Celestin Mahane

Farmer

### **MY CHILD'S DIET WILL NO LONGER BE UNBALANCED: ADVANTAGES OF CULTIVATING FRUITS AND VEGETABLES.**

Pierre Celestin Mahane is the father of two young children under the age of five. Mahane, like many of his neighbors in the Nyabihu district, relied on subsistence farming, primarily the production of Irish potatoes, maize, and other cold-weather and volcanic soil-tolerant food crops. Everyone consumes starchy meals and sells fruits and vegetables to support their families because of the agro-climate aspect.

The story, however, changed in the middle of November 2021 when Mahane was exposed to a billboard advertising the advantages of eating fruits and vegetables and best techniques for doing so.

"The billboard was so vibrant that everyone in the community was drawn to see what it was about. One of the quickest and most curious locals to run to view it was me. I took the time to look at it and discovered there were a number of fruits and vegetables there that I had never thought to eat or give to my children, despite the fact that they could improve our health," Mahane said.

Mahane's wife, beneficiary of the HortInvest project, participated in nutrition-related training prior to the campaign. She often talked to her husband, but he wouldn't make any changes until he saw the banner and heard the nutrition and behavior change broadcasts through Radio Rwanda. Prior to learning the value of including fruits and vegetables at every meal, he only prioritized the harvest for the market rather than his family.

"My child's diet will no longer be unbalanced because I now understand the advantages of cultivating fruits and veggies for my family. Even if I can't grow them all in my tiny kitchen garden, once we run out, I'll be purchasing them from the market." He has been organizing the other men in the neighborhood, and so far he has spoken with nine of them who have started buying fruits and vegetables for their families as well.



## **IMPACT SNAPSHOT**

Men engagement in nutrition promotion activities

Increased uptake of fruits and vegetables for a balanced diet

## HOUSEHOLD EXPENSES COVERED BY VEGETABLE SALE PROFITS

Before receiving training and seeds I used to eat beans and cassava leaves without variety and forgot about vegetable storage during the dry season. Following my training, I began to put what I had learned into practice by visiting nurseries to obtain seedlings, transplanting them to create various garden shapes, and giving some of the leftover seedlings to my neighbors to encourage them to grow kitchen gardens.

Despite all my efforts and dedication to maintain fruitful kitchen gardens throughout the year and regularly consume vegetables, the prolonged dry season negatively impacted my crops, but I was still able to maintain my kitchen gardens productive.

Since the start of the kitchen gardening program at home, my husband hasn't spent money on buying veggies, and he has occasionally assisted me in managing the vegetables.

I first learned about the HortInvest Initiative in March 2019 as part of the community mobilization process, and after hearing about its objectives, I expected the project to support our efforts to grow fruits and vegetables as well as reduce poverty and malnutrition.

HortInvest provided me with training on various methods for managing kitchen gardens, which enabled me to manage these gardens without having to cultivate other major crops on the same property. We were trained to have a kitchen garden to produce vegetables all year long for a healthy diet in our home, even during the dry season. I make money from my produce, particularly from the sale of beetroots, which I use to purchase food that I don't grow at home.

I use the profits from selling extra vegetables from my kitchen gardens to pay for other household expenses and this makes me most proud. Since I produce more than two vegetable species in kitchen gardens, none of my family members are at risk of malnutrition because we constantly prepare meals with a variety of greens.



## IMPACT SNAPSHOT

Access to fruits vegetables from kitchen garden

Access to income out of selling produce from kitchen garden

# Nyirakanyana Antoinette

Farmer

## HAVING A KITCHEN GARDEN IS NOW A PRIORITY FOR MY HUSBAND AND I

Nyirakanyana Antoinette is a mother of three children: "In my household, especially when it came to food preparation, things weren't straightforward prior to my involvement in the cooking demonstration session. Beans, potatoes, and maize were more than sufficient for the family, and since my first child was only six months old when we had to share meals on the same plate, I had no understanding that I needed to make meals for the child.

In addition to providing kitchen garden seeds and continuing regular follow-up throughout each season, the project also brought three different fruit trees into the village and distributed them to low-income households, including my family, with the goal of increasing fruit production and saving money that would otherwise be spent on buying other nutrient-dense foods. Since we had them on my plot and had more than three different kinds of vegetables in the garden, it has been easier for me to change my perspective about the significance of eating fruits and vegetables. This has helped us solve the problem of our lack of food diversity.

