



USAID
FROM THE AMERICAN PEOPLE



A CASE STUDY FROM RWANDA

Ibyiringiro Project

Restoring Hope 2008-2013



Copyright © 2013 Catholic Relief Services

For any commercial reproduction, please obtain permission from
pqpublications@crs.org or write to:

Catholic Relief Services
228 West Lexington Street
Baltimore, MD 21201-3413 USA

Cover photo: CRS Staff

ACKNOWLEDGEMENTS

This booklet is made possible by the generous support of the American people through the United States Agency of International Development (USAID)/PEPFAR. The content is the responsibility of Catholic Relief Services (CRS) and does not necessarily reflect the view of the United States government.

This booklet is the fruit of a participative experience and the team work of Ibyiringiro consortium members. The team compiled stories from beneficiaries who were impacted during the five years of the Ibyiringiro project.

Contributions from the team include ADRA, Africare, Caritas Kibuye, CRS, Food for the Hungry and World Vision as well as the numerous unnamed field staff who worked relentlessly to collect stories from beneficiaries.

CRS Rwanda thanks the CRS regional team for their contributions. Special thanks go to Alemayehu Gebremariam, CRS Regional Technical Advisor for Health and HIV for drafting two case studies in the booklet. Also, many thanks go to Bridget Kimball, Regional Business Development Advisor for her editorial assistance.

We also extend our gratitude to the CRS Headquarters team for their creative contributions in the design of this booklet.

Lastly, we thank all the project participants featured in this booklet who agreed to share with us their outstanding stories.

We hope that through the stories in this booklet, the impact of the Ibyiringiro project is visualized.

CRS Rwanda team

IBYIRINGIRO CASE STUDY

A case study from Rwanda

TABLE OF CONTENTS

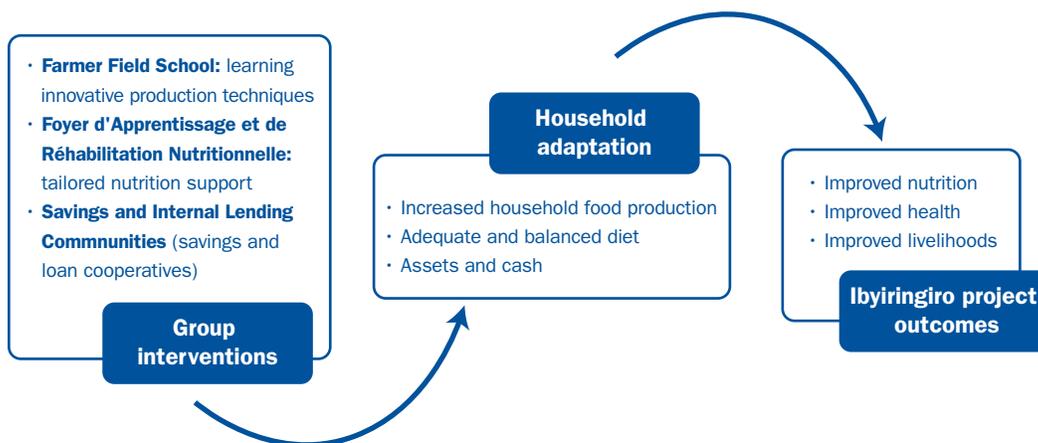
Introduction	III
Holistic Care for Greater Impact	1
Making Hand-Washing Fun.....	5
Food Processing: Cooking technique transforms the orange-fleshed sweet potato into a family's source of income.....	6
Helping beneficiaries to create income-generating activities	8
Beating malnutrition, one person at a time.....	10
Nutrition for all: Male involvement in nutrition activities	12
Training on vegetable consumption helps participants improve health and increase income.....	14
Erasing the Stigma: A Story of a Mother Living with HIV in Rural Rwanda	17
The Life-Changing Potential of Savings and Internal Lending Communities	19
Transforming Lives through Knowledge: The Farmer Field School in Bugesera district.....	21
Grassroots revolution: A Farmer Field School member became an expert technician for bio-intensive agriculture techniques	24
Group Approach to Nutritional Rehabilitation for PLHIV: The FARN Model.....	26
UMUHOZA COOPERATIVE: Changing lives, and improving health, through pig breeding	29

INTRODUCTION

HIV interacts with other drivers of poverty to simultaneously destabilize livelihoods at the household level and social safety nets at the broader community level. Evidence shows that people living with HIV (PLHIV) experience increased vulnerability due to multiple reinforcing causes, including frequent illness, food insecurity, malnutrition, social marginalization and limited access to assets and services. In combating this situation, integrated interventions – targeting needs in health, nutrition and economic strengthening – are more likely to achieve comprehensive and lasting positive outcomes.

For the past five years, beginning in 2008, CRS and its partners have implemented the **Ibyiringiro** project, funded by USAID via the President’s Emergency Plan for AIDS Relief (PEPFAR), in 24 districts across Rwanda. An integrated approach to HIV care was applied in nine of the districts to reach over 12,000 beneficiaries with community-based health, nutrition and livelihood interventions. Group models including “Foyer d’Apprentissage et de Réhabilitation Nutritionnelle” (FARN), Farmer Field School (FFS) and Savings and Internal Lending Community (SILC) were employed to enhance access to nutrition, food security and livelihood services, respectively. As a result, household practices and individual behaviors were positively impacted, leading to remarkable gains in health and nutritional outcomes of beneficiaries. For instance, Mukarushema Consolée was able to obtain health insurance for herself and her seven children after joining an Ibyiringiro-supported pig-raising cooperative. Learning simple food processing techniques for the orange-fleshed sweet potato enabled Mukangenzi Philomène to start her own doughnut business, now a flourishing enterprise.

IBYIRINGIRO THEORY OF CHANGE MODEL



HOLISTIC CARE FOR GREATER IMPACT

MULTI-FACETED AND INTERLINKED CHALLENGES COMPLICATE THE PLIGHT OF PLHIV

“I didn’t care about what I was eating. I had lost interest in looking after myself or my family. My constant fear of death left me feeling hopeless,” says Rosine Vuguziga, an Ibyiringiro project participant from the Mukarange sector of Kayonza district. The 42-year-old mother of five tested positive for HIV in 2003. She experienced poor health, social marginalization, and a lack of enthusiasm for life until she joined Ibyiringiro in 2009.

