

# AGENCY FOR INTEGRATED RURAL DEVELOPMENT

# TRANSFORMATIVE SUCCESS STORIES:

Empowering Smallholder Farmers in Uganda through Sustainable Agriculture Practices





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# **Executive Summary**

The case studies featured in this compilation demonstrate the transformative power of sustainable agriculture practices, livestock integration, and value addition in improving the livelihoods of smallholder farmers in Uganda. Key findings include:

- Improved crop yields and soil fertility through the use of organic fertilizers and biopesticides
- Increased income generation through the sale of surplus produce, livestock, and value-added products
- Enhanced food security through the production of diverse crops and livestock
- Empowerment of women and community members through training and knowledge sharing
- Improved environmental sustainability through the adoption of conservation agriculture practices and the use of locally available materials.

These case studies provide valuable insights into the challenges and opportunities faced by smallholder farmers in Uganda and highlight the importance of sustainable agriculture practices, innovation, and community-led initiatives in promoting rural development and improving livelihoods.

# Introduction

The following case studies showcase the success stories of smallholder farmers in Uganda who have adopted sustainable agriculture practices, integrated livestock into their farming systems, and implemented value addition strategies to improve their livelihoods. These case studies highlight the impact of training, innovation, and community-led initiatives in promoting sustainable agriculture and rural development.



# Case study 1: Ms. Juliet Mukyala's urban farming success in Kyebando-Nansana Municipality, Wakiso district

# **Background**

Mrs. Juliet Mukyala, a dedicated member of Wakiso Model Permaculture, has demonstrated exceptional skill and innovation in urban farming within a confined space in Kyebando, a densely populated urban area. Despite her lack of formal employment, Mrs. Mukyala has transformed her household into a thriving micro-farm, showcasing the potential of urban agriculture.

# **Urban Farming Techniques**

To maximize her yield in a limited space, Mrs. Mukyala has adopted several innovative growing techniques, including:

- 1. Sack Gardening: Using sacks filled with soil to grow vegetables vertically.
- 2. Recycled Containers: Repurposing old plastic containers, such as jerry cans, basins, and soda crates, to create portable and space-efficient planting vessels.

These methods have enabled her to maintain a sustainable and eco-friendly approach to urban farming while increasing her productivity.

# **Impact and Achievements**

Mrs. Mukyala's urban farming venture has had a significant impact on her life and the community:

- Increased Productivity: She has significantly increased her vegetable production, providing a steady supply of fresh produce for her family and creating surplus for sale in local markets.
- Economic Empowerment: The income generated from selling her vegetables has provided Mrs. Mukyala with financial independence and stability.
- Community Inspiration: Her success story serves as a testament to the possibilities of urban farming and the benefits of sustainable agricultural practices, inspiring other members of the Kyebando community and the Wakiso Model Permaculture group.

## **Vision and Future Plans**

Mrs. Mukyala's vision extends beyond vegetable growing:

- Scaling Up Vegetable Production: She plans to increase the variety and quantity of vegetables she grows to meet the rising demand in local markets.
- Rearing Turkeys: She intends to reinvest in poultry farming, building on her previous success with turkey rearing.
- Community Education: Mrs. Mukyala plans to organize workshops and training sessions to teach urban farming techniques to her neighbors and fellow community members.

## Conclusion

Mrs. Juliet Mukyala's journey in urban farming is a remarkable example of how innovation, determination, and sustainable practices can transform limited urban spaces into productive and profitable farms. Her success highlights the potential of urban agriculture and serves as an inspiration for others seeking to improve their livelihoods through farming.



# Case study 2: Juuko Charles' Poultry Rearing and BSFL Integration

## **Background**

Juuko Charles, a 65-year-old farmer from Kikota Village, Masulita Town Council, Wakiso District, Central Region, Uganda, supports a large family of 16 members. With a passion for poultry farming, Charles has been rearing 35 chickens, a mix of local and crossbred varieties.

# **Community Involvement and Training**

Charles is an active member of the Agali Awamu Farmers Group in Masulita Town Council, Kikota Village. The group has received training on sustainable agriculture for the past 5 years, and Charles has enthusiastically implemented the techniques he learned, contributing to his success in poultry farming.