My spouse now appreciates how important having a kitchen garden has become a priority in our household. He looks after the kitchen garden more than I can when I'm busy. Since I've mentioned to him how important it is for our health to eat fruits and veggies, he remembers to bring fruit for us.

We have chosen as a family to continue even after the project is finished since we don't want to see our children become malnourished or perhaps have health problems. Parents too need to stay healthy. The initiative has undoubtedly benefited my family because the knowledge it provided was one of the factors that changed our way of living. I would urge everyone to know that eating habits affect more on everyone's lives, but more attention must be paid for the lives of children under the age of five because failure to offer the necessities at an earlier stage in life might ruin their lives.



## IMPACT SNAPSHOT

### Kitchen garden and communal fruit trees

Benefits of the program

# Providence Nyiransengimana

Farmer

## **BOTH MEN AND WOMEN BENEFIT FROM KITCHEN GARDENS FOR PERSONAL CONSUMPTION AND FAMILY SUSTENANCE**

In the Rutsiro district, Gihango Sector, and Bugina Cell is where you'll find the ECD gishushu community. Providence Nyiransengimana, a 38-year-old in the Gishushu home-based ECDs, is one of the caregivers there. Providence testified that she had been aware of the HortInvest initiative from the beginning of 2019 when the nutrition community mobilization was launched, and that she had volunteered to lead cooking demonstration sessions in the village as a role model woman (Maman Lumiere). They had difficulties because they did not have any cooking kits set aside for the demonstration prior to the HortInvest project.

"The Hortinvest project staff visited our cooking demonstration (which encouraged mothers to bring their children to the sessions), providing nutrition education to caregivers/mothers. They took the initiative to support us with cooking kits that included saucepans, cooking spoons, mats, buckets, basins, jerricans, and cutlery. This significantly improved the practice with proper hygiene and sanitation and encouraged mothers/caregivers to bring their children to the sessions.

After the project gave our village cooking kits and trained me in kitchen gardening, I regularly renewed my kitchen gardens so that I never missed cooking vegetables like carrots, beets, and amaranth for my family or for children attending ECD. For this reason, I appreciate the project very much for the support with vegetable seeds.

I suggest that both my female and male neighbors start a kitchen garden and develop fruit trees so they may continue to produce fruits and vegetables for their own consumption and to generate cash. For instance, I had enough vegetables last season to feed my family and sell as well. Second, tell them to allow their children to attend ECD with others."



## **IMPACT SNAPSHOT**

### **Cooking demonstration lead**

Training provided

## Uwimbabazi Claudine

Farmer

### **EATING FRUITS AND VEGETABLES HELPED MY MALNOURISHED CHILD'S NUTRITION LEVELS UNTIL RECOVERY**

Uwimbabazi Claudine, 34 years old, has two children, one of whom is under five. She lives in one of the HortInvest project's target villages, close to a wetland where IABM cooperative members alternate growing vegetables and corn. She became aware of HortInvest after visiting this one of the demonstration sites.

She was a mother with little experience in kitchen gardening and nutrition. Her child was malnourished and was transferred to a health center for follow-up. "I obtained coaching from the health center and at the same time, I was constantly visited and monitored by the nutrition action group and HortInvest nutritionist. Regular check-ups taught me how to plant, and community health workers and nutritionists stressed the value of eating fruits and vegetables, which helped my child grow better. In the presence of the Nutrition action group, I regularly attend cooking demonstration sessions. I started expanding my kitchen garden to include more fruit trees and vegetables."

I benefited from project interventions, particularly fruit trees and vegetable seeds. I gained a thorough understanding, and as a result, I am cultivating a variety of vegetables and taking care of fruit trees I was given as part of a project intervention with behavior change. I acquired some fruit and vegetable seeds through project intervention and some that I bought on my own. Vegetables are now an essential part of our diet, and the surplus can be sold.

I am now aware of the significance of eating fruits and veggies because they helped my malnourished child's nutrition level until recovery. In order to fight against stunting and improve childcare, we are gathering a variety of fruits from our tree tomato and passion fruit trees. Even to the communal cooking demonstration sessions, I bring my own vegetables.



