

Sustainable Agriculture and Food Security Grant Annual Report 2013-2014



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1.0 Introduction

A recent report published by the Food and Agriculture Organization of the United Nations (FAO) outlined a positive trend: the number of hungry people worldwide has declined by more than 100 million over the past decade. ¹ This good news confirms the contributions of the ministry of World Renew and its partners' work with food insecure people around the world.

While the trend is positive, the work is far from over—805 million people remain chronically undernourished, the vast majority residing in developing countries. The FAO calculates that approximately

half of the world's hungry people are from smallholder farming communities where they survive off marginal land prone to disasters like drought or floods.²

World Renew, whose primary purpose is to help bring about transformation in communities, has prioritized agriculture as one of four key sectors that will promote positive sustainable change in disadvantaged communities, particularly when "We know that a peaceful world cannot long exist one-third rich and two-thirds hungry."

—Jimmy Carter

implemented with and through empowered Christian partner organizations and community leaders.

World Renew's strategic plan highlights the challenges currently facing smallholder farmers, including the impact of the changing climate on food production and the increase in frequency and severity of disasters such as drought and floods. One of the three strategic pillars that arise out of this changing global context is developing the capacity of communities in food security and disaster risk reduction. World Renew's current Sustainable Agriculture and Food Security Strategy includes four pillars:

- Embracing agricultural practices that are stewardly, sustainable, and address issues of poverty and injustice, with a focus on restoring creation through the use of locally available resources.
- Strengthening the capacity of staff to deliver high-quality agriculture and food security programs.
- Ensuring increased funding amounts and diversified sources of funding for integrated agriculture and food security programs.
- Improving the quality and effectiveness of agriculture and food security programs.

The Sustainable Agriculture and Food Security (SAFS) Grant has helped advance sustainable agriculture and food security by providing financial and technical support for key initiatives that address the needs of smallholder farmers in communities in which World Renew operates. The SAFS Grant provides World Renew country offices and partner agencies the opportunity to try innovative small-scale initiatives in order to assess their sustainability and impact. Such initiatives, if successful, could attract future funding on a larger scale. This unique opportunity was made possible through an estate gift that was designated to enhance food security among rural households by supporting key learnings and approaches recommended in the *Agriculture and Food Security Program Evaluation Report* of 2009. The evaluation, which covered World Renew's agriculture and food security programming from 2000-2009, revealed that there is a need to focus on the most important priorities of smallholder farmers and address key initiatives that will have the greatest impact on rural livelihoods.

¹ http://www.fao.org/news/story/en/item/243839/icode/

² http://www.wfp.org/hunger/who-are

Since 2010, World Renew's country offices and partners have had the opportunity to submit proposals for up to \$10,000 that address one of seven thematic areas (see sidebar). The grants offer an opportunity to test and improve a new agricultural process or technology or to adapt a process or technology that has been successful elsewhere and not previously implemented with the participant farmers.

In 2013-2014, the SAFS Grant funded six innovative projects (selected out of ten proposals submitted to the SAFS proposal review panel) working with smallholder farmers in five countries, as well as three learning opportunities for World Renew staff and partner agencies in six countries. A total of \$47,323 was dispersed, with several projects scaling up initiatives for greater impact in the communities where World Renew serves.

One of the main impacts of the SAFS Grant this year was the number of farmers trained and supported in initiating their own on-farm experiments. In all five countries participant farmers took the lead, experimenting with new techniques and then sharing their successes with

SAFS Grant Priority Themes

- FARMER-TO-FARMER EXTENSION AND LEARNING: Initiatives that promote farmer-to-farmer extension and the exchange of new knowledge on key agricultural practices and learnings.
 CONSERVATION AGRICULTURE/SOIL FERTILITY RESTORATION: Farming methods that promote a more efficient use of resources and improve soil fertility, productivity, profitability, and sustainability.
 MICRO-SCALE WATER RESOURCE MANAGEMENT: Initiatives that promote effective use of available water resources.
 AGRICULTURAL TECHNOLOGIES: The introduction of technologies that enhance food security, including new crops, management practices, and infrastructure development.
 - MARKET LINKAGES AND VALUE CHAIN EMPOWERMENT: Initiatives that facilitate connections between producers and consumers, and programs that encourage horizontal and vertical value chain integration.
 - AGRICULTURE-INTEGRATED MICROFINANCE: Programs that facilitate sustainable access to savings and credit services for rural households.
- AGRICULTURAL-RELATED ADVOCACY: Initiatives that promote positive change to systemic challenges faced by smallholder farmers.

neighbouring farmers. For smallholder farmers, experimenting on the small amount of land they cultivate presents a high risk. The number of farmers willing to try something new testifies to the desire of farmers to adapt to their changing contexts and to their level of confidence in World Renew and its partner agencies.

In Bangladesh, Honduras, Niger, Sierra Leone, and Uganda, smallholder farmers are now better equipped to adapt their farming operations to the changing climate, have made improvements to their soil fertility, and have accessed credit and linked with markets, all through innovative, scalable, context-specific initiatives made possible through the SAFS Grant. The following sections highlight these projects, with a summary of each project's strategies, key achievements, and lessons learned.

2.0 Farmer-led Agricultural Research for Higher Millet Yields in Niger

2.1 Background

Niger is located in West Africa, in the Sahelian ecosystem where rainfall averages between 200-500mm per annum and soil fertility is of great concern. Millet, a drought-resistant crop, is the staple food in Niger, though frequent drought continues to contribute to chronic food insecurity and repeated need for food aid in the project zone. The normally low levels of rainfall make the region even more susceptible to climate changes in the future.

In 2011, farmers in the Aguie and Yaya regions had a very poor harvest, and the majority of men left their homes to find work in Nigeria, leaving their wives and children behind. World Renew and its local partner, Salama, engaged in a large relief project in 2011 in order to help men return to their communities. The project included the distribution improved seed varieties to the farmers.

Although the seed varieties were appreciated, the 2012 yield still was not sufficient to meet the families' food needs. Good seed alone is not enough to ensure a good harvest; new farming techniques are needed to help people meet their food needs. Seed priming was experimented with by a group of women in 2012, and although the women were enthusiastic about the results, without a control plot there was no way to compare yields. Seed priming is low cost and, based on the literature, has the potential to improve yield by 10-25%.