# **Traditional Feeding Practices**

Initially, Charles relied on a combination of locally available feed ingredients, including:

- Maize Bran
- Mukene (silver fish)

- Broken Maize
- Boiled Banana Peelings
- Russian Comfrey
- Dried Calliandra Leaves

These ingredients, while effective, represented a significant portion of his farming expenses.

## **Introduction of Black Soldier Fly Larvae (BSFL)**

To reduce feed costs, Charles began rearing Black Soldier Fly Larvae (BSFL) six months ago. BSFL are known for their high protein content and ability to convert organic waste into valuable feed.

By integrating BSFL into his poultry diet, Charles aimed to create a more sustainable and cost-effective feeding system.

## **Impact of BSFL on Feed Costs**

The introduction of BSFL has significantly reduced Charles' feed expenses. This innovative approach has not only cut costs but also ensured that his chickens receive a high-protein diet, promoting better growth and health.

## **Expansion Plans**

Buoyed by the success of his BSFL integration, Charles plans to expand his flock to 200 chickens, comprising:

- 100 Local Breeds
- 100 Mixed Broilers and Kroilers

## **Challenges Faced**

Despite the benefits, Charles has encountered several challenges with BSFL technology, including:

- Pest Infestations
- Contaminated Feed

# **Farmer's Perspective**

Reflecting on his experience with BSFL technology, Charles noted, "I am glad to have alternative protein sources for my poultry... Through BSFL, my family will have a diversified income stream."

## Conclusion

Juuko Charles' journey in poultry farming exemplifies the potential of innovative practices in achieving sustainability and cost-effectiveness. While challenges remain, his commitment to integrating BSFL into his feeding routine highlights a promising path forward for small-scale farmers.



# Case study 3: Nakijjoba Solome – Enhancing Food Security and Income through Sustainable Bahana Farming

# **Background**

Nakijjoba Solome, a dedicated member of the Agali Awamu Farmers Group in Kikota Village, Masulita Town Council, Wakiso District, Uganda, has successfully leveraged banana farming to improve food security and household income. Supporting a family of nine, she has demonstrated resilience and commitment to sustainable agricultural practices.

# **Journey into Sustainable Banana Farming**

Solome's journey in banana farming began with the support of the Sustainable Agriculture Project. As one of the most experienced members of her group, she received 50 banana suckers, which she effectively managed to establish a productive plantation.

Through dedicated efforts, Solome has maintained her plantation for over three years, employing best farming practices such as:

- Proper spacing for optimal growth and high yield
- Pruning to remove unnecessary shoots for better nutrient distribution
- Pest and disease management through effective control measures
- Mulching using old banana stems and crop residues to retain soil moisture and fertility



# Case study 4:

Story of Change: Enhancing Food Security and Income Through Sustainable Vegetable and Fruit Farming

# **Background**

Nawalu Harriet, chairperson of Tulina Esubi Mixed Group, has established herself as a dedicated leader and passionate advocate for sustainable agriculture in Luggi Village, Lukwanga Sub-County, Wakiso District.

# **Vegetable Production**

Harriet specializes in growing a variety of vegetables, including Sukuma wiki (kale), parsley, and spring onions. Her primary focus is income generation through the sale of these vegetables. She attributes her success to agricultural trainings, which enabled her to enhance her land's productivity.

## **Intercropping and Diversified Farming**

In addition to vegetable farming, Harriet practices intercropping with other staple crops, such as bananas, coffee, and sweet potatoes. This practice contributes to household food security and provides multiple income streams.

# **Agroforestry and Fruit Tree Integration**

Harriet's dedication to sustainable farming extends to agroforestry, where she has integrated trees, particularly fruit trees, into her farming system. She places a special emphasis on pawpaw cultivation, using a resilient variety that produces fruits resistant to pests and diseases.



# **Market Access and Group Collaboration**

Tulina Esubi Mixed Group, under Harriet's leadership, has achieved notable success in bulking their vegetable produce, enabling them to access larger markets. This access to a reliable market has motivated Harriet and her fellow group members to scale up vegetable and fruit production.

# **Support and Future Aspirations**

The Wakiso Sub-County has identified Harriet's group as a key vegetable-growing group in the area. The sub-county has encouraged them to apply for funding through the Parish Development Model (PDM), a government initiative aimed at improving livelihoods. Harriet is optimistic that with additional financial support, she and her group members can further expand their vegetable and fruit production.