“I had appalling experiences of deteriorating health and poor nutrition in those days,” she says. “When I joined Ibyiringiro, my weight was 40 kg and the doctors said my CD4 count was less than 300. My husband was imprisoned and his relatives began harassing me after learning my HIV status. Neighbors didn’t allow my children to play with theirs and I was threatened with being beaten up by some people simply for being HIV-positive.” Beyond poor health, Rosine’s story represents the despair and social marginalization that many PLHIV in Rwanda and elsewhere experience.

HELPING PEOPLE HELP THEMSELVES

Ibyiringiro program participants received technical and material support, including training in improved agricultural techniques, bookkeeping and business skills, hygiene and sanitation kits, startup fees for health insurance, nutrition training and monitoring, and referral linkages for specialized services. Community health workers, mostly drawn from among project beneficiaries, have been trained and charged with providing community-level services. Most interventions were coordinated through groups of 15 to 30 members formed along the three key domains of agricultural production, nutrition and economic strengthening through Farmer Field Schools (FFS), Foyers d’Apprentissage et de Réhabilitation Nutritionnelle (FARN) and Savings and Internal Lending Communities (SILC). These services were complemented by hygiene and sanitation education, adherence counseling, and provision of up-to-date information on positive living either through home visits or through group platforms. Adoption of new skills and positive behaviors by beneficiaries are central to Ibyiringiro’s sustainability plan.



Rosine Vuguziga at her Kitchen garden. PHOTO BY ALEMAYEHU GEBREMARIAM/CRS

When she learned about Ibyiringiro, Rosine seized all opportunities presented to her through the project. She became an active member in all three Ibyiringiro groups – FFS, FARN and SILC – and began replicating key techniques and behaviors in her household. The blooming vegetable gardens in her backyard, the clean and tidy house and compound, the drinking water purification being practiced, the latrine and hand washing facilities all attest to the success of her efforts. “Now I am sure about the effects of balanced diet, hygiene and sanitation practices on good health. My only occasions for visits to the health clinic in the past two years have been for routine checkups,” she reports proudly.



Rosine Vuguziga boasting her hygiene practices. PHOTO BY ALEMAYEHU GEBREMARIAM/CRS

With BMI at 22 and CD4 counts above 1100, her clinical outcomes look equally impressive. Rosine received a 100,000 FRW loan from the SILC group which helped her generate additional income through small businesses. “I always dreamed of having a cow and this project helped me achieve that goal,” she says. These days, she is able to send her children to school, owns three goats while paying 18,000 FRW annually for health insurance, and taking care of all other household needs.

Rosine is sharing her multi-pronged successes and new skills from Ibyiringiro with her neighbors, and has come to be regarded as a role model and respected member of the community.

INTEGRATION YIELDS BETTER OUTCOMES

Ibyiringiro’s community-based care model created opportunities for PLHIV in Rwanda to redress poor health, malnutrition and poverty through multiple interventions. Rosine firmly believes that her benefits would have been less had the project been limited to non-integrated services. “We harvest vegetables from FFS to perform cooking demonstrations or to learn food transformation skills during FARN,” she explains. “The balanced diet lessons from FARN are applied in the homes but most of the ingredients come from kitchen gardens cultivated with skills obtained from FFS. Hygiene and health practices require soap and other materials, where SILC and income-generating activities become indispensable. These interventions are naturally complementing and my gains would have been incomplete if one or the other elements had been missing.”



Rosine Vuguziga Joyous about her successes. PHOTO BY ALEMAYEHU GEBREMARIAM/CRS

Notwithstanding individual differences in performance, the results achieved by Rosine resonate with the majority of Ibyiringiro beneficiaries across the nine districts of Rwanda. Her warm smiles also represent many faces of people who have made dramatic advances in mitigating the HIV crisis with assistance from the project. Ibyiringiro's integrated model has implications for community-based HIV care, as well as wider poverty alleviation initiatives. To be sustainable, responses to the HIV epidemic must not overlook the importance of holistic care to achieve greater impacts in the lives of people infected and affected by HIV.

MAKING HAND-WASHING FUN

HITIMANA Jacques lives with his three children and wife, Uwamaliya Agnes, in Musenyi sector, Nyagihunika Cell, Rushubi village in Bugesera District. Jacques is HIV-positive and has participated in Ibyiringiro savings, agriculture, and hygiene activities as a member of KOPAINYA Cooperative in the Abakeramurimo Ibyiringiro project group. By adopting the use of a tippy-tap for household hand-washing, Jacques has improved the hygiene habits and health of his family.

Before the Ibyiringiro project started, Jacques did not consider washing his hands an important thing. “I could pass the whole day without washing my hands, even before eating, despite visiting the latrine,” says Jacques. Even on the rare occasion when he did wash his hands, he never used soap. Jacques’ family, especially the children, often suffered from hygiene-related diseases such as diarrhea. The reason for a lack of hand-washing was a combination of not knowing its importance for health, but also an absence of hand-washing facilities to use after visiting the latrine or, in the case of the children, after playing outside. The family saw the lack of piped water in their rural area as a barrier to regular hand-washing. Through the Ibyiringiro project, Jacques learned basic information about hygiene, including practical, low-cost solutions to address such challenges using locally-available materials. He learned how to construct a tippy-tap as a simple method for washing hands. Jacques says that since he installed a tippy-tap near the latrine, his children have enjoyed it very much, frequently washing their hands because they found it amusing. He explains, “The tippy-tap is a simple and inexpensive method to encourage hand-washing in rural villages like mine, as it primarily consists of a small jerry can of 3-5 liters which releases a small amount of water each time it is tipped. When the tap is released, it swings back to its starting upright position. The tippy-tap is easy to make with commonly available materials and doesn’t depend on a piped water supply. It’s very hygienic in that it is foot-operated, so you only touch the soap.” He is happy that by just washing their hands, his children are now free from the bacterial and diarrheal diseases that can be prevented with hand-washing. He notes, smiling, that, “this method has helped me and my family to be healthier.”

FOOD PROCESSING: COOKING TECHNIQUE TRANSFORMS THE ORANGE-FLESHED SWEET POTATO INTO A FAMILY'S SOURCE OF INCOME

LIVING POOR AND HOPELESS

Before she joined the Abanyarukundo association, Mukangenzi Philomène was living without hope. The 52-year-old HIV-positive mother of five from Kabeza village in Nyamagabe district was poor and without the necessary resources to feed her children, pay school fees, or buy clothing for her family. “Not being able to support my children left me feeling defeated,” she admits. In 2008, Philomène joined the Abanyarukundo association within the KDMR cooperative, supported by CRS’ USAID-funded Ibyiringiro project, and her life began to change.