In 2013, opportunities arose for collaboration with SIM and World Vision to try intercropping millet with acacia species and leguminous

IMPACTS AT A GLANCE

Country: Niger

SAFS Grant Priority Themes: Farmer- to-farmer extension; soil fertility restoration; agricultural technologies

Number of Beneficiaries: 33 direct (25 male, 8 female), 291 indirect

Actual Spending: \$2,059.06

Outcomes:

- 291 people attended community meetings promoting the participants' research
- Primed millet yields proved higher than non-primed
- Incidence of *Striga* weed was reduced when fields were inter-planted with sesame
- Fields with precisely measured planting distances generally performed better

crops. A government agriculture agent in the Maradi area also suggested that farmers try intercropping sesame with millet in order to reduce the harmful effects of *Striga* weed. This work, funded through the SAFS Grant, is a step toward helping the communities build resilience and reduce the impacts of drought in the future.

2.2 Project Description

Salama has been working in the Maradi region since 2005. For this project, Salama worked through three local extension agents who had good relationships established with the communities and were very motivated to make supervisory visits to the farmers involved. This was Salama's first time, however, conducting formal experiments.

The project's strategy was to facilitate and encourage farmer-led experimentation in techniques that would increase soil fertility and crop yields. Farmers selected the techniques they wanted to try and were then trained in how to conduct small-scale experiments on their own land. Farmers shared their observations during community meetings and agreed to promote successful practices and train others. Farmers'

successes have also helped guide World Renew in which practices should be scaled up and promoted more widely in Maradi.

During the experiments, extension agents and farmers observed the progress in growth of the plants, took photos, and took samples of grain at harvest. Participants were encouraged to visit each other's fields and community meetings were held. In total, seven techniques were evaluated: seed priming, millet/cowpea intercropping, millet/groundnut intercropping, millet/Bambara groundnut intercropping, millet/*Sesbania sesban* intercropping, millet/*Acacia* intercropping, and millet/sesame intercropping.

2.3 Results Achieved

Forty-three experimental and control plots were established and monitored, with farmers experimenting on an additional 12 plots on their own (these experiments were not documented by Salama's field agents). Following the experiments, eight community meetings were held (attended by 291 people), and 40 farmers have committed to promoting one or more of the new techniques in their communities. While not all

experiments had positive results due to the challenges described below, it was evident that seed-priming was a valuable technique as clear differences between primed and non-primed millet were observed by farmers. In Yaya, one farmer obtained 48 healthy bundles of grain from the field of primed seed and only 23 bundles from the non-primed seed. In Aguie, even though the farmers experienced total crop failure due to insects and erratic rainfall, farmers noted that the primed millet looked healthier and withstood insects and lack of rains longer than the non-primed millet.



Other results achieved include the following:

- Salama field agents and farmers in Yaya and Aguie were trained in on-farm experimentation and are now equipped to scale up experiments in subsequent growing seasons.
- There was a clear difference between plants intercropped with *Sesbania sesban* and those without.
- The incidence of *Striga* weed was significantly decreased in fields where sesame was planted.
- Fields with precisely measured planting distances generally performed better than fields planted traditionally. For example, one field of millet intercropped with cowpeas produced 6 kg where seed spacing was measured and only 4 kg when planted traditionally.
- Bambara groundnut suffered fewer insect attacks than the other types of beans.

2.4 Lessons Learned

Several key lessons were learned that will be applied to ongoing programming in Niger, with potential to be applied in neighbouring Mali as well.

- Seed priming can be easily adopted by all farmers, though it may require a shift in mindset as it is often a technique only used to "catch up" when a second sowing is needed.
- Too many experiments were tried with too few farmers, resulting in only a few farmers trying each technique. Trying too many different techniques at once also stretched the capacity of Salama field

agents to provide adequate assistance to each participant farmer. This was also a contributing factor for late planting of experiment plots.

Farmers had varying success in their experiments, experiencing moderate to high increases in yield from seed priming and intercropping. Despite the crop failures experienced by many of the farmers due to insects and erratic rainfall, most of the challenges can be mitigated for subsequent growing seasons.

- *Sesbania sesban* was not always soaked in water prior to planting, leading to low germination rates.
- Acacia tree seedlings were not always fenced, and without fencing around each tree or around the entire field were susceptible to destruction by free-ranging animals.
- A written description with exact instructions to ensure standardization would have improved communication about experimental procedures.
- Some of the landowners were either not very involved or completely absent during the experiments, with particularly those from the Aguie region traveling to neighbouring countries searching for ways to feed their families. This resulted in either uninterested paid laborers or Salama field agents caring for the experimental plots of absentee farmers. As a result, the leguminous tree, *Sesbania sesban*, was removed from fields by day laborers who mistook the plant for a weed.

VOICES FROM THE FIELD

"After this seed priming experiment, I cannot plant millet the traditional way again," Yan explained to World Renew's staff. The concept is so simple: soak your grain seeds in water for eight hours the day before you plant, and dry them off before planting.

Yan decided to try it. Just eleven days after planting, there was already a clear difference: plants from primed seeds were taller, greener, and healthier than non-primed.

"Not only did they germinate faster and better, the primed plants produced first," exclaimed Yan. Yan used the same millet variety and followed the exact same planting techniques on both sides of his field – the only difference was the priming. From the primed side, Yan harvested 48 bundles. "And even the grain was actually bigger," he added. The non-primed side produced only 23 bundles.

One small change more than doubled millet production! Yan has since eagerly shared what he learned with about 300 community group members, both in his town and in several villages in the area.



Yan's field, with primed seed growing on the right and non-primed seed on the left.

3.0 Rice Seed Bank Project in Sierra Leone

3.1 Background

A majority of the population in the Koinadugu District of Sierra Leone are farmers who depend on agriculture for their livelihood. Rice is a staple food, and yields have been affected by delayed and erratic rains in recent years.

World Renew and its local partner, Christian Extension Services (CES), have been working to improve food security in the district by introducing improved agricultural techniques, focusing particularly on female-headed households and on creating social capital in the communities to foster peace and development.

Customarily, men in Sierra Leone are responsible for earning the family income, managing farm production, and making decisions regarding the family and community. Men are also the traditional landowners, including Inland Valley Swamp (IVS) land which is used for rice production.