### Conclusion

Harriet's journey from struggling with poor soil fertility to becoming a successful vegetable farmer and group leader is a testament to the power of sustainable agricultural practices. Her dedication to improving productivity, diversifying crops, and integrating agroforestry has not only improved her household's income but also contributed to the environmental protection goals of the project.

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# Case study 5: Using Herbal Medicine for Improved Local Poultry Production: A Case Study of Kizza Margret

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#### Introduction

Kizza Margret, a member of the Sosolye Women Farmers Group in Katalemwa town, Matuuga, has successfully improved her local poultry production through the use of herbal medicine and improved management practices.

## **Background**

Before joining AFIRD, Margret kept local poultry on a free-range system with limited intervention, resulting in low productivity and high mortality rates. However, after receiving training on animal husbandry and learning from other farmers, she adopted new practices that significantly improved her poultry production.

# **Improved Management Practices**

Margret has implemented several improved management practices, including:

- Vaccination to control poultry diseases
- Brooding for young ones
- Controlled breeding to prevent inbreeding

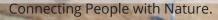
These practices have contributed to a significant increase in the number of birds and improved overall productivity.

## **Use of Herbal Medicine**

Margret uses various herbal medicines to prevent and treat poultry diseases, including:

- Olucit: cooked leaves are given to drink
- Enjaga: cooked leaves are given to drink
- Ekiyondo: squeezed leaves are given to drink or passed over fire and squeezed
- Omutubya: squeezed with water and ash, left overnight and given to birds the next morning
- Taaba: squeezed with water and ash, given to birds
- Garlic and paper: ground, mixed with water, and given to birds

These herbal medicines have been effective in preventing and treating common poultry diseases such as fowl pox, diarrhea, and cough.



# **Impact**

Margret's improved management practices and use of herbal medicine have had a significant impact on her poultry production, including:

- Increased number of birds from 1 to 14
- Improved productivity, with 4 hens hatching eggs naturally
- Increased income from selling birds and eggs
- Improved food security, with access to chicken meat and eggs for household consumption

## **Conclusion**

Kizza Margret's experience demonstrates the potential of herbal medicine and improved management practices to improve local poultry production. Her success has not only improved her household's income and food security but also contributed to the development of her community.



# Case study 6: Housing the Way to Go for Enhanced Animal Income Generation: A Case Study of Mubiru David

# **Background**

Mubiru David, a resident of Kibuye Mukafenne village, Luwunga parish, Mituba Esatu, Kakiri subcounty, transitioned from office work in Kampala to farming on his 2-acre land. With no prior farming experience, he joined the Kibuye Growers Farmers Group, which is part of the AFIRD network, and has been an active member for two years.

#### **Animal Production**

Mubiru has established a diverse animal production system, comprising:

- Pigs (6)
- Poultry (35 local birds, 40 kroilers)
- Cattle (2 crosses, 1 improved)
- Goats (2 improved, 4 local)
- Ducks (7)

His success in animal production is attributed to the establishment of structures for each animal type, enabling a zero-grazing system, minimal disease spread, and controlled feeding.

## **Importance of Animal Housing**

Mubiru emphasizes the significance of animal housing in his operation:

- Allows for zero-grazing, preventing crop destruction
- Minimizes disease spread
- Enables monitoring of animal feed quality, quantity, and type
- Enhances animal health monitoring
- Provides better security for animals, protecting them from theft and wild animals

# **Family Involvement and Labor**

Mubiru credits his family's involvement as crucial to his success:

- Daily cleaning of animal houses and equipment to maintain hygiene and sanitation
- Family members share responsibilities, with women caring for goats and chicken, and men caring for pigs and cattle



## **Sources of Animal Feeds**

The family grows feeds for their animals, including:

- Potato vines for pigs, goats, and cattle
- Calliandra and elephant grass along boundaries and as soil stabilizers
- Brocherial molato garden
- Maize bran mixed with other ingredients

## **Income Generation**

Mubiru's animal production generates significant daily and monthly income:

- Daily income from cow milk (10 liters) 20,000 UGX
- Monthly income from cow milk 600,000 UGX
- Monthly income from poultry eggs and birds -184,000 UGX
- Income from pig and goat sales from 300,000 400,000 UGX every 7 months

The income generated has enabled the family to:

- Construct a new house
- Pay school fees for their children
- Acquire basic necessities
- Pay labor for gardening
- Repair animal structures
- Purchase medicine for animals

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# Case study 7: Mukama Afaayo Success Story: Enterprise Diversification

#### Introduction

Mukama Afaayo, a group located in Kitebi and Butega villages, Kakiri sub-county, joined AFIRD in 2023. Over the past two years, the group has benefited from various trainings on sustainable agriculture, enhancing food security and income generation for its members.