JOINING AN IBYIRINGIRO-SUPPORTED COOPERATIVE BROUGHT NEW SKILLS AND OPPORTUNITIES

Soon after she joined, project staff taught the members of her group how to prepare balanced meals using local products and how to improve household hygiene and sanitation. The training was part of the Ibyiringiro project’s emphasis on nutrition education, including promoting the benefits of a balanced diet, incorporating the consumption of a variety of vegetables into one’s daily diet, and learning to cook foods without destroying their nutritional value.

In 2009, her group learned improved agriculture techniques and they started to support each other in building kitchen gardens to produce vegetables to help boost household dietary diversity and promote healthy living. “On my own land,” says Philomena, “I decided to grow amaranths, carrots and cabbage and at the cooperative’s common plot in the Kato Valley of the Remera cell, we began cultivating orange sweet potatoes.”

Then, in 2010, Philomène and her fellow cooperative members learned some simple food processing techniques for fruits, vegetables and orange sweet potatoes. “They taught us how to make juice from beetroot, pineapple, and passion fruit and how to use orange sweet potatoes to cook doughnuts, biscuits and queen cakes,” she says. “This was the first time that I had ever seen food processing techniques for sweet potatoes or other fruits and vegetables. Before this training, I had only ever boiled and fried sweet potatoes. Not only did the processed foods taste great, but we also learned how to sell what we produced to generate revenue.” At the end of the food processing training, Philomène was eager to apply what she had learned. Among the various food production techniques that had been demonstrated in the training, she decided to try doughnuts. “I selected doughnuts because I didn’t need an oven to cook them and all the necessary ingredients were readily available. At the time, I was already growing sweet potatoes, and all

of the other necessary ingredients, such as sugar, vanilla and yeast, were available at the market,” explains Philomène.

The doughnuts that she produced sold well in the market, a result she attributes to the care she devoted to their preparation and the doughnuts’ quality and taste, which exceeded others on the market. “When cooked properly, the natural sugar in orange sweet potatoes creates a delicious doughnut. They were a hit in my local market because of their flavor,” states Philomène.

To start up her new income-generating activity, Philomène took out a loan of 20,000 RWF from her SILC group, which was to be paid back after a month.

Following the early success of the doughnuts in her community, she expanded her business to new markets, including a neighboring commercial center, schools, a prison and a health center. After six months of producing doughnuts, she had earned over 40,000 RWF, easily paying off her SILC loan.

PHILOMÈNE’S LIFE TODAY

Today, Philomène earns an average income of 10,000 RWF a week, which she uses to buy food and clothing for her family and pay school fees for her children.

Philomène is very grateful to the Ibyiringiro project for its life-changing impact. “I have come a long way since I joined Abanyarukundo in 2008,” she reflects today. Producing doughnuts has not only improved her socio-economic status, but it has also given her a productive role in her community that is widely appreciated. Furthermore, she now shares what she has learned with other community members who are not members of the project. She says, “Now that I have found hope for my own life, I enjoy teaching others, sharing my knowledge and helping other cooperative members to do the same.”

HELPING BENEFICIARIES TO CREATE INCOME-GENERATING ACTIVITIES

DESPERATE AND FACING DISCRIMINATION

Prior to forming a savings and lending group, HIV-positive individuals in Kavumu village in Rubengeza sector, Karongi district suffered from discrimination and social exclusion. Frequently ill, some thought of committing suicide. Few social resources existed: although some were members of associations for people living with HIV, others saw no discernible benefit in contributing 200 FRW per month.

In 2009, with Ibyiringiro support, 30 such individuals – 20 women and 10 men – came together to form the Abunzubumwe group.

FROM DESPERATION TO HOPE

Through the Abunzubumwe group, members came together to learn techniques for organic agriculture, principles of nutrition, hygiene and healthy living, as well as savings and credit methods. The savings component – training in SILC – showed members how to save 100 FRW per week in order to create a loan fund, from which they could then borrow in order to invest in income-generating activities. After a few months of seeing the benefits, members decided to increase their contributions to 500 FRW per week. In their current cycle, which began in March of 2013, members have yet again increased their weekly savings, this time to 1200 FRW. All members of the Abunzubumwe group reported that members are able to find this amount because of their success with income-generating activities.

One member of the Abunzubumwe group, Nathalie Kampogo, a 55-year-old mother of six, decided to try selling sorghum beer. Thanks to the credit granted by SILC, she was able to transform her home into a place where she could conduct her business; before long, she was able to expand it and soon it was well-established. Today, she has bought a cow and is able to pay school fees for her two children attending high school. Another member, Louise Ntiyibagirwabayo, 33 years old and a mother of two children, sells vegetables in Rubengera market. The credit she accessed in SILC has helped her grow her trade and enabled her to buy a cow.



Louise in front of her cow

PHOTO BY CARITAS

The group has established a mechanism so that unloaned money can be paid into a jointly-managed bank account at Inkunga SACCO, for which any withdrawal decisions are made by the group on the day of the meeting. Overall, the group currently has 358,290 FRW in circulation and their SACCO account has 42,000 FRW. Group members testify that they continue carrying out SILC and the other components of Ibyiringiro because these activities

have helped them create new opportunities. In the future, Abunzbumwe group intends to undertake a joint income-generating activity in order to strengthen their group cohesion and unity.



SILC group conducting savings and lending activities PHOTO BY CARITAS

BEATING MALNUTRITION, ONE PERSON AT A TIME

One of the strategic objectives of the Ibyiringiro project is to improve “the services available to PLHIV and OVC.” To achieve this objective, the project applied holistic palliative care from the household to the community level. The approach involved education on nutrition, health and sanitation; cooking demonstrations and monitoring of nutrition status using a positive deviance/peer educator approach; the promotion of home vegetable gardens using demonstration plots and seed distribution; support for savings and internal lending for income-generating activities through SILC methodology; and the provision of home-based palliative care, which was supported by volunteers selected from among project participants. The project recorded significant reductions in malnutrition among participating PLHIV. In Kayonza, for instance, the malnutrition rate among beneficiaries decreased from 22.2% in 2010 to 2.6% by the end of the project in 2013.

MUNYANEZA JOSEPH IS ONE OF THE MANY PEOPLE WHO WERE ABLE TO BEAT MALNUTRITION IN KAYONZA. LIFE BEFORE IBYIRINGIRO

Joseph, an HIV-positive man, lives in Urugarama cell, Gahini sector, Kayonza district. Before joining the project, Joseph had been suffering for two years from different opportunistic diseases, including diarrhea. At his lowest point, his immune system registered a CD4 count of 24. Severely malnourished, with a body mass index (BMI) of 13.4, his weight had plummeted to 38 kilos. Severe malnutrition can only be treated at a hospital or health center. However, Joseph was too weak to regularly walk the 5 kilometers from his home to the health center.