The villages selected for implementation of this SAFS Grant-funded project are the most remote and populous within their wards. A survey by CES staff revealed that female farmers are the poorest and most marginalized persons in the communities, and they rely on accessing rice seed on credit because they run out of food by planting season. Interest on these rice seed loans is extremely high at 100%, and the women are also forced to pay part of their harvest for renting the land, leaving them in a cycle of poverty. As women also bear the primary burden of feeding and caring for children and paying for school fees, if women are adequately equipped with the necessary skills in

IMPACTS AT A GLANCE

Country: Sierra Leone

SAFS Grant Priority Themes: Agriculture-integrated microfinance

Number of Beneficiaries: 150 (all female) direct; 750 indirect

Actual Spending: \$9,533.39

Outcomes:

- 150 female farmers increased their knowledge and skills on the System of Rice Intensification
- 150 female farmers increased their rice yield
- 5 new seed banks were established and are functioning well
- All rice loans were repaid to the common community loan pool, with interest

agriculture and given the opportunity to earn an income through their farm produce, the whole family will benefit.

3.2 Project Description

This project was designed to improve the food security of 150 households in five villages in Koinadugu District through the provision of an improved variety of seed rice. The ultimate goal is that the female farmers impacted by the program would not have to leave their communities in search of seed loans for the next planting season and would have food to see their families through to the next harvest.

The project aimed to provide two bushels of rice seed to thirty female farmers in each of the five communities as a start-up for a community-managed revolving seed stock, with the seed banks created having a 25% interest rate. Training on improved farming techniques for IVS rice production, and particularly on the System of Rice Intensification (SRI), was held to complement this strategy.

3.3 Results Achieved

The Rice Seed Bank project successfully increased the availability of improved rice seed for 150 female farmers. Five seed banks were established and are functioning well, and new farmers have been identified to benefit from the interest paid to the seed banks from the previous seasons' seed loans. Leadership

training on seed bank management was conducted with all 150 women farmers, and another 74 Village Development Committee members and local leaders also completed leadership training on seed bank management as other communities begin to express interest in the program.

The 150 female farmers were also trained in SRI and were taught valuable skills in farm record keeping, including how to track expenses and assess yields. As a result of the improved seed received and the SRI techniques they implemented, 80 percent of the farmers increased their incomes and all 150 farmers harvested more this year than the previous year. All 150 women repaid their rice seed loan in full, with 375 bushels of rice now stored in the seed banks; this will allow an additional 35 women to benefit from the project in the following season as the seed bank stock has increased.



Beyond the tangible result of improved food security, the women report that they are now better able to send their children to school and to buy school materials because of their increased income. Many women also report that, because of what they have accomplished, their spouses have a growing respect for them.

3.4 Lessons Learned

One of the key challenges faced during the implementation of the project was the gender dynamics in the five villages. Women face constant discrimination as men believe that women lack ability and have lower intelligence levels. Women have little social capital, are excluded from decision making, and lack access to land and farming inputs. While the program targeted women for training and the provision of seed, men were involved in the project in an attempt to help them to see how when women are respected and benefit from programming, the entire community is positively impacted.

Other challenges included:

- The distances between participants' fields made it difficult for field staff to supervise the different steps in the SRI process at times.
- Not all 150 farmers were adopters of SRI; some of the women were not initially interested in trying the new farming techniques. Behaviour change communication methodologies could help improve initial uptake.
- Fencing of fields was difficult for some women who did not have the money to hire male labourers.

Despite the challenges faced, the demonstration plots in each village had very good yields. This helped create group solidarity and encouraged adoption of improved seeds and planting techniques by group members. Using seedling nurseries as promoted by SRI led to abundant and healthy rice panicles, and proper and timely land preparation led to easy control of water and facilitated planting. The higher yields in the SRI plots will lead to increased uptake of SRI techniques in future years as others grow comfortable with the ideas being promoted.

VOICES FROM THE FIELD

In Firawa and Komoya, Sierra Leone, community members are eager to talk about how the SAFS program is creating peace between families in the two villages.

Using selection criteria, thirty women were selected in each of the two communities to receive two bushels of improved rice seed. When the distribution took place, the men in the communities raised their eyebrows, asking, "Why were we not selected as the recipients of the rice, since we are the rightful owners of the land?" In this Kuranko tribal area, men hold claim to over 90 percent of the Inland Valley Swamp land.

For many of the women farmers, this was the first time that they benefited from agricultural trainings and were put in contact with the local agricultural extension services serving their communities. CES staff person Foray Wollay Marah reassured the men that although the SAFS project would benefit the women directly, it would also indirectly benefit the men and their children.

Already in a short time frame, signs of improved food security are evident in the area, and there is a growing unity among the women in the two community groups and between the women and their husbands. "At first we thought the project was a way of trying to give the women control of our land so that they could become wealthy," one of the men said. "But we now know that the project will not only benefit us and the women as well, but also our families as a whole."

The people of Firawa and Komoya expressed how impressed they are with the early maturity period of the improved rice that was distributed, which is several weeks shorter than traditional rice varieties. With evidence that the project is in fact positively impacting the whole community, men who were not initially supportive have come around. United under a common interest in cultivating high-yield rice in inland swamps, men have begun sharing the project responsibilities with the women and have worked at clearing brush, fencing, plowing, and even cultivating the swamp land.



4.0 Indigenous Chicken Rearing Project in Uganda

4.1 Background

The Church of Uganda Nebbi Diocese (CoU Nebbi) has been engaged in improving rural household livelihoods and food security through agricultural related programs in northern Uganda since 1995. Over the last three year, CoU Nebbi has been adopting the self-help group approach as a community entry point and mobilization strategy.

Many of the self-help groups in Kaya Parish have expressed interest in learning more about solutions to the challenges they are facing in raising chickens. Households in the parish are predominantly earning their livelihoods through smallholder farming, and while it is rare to find goats and cows, most households keep a small number of chickens.

The ability of these households to increase flock size in order to meet household and market demands for chickens and eggs is hampered by a lack of knowledge and skills on both the rearing and marketing sides of production. Improving a farmer's ability to increase flock size increases the amount of protein-rich foods available at the household level, increases the amount of manure available to integrate into kitchen gardening practices, and allows farmers to sell chickens to meet immediate financial needs.