# **Case Study: Abdul Masiina**

Mr. Abdul Masiina, a member of Mukama Afaayo, resides in Butega village. He has diversified his farming activities to include improved goat rearing and crop production for food security. The training on animal management provided by AFIRD empowered him to venture into goat rearing as an additional income-generating activity.

## **Exposure Visit and Implementation**

Following an exposure visit, Masiina gained valuable insights into AFIRD's activities and began implementing them on his farm. He planted a cassava garden, dubbed "AFIRD," and started growing sweet potatoes and maize, which he had not previously cultivated. Maize has become a staple crop for him, planted every season to ensure food security.

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## **Progress and Benefits**

Masiina's farm has undergone significant transformations:

- His goat herd has expanded from 6 to 28
- He grows a diverse range of crops, including tomatoes, vegetables, bananas, cassava, maize, and beans
- He utilizes goat manure as organic fertilizer, resulting in healthier plants and higher yields
- He sells vegetables to community members and group members, generating additional income

#### **Conclusion**

The Mukama Afaayo group, through the efforts of members like Abdul Masiina, has demonstrated the benefits of enterprise diversification in achieving food security and income generation. With continued support from AFIRD, the group is poised for further growth and success in sustainable agriculture.

# Case study 8: Integrating Livestock for Sustainable Agriculture in Masulita, Wakiso District: A Story of Change

#### Introduction

Nabukeera Margret, a widow and secretary of Biika Men and Women's Group in Masulita Town Council, Wakiso District, has been a key player in a sustainable agriculture project aimed at promoting food security, income generation, and environmental conservation among smallholder farmers.

# **Background**

Biika Men and Women's Group, a community-based organization, focuses on improving the welfare of its members through agricultural initiatives. The integration of livestock, particularly Boer goats, was seen as a viable approach to improve the quality of local goats through crossbreeding, provide organic manure for crop production, and increase household income.

## **Livestock Integration and Impact**

The introduction of Boer goats into Margret's farm has brought significant benefits:

- 1. Genetic Improvement and Crossbreeding: Margret's Boer goats have enhanced the bloodline of the local goat breed through crossbreeding. The crossbred goats are stronger, grow faster, and have a higher market value, providing a reliable source of income.
- 2. Manure for Soil Improvement: Goat droppings have proven to be an excellent fertilizer, helping Margret improve the quality of her soil. As a result, her crop yields have significantly increased.
- 3. Income Diversification: The introduction of Boer goats has enabled Margret to diversify her sources of income. In addition to selling crossbred goats, Margret earns money from providing crossbreeding services to other local farmers.



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# **Training and Record-Keeping**

Margret's success can be attributed to the training she received in livestock management and recordkeeping. She maintains detailed records of:

- Reproduction records
- Treatment records
- Crossbreeding records
- Payment records

## Conclusion

Nabukeera Margret's experience demonstrates the transformative power of integrating livestock into smallholder agriculture. The Boer goats she received have improved her household income, enhanced the productivity of her crops, and contributed to environmental sustainability. Her meticulous recordkeeping and training have been crucial in maximizing the benefits of the project. Margret's farm now serves as a model for other smallholder farmers in the region, showcasing the potential of livestock integration to improve rural livelihoods.

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# Case study 9:

# Use of Sustainable Agriculture Practices for Improved Livelihood: A Case Study of Sarah Nakalyowa

#### Introduction

Sarah Nakalyowa, a member of Biyinzika Weavers Farmers Group, resides in Kiryagonja, Matuga. She lives and works with her children on a 1-acre land, supporting a family of 8 people. This case study highlights her transformation from reliance on weaving and handwork for income to embracing sustainable agriculture practices, ensuring food security and improved livelihood.