In March 2008, Joseph went to the hospital for his treatment but that day he got more than just the treatment. The nurse recommended that he join an association of HIV-positive people for support. Joseph followed up on the nurse’s recommendation and joined the Abizerimana association. A couple of months later, this association was selected to be supported by Ibyiringiro project. “That is when an amazing journey started,” said Joseph.



Munyaneza Joseph in his garden

PHOTO BY ROBERT ADRA

A JOURNEY OF CHANGE

After being selected, Abizerimana association members were organized into small groups of 15 people each called IBY groups. Joseph’s IBY group participated in different trainings in which they learned how to increase the yields of their small plots of land using improved agricultural techniques; they also learned how to prepare balanced meals using local products, as well as how to improve household hygiene and sanitation.

The Ibyiringiro project reinforced nutrition education, including promoting the benefits of a balanced diet and the daily consumption of nutrient-rich vegetables, complemented with good hygiene and monitoring one's nutritional status, in order to eliminate malnutrition. Joseph participated regularly in monthly cooking demonstrations and nutrition education classes, where his BMI was monitored. The monthly BMI checks kept program participants informed of their nutritional status and motivated them to practice promoted behaviors in order to continually improve their nutritional status and then, once goals were met, to maintain them.

Back home, Joseph eagerly practiced all the new behaviors he was learning. With the support of the association members, he established a kitchen garden and soon he had an abundance of vegetables for his household. He also started eating a balanced diet and began consuming more vegetables and fruits. He soon noticed that he was less sick, had more energy, started to gain weight and was feeling healthier.

In addition to nutrition education and assessments, Ibyiringiro promoted SILC groups to provide members with credit which could then be used to initiate an income-generating activity and thereby provide members with the means to procure food items not being cultivated in their own fields. From the SILC training, Joseph learned how to start an income-generating activity, and he started to sell part of the yield from his kitchen garden to his neighbors.

With the income he earned from selling surplus vegetables from his kitchen garden, he has been able to pay his insurance and school fees for his children. Joseph has since become a volunteer and today he trains other people on how to improve their nutrition, while helping them to establish their own kitchen gardens.

Today, Joseph has gained over 18 kilos and has a BMI of 19.9. His CD4 count is 274. A jovial Joseph confided with a smile, "Ibyiringiro has helped me become a man in my family again. The person I was at the beginning of the project and the person I am today are two completely different people."

NUTRITION FOR ALL: MALE INVOLVEMENT IN NUTRITION ACTIVITIES



Vedaste at home PHOTO BY PERTTU SARALAMPI FOR CRS

BELIEFS BEFORE IBYIRINGIRO: BEER, NOT VEGETABLES

Not so long ago, Vedaste Mugengana was malnourished and unhealthy. In 2008, Vedaste weighed 50 kilos and had a CD4 count of 120; now, five years later, he weighs 64 kilos and has a CD4 count of over 200. “Ibyiringiro taught me that I am responsible for my own health and for the health of my young children,” says Vedaste.

The 47-year-old father of four from Nyanza village in Karana Cell, Cyanika Sector, Nyamagabe District admits that he used to prefer beer to vegetables and, beyond collecting water for the kitchen, left food preparation to his wife. “Healthy food was generally available, but I preferred to eat things like chips and I spent my money on beer. I thought that being in the kitchen was only for women,” he says. He didn’t know anything about good nutrition, or what his body needed to stay strong. At home, they grew soybeans in their garden, but he didn’t know all the different ways in which they could be used, such as to make soy milk or tofu products. Before Ibyiringiro, Vedaste never ate fruits or vegetables, because he did not understand the importance of them in fighting illnesses. He says, “I thought that these types of food were only for women and children.” They did not fully utilize the space available at home to cultivate, but now they use the little space they have to grow vegetables to be used at home.

COMMUNITY-BASED NUTRITION GROUP HELPED CHANGE MINDSET AND IMPROVE HEALTH

In 2008, Vedaste joined a community-based nutrition group supported by the Ibyiringiro project. He went to the group meetings on his own, as his wife was occupied with other activities. Through the community group, he learned to make soy milk, tofu and other soy products. He was also able to teach his wife how to make these products, and now they eat them at home. The FARN group also taught him about the importance of fruits and vegetables in preventing opportunistic illnesses and in maintaining a balanced diet. Nowadays, he and his family eat fruits and vegetables at least five days out of each week.

In his association, there are 55 people, including 37 women and 18 men. Most of the men are like Vedaste was before, in that they don't see a role for men in food preparation or in the household diet. During the FARN group sessions, the men would help to get water, but then they would let the women do the cooking. So, one day, Vedaste decided that he should serve as an example for the other men, and decided to do the cooking during a FARN session. He led the session and prepared the food for everyone. He showed the other men that they could also be involved in the preparation of food. From that day on, the other men started to become more involved and also brought the activities that they learned back to their homes.

BRINGING CHANGE BEYOND THE PROJECT AND IMPACTING THE COMMUNITY AT LARGE

Even outside of the association, Vedaste has tried to sensitize his male neighbors on the importance of their involvement in nutrition activities. He proclaims, "I know out of ten homes, at least five have improved their nutritional practices due to my sensitization." Now, when his wife is not at home, he doesn't hesitate to prepare food for himself and for his children.

Vedaste's outreach efforts have piqued the interest of his neighbors. "I see that other people in the neighborhood, who are not part of the FARN group, come to listen in and learn when we have our nutrition sessions. Through this, we are helping to spread the knowledge through the whole community."

TRAINING ON VEGETABLE CONSUMPTION HELPS PARTICIPANTS IMPROVE HEALTH AND INCREASE INCOME

TABOOS AGAINST VEGETABLES

Members of the Kohura cooperative (Cooperative Humura Rango) in Bugesera district used to avoid vegetables, seeing them as weeds, something to eat only when nothing else was available, or even something that was socially taboo to consume. Valerie Mukanyandwi, a cooperative member, says, “We used to have many taboos on vegetables. For instance, we believed that men could not eat cassava leaves: when a man consumes them, he becomes a shadow of himself and cannot make decisions as a man.” She continues, “We were in the darkness of ignorance because we were satisfied with always eating only beans and tubers in our regular diet; for us, that was enough. Vegetables were seen as something to eat when we were out of beans.” Following Ibyiringiro nutrition education, however, she says, “We changed our mindset!”