4.2 Project Description

The pilot indigenous chicken rearing project was implemented by CoU Nebbi in the village of Armukeng with two existing self-help groups. The project focused on trainings related to indigenous chicken rearing in order to improve household livelihoods and food diversity.

After initial training on poultry management and appropriate housing, one Kuroiler cock was distributed to each household that had 3-5 indigenous hens and that had constructed an improved poultry house.

IMPACTS AT A GLANCE

Country: Uganda

SAFS Grant Priority Themes: Marketing linkages and value chain empowerment; agricultural technologies

Number of Beneficiaries: 40 (25 female, 15 male)

Actual Spending: \$4,548.80

Outcomes:

- 100% of participants have constructed improved poultry houses
- 88% of participants have reduced incidences of bird loss due to disease, increasing flocks from the initial 5 birds to at least 20 per household
- 34 households have adopted kitchen gardening using composted chicken manure to boost the garden's productivity
- 40 households have established market linkages to sell their chickens

The Kuroiler is a hybrid breed of chicken developed in India that is dual-purpose, as it produces both meat and eggs, and can survive on agricultural and kitchen waste.

Additional training was then provided to forty participants on poultry vaccinations, treatment, disease control, and the use of indigenous tree species and other medicinal plants in chicken rearing. The project also trained the self-help group members on chicken litter use and application through demonstrations of manure composting techniques. Specific trainings were held on the use of the manure compost on different types of kitchen gardens and on the growing of vegetables including tomato, okra, and onion.

Finally, in addition to the trainings on chicken rearing and manure composting, the project trained forty participants on business and marketing skills, including record keeping and price determination for poultry sales.

4.3 Results Achieved

This pilot project was very successful in achieving its goals. Forty Kuroiler cocks were procured and distributed after the initial trainings to forty participants who had constructed improved poultry houses. By June 2014, 32 of these households already had 648 birds (representing 4 months of production). The improved poultry houses include egg laying shelves and ensure that the chickens are protected from predators and disease.

In addition:

- All 40 households have established links to markets for their chickens.
- 83 percent of participants are able to apply their new knowledge of poultry vaccination and disease treatment and control, including through the use of local plants such as moringa and aloe vera.
- 83 percent of participants are using chicken litter in their kitchen gardens. The participating households have also expanded the variety of vegetables they are growing and consuming.
- Female involvement in the project was high—65% of participants—which gave CoU Nebbi staff the opportunity to address cultural barriers that prevent women from eating chicken and eggs.



Vegetable nursery bed using chicken manure

- Relations between men and women at the household level improved through specific training that explored gender relations with regards to roles, decision making, and enterprise skill development. Female participants related their excitement in seeing their spouses' increased respect for their contributions to decisions in the household.
- As a result of knowledge and skills acquired through the business and marketing training, motivated self-help group members have applied what they learned far beyond poultry to beekeeping and cash crops such as grain amaranth. Some members' savings goals have extended to the purchase of goats and cows now that they understand marketing.

4.4 Lessons Learned

This small project served to increase the profile of the church in the community as CoU Nebbi modeled its core values by supporting development initiatives. Several specific factors led to the success of this project and serve as lessons learned that will contribute to projects carried out by the CoU Nebbi in the future:

- The timely procurement of Kuroiler chickens as well as the timely preparation of improved poultry housing by participants was a critical factor in the project's success.
- A high level of cooperation between participants, project management staff, and the Diocese office enabled the project to progress well.
- Participatory monitoring involving project participants, management committee members, and Diocese staff encouraged collective learning and accountability.

Key challenges in this project came from the slow adoption of certain training components, such as establishing fenced areas for protecting chickens and the timely vaccination of birds. Project participants who adopted the new practices quickly increased their flocks from 5 to more than 30 within 5 months, which will only serve to encourage others to do likewise in the future.

VOICES FROM THE FIELD

Thamim Ojoo is a 45-year-old participant of the indigenous chicken rearing project, funded through the SAFS Grant. Thamim attended all the trainings and is very proud of his chicken production. "Using my new knowledge, I constructed a poultry house and I'm now able to effectively administer vaccines to my birds in addition to using traditional medicinal plants for treating disease," Thamim explained.

Thamim now has 32 birds and dreams of increasing his flock to 120 birds. He credits cross-breeding for facilitating his increase in production in the past six months. "I plan to sell some chickens to pay school fees for my children, and having more chicken and eggs available will also improve my family's diet," he said.



5.0 Promoting Adaptation of Environment-Friendly Agriculture in Bangladesh

5.1 Background

Since 1995, World Renew's partner SATHI has been implementing community development programs with urban slum dwellers in Bangladesh. During the 2012-2013 SAFS Grant cycle, SATHI successfully implemented an urban agriculture project focusing on composting, seed preservation, and kitchen gardening in three unions of the Atpara sub-district. In addition, SATHI expanded their work into rural areas in the Netrakona District as part of a maternal and newborn health program funded through the Canadian government. As a result of SATHI's work last year, there has been increased interest among farmers in other unions to learn about composting and kitchen gardens. This 2013-2014 SAFS-funded project focused on two new unions in the Atpara sub-district of Netrakona.

Netrakona is a low-performing district in terms of education, health, and communication systems. Regular floods, lasting three to four months of the year, have farmers depending heavily on the monocropping of rice. This situation has resulted in 70 percent of households—which have an average family size of over five members—living on less than half a dollar a day and experiencing high levels of malnutrition, especially among children. Farmers are heavily dependent on fertilizer purchased in the market due to their lack of knowledge related to composting and other inexpensive ways of improving soil fertility. In surveying communities before the project began, SATHI heard from many community members that if they were taught techniques for making compost and cultivating vegetables, they believed they would be able to meet the nutrition needs of their families.

5.2 Project Description

The goal of this project was to help communities practice environmentally-friendly agriculture through the adoption of composting and vegetable gardening, thereby reducing farmers' dependence on chemical fertilizer and increasing soil fertility. Farmers were encouraged to grow vegetables and incorporate them into the family diet in order to improve household nutrition. This was accomplished through identifying previously trained farmers and teaching them how to teach others through peer-to-peer learning. In this way, the skills of farmers from the previous year were strengthened, while new farmers were added to the project. The previously trained farmers received Training of Trainers (TOT) teaching on composting and vegetable gardening and then conducted practical training sessions for new farmers.