## IMPACT SNAPSHOT

# Recovery from malnutrition

Effects of Nutrition Action Group demo sessions

## Uwayezu Pascal

Farmer

### **JUST AS MUTUELLE DE SANTE IS PRIORITIZED IN EVERY HOUSEHOLD, THE SAME SHOULD BE DONE FOR KITCHEN GARDENS AND FRUIT TREES**

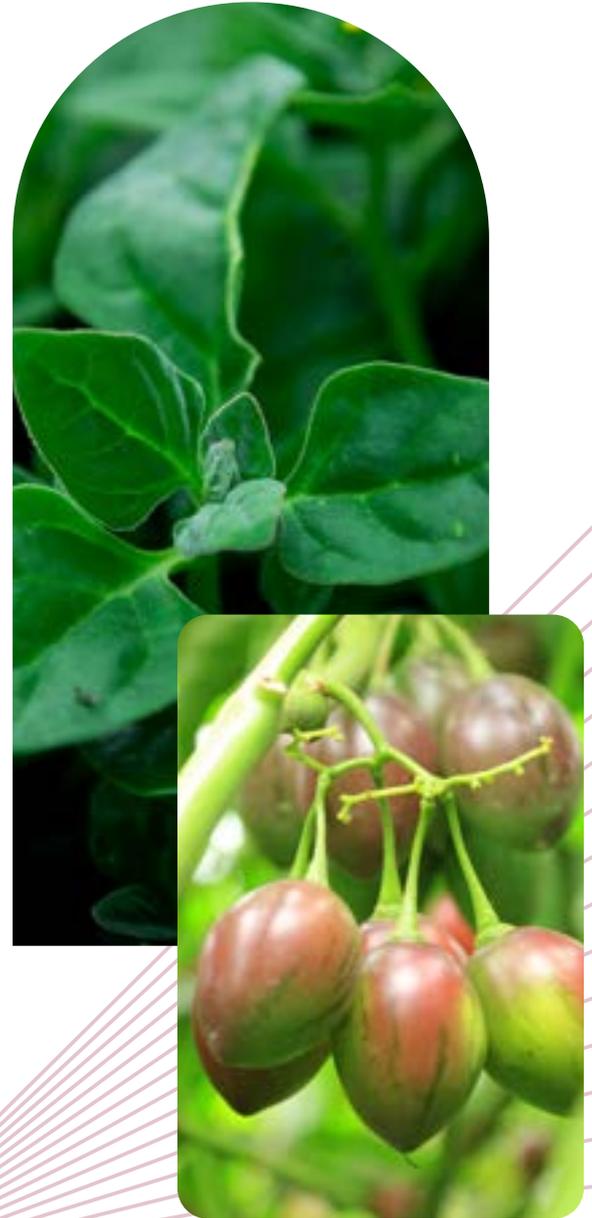
Uwayezu Pascal is the father of five children, two of whom are under five years old and the youngest is under two. The project has aided his family in obtaining fruits and vegetables. Since we only ate fruit once or twice a month before HortInvest, I never thought my family would be able to access fruits the way we wanted. However, the dream is now a reality.

Pascal first learned about several HortInvest project interventions at the project's introduction, including the promotion of fruits and vegetables along with other initiatives aimed at avoiding malnutrition and increasing public knowledge of healthy eating. The project began by introducing seeds for vegetables and setting up demonstration kitchen gardens, where some seedlings were given to other homes to start their own kitchen gardens.

"Having a kitchen garden has significantly enhanced our quality of life because the vegetables it produces transformed the flavor and texture of our food, which we enjoy. Additionally, as the project team previously indicated during the seed distribution, vegetables contain vital components that have shielded us from infections. My wife is also supportive, she takes care of the kitchen garden and fruit trees.

For my family, it wasn't always simple to eat fruits prior to receiving the fruit tree seedlings. Due to our lack of money, we could go much more than a month without eating them. For weeks and months, we only ate beans, Irish potatoes, and sweet potatoes on a daily basis. However, as previously mentioned, my family is doing well, and the feeding practices have changed.

The kitchen gardens are also helping my neighbors. Just as Mutuelle de Sante is prioritized in every household, in this country, the same should be done for establishing a kitchen garden and fruit trees for domestic usage."



## IMPACT SNAPSHOT

**Enhanced quality of life**

**Generational lessons on good nutrition**

**Benefits of kitchen garden**

# HortInvest Fruit Tree Project

## Nutrition Action Groups

### **18,165 HOUSEHOLDS FROM 40 VILLAGES BENEFIT FROM 65,000 FRUIT TREES**

In response to the government initiative to distribute at least three fruit trees per household with the goal of increasing fruit production and consumption among Rwandans as well as preventing and reducing stunting, HortInvest project enhanced activities such as the establishment of kitchen gardens, including fruit tree plantation.

The baseline study from 2018 revealed that women of reproductive age do not consume enough fruits and vegetables overall and vitamin A-rich food sources in their diets, which led to the identification of the advocated fruits (WRA). Avocado, papaya, tomato trees, pension fruit, mango, and orange are among the chosen fruits.