Many members of the Kohura cooperative are HIV-positive. Before joining the Ibyiringiro project, many of them were ill much of the time, with low CD4 counts, indicating weak immune systems. They had limited knowledge of the nutritional value of the food they ate and they did not know that vegetables are a good source of vitamins and minerals, with critical importance in strengthening the body’s immune system against opportunistic diseases.



KOHURA co-op members working on their vegetable garden demonstration plot

PHOTO BY CRS

VEGETABLES: A SOURCE OF NUTRITION AND INCOME

Through Ibyiringiro trainings on agriculture and nutrition carried out since 2008, cooperative members have changed their habits. Members of the Kohura cooperative now deliberately vary their daily diet to obtain vitamins and minerals from different sources. They credit nutrient-rich vegetables, such as beetroot, carrot, spinach, and lettuce, promoted by the Ibyiringiro project with helping them to diversify their diet and thereby improve their health. They recognize the importance of the nutrients in vegetables in protecting the body against opportunistic infections and diseases and strengthening the immune system.

Before joining the project, Valerie says, her CD4 count was 350. After improving her diet with vegetables and health practices she learned through Ibyiringiro, her CD4 count increased to 840. She is feeling healthier these days and is able to do all her household work throughout the day without being fatigued.



Valerie harvesting vegetables to sell at local market PHOTO BY PERTTU SARALAMPI FOR CRS

Philippe Senzira, another member of the Kohura cooperative, believes the true “food” gained through the project is the knowledge participants have acquired: knowledge about improved techniques of cultivating kitchen garden to produce nutrient-rich vegetables. This knowledge, he says, will continue to feed them and their children into the next generation.

NEW VARIETIES OF VEGETABLES HAVE ALSO BECOME A SOURCE OF INCOME

Besides contributing to healthier diets within the household, new varieties of vegetables promoted by Ibyiringiro have become a source of income for project participants. Valerie notes that by selling the beetroots, leeks and onions from her kitchen garden, she earns an average of 8,000 FRW each week. With this income stream, she was recently able to rehabilitate her house.

Vicencia, another member of Korura Cooperative, earns about 15,000 FRW a week from her vegetable plots. With this income, she has been able to meet household needs, including paying school fees for her children.

Through the consumption of vegetables promoted by Ibyiringiro, participants have truly enhanced their wellbeing. In addition to strengthening their health, they have a newfound source of income.



Vicencia in her vegetable garden.

PHOTO BY ZACHARIE/CRS



Vicencia behind her clay pot for organic liquid manure.

PHOTO BY ZACHARIE/CRS

ERASING THE STIGMA: A STORY OF A MOTHER LIVING WITH HIV IN RURAL RWANDA

LOOKING BACK: EXPERIENCING STIGMA

HIV-related stigma and discrimination refers to intolerance, negative attitudes, abuse and maltreatment directed at people living with HIV and AIDS. The consequences of stigma and discrimination are wide-ranging: being shunned by family, peers and the wider community; poor treatment in healthcare and education settings; an erosion of rights; and psychological damage. HIV-related stigma can have a negative effect on the success of HIV testing and treatment.

Nvurirwenande Marthe's life changed dramatically in 2005, when she learned that she was HIV-positive. The 50-year-old widow's life had already been hard: she had been raising her two children alone since 1995, when her husband passed away. After learning her serologic status, Marthe lost hope that she would live much longer. She was emaciated and completely desperate. Seriously sick, she was not able to send her children to school for lack of means. Making matters worse, she faced severe discrimination from her in-laws and neighbors because of her status. "Even children in my neighborhood were mocking me as an HIV-positive person. What I did was just to pray so that God will give me patience not to fight with those people who were mocking me every day," she says. That same year, she started antiretroviral therapy.

FROM STIGMATIZED TO COMMUNITY LEADER

In 2009, Marthe joined the Ibyiringiro project and began receiving psychosocial support. Her interaction with other beneficiaries enhanced her morale against stigma and discrimination. By joining the project, she was also able to benefit from other project activities including agriculture, nutrition and SILC interventions. In addition, she became a community health volunteer and was trained in psychosocial assistance, knowledge of HIV and basic nutrition principles. "In our meetings, the group members share knowledge, feelings and emotions and that was helpful. Members support each other to face stigma and discrimination," she testifies.

At home, Marthe applied bio-intensive agricultural techniques promoted by Ibyiringiro. She planted an array of healthy vegetables and harvested bountiful, nutritious crops. Impressed by the production of her kitchen garden, neighbors started to approach her and ask for vegetables. From that point on, they stopped stigmatizing her.

MARTHE'S LIFE TODAY: COURAGE AND DETERMINATION

Despite her HIV status, Marthe is now a respected member of her community. With money she borrowed from her SILC group, she was able to repair her old house. Her nutrition status has improved as well, and she now prepares balanced

meals for herself and her family, based on recipes and techniques she learned through Ibyiringiro. “Before joining the project, I weighed 45 kg and had a CD4 count of 300; I now have a CD4 count of 700 and my current weight is 58 kg. I owe it to nutritious food that comes from my own garden,” she says.

Today, a friendly, sociable woman, she feels she is useful and helpful to her community. “I am healthier and stronger now.” As Marthe’s neighbors have recognized, her personal courage and determination have transformed her life in many ways, notably in putting stigma and discrimination behind her vibrant life.

THE LIFE-CHANGING POTENTIAL OF SAVINGS AND INTERNAL LENDING COMMUNITIES

LIFE BEFORE SILC: DIFFICULT DAYS

Before Esperance KAYITASIRE became involved in Ibyiringiro activities in 2010, she had no home, no clothes and no money. “I was so thin that a light breeze could have knocked me over,” she says. Esperance, a 50-year-old widowed mother of one child, worked for others cultivating their fields, and from this labor was able to save about 50 FRW (13 cents USD) a week. In October 2010, she became a member of an Ibyiringiro-sponsored savings and internal lending community (SILC) group and attended training on income-generating activities.

After the Ibyiringiro training, Esperance managed to increase her weekly savings from 50 FRW to 200 FRW. She committed to continuing as a SILC member even as she struggled to set aside the money each week, but she was determined to make the most of the knowledge she had gained from the training.