The project also focused on raising the awareness of the wider community about nutrition and the importance of dietary diversity through events, drama performances and participation at the local agricultural fair.

IMPACTS AT A GLANCE

Country: Bangladesh

SAFS Grant Priority Themes: Farmer-to-farmer extension and learning; soil fertility restoration

Number of Beneficiaries: 1,148 direct (759 male, 389 female); 4,592 indirect

Actual Spending: \$6,740.25

Outcomes:

- 440 farmers have adopted composting and vegetable gardening
- 158 Peer Farmers were mobilized and worked together to train 100 new farmers
- 6 drama performances were organized in the community
- 120 farmers are growing at least two new types of vegetables

5.3 Results Achieved

In total, over the life of the project, 440 farmers (255 male, 185 female) have adopted composting and vegetable gardening. Based on the project strategy described above, SATHI trained 158 Peer Farmers using a TOT model. These Peer Farmers then played an active role in motivating and training 100 new farmers in composting and vegetable gardening. In total, 120 new farmers are growing at least two new types of vegetables and 23 have been able to increase their household income through selling excess produce.

The project engaged one member from each of 67 groups formed through other SATHI-implemented programs (Maternal and Newborn Health and Child Centered Community Development), 10 Peer Farmer groups, five Union Committees, and two People's Institutions in implementing and monitoring the project activities. The Union Committee and People's Institution leaders will help motivate farmers to continue with the new practices they have learned.

Through community engagement activities, the project reached 4,512 community members, with the direct involvement of 1,148 (389 female, 759 male) participants. Four hundred and forty advanced farmers are now trained and motivated and have gained skills for how to share their knowledge of composting and vegetable gardening with others.

5.4 Lessons Learned

During the implementation of this project, the following lessons were learned:

- Observable successes and tangible benefits from a project encourage and motivate other people to join in. The sharing of experiences and successes between Peer Farmers and new farmers was a very effective strategy in motivating the new farmers.
- The peer learning approach is very effective and can be contextualized with other development initiatives and in other development sectors.
- Mass awareness-raising events, including drama shows and agriculture fairs, were successful in raising awareness in the wider community.

The primary challenge faced during project implementation was in motivating Peer Farmers to train other farmers voluntarily (i.e. with no compensation).

VOICES FROM THE FIELD

I never thought that I could earn income for my family," explained Momota, a housewife living in the village of Goatola in the Netrakona District of Bangladesh. "I thought it was my husband's role to provide for our three children." Then, in 2012, her husband had a stroke and became bedridden. Momota sold all of their cultivable land in an effort to pay for his medical treatment. She also started growing vegetables around her homestead to feed her family, but her yields were low and her family became increasingly impoverished.

When given the opportunity to join a farmers group though World Renew's partner SATHI, she took full advantage of the opportunity. Momota received lessons in vegetable gardening and composting and joined a savings group which the group named "Lalshak". With the knowledge and experience she gained, Momota planted gourds, spinach, red amaranth, eggplant, and other vegetables and made compost to increase the fertility of her garden's soil.

With higher yields and better quality produce, not only can her family eat from her garden but Momota is now also able to sell some vegetables and earn some money. "My family is healthier, my children are going to school again, and I am preserving the soil's fertility using compost," Momota said. "Lalshak has taught me that it is everyone's duty to preserve the environment to make a better world. I am proud that I am contributing to this."

Momota plans to grow more vegetables this winter. She dreams that in her village there will not be any abandoned land and that every farmer will improve the fertility of their soil by making compost. She is confident that every farmer can provide for their family and increase their income. "There is a magic lamp in their hands; they only need to know how to light it," explained Momota. "I learned how and it changed my life. I hope to encourage and motivate others to light theirs too."



6.0 Training Women in Vegetable Production to Improve Household Food Security in Honduras

6.1 Background

Harvest Honduras was established in 1987 and is actively working in eleven communities. In each community trained leaders are developing small projects according to the specific needs of the community around leadership formation, integral health care, food security, and rural financing.

One area of focus for Harvest is meeting the nutritional needs of children five years old and under. Harvest helps improve children's health by supplying food and training mothers how to improve their children's nutrition. Through the SAFS Grant, last year Harvest supported this goal by training 145 people on the production of vegetables through farmer-to-farmer extension.

The people in the region in which Harvest works have a diet that is based heavily on corn and beans, which are cultivated on small plots of land. Due to climatic changes and poor agricultural practices, farmers struggle to produce enough to live on. They rely on seasonal rainfall and often do not have the economic resources to purchase fertilizer or invest in irrigation, leaving their production totally dependent on nature.

6.2 Project Description

The success of the project last year led other communities to express interest in learning about sustainable horticulture practices as a means to alleviating chronic food shortages and improving nutrition.

The project followed a strategy similar to the previous year, with farmer-to-farmer training between a group of women from

IMPACTS AT A GLANCE

Country: Honduras

SAFS Grant Priority Theme: Farmer-to-farmer extension and learning; conservation agriculture; micro-scale water resource management

Number of Beneficiaries: 80 direct (41 male, 39 female); 400 indirect

Actual Spending: \$9,664.00

Outcomes:

- 80 participants from three communities were trained in sustainable horticulture practices
- 37 households have established vegetable gardens on their land
- 5 exchanges and learning visits were conducted
- 9 different vegetable crops are being cultivated

Stewardship Christian Ministries who were previously trained in sustainable horticulture practices and new project participants living in three rural communities of southern Honduras. The three target communities are located in one of the driest and hottest areas of the country.

The project included four main activities:

- One *gardening group* per community was organized, with women being specifically targeted.
- Project participants were *trained in sustainable horticulture practices* and in the establishment of vegetable gardens using local materials, such as used tires, plastic bottles, and organic litter.
 Participants were encouraged to grow a large variety of crops and to incorporate them into home meals, including mixing them into the dough used for tortillas to improve children's nutrition in particular. They were also taught pest control, harvesting and processing methods.
- *Learning exchange visits* were conducted between participants of the current project and farmers in communities who participated in the project in the previous year.

- Participants were *introduced to micro-irrigation systems*, including drip irrigation using plastic bottles, drip irrigation using hose, and sprinkler and gravity systems.