The HortInvest project employees transported the seedlings to the designated distribution locations in the communities, assisted by the Nutrition Action Groups, and local government staff who oversaw the distribution operation.

In each district, seedlings were distributed based on the number of households, and the climate that supported specific species. At least three fruit tree saplings were distributed to each home who attended the event. On the day of distribution at the location, the key methods for planting and caring for the seedlings were explained.

A total of 18,165 households from 40 villages in the HortInvest nutrition activities area of focus and 152 model villages in the 6 districts were targeted by the HortInvest project's fruit trees plantation intervention between Q4 2020 and early Q1 2021. 65,853 fruit tree seedlings have been distributed overall.



## IMPACT SNAPSHOT

**18,165**

Households

**40**

Villages

**152**

Model villages

**65,853**

Fruit tree seedlings distributed

## Best in Rwanda Group (BRG)

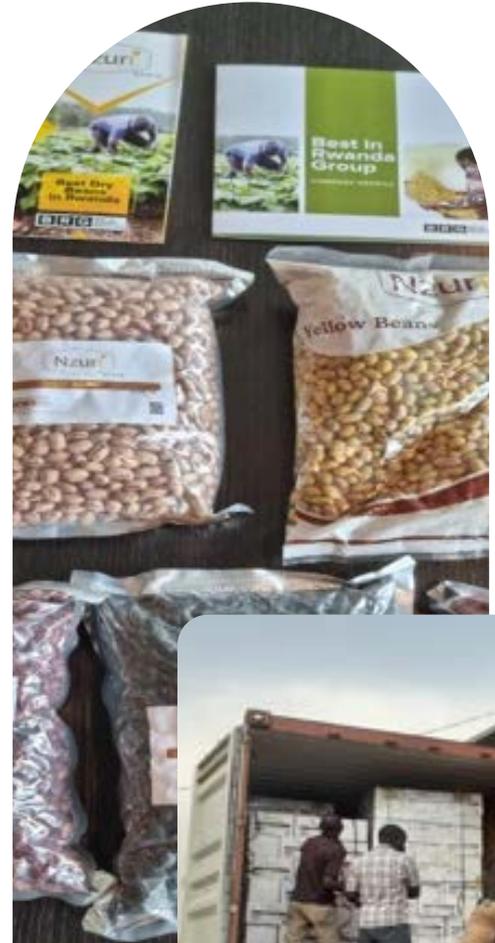
### Nzuri Beans

## EXPORT EXPANSION FROM ONE TO 18MT/QUARTER TO 18MT/MONTH

A premium dry bean exporter, Best in Rwanda Group (BRG), began exporting to Oman in 2018. Prior to joining HortInvest, BRG only exported dry beans to Oman in packages of 25 to 50 kg. In 2020, BRG traveled to the Netherlands and attended the Fruit Logistica in Berlin, Germany, with the assistance of HortInvest to gain knowledge of the European retail market. The trip to the Netherlands also included stops at supermarkets and possible clients. Fruit Logistica taught BRG how to convert the packing of large bags of premium dry beans into smaller packages of 1 kg. BRG then started shipping the smaller packets to a new client he acquired from them who is headquartered in France.

The company was able to expand to Belgium, Canada, and potentially South Africa. Additionally, volumes shipped increased from 18MT/quarter to 18MT/month. Since BRG is not a bean producer, the project connected them to cooperatives (20 cooperatives at first) for the supply of beans. These cooperatives were improved along the way and have quickly accepted the bean kinds that BRG customers required. More than 2,000 smallholder farmers were employed by BRG to produce high-quality beans for export. In order to improve the quality of the beans, these farmers received assistance in good agricultural practices, post-harvest methods, upgrading of their aggregation centers, and the provision of basic storage and post-harvest equipment to ensure that the quality was maintained.

The Nzuri brand became known on the EU market when the packaging was changed from wholesale bulk 25–50 kg bags to 1 kg bags, and now the final consumer can tell that the Nzuri Beans Brand is from Rwanda. BRG was able to build their own warehouse through the Nzuri Beans Project, which is well-equipped for sorting, grading, and packing dry beans. This is a resource that BRG can readily use as collateral to obtain business financing.