Esperance standing next to the house that she built with her own money

PHOTO BY PERTTU SARALAMPI FOR CRS

Soon after, she asked for a loan of 5,000 FRW. With that money, she bought sorghum and made local beer so that she could have an immediate profit. She quickly sold the beer and after reimbursing the principal of the loan, she took home a profit of 3,000 FRW. With that money, she bought fabric so that

she could make some new clothes, since she was ashamed to meet people because of her appearance.

After that first experience, she requested another loan from the SILC group of 10,000 FRW. With that loan, she bought more sorghum and made more beer. This time around, she made a profit of 8,000 FRW and bought a pig. Soon, with profit from her business, she bought a small plot of land where she planted onions to sell at the market.

A LIFE-CHANGING EXPERIENCE: REALIZATION OF THE SILC POTENTIAL

Esperance began to realize how much she could do because of the SILC group activities. She began to think about building her own house and decided that would be her goal. So the next time, she asked for a loan of 20,000 FRW, with which she bought more sorghum and made more beer. She decided to sell the beer at a small business center. She made a profit of 25,000 francs. “Combining my profits from the beer sales with the money I made from cultivating on a small plot of land, I had a total of 30,000 francs which I used to buy a plot of land on which to build my house,” said Esperance.

Esperance continued the same process of getting a loan from her SILC group and making and selling beer. From each profit she bought something to build her house. In September 2011, one year after joining the SILC group, the other members came over to help her start building. They even pooled their SILC money to help pay the mason.

After building her house, she had problems saving enough money to buy steel sheets for her roof. The amount that she needed to complete her roof was 150,000 francs. Thankfully, the pig that she had bought with the profit from her second loan gave birth to 10 piglets, which she sold for 150,000 and then used the money to buy the steel sheets and complete the construction of her roof.

After completing her house, she continued as an active member of her SILC group. She now has a large kitchen garden and two goats at her house. She has also joined a FARN and a Farmer Field School group and confirms that she will continue with all of the activities that she has been a part of because of Ibyiringiro. When her neighbors look at her now and remember what she was like before she joined the SILC group, she serves as an inspiration to them. They realize that change is possible and they can do the same thing, if they join a SILC group. Says Esperance, “Before Ibyiringiro, I had less than zero and now I have my own house, two goats, and hope for the future.”

TRANSFORMING LIVES THROUGH KNOWLEDGE: THE FARMER FIELD SCHOOL IN BUGESERA DISTRICT

In Bugesera, a district located in the Eastern Province of Rwanda, crops are often severely affected by drought. During the long dry season, which runs from June to August, farmers who do not own plots of land in marshlands and who do not implement appropriate conservation techniques suffer severe food shortages.

To address these issues, Ibyiringiro, a USAID-funded project, implemented a Farmer Field School (FFS) system. Beginning in 2008, groups of farmers consisting of orphans and people living with HIV were trained in bio-intensive agriculture techniques designed to improve the fertility of soil and increase crop production on small plots of land.

The application of these techniques has yielded impressive results. Not only do these farmers no longer face shortages of food during the dry season, but they also now grow new vegetables which were impossible to grow in the past.

BIO-INTENSIVE TECHNIQUES IN FFS: THE SUCCESSES OF THE TWITEZIMBERE GROUP

In 2009, a group of Ibyiringiro beneficiaries from Bugesera district, Nyarugenge sector, Kabuye cell, Gagteko village formed a farmers' group that they named Twitezimbere. The group was created from within KOHURA, an agriculture and livestock cooperative that also runs a farmer field school, nutrition initiatives and savings and lending activities. From KOHURA, 31 members including 22 women and 9 men joined together to form Twitezimbere Farmer Field School.

At the FFS demonstration plot, rented at 7,000 FRW each year, Twitezimbere members learned different techniques for bio-intensive agriculture including:

- A vegetation composting process that uses liquid organic manures made from animal droppings and herbs
- Tillage techniques suitable for dry areas (including Mandala gardens and Sunken beds which allow the soil to retain more water during the dry season)
- Preparation of organic pesticides made from inexpensive, locally-available materials such as herbs and water

The group applied all of these techniques in their demonstration plot and grew diverse groups of crops rich in nutrients, such as amaranths, onions and carrots. They also adopted crops that were new to them, such as beetroot, sweet pepper and eggplant, which helped to diversify diets, an important component of healthy living.

Members of Twitezimbere Ibyiringiro group from Bugesera district in their Farmer Field School demonstration plot.

PHOTO BY ZACHARIE/CRS



Members of Twitezimbere Ibyiringiro group from Bugesera district behind the kitchen garden in their farmer field school demonstration plot.

PHOTO BY ZACHARIE/CRS



Jacqueline Nyiranzayirwanda a member of Twitezimbere Ibyiringiro group from Bugesera district with her four children in their backyard vegetable garden.

PHOTO BY ZACHARIE/CRS



After the learning experience at the demonstration, all Twitezimbere FFS members adopted bio-intensive techniques at their own home gardens, resulting in improvement in their food security.

After implementing bio-intensive agriculture and subsequently increasing the availability of new foods, many members of the Twitezimbere FFS reported that their CD4 count and nutritional status improved. For example, before joining FFS, John Rugerinyange and Francine Nyiranizeyimana had CD4 counts of 270 and 300 respectively. Recently, Mr. Rugerinyange was happy to report that his CD4 count had risen to 1,160 while Ms. Nyiranizeyimana reported that hers has reached 700.

Jacqueline Nyiranzajirwanda, a poor and HIV-positive widow with four children (one of whom is infected by HIV), lives on a small, infertile plot of land. Using what she learned at FFS, she built a kitchen garden, sunken bed, Mandala garden and double dug bed. These bio-intensive techniques have yielded large amounts of vegetables. Not only can Jacqueline use these vegetables to feed her children, but she has been able to sell the surplus at the market. Since she began FFS, the health of her children has improved, her CD4 count has increased from 350 to 2,250 and she has made 8,000 FRW by selling her extra vegetables.

SHARING GOOD PRACTICES WITH THE COMMUNITY

Thanks to effective collaboration between Twitezimbere and local administrative authorities, the knowledge gained through FFS is now reaching the rest of the surrounding community. Local authorities were invited to field days organized by Twitezimbere groups, where they had the opportunity to see the groups' achievements. The officials were so impressed with what they saw that they requested the Twitezimbere FFS leader to establish a demonstration plot behind the village administration office. The hope is that this plot can be used to teach more members of the community about bio-intensive agriculture techniques. Twitezimbere members are also taking personal initiatives to pass on what they have learned to different members of the community. Among nine Twitezimbere members who were interviewed, five had taught at least one of their neighbors the techniques.