# Background

Before joining AFIRD, Sarah had limited knowledge of farming as a viable source of income and food security. Her primary occupation was weaving and handwork, which provided insufficient income for her family's needs. However, after participating in AFIRD's training programs, Sarah underwent a significant mindset shift, recognizing the potential of farming to improve her livelihood.

# **Challenges and Transformation**

Sarah's 1-acre land was initially unproductive due to the excessive use of herbicides, which destroyed the soil structure. She also faced challenges with outdoor pig rearing, which resulted in the loss of her pigs to poisoning. However, after learning about the importance of organic farming practices, Sarah began to rejuvenate her soil by adding manure and adopting sustainable agriculture methods.

## **Sustainable Agriculture Practices**

Sarah has adopted several sustainable agriculture practices, including:

- Using goat dung and urine as organic fertilizer
- Keeping a diverse range of crops, including bananas, yams, beans, vegetables, and cassava
- Implementing farm planning and record-keeping
- Establishing a tree nursery and animal fodder plantation



# **Impact and Benefits**

Sarah's adoption of sustainable agriculture practices has resulted in significant benefits, including:

- Improved soil fertility and productivity
- Increased crop yields and diversity
- Enhanced food security for her household
- Increased income from selling surplus produce
- Improved nutrition and health for her family

#### Conclusion

Sarah Nakalyowa's story demonstrates the transformative power of sustainable agriculture practices in improving livelihoods. Through her participation in AFIRD's training programs, Sarah has gained the knowledge and skills necessary to adopt sustainable agriculture practices, ensuring food security and improved income for her household. Her experience serves as a model for other smallholder farmers, highlighting potential of sustainable agriculture improve rural livelihoods.

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# Case study 10: Using Biopesticides and Biofertilizers for Enhanced Crop Production: A Case Study of Nansikombi Dorcus

## Introduction

Nansikombi Dorcus, a member of Dare Union Group in Kampomera, Masulita sub-county, has successfully adopted of biopesticides the use and enhance biofertilizers to crop production on her 50x100 meter land. This case study highlights her experience with ash brew, biopesticide, and its impact on her crop yields and income.

# **Background**

Dorcus had been struggling with low crop yields despite her long experience in farming. However, after receiving training on sustainable agriculture practices, including integrated pest and disease management, she gained knowledge on how to control pests and diseases and improve soil fertility.



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## **Production and Use of Ash Brew**

Dorcus learned to produce ash brew, a biopesticide, using a simple recipe:

- Gather ash, clean it in a sieve
- Cut soap into small pieces
- Boil water, add chopped soap, and dissolve
- Add ash, mix, and remove from fire
- Allow the mixture to settle and cool down

She uses 400ml of ash brew in 20 liters of water and sprays it on all crops. This biopesticide is effective against crop pests and fungal diseases, promoting vigorous and healthy crop growth.

# **Impact and Benefits**

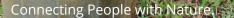
The use of ash brew has brought significant benefits to Dorcus's farming:

 Reduced costs: Ash brew is a costeffective alternative to inorganic pesticides

- Improved crop yields: Ash brew has increased the shelf life of her vegetables, allowing for longer harvesting periods
- Increased income: Dorcus sells surplus vegetables, including bitter eggplants, earning 5,000 Uganda shillings per basin
- New business opportunity: Dorcus now produces and sells ash brew to fellow farmers, earning 50,000 Uganda shillings per season

## Conclusion

Nansikombi Dorcus's experience demonstrates the effectiveness of biopesticides and biofertilizers in enhancing crop production. The use of ash brew has not only improved her crop yields and income but also provided a new business opportunity. This case study highlights the potential of sustainable agriculture practices to improve rural livelihoods and promote environmental conservation.



# Case study 11:

Success Story: Organic Fertilizer and Pesticide Production by Mrs. Nalubwama Grace

#### Introduction

Mrs. Nalubwama Grace, a resident of Baale village, Masuliita subcounty, Wakiso District, is a farmer trainer and member of the Nezikokolima women's group. She has successfully adopted and promoted sustainable agriculture practices, including the production of organic fertilizers and pesticides.

## **Background**

The Nezikokolima women's group received training on Integrated Pest and Disease Management (IPDM) from AFIRD. The training equipped them with knowledge on how to control pests and diseases using organic methods and how to produce organic pesticides and fertilizers.