## IMPACT SNAPSHOT

**18MT**  
PER QUARTER

**18MT**  
PER MONTH

## FROM NO MARKET TO TRUSTED EXPORT COOPERATIVE

IABM (Iterambere ry'Abahinzi-Borozi ba Makera) began operations in 1990 with an emphasis on the production and processing of maize. For rotational purpose they also involved in horticulture production whereby they used to grow almost every type of vegetables including onions, tomatoes, sweet peppers, cabbages, carrots, beetroots, among others in a traditional way; with no good agriculture practices. IABM submitted a project proposal (an increase in output and quality improvement) and was accepted in the project portfolio beginning in 2019 after learning about HortInvest and its priority areas through Agriterra in 2018.

The assistance they received was market research, which allowed them to learn about demands and preferences for high-value crops. IABM was connected to Garden Fresh, one of Rwanda's potential fresh produce exporters. Since the 2019 season C, French beans were regarded as the primary activity in the horticulture value chain.

Despite not being familiar with its production, French beans were chosen by Garden Fresh as the best crop for the export market. Over time, farmers developed their expertise and increased their production to 8 hectares per season, with a minimum total yield of 52 MT (exportable per season). Farmers claim that there has been a significant improvement, with production up and profits of at least 100 rwf/kg net profit.

IABM went from having no market for vegetables to having a market for export, and up to 80 farmers have engaged in the production of french beans, earning about 15 million RWF per season. From French beans, the cooperative produces a net profit of 5 million RWF each season. The cooperative's expansion has built trust with financial institutions.

IABM increased the amount of french beans it delivered, from 12MT to 52MT per season. IABM built their own cold room through the HortInvest project, which is well-equipped to maintain french bean quality while awaiting transportation facilities.



## IMPACT SNAPSHOT

**12 - 52MT**

Increase in Volume of  
Exports

**100 Rwf/Kg**

Net Profit

# KOTEMII

Export

## 89% OF FARMERS OPEN BANK ACCOUNTS, ACQUIRE LIFE AND HEALTH INSURANCE

Founded in 2010 as a group of farmers, KOTEMII (Koperative Terimbere Muhinzi Ibishyimbo n'Ibigori) was formally registered in 2014. Through a supply chain collaboration with Best in Rwanda Group (BRG), the cooperative became a part of HortInvest's portfolio in 2020. Before joining HortInvest, KOTEMII was traditionally growing local beans without any agronomic assistance and could only sell them to the local market at a low price of between 300 and 500 rwf/kg.

KOTEMII signed a seasonal supply contract for 10MT of dry beans, which was accompanied by training and workshop packages on good agricultural practices, post-harvest handling, and exchange visits to learn best practices for satisfying the requirements of export markets and quality assurance. To increase productivity and quality, KOTEMII applied best practices discovered on a 26 hectare land area.

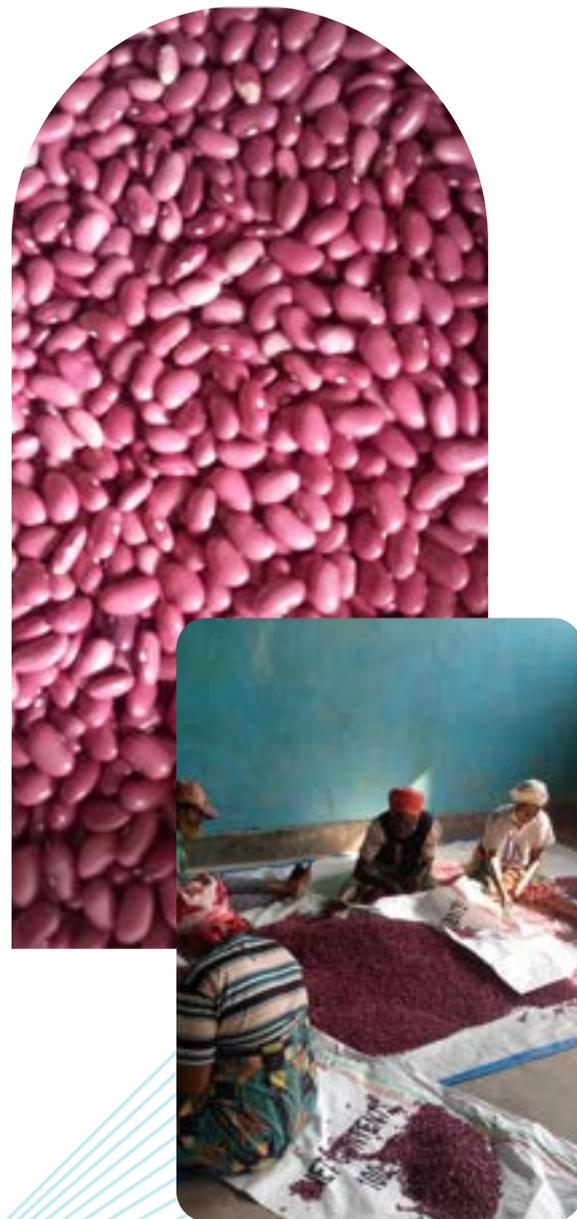
With an increase in productivity from 1.2 MT/ha to 2.4 MT/ha and at a premium price, the relationship with BRG has proven successful. KOTEMII was also linked to RAB and was given the opportunity to become seed multipliers for improved seeds. Four kinds are currently being tested to determine how many varieties will be produced.