Learning bio-intensive agriculture techniques was not the only positive outcome for Ibyiringiro beneficiaries. Gaining the tools necessary to overcome food insecurity and malnutrition has given them renewed sense of hope and self-efficacy. Also, by successfully collaborating with fellow PLHIV and sharing good practices with their neighbors, the beneficiaries have proven to themselves and their community that they can play a positive role in development. As positive role models, these beneficiaries are uniquely positioned to both reduce stigma and increase social cohesion for PLHIV.

GRASSROOTS REVOLUTION: A FARMER FIELD SCHOOL MEMBER BECAME AN EXPERT TECHNICIAN FOR BIO-INTENSIVE AGRICULTURE TECHNIQUES

Small plots and over-cultivation due to high population density, compounded with inefficient agricultural techniques and poor climatic conditions are some of the main causes of food insecurity in rural Rwanda, especially in the Eastern and Southern regions of the country.

The Ibyiringiro Project set out to ensure that high quality, sustainable and comprehensive agricultural extension services are available to Rwandan farmers to help address chronic food insecurity problems. To this end, Ibyiringiro trained project participants on bio-intensive agriculture techniques that help farmers increase yields on small plots. Such techniques include the use of organic inputs, including organic manure and pesticides, and improved tillage techniques such as double dug, raised and sunken bed gardens, kitchen gardens, Mandala gardens and container gardens.

Farmer training was carried out through the Farmer Field School (FFS) approach, a participatory peer learning methodology which provides farmers with a forum to exchange experiences and learn from field experiments and observation. FFS methodology is based on learning by doing, through discovery, comparison and a non-hierarchical relationship among learners and trainers. Under this approach, farmers living in the same area and sharing similar agricultural challenges and constraints are organized into small groups of 25 to 35 and trained by a facilitator, the FFS leader, who is selected from among the group members and trained in the FFS approach and bio-intensive agriculture techniques. These facilitators in turn train group members.

Vincentia Mukangenzi, a farmer from Bugesera district, Mareba sector, Rango cell, Gihoko village in the Eastern Province of Rwanda, enthusiastically adopted the bio-intensive agricultural techniques and witnessed dramatic success, enabling her to support her household of 11 people.

DRAMATICALLY IMPROVED FAMILY WELFARE

Vincentia was trained on bio-intensive agriculture techniques through the Tuzamurane Ibyiringiro group's Farmer Field School. Following her training, she began improving her plot of land with bio-intensive agriculture techniques by adding a kitchen garden, sunken beds, a Mandala garden, trench compost, basket compost, a Zay pit, and a container garden. She also began using organic liquid manure made from animal droppings and organic pesticides made from herbs to treat diseases and insects.



Vincentia taking care of her garden PHOTO BY PERTTU SARALAMPI FOR CRS

With diversified production of amaranths, onions, carrots, eggplants and cabbage, she was able to produce enough to feed her big family and even to sell the surplus. From beetroot and onions she harvested on her double dug beds, she earned 18,000 FRW. With the income generated from her garden, she was able to buy the cement to build a toilet, pay the school fees for three of her children and participate in a Savings and Internal Lending Community group and in the local savings cooperative, known as Sacco. From Sacco, she was able to obtain a loan, which she used to construct her house.

IMPRESSIVE SUCCESSES THAT MADE HER A “TRAINER OF TRAINERS”

Within a few months of joining the FFS, she started gaining recognition for her success in applying the bio-intensive agricultural techniques. She was selected by World Vision, a CRS implementing partner in Bugesera district, as a trainer of trainers and was put charge of four FFS within a project-supported cooperative. Later, in 2010, she was awarded as a model farmer, for which she received a pig and a 10,000-liter plastic water tank that helps her water the crops during the dry season. In addition, the Cell Executive Secretary promised a cow to Vincentia to support her in continuing to perform her activities.

SHARING THE KNOWLEDGE GAINED

Thus far, Vincentia has trained 22 FFS members on the bio-intensive agricultural techniques she learned. She has also educated group members on ways to fight malnutrition among children. Apart from her important role in training FFS members, Vincentia has also showed her neighbors some of her bio-intensive agriculture techniques, especially regarding kitchen gardens, which has in turn helped them to make their own households more food secure.

GROUP APPROACH TO NUTRITIONAL REHABILITATION FOR PLHIV: THE FARN MODEL

Evidence has shown important links between improved HIV outcomes and nutrition. Adequate nutrition is necessary to maintain the immune system, manage opportunistic infections, optimize response to medical treatment and ART, and support optimal quality of life for people living with HIV.¹

CRS and its partners integrated a modified positive deviance model into the Ibyiringiro project to improve nutritional outcomes of over 12,000 PLHIV and affected family members in nine districts in Rwanda. Accordingly, the “Foyer d’Apprentissage et Réhabilitation Nutritionnel” (FARN) services were coordinated for 575 groups of 12 to 15 beneficiaries each to attain positive results including increased BMI, improved knowledge and skills on dietary intakes, and improved general health conditions. FARN services included nutrition education and counseling, cooking demonstrations on balanced diet based on locally available foods, health and hygiene education, nutritional monitoring, and psychosocial support.



A member of Abisunganye FARN group performing nutrition monitoring.

PHOTO BY ALEMAYEHU GEBREMARIAM/CRS

¹ HIV/AIDS, nutrition, and food security: what we can do. The World Bank, 2007.

Members of the Abisunganye FARN group in the Kayonza district proudly share their successes in this regard. Established in 2009, the group consists of 12- 15 HIV-positive individuals who voluntarily stayed together throughout the course of the project. Members unanimously testify to their experiences in achieving dramatically positive changes in their lives as a result of their active participation in the FARN activities. Most of them admitted that they experienced poor nutritional and health conditions before joining the group. One member described her previous situation by saying, “I used to live in isolation without knowing much about how to co-exist with HIV. I didn’t know about what constitutes good nutrition, hygiene and sanitation practices.” Some members of the Abisunganye FARN group belonged to a PLHIV group that had offered psychosocial support; however, all members agreed they had little experience in taking control of their health and nutritional conditions before FARN membership.

The Abisunganye FARN group members have had strong motivation to undertake biweekly group sessions where learning and exchange of skills on improved nutrition and health practices take place. Group sessions are organized at members’ houses on a rotational basis and coordinated by a community health worker who is also a member of the group. Members bring locally available food items to facilitate learning-by-doing sessions each time they meet. The sessions are also employed to deliver health education on various topics including hygiene, sanitation, prevention of opportunistic infections, and treatment adherence using nationally-approved materials. Members described the FARN group as a most important solidarity platform that has enabled them to live positively with the virus.