# Organic Pesticide and Fertilizer Production

Mrs. Nalubwama Grace and her group discovered a pesticide that controls weevils in bananas, maize, and vegetables, while also acting as a fertilizer for different plants. The pesticide is prepared using locally available materials, including:

- Wood ash
- Bar soap
- Oluwoko
- Tethonia
- Kamulali
- Tobacco
- Human urine (kept for 21 days)

The mixture is diluted with water and sprayed on affected plants to control pests and diseases





## **Impact and Benefits**

The use of organic pesticides and fertilizers has brought significant benefits to Mrs. Nalubwama Grace and her community:

- Improved crop yields and plant health
- Increased income from selling surplus produce
- Reduced costs associated with purchasing chemical pesticides and fertilizers
- Enhanced environmental sustainability through the use of locally available and organic materials
- Empowerment of women and community members through training and knowledge sharing

# **Entrepreneurial Ventures**

Mrs. Nalubwama Grace has started packaging and selling the organic pesticide in small bottles, earning an income of 5,000 Uganda shillings per liter. She also encourages community members to join her group and adopt sustainable agriculture practices.

#### Conclusion

Mrs. Nalubwama Grace's success story demonstrates the potential of organic pesticide and fertilizer production to improve crop yields, enhance environmental sustainability, and increase income for smallholder farmers. Her entrepreneurial spirit and commitment to knowledge sharing have empowered her community and promoted sustainable agriculture practices.

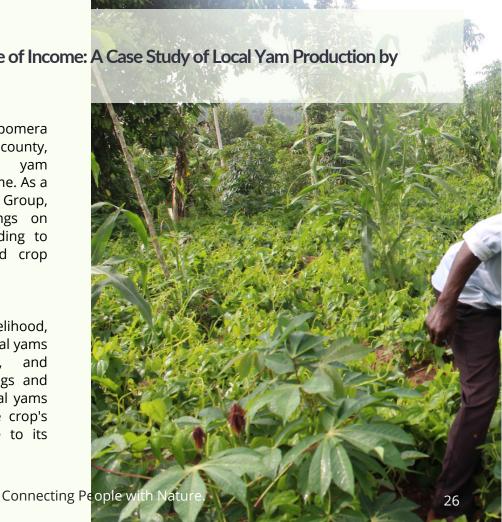
Case study 12: Indigenous Local Crops as a Source of Income: A Case Study of Local Yam Production by Ssalongo Charles

## Introduction

Salongo Charles, a resident of Kampomera village, Tumbali parish, Masulita sub-county, has successfully leveraged local yam production as a reliable source of income. As a member of Dare Union Farmers Group, Charles has benefited from trainings on sustainable agriculture practices, leading to improved soil fertility and increased crop yields.

## **Background**

Charles depends on farming for his livelihood, growing a variety of crops, including local yams (Balugu), fruits, coffee, bananas. vegetables, in addition to keeping pigs and cattle. He has focused on growing local yams on 0.5 acres of land, recognizing the crop's potential for income generation due to its increasing demand and prices.



# **Challenges and Transformation**

Initially, Charles grew local yams without applying manure, resulting in low yields of only 2 bags per season. However, after attending trainings on sustainable agriculture practices, he gained knowledge on improving soil fertility. Charles began producing biofertilizers using a mixture of charcoal dust, ashes, and animal manure in a ratio of 1:1:2, respectively. By applying two handfuls of this manure to each mound of yams planting time, Charles has consistently improved his yields.



# **Impact and Benefits**

The adoption of biofertilizers has brought significant benefits to Charles's local yam production:

- Increased yields: From 2-4 bags to 6 bags of 50kg per season
- Improved soil fertility: Enhanced soil structure and nutrient content
- Increased income: Higher yields and prices for local vams have increased Charles's income
- Reduced costs: Using locally available materials to produce biofertilizers has reduced Charles's expenditure on fertilizers

#### **Conclusion**

Salongo Charles's experience demonstrates the potential of indigenous local crops, such as local yams, to serve as a reliable source of income. By adopting sustainable agriculture practices, including the use of biofertilizers, Charles has improved his crop yields, increased his income, and reduced his costs. This case study highlights the importance of promoting sustainable agriculture practices and supporting smallholder farmers in their efforts to improve their livelihoods.