6.3 Results Achieved

The following results were achieved by the project:

- 80 participants (41 male and 39 female) from the three communities were trained in sustainable horticulture practices—35 more people than originally planned. Many of the participants were couples who participated together, as well as young people who accompanied their parents to training sessions, and therefore it is not expected that all 80 will establish their own gardens.
- 37 households have established a vegetable garden at their home.
- 9 vegetable crops are being cultivated by participants, including tomato, cucumber, onion, cilantro, chard, celery, carrots, beets, and green pepper.
- 5 learning exchanges were conducted, which created a lot of motivation among participants particularly the visit to the community of Piedra de Agua.
- 5 micro-irrigation techniques were introduced.



The impact of the project on family diets will be assessed six months following project completion, as many families have only been gardening for four to five months, making it too early to assess whether there has been an improvement in the quality and quantity of food their household is consuming.

6.4 Lessons Learned

While this project began with the intention of training women, over time men and young people became actively involved in establishing home gardens. The facilitators took extra care to ensure that the techniques taught would not place an additional burden on women, focusing on establishing gardens near or at the house and using local materials for construction, composting, and saving seed to avoid the need to purchase costly inputs.

Farmer-to-farmer exchanges were one of the most motivating factors for participants and the biggest contributor to the project's success. At the start, participants were hesitant to grow vegetables in such a difficult environment, with high temperatures and low water availability. Learning exchanges with farmers trained the previous year helped people see the possibilities for growing successful gardens under similar conditions.

For those who did not have enough space around their home or whose land was unsuitable, growing vegetables above ground in old tires and recycled plastic containers became a popular alternative. Most families were able to produce enough compost from materials found abundantly in the community. Participants also learned to use seedbeds to reduce the risk of crops being eaten by animals or damaged by

pests or strong sunlight. Among the different micro-irrigation techniques presented, farmers particularly liked using plastic bottle drip irrigators.

The cost of producing vegetables organically remains the biggest challenge for participants. Rather than monetary costs, it is the extra time and effort required for weeding and using organic pest control methods which can lead some farmers to turn to chemical fertilizers and pesticides. Drought, which is leaving water sources reduced in summer, also remains a challenge.

Harvest's personnel strategy is to rely on volunteers, rather than paid staff, to support the development of community projects. Despite the challenges of not having permanent staff, Harvest's experience is that farmer-to-farmer learning ensures that there is sufficient capacity and motivation for the successful implementation of the new techniques taught, and gaining the support of community leaders and volunteers leads to long-term sustainability.

VOICES FROM THE FIELD

Petrona and her husband Beto live in the community of El Limon in Honduras. Thanks to Harvest's work and funding made available through the SAFS Grant, they are very motivated to plant vegetables to improve the nutrition of their family. "We have worked together on the preparation of the land and the maintenance of our family garden," Petrona explained.

The couple have learned many things through the trainings they have participated in about sustainable horticulture practices. "We are not only growing vegetables inside old tires, but have recently prepared a small plot of land with compost beds for planting vegetables such as green peppers, onions, and beets," Petrona said.

Petrona and Beto expect their harvest to provide enough vegetables for their family to eat and to have a surplus that they can sell to earn some extra income. They are thankful for what they have learned and for how it is positively impacting the food security of their family.



7.0 Conservation Agriculture and Soil Fertility Restoration in Uganda

7.1 Background

The Pentecostal Assemblies of God (PAG) Kabale has been working in partnership with World Renew in southwest Uganda since 2006. The partnership is based on a mutually shared vision of reaching God's people in need through holistic programs.

Soils in the Kabale District are structurally weak, show poor productivity, and are prone to erosion. The district is very densely populated, which has adversely affected the agro-ecology of the region, as every available piece of land is under cultivation. Ninety percent of the population of the district are subsistence farmers, and population growth has outstripped the carrying capacity of the land resulting in chronic food insecurity.

This is the second year of a program which seeks to address the problem of soil fertility in an effort to increase the yields of vulnerable households in six target communities.

7.2 Project Description

The communities selected were prioritized because of high levels of food insecurity and vulnerable people, including women, orphans, and people living with HIV and AIDS. The project was designed to address issues of soil infertility by emphasizing the adoption of conservation agriculture methods, including practices such as mulching, green manure cover crops, liquid manure, composting, agroforestry, crop rotation, and intercropping. In the first year of the project, four communities were reached; during the second year two new communities were selected to receive training and the four initial communities continued to receive support.

IMPACTS AT A GLANCE

Country: Uganda

SAFS Grant Priority Theme: Conservation agriculture/soil fertility restoration

Number of Beneficiaries: 150 direct (20 male, 130 female); 750 indirect

Actual Spending: \$8,452.24

Outcomes:

- 150 farmers were trained on soil restoration practices
- 112 farmers have used different forms of manure and compost in their field
- 120 farmers have tried one or more legume in their field
- 30 Community Extension Volunteers were trained and are transferring their knowledge and skills to at least five other farmers each

Six demonstration sites were established as learning centers for the six farmers' groups, where farmers attended monthly trainings using participatory approaches. For communities from year one of the project, emphasis was on the adoption of agriculture practices already learned and farmer-to-farmer extension. In addition, five Community Extension Volunteers (CEVs) were nominated from each community who then identified five farmers each who they were responsible to train. Review meetings were conducted with community leaders, political leaders, and church leaders to sensitize them to and update them on the conservation agriculture methods being promoted, to evaluate progress made, and to make recommendations for future interventions.

7.3 Results Achieved

This project is yielding good results, though at an understandably slow pace as the conservation agriculture methods promoted are significantly different from traditional farming methods practiced in the district. Many farmers want to see the results from the demonstration sites and neighbouring farms first before they put into practice what they have learned on their own land.

In total, 150 farmers (130 female, 20 male) in six communities were reached by project interventions. The following results were achieved:

- 150 farmers (130 female, 20 male) were trained on soil restoration practices. The use of green manure cover crops was a key focus of the trainings, and two demonstration gardens for lablab and fava beans were established.
- 112 farmers (92 female, 20 male) were trained on the use of manure and compost creation and use and have applied the new practices on their own farms.
- 120 farmers (96 female, 24 male) have tried one or more of the legume options in their own fields.