Farmers started using enhanced seeds, while nearby farmers have begun using seeds for the export market. The production benefits the cooperative and its members through increased revenues.

KOTEMII assisted its members in securing both (Ejo Heza) and annual health (Mutuelle de sante) insurance for their families. Jobs have also been created by KOTEMII for non-cooperative members. The cooperative hires a minimum of 10 people to transport beans to its aggregation facilities during harvest and postharvest, and 15 people to sort beans on a daily basis.

89% of farmers have opened bank accounts. Due to the fact that all payment-related concerns are handled through financial institutions, cooperative work has been made easier.

KOTEMII was able to purchase its own irrigation pump through the Project, which can water beans all during the dry season.



## IMPACT SNAPSHOT

**89%**

of farmers opened a  
bank account

**1.2 to 2.4 MT**

**Per Hectare**

Increased Yield

## THE IMPACT OF COMMITMENT TO GROWTH

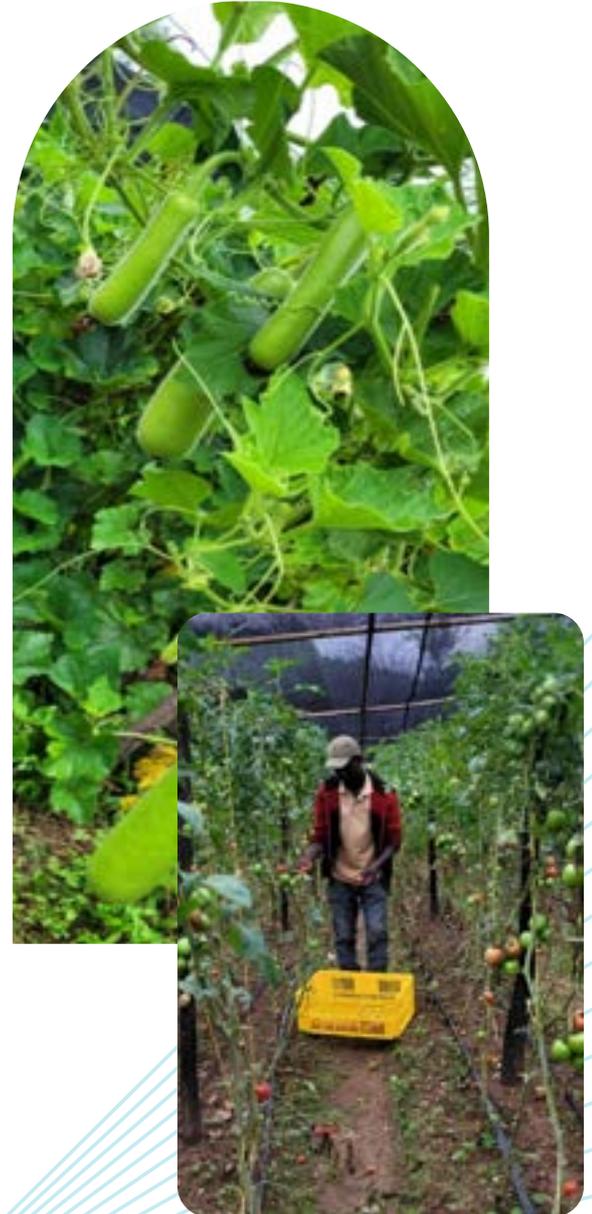
UMURIMO W'UMWUGA, was established in 2018 with the mission of eradicating malnutrition within their families. They began by making a contribution of 100 rwf per member and rented a plot of land where they grew amaranth and cabbage for domestic use. Later, the district connected them to HortInvest after registration at the district level. Hortinvest has incorporated them in its portfolio since 2019 after recognizing their commitment to grow.

With Hortinvest's assistance, they leased an additional 0.5 ha. They also received several practical trainings and workshops on good agricultural practices, the use of better seeds, and other topics. With the learned knowledge, they grew vegetables (sweet pepper, cucumbers, carrots, etc.). They extended to 2 hectares because the produce brought in more money.