# Case study 13: Local Poultry Keeping for a Better Life: A Case Study of Sentamu Frank

## Introduction

Sentamu Frank, a resident of Bulima village, Buwanuka parish, Kakiri sub-county, has transformed his life through local poultry keeping. As a member of Mukama Afuga Farmers Group, Frank has benefited from a three-year sustainable agriculture project implemented by AFIRD. This case study highlights Frank's journey in improving his local poultry management practices, leading to increased income and improved livelihood.

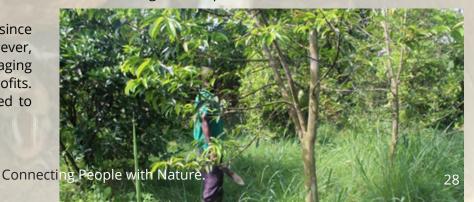
# **Background**

Frank has been keeping local chickens since his youth, encouraged by his aunt. However, he lacked technical knowledge on managing local poultry, resulting in minimal profits. Despite this, Frank remained committed to local chicken rearing.

## **Training and Transformation**

Through AFIRD's sustainable agriculture project, Frank's group received training on animal management and husbandry practices. Frank gained valuable knowledge and skills, which he applied to his local poultry management. He adopted best practices, including:

- Establishing a local poultry house with a semi-intensive system
- Providing a balanced diet of maize bran mixed with other ingredients
- Keeping chicks and their mothers in a brooder for four months to improve growth rates
- Vaccinating birds to prevent disease infections



# **Impact and Benefits**

Frank's adoption of improved local poultry management practices has brought significant benefits:

- Increased bird population: From 20 birds to 70 birds between 2022 and 2024
- Improved growth rate: From 10% to 80%
- Increased income: Frank earns 50,000 Uganda shillings per week from selling birds
- Enhanced food security: Frank grows maize specifically for poultry feed, ensuring a stable food supply for his birds
- Improved livelihood: Frank uses the income generated from local poultry keeping to support his family's basic needs

### Conclusion

Sentamu Frank's case study demonstrates the potential of local poultry keeping to improve livelihoods. With training and support from AFIRD, Frank has transformed his local poultry management practices, leading to increased income, improved food security, and enhanced livelihood. This case study highlights the importance of sustainable agriculture practices and the impact of training and support on smallholder farmers' lives.





# Case study 14: Tusubira Nakatunda Farmers Group Success Story: Animal Integration for Sustainable Agriculture

#### Introduction

Tusubira Nakatunda Farmers Group, located Nakatunda Village, Lugungudde parish, Masulita subcounty, Wakiso District, has made significant strides in integrating animal husbandry into their farming practices. With 19 members, the group has been working with AFIRD since 2020 and has completed the first phase of their three-year program.



# **Background**

As part of their training, the group participated in a learning visit to Katabailes farm, which inspired Mr. Damba Francis, the group's chairperson and farmer trainer, to initiate a goat project. Francis constructed a goat house and purchased two goats, which have since increased to eight. He also took steps to improve the breed by acquiring a male goat from Ismail Katongole.

# **Objectives and Benefits**

Francis's goat project aimed to:

- Collect manure and urine to improve crop performance and soil fertility
- Generate income through the sale of goats
- Enhance the group's overall agricultural productivity

The project has encouraged other group members to adopt similar initiatives, promoting a culture of animal integration and sustainable agriculture practices.

## **Best Practices and Innovations**

Francis has implemented several best practices and innovations, including:

- Planting diverse animal pastures and fodder to feed the goats
- Utilizing machines provided by AFIRD to cut grass into small pieces for animal feed
- Improving breed quality through strategic breeding practices

### Conclusion

Tusubira Nakatunda Farmers Group's success story demonstrates the value of integrating animal husbandry into sustainable agriculture practices. Through their goat project, the group has improved soil fertility, increased crop yields, and generated income. This case study highlights the importance of training, innovation, and community-led initiatives in promoting sustainable agriculture and improving rural livelihoods.



Case study 15: United We Stand Success Story: Value Addition on Spices



#### Introduction

The United We Stand group, located in Katikamu village, Katikamu parish, Masulita sub-county, Wakiso District, has made significant strides in promoting sustainable agriculture practices among smallholder farmers. Since joining AFIRD in 2020, the group has received training on various activities, including spice growing, with a focus on value addition.