- 36 households have testified to improved soil fertility, observed through improved yields from gardens and increased food security. These farmers are applying manure before planting, using proper spacing, planting in rows, planting and weeding on time, rotating crops and applying other conservation agriculture practices taught through the program.
- 30 CEVs (20 female, 10 male) met monthly for training, adopted all of the practices they were trained in, and are transferring learned skills to at least five others in their communities.
- 1 exposure visit was conducted to two model farms, with 30 farmers' group leaders and CEVs participating. 28 of these leaders are putting something they learned during the visit into practice.

Farmers from outside of the targeted group have started adopting the conservation agriculture methods being promoted through the program after observing the methods at demonstration sites or in neighbouring farmers' fields. For example, an Anglican priest who was formerly opposed to the methods visited one of the demonstration sites frequently and eventually starting using mulch on part of his land. The project was also able to positively influence the opinions of political, religious, and local leaders who visited the demonstration sites who now understand the value of the practices being promoted.

7.4 Lessons Learned

Farming in Kabale is primarily the occupation of women, even though men have control over the land. The challenge of low male involvement was addressed during stakeholder reflection meetings where men were encouraged to be involved and supportive. PAG Kabale ensured male participation in all stages of the project implementation, including the selection of CEVs, one third of which are men. Male participants were also encouraged to provide land for demonstration gardens, with three out of six sites provided by men.

Key lessons regarding the appropriateness of the project design and implementation include:

- Farmers learn better through peer learning, observation and practice rather than by just listening.
- The use of CEVs, farmer group leaders, farmers' groups and demonstration sites increased the reach of the project and created a sustainable system of ongoing support for the farmers.
- In an area of high population density, it is important to focus on edible green manure cover crops as farmers have a limited amount of land on which to grow food.

- The project aimed to include government agriculture extension workers to improve the sustainability and increase adoption rates of conservation agriculture. The government workers, however, proved not to be good role models in farming and were reluctant to document their work.
- Communities where PAG churches are present more readily adopted the new farming methods as compared to the communities without PAG churches. This is likely related to the fact that trust has been built in these communities and that these communities have gone through the Participatory Evaluation Process (PEP) with PAG Kabale, which encourages people to recognize their skills and resources and take action to achieve their goals based on their existing strengths.

VOICES FROM THE FIELD

Geresem Twesigye, 29, is among the 150 farmers that have been trained by World Renew's partner PAG Kabale in 'Farming God's Way' (conservation agriculture) and other soil fertility restoration practices. Geresem owns a very small piece of land, less than one-tenth of an acre, which he has cultivated for many years.

After attending trainings in 2013, Geresem started applying the lessons he learned. He is now into his fifth planting season of using the soil conservation methods. In the first planting season after the training, Geresem planted tomatoes on his land. He harvested 25 kgs and was able to earn UGX 50,000 (\$18). During the trainings, farmers were also taught about crop rotation, so in his second planting season, Geresem planted beans and harvested one and a half bags which he sold fresh. In the third planting season, he planted maize and harvested two bags of fresh maize from which he earned UGX 70,000 (\$26). Last planting season, Geresem planted lish potatoes, harvesting three bags and earning UGX 180,000 (\$66).

"I have influenced six neighbouring farmers to practice Farming God's Way," Geresem explained. "And I currently have a garden of cabbages, which I planted during the dry season." Most farmers do not plant vegetables during the dry season, which means that Geresem will enjoy good sales of his cabbages since it is unlikely that there will be many vegetables on the market at the time of his harvest.

Geresem was able to plant in the dry season due to soil moisture reserves he captured using mulch, a technique he learned through the program. While obtaining mulch can be a challenge in Kabale, Geresem gets his mulch from a local golf course. Previously, whenever the grass was cut it was heaped and burned. Geresem saw this opportunity, and now collects the grass before it is burned.



8.0 Capacity Building for World Renew and Partner Staff

In addition to making grants available for agriculture and food security programming, ten percent of the SAFS Grant is earmarked annually for capacity building related to agriculture and food security, including attending trainings or workshops. This past year, three learning opportunities were funded, directly benefitting World Renew staff and their implementing partners in six countries.

8.1 African Rice Congress

In October 2013, World Renew's Program Consultant in Sierra Leone, Andrew Gwaivangmin, attended the Africa Rice Congress in Yaoundé, Cameroon, with the help of a SAFS capacity building grant. Rice is a staple crop in Sierra Leone, with high potential for improved yields and, ultimately, reducing poverty and hunger in the country. The Congress focused on five themes:

- climate-resilient rice for Africa's environment
- sustainable intensification and diversification of rice-based systems
- rice processing and markets
- rice policy for food security though smallholder and agri-business development
- innovation systems and information and communications technology for rice value chain development

Key learnings from the Congress were shared with World Renew's partner in Sierra Leone, Christian Extension Service (CES), who then applied the learnings in the implementation of their SAFS Grant-funded project which focused on improving rice production in Inland Valley Swamps (see page 7). In particular, key lessons helped to improve CES's knowledge and capacity with regard to field management and practices being implemented, including:

Farming Techniques

- Training farmers to transplant rice in lowlands is possible without reducing yield.
- Introducing farm practices that reduce the cost of weed control saves farmers money.
- Implementing rice seed screening helps increase the competitiveness of highly productive rice plant types without significantly affecting farmers' yields.

Rice Variety

• Farmers are adopting the cultivation of NERICA varieties to increase household



income; however, no one variety of rice is suitable for all ecological conditions, no matter how similar.

• Participation of farmers in rice varietal selection is the most sustainable farmer-based practice of production; farmers often have criteria for variety selection aside from yield, such as aroma, colour, and ease of processing.

• Farmers should avoid mixing rice varieties on the same plot of land, as this contributes to difficulties in disease control.

Farmers Training in Groups

- Regular training and formation of farmers' groups will increase crop yield in the long term.
- Targeting economically active members of households promotes production.
- Considering gender issues remains an essential element of empowering small scale rice farmers.
- Providing market access to farmers through value addition and improved infrastructure development is important.

Key learnings from the Congress were also shared with World Renew's regional staff in West Africa during a team meeting in Senegal in early 2014, which will ensure further uptake of the lessons learned, particularly in the rice-growing areas of Mali in which World Renew works.