“We didn’t have any knowledge about good nutrition and the relevance of balanced diets to improved health. We had been growing certain types of crops but never realized what nutritional values they contained,” explains one member. “In the FARN group, we learn what type of nutrients can be obtained from the different locally available foods. Once we knew more about the different kinds of nutrients, it motivated us to grow more kinds of vegetables and fruits to diversify our sources. Our new skills liberated us to choose what to grow and how to use the products from our farms.”

Each of the Abisunganye members narrates fascinating stories of success as a result of participating in the FARN activities. Uwamahoro Dativa was one among those who expressed gratitude to the Ibyiringiro project and to the FARN services in particular because of the positive changes in her health and nutritional outcomes. “I received training on nutrition, hygiene, and healthy living strategies. I have also participated in a number of cooking demonstration sessions over the past few years,” she says, “and now I know how to prepare and consume a balanced diet. The FARN sessions taught us deeper things about nutrition, including different nutrients and their sources.

“I would have been long dead if it was not for these interventions,” continues Dativa. “Imagine, when I joined the project, my CD4 count was 11 and I weighed

41 kilos. I am a living testimony of how improved nutritional status can prolong life and enhance its quality. Now I feel perfectly healthy with my weight being 71 kg and CD4 over 860.”

Another member says, “The skills of transforming soya beans into milk, sweet potatoes into cakes or carrots into juice was an indispensable gift from FARN intervention that I will never forget,” admiring the food processing lessons.



Abisunganye FARN group members gaining food processing skills.

PHOTO BY ALEMAYEHU GEBREMARIAM/CRS

The Ibyiringiro FARN model has helped Abisunganye group members and other PLHIV across the program achieve remarkable positive outcomes in nutrition and health. The FARN approach has also created opportunities for dynamic learning and exchanges among group members. Abisunganye FARN group members say that each session brings exciting new lessons that they don't want to miss, and they plan to continue their meetings even after the phase-out of the IBY project. “We have become role models in our community because of our improved nutritional, hygiene and health practices,” says one. “The IBY project may end, but our group activities will continue to flourish. How can we drop one of our weapons for mutual support and survival?”

FARN activities are relevant to broader community members in the context of community-based nutrition interventions and hence deserve public health policy considerations. More rigorous epidemiological studies are warranted to establish association and causal links between FARN activities and some of the clinical and health outcomes.

UMUHOZA COOPERATIVE: CHANGING LIVES, AND IMPROVING HEALTH, THROUGH PIG BREEDING

Mukarushema Consolée, a mother of seven living in Murehe village in Miyove Sector of Gicumbi District, had no health insurance and worried about the consequences to family finances if anyone were to fall ill. It was a plight shared by many of Consolée's neighbors, particularly those infected with HIV. Although many in Miyove were poor, people living with HIV suffered exacerbated poverty due to a vicious cycle: Because of poverty, PLHIV suffered insufficient daily caloric intake, with protein shortages being particularly pronounced. As a result, they lacked the energy necessary to produce food or often were bedridden because of infectious or other non-communicable diseases. They were shunned by their neighbors and stigmatized for their poverty and illness. Food insecurity was pervasive and health was poor.

To confront this problem, community members in Miyove sector established the Umuhoza Cooperative in 2009 as an association and eventually received a certificate of registration from Rwanda Cooperatives Agency (RCA) in June 2010. Today the cooperative has 39 members, half of whom have HIV. The Umuhoza Cooperative has succeeded in improving the lives of its members. Members, such as Consolée, now have a diverse array of vegetables in their diet and improved health, thanks to a remarkable source: pigs.



Barayavuga's pig with newly born sows. PHOTO BY WORLD VISION

THE CHANGE BROUGHT TO MEMBERS BY IBYIRINGIRO

The main activity of the Umuhoza cooperative is pig breeding. In 2012, the cooperative received 55 pigs with a monetary value of 3,190,000 FRW. Although 16 pigs died before reaching reproductive maturity due to gestation complications, Umuhoza cooperative members worked hard to ensure that the remaining pigs thrived. To improve the care of the pigs, the cooperative signed an agreement with beneficiaries detailing the roles, responsibilities and expected benefit of each party. Consolée happily shares her experience: “After 15 months, our pig produced six piglets.” To date, the 39 pigs have so far produced an impressive total of 286 piglets, of which 159 have been sold, fetching 1,280,500 FRW for cooperative members.

In Consolée’s case, she decided to sell most of her six piglets. She explains, “I sold five of them. The money I got helped me to pay health insurance for my family and I paid back 8,000 FRW to the cooperative.” With the income from the sale of the piglets, the cooperative has been able to pay the medical insurance fees for its members.

Adding to the health benefits is the manure that cooperative members now have available for their gardens. There is a close relationship between raising pigs and growing crops, especially vegetables. Manure from the pigs is used by cooperative members in their vegetable gardens, while vegetable leftovers are fed to pigs. The manure has improved the poor soil of Umuhoza sector: beneficiaries now have quality organic vegetables and other crops, thanks to the manure from the pigs.



Even in poor soil, vegetables thrive with manure from pigs PHOTO BY PERTTU SARALAMPI FOR CRS

To facilitate members' access to manure, the pigs are reared by individual cooperative members. However, a committee regularly visits the cooperative members to assess the situation of the pigs. The piggery farming has become a reliable source of wealth for Umuhoza cooperative and has also spurred mixed livestock production among Umuhoza cooperative members. As a result, the household assets of cooperative members have increased thanks to their growing income.

Strengthened by their success, the UMUHOZA cooperative members want to diversify from pig-raising to dairy farming. As Consolée says, "Our vision is to progressively purchase cows for the cooperative members with the money from the pigs, but without giving up the pig breeding." They also want to effectively make use of veterinary services at the sector level to follow up on the animals.

Through the Ibyiringiro project, the cooperative members have been empowered economically and socially. Because they have become productive, the community's perception about them has changed and stigma has decreased. They are perceived as integrated, valued members of the society.

Today the village coordinator, M. Musengimana Innocent, praises Umuhoza members, saying, "I'm proud of the members of this cooperative. They are real change agents in our area."



Village Coordinator addressing Umuhoza cooperative members PHOTO BY PERTTU SARALAMPI FOR CRS

Catholic Relief Services
228 West Lexington Street
Baltimore, MD 21201 USA
Tel: (410) 625-2220

www.crsprogramquality.org