# **Background**

Initially, the group planted lemon grass and rosemary with the intention of selling them to buyers. However, they soon discovered that the prices were low and the demand was limited. Undeterred, the group decided to explore value addition options to increase the economic viability of their spice production.

## **Value Addition Process**

The group's chairperson, Mrs. Namboowa Milly, attended a learning visit to the Jinja Agriculture Show, where she acquired a solar drier and a machine that breaks the rosemary into small pieces. The group's value addition process involves:

- Harvesting rosemary and drying it in the solar drier for three days
- Breaking the dried rosemary into small pieces using the machine
- Crushing the pieces into powder form using a blender
- Packaging the powder in polythene bags and labeling them with the group's branding

# **Marketing and Sales**

The group sells their rosemary powder to nearby places and Kakiri town, generating income for the members. The packaging and labeling of the product are done by Mrs. Namboowa Milly, who is also the group's farmer trainer.

## Conclusion

The United We Stand group's success story demonstrates the potential of value addition in increasing the economic viability of smallholder farmers' produce. By investing in solar drying and processing technologies, the group has been able to transform their rosemary into a high-value product, generating income and improving their livelihoods. This case study highlights the importance of innovation, entrepreneurship, and value addition in promoting sustainable agriculture and rural development.

# Case study 16:

Transforming Livelihoods through Energy Efficiency: Ms. Mubiru's Journey with Sustainable Stoves

# **Background**

Ms. Mubiru, a dedicated member of the Kibuye Growers Association in Kafeene Village, Wakiso District, has always sought innovative ways to improve her livelihood while conserving the environment. Recently, she attended a practical training session on energy-saving stoves, a key intervention under the Sustainable Agriculture Project.

#### Intervention

During the training, Ms. Mubiru learned how to construct a 2-in-1 non-portable energy-saving stove using locally available materials, including ant hill soil, dry chopped grass, water, and banana stems. The stove design allows for efficient cooking, reducing firewood consumption and smoke accumulation.

# **Outcomes and Impact**

Since implementing the new stove design, Ms. Mubiru has observed:

- Reduced smoke in the kitchen: A healthier and more comfortable cooking environment.
- Efficient fuel usage: Reduced firewood consumption, saving time and resources.
- Time-saving cooking: Simultaneous cooking of food and sauce or tea.





## **Lessons Learned**

The experience highlights the importance of:

- Adopting innovative technologies: Utilizing locally available resources for sustainable practices.
- Practical training and community engagement: Fostering sustainable both the practices that benefit environment and household livelihoods.

## Conclusion

The success of Ms. Mubiru and the Kibuye Growers Association serves as an inspiration to other communities seeking to improve their energy efficiency and environmental conservation efforts. By adopting energy-saving stoves, communities can contribute sustainable agriculture while enhancing their quality of life.

# Conclusion

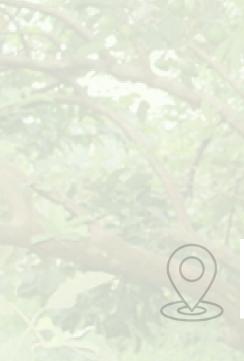
In conclusion, the various case studies presented demonstrate the transformative power of sustainable agriculture practices, innovative farming techniques, and community-led initiatives in improving rural livelihoods. The success stories of farmers such as Mrs. Juliet Mukyala, Juuko Charles, Nakijjoba Solome, and others highlight the potential of urban farming, poultry rearing, banana farming, and other agricultural practices to enhance food security, income generation, and environmental sustainability.

The adoption of sustainable agriculture practices, such as the use of biopesticides and biofertilizers, has not only improved crop yields and plant health but also reduced costs associated with purchasing chemical pesticides and fertilizers. Additionally, the integration of animal husbandry into farming practices has promoted soil fertility, increased crop yields, and generated income.

The case studies also demonstrate the importance of training, innovation, and entrepreneurship in promoting sustainable agriculture and rural development. The use of value addition, such as the production of rosemary powder, has increased the economic viability of smallholder farmers' produce, generating income and improving livelihoods.

Overall, these success stories demonstrate that with the right training, support, and innovative practices, smallholder farmers can improve their livelihoods, enhance food security, and promote environmental sustainability.







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