In 2020, the cooperative established a connection with one of the potential exporters, Virunga Biotech, and has been closely collaborating to guarantee increased production and good quality ever since. For the export market, they began testing new vegetable types. Virunga pre-financed them with improved seeds for the export market to test. Some of the seeds, such as eggplant, cucumbers, carrots, bitter gourd yielded fruit that was able to produce 400 kg per week and received favorable reviews for its quality.

Despite their high cost, cooperative members currently believe that enhanced seeds are worthwhile because they yield crops of higher quality and bring in more money than local seeds. "With improved seeds, we are selling at 2000 rwf/kg," says a farmer. "Without HortInvest training, the price range for 1 kg of most vegetables grown with local seeds was between 300 and 500 rwf/kg."

The cooperative believes it would be more advantageous to buy their own land for production and office space rather than continue to lease both the land and office building. They are confident that if the partnership keeps producing the current profits, they will be able to acquire the necessary assets to operate the horticulture business.



## IMPACT SNAPSHOT

### 300 - 500 RWF

Per Kilogram with  
Local Seeds

### 2000 RWF

Per Kilogram with  
Improved Seeds

**Angelique Umutoni**  
Trainee - Financial Literacy &  
Record Keeping

**I STARTED TAKING A MORE  
BUSINESS-ORIENTED APPROACH,  
INVESTING BASED ON THE  
EXPECTED RETURNS.**

I work as a farmer in the Rubavu district where I grow onions, beets, carrots, and occasionally fresh green beans. People in the rural areas, like me, farm so that they and their families will have something to eat, but farming is often not considered a business.

As a member of the KAIDU cooperative, I took part in a financial literacy workshop organized by HortInvest Rwanda. When I first heard about the training, I knew nothing about finances and investment. I used to select farm crops based on which had the highest demand and I would sell without knowing how much profit I was making.

After following the financial literacy and record keeping training, I started taking a more business-oriented approach, investing based on the expected returns. As a result, I started tracking my investments, family labor costs, and returns. My decisions about what crops to grow are now based on profitability, considering investment costs, demand, and market prices. Using the information and mindset I gained from the training, I have decided to continue producing onions, beets, carrots, and green beans.

Looking back, I have really benefited from this training, and I am proud to know what I have invested in, what it has resulted in, and how profitable it was.



**IMPACT SNAPSHOT**

**Mindset Change**

Began tracking investments, costs, and returns

**Crop selection**

Using a more business-oriented approach to select crops

## **BEHAVIOR CHANGE, IMPROVED AGRICULTURE, AND KITCHEN GARDENS TO COMBAT MALNUTRITION**

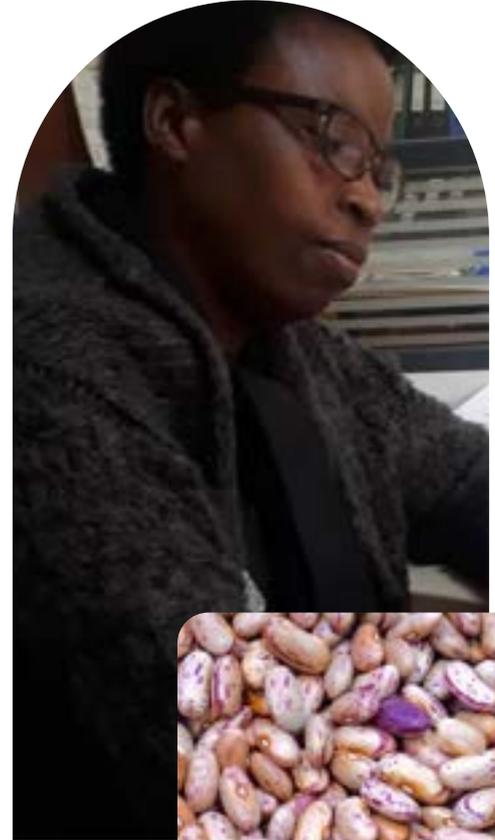
My name is Mukabaziga Victoire, the Muhanga district's ECD (Early Child Development) focal person. We collaborate closely with the SPEM (Sector Plan of Eliminating Malnutrition) committee.

Prior to collaborating on the HortInvest project, SPEM in the Nyamabuye sector was not being utilized. When Hortinvest stepped in, we saw a great difference compared to other SPEM committees from other sectors.

As soon as the committee started working, all members of the Nyamabuye SPEM Committee were informed of their responsibilities. Numerous changes have occurred at the community level over the past 18 months, including an increase in knowledge and change in behavior, improved agriculture, fruit trees and kitchen gardens to combat diseases, cooking demonstrations, and other community activities. SPEM members attended each of these events and followed up on them, with HortInvest also present to support and facilitate financially and through capacity building. Regarding the SPEM, their actions are elevated to the District level as a contribution to the District population.

All those outstanding achievements started at the village level with the committee's assistance. HortInvest meetings, suggestions, and training sessions resulted in modifications that improved healthy nutrition and reduced malnutrition, with each committee member making a distinctive contribution. Though a variety of foods, including beans, vegetables, potatoes are available, you still see families with undernourished children because their parents do not understand the need of a balanced diet. The committee intervened to provide assistance in these circumstances.

Additionally, the stunting rate in Muhanga has decreased; it was 35.8% in 2020-2021 but is only 31.7% this year. With the assistance of Hortinvest and other partners, DPEM and SPEM committees' involvement became more effective, contributed to behavior change at community level, increased rate of consumption of fruits and vegetables.



## **IMPACT SNAPSHOT**

**35.8% - 31.7%**

Stunting rate decreased

**Gabriel Habimana**  
SPEM Committee

## TOGETHER WE CAN END MALNUTRITION IN OUR COMMUNITIES

Gabriel Habimana has been in charge of social affairs in the Muhanga district's Nyamabuye area for 10 years. He is an active member of the Nyamabuye SPEM (Sector Plan for Elimination of Malnutrition) committee.

"With the help of the HortInvest project intervention over the past 1.5 years, we were able to meet for the first time as members, get to know one another, and complete an action plan that is now the foundation for our current activities.

A noteworthy accomplishment for the community was the introduction of about 10 families with malnourished children to the churches. This helped the children recover as quickly as possible. Another accomplishment was that we, the committee members, went on team or peer-to-peer house visits with the recipients and gave them advice.

We are collaborating with a variety of parties, including the DPEM (District Plan for Elimination of Malnutrition), which provides us with parameters for our actions and from which we draw our action plan. We have encountered a number of difficulties, including the SPEM committee members' many duties, which occasionally limit their availability for committee operations. Ultimately, a close follow-up is required, therefore someone must be designated to accomplish it. The committee members who are employed by the private sector were asked to invest some time and make a contribution to the resilience of the nation.

Despite the difficulties, the SPEM committee is an important and necessary group because it is the only one focusing primarily on issues related to the eradication of malnutrition at the sector level. It is crucial because it is planned in accordance with Rwanda's strategic plan to end malnutrition, and it may be one of the best ways for the nation to accomplish this goal. And we can attest to its effects because it is in use. We are driven to keep going since there are still malnutrition cases in our neighborhood and area, and as a committee, we are dedicated to being involved in programs to eradicate the problem in order to help the nation reach its goal."



## IMPACT SNAPSHOT

**10**

Families supported in the  
eradication of malnutrition

## **FINANCIAL LITERACY MITIGATES FARMER LOSSES REPLACING IN-KIND PAYMENTS WITH CASH.**

As a farmer, I was interested in the financial literacy training to know what I am investing in my daily farming activities. I expected to gain new knowledge from the training and learned a lot about profit and loss calculations. To mention a few: how to treat capital investments; how to calculate the depreciation of materials; how to value in-kind payments and how to compare the costs of accessing credit from different sources (friends or financial institutions).

Before the training my investments were very high as I was not recording them. Now, I invest on purpose and avoid financial losses, for example by replacing in-kind payments with cash. Also, I started to work with Urwego Bank that provides agricultural inputs because I'm confident that I can repay. I am saving for next season to finance most of the farm investments rather than taking loans.

The positive results in my farm inspired me to become a trainer to share the knowledge with my family, neighbours, and fellow members in the KAIDU cooperative. Most farmers do not calculate their investments but simply consider the production quantity times the market price as profit. Through the training, farmers know the level of investment which supports them to sell the produce with a profit.

One of the challenges of being a trainer is to ensure a good application of the lessons learned by the farmers. Recording takes time and if not done properly information will get lost. It is also more difficult to train old people. As a trainer, I always encourage farmers to continue recording and 65% of the trainees in my cooperative do so. We also have good relationships with other cooperatives with whom we discuss the lessons we learned.



## **IMPACT SNAPSHOT**

**65%**

KAIDU members adopted record keeping

# Notes