VOICES FROM THE FIELD

"The Africa Rice Congress helped me to understand that rice sector development can become an engine for economic growth in West Africa and the continent. It can also contribute to eliminating poverty and food insecurity within the sub-region, and raise the social well-being of millions of our poor people. If and when we are able to enhance local production, processing, and marketing, West Africa's cities will have access to affordable food. In addition, rice production can create employment along the value chain and in related sectors. I enjoyed the added skills, knowledge and attitude change gained from the Congress, without which I would have been ignorant in many aspects of the rice sector development. This has helped me work with CES to re-strategize in our efforts around rice production in Sierra Leone."

— Andrew Gwaivangmin, World Renew Program Consultant, Sierra Leone

8.2 Nicaragua Agroecology and Social Transformation Course

With the help of a SAFS capacity building grant, four staff from World Renew field offices in Guatemala, Honduras, and Nicaragua and nine staff from partner organizations in Nicaragua were able to attend a twelve-day course on Agroecology and Social Transformation in Estelí, Nicaragua.

Guatemala, Honduras, and Nicaragua are nations that face difficult challenges in terms of creating and promoting food systems that do not compromise health, human development, or the environment. Among rural producers and consumers, there are challenges and opportunities within the context of dependence on export production (especially coffee), cultural changes, climate change, and social and political structures. Nicaragua in particular is a place where agroecology exists as a viable strategy for addressing these problems and is supported by different social movements that include the agricultural sector, unions, academics, politicians, and nongovernmental organizations.

The objective of the Agroecology and Social Transformation course was for participants to develop conceptual and methodological skills to be able to incorporate the basic principles of agroecology into a

process of social transformation that is focused on health and human capacity to achieve sustainable, healthy, and just development. Participants gained an understanding of and appreciation for agroecology and how it fit within their organizations' goals and values. Actions planned following the short course include:

- Forming cooperative producer groups: As World Renew works with producer groups in its agriculture programming, the challenge of marketing constantly emerges, especially with regards to coffee and cacao. One cooperative present at the course offered to host World Renew and its partners for a three-day exchange visit in January 2015. The exchange visit will further help the staff identify the steps a producer group should take to become a cooperative and identify the steps a coffee or cacao producer in particular needs to complete in order be fair trade and organic certified.
- **Promoting creole seed varieties as a climate change adaptation strategy:** During the course, Carman Picado gave a presentation on the elaborate system her community has of identifying, selecting, testing, and storing several dozen creole varieties of corn and beans. Carman invited

World Renew and its partner staff for a two-day exchange visit in September 2014. While World Renew's partners already have a good understanding of creole varieties, seeing them tested at the community level will be very important as they become promoters of this seed stock. There are two objectives for this exchange visit: to identify creole varieties of corn and beans that fit into the crop diversification strategy and can help communities adapt to a less predictable climate and to identify a source for seed stock.



- **Receiving mentoring through the Community Agroecology Network (CAN):** During the course, World Renew's partners were exposed to the principles behind agroecology for the first time. The framework developed by the Community Agroecology Network (CAN) suggests that there are three levels of transition that include:
 - 1. Increasing the efficiency of conventional practices in order to reduce the use and consumption of costly, scarce, or environmentally damaging inputs.
 - 2. Substituting conventional inputs and practices with alternative practices.
 - 3. Redesigning the agro-ecosystem so that it functions on the basis of a new set of ecological principles.



The Nicaraguan partners recognized that most of the participants in their programs were at levels one or two. CAN agreed to mentor the Nicaraguan partners at no charge and to host a two-day exchange visit in a community affiliated with CAN where a number of farmers have reached the third level of transition. The Nicaraguan partners will create plans to help outline the steps to monitor the path that a smallholder farmer goes through as his farm transitions through the three levels of transition.

In the end, the Agroecology and Social Transformation course was an invaluable learning opportunity and presented an excellent opportunity for networking. Participants were taught appropriate sustainable agriculture practices that are essential for healthy families and vibrant and resilient rural communities. The learnings from the course are already being used to guide the development of proposals and programming in Guatemala, Honduras and Nicaragua, specifically around disaster risk reduction, seed banks and native seed selection, and bio-intensive gardening.

8.3 East Africa Amaranth Evaluation

Between 1998 and 2008, World Renew introduced and promoted grain amaranth in the East African region. Amaranth's drought resistance (amaranth requires half the amount of water of maize), its high protein and high lysine content, and its good taste led World Renew to begin experimenting with the crop in semi-arid areas. The first experiments took place in two villages in Machakos, Kenya. Amaranth promotion was later enlarged to include higher rainfall areas in Kenya, Uganda, and Tanzania. People living with HIV and AIDS who daily consumed amaranth reported improved health and better tolerance of anti-retroviral medicines, leading the projects to also start to include demonstrations at health clinics and at village-level trainings in nutrition.

The East Africa Amaranth Evaluation, which took place in April 2014, provided a key learning opportunity for World Renew staff, partner organisations and amaranth farmers in Uganda and Kenya. Ex-post evaluations are conducted after a certain period has passed since the completion of a project, with an emphasis on the effectiveness and sustainability of the project. The advantage of an ex-post evaluation is that it allows for the assessment of the long-term impacts of the project in and beyond the project's target

areas and for learnings around why farmers have or have not adopted a promoted crop or technique.

This ex-post evaluation, funded in part through a SAFS capacity building grant, allowed World Renew to determine the impacts and lessons from the grain amaranth promotion work and also to build staff capacity in the region for this unique type of evaluation. The evaluation also focused on ways of promoting amaranth in improving household nutrition and food security in the future by identifying factors that influence production, marketing, and consumption of the grain. Team members from World Renew's East Africa and Asia ministry teams and partners took part in the learning, and a nutritionist was also invited to be part of the evaluation team.



Amaranth farmers displaying their crop

Overall, the results of the evaluation were very encouraging. There is compelling evidence that the introduction and promotion of grain amaranth that World Renew and others began in the late 1990s and early to mid-2000s was sustainable and that amaranth use spread from farmer to farmer beyond the target areas of the programs. Farmers ranked amaranth as a highly important crop, and even farmers with limited land holdings were dedicating small areas to growing amaranth as a nutritional supplement crop.

A number of key challenges were uncovered, including grain amaranth's potential to worsen already fragile soils in the region, seed degeneration, and commercialization and marketing challenges for farmers who

strongly desired to earn income from amaranth as a cash crop. Recommendations included incorporating amaranth in health and nutrition programming in the future, introducing green manure cover crops and other soil fertility restoration practices when promoting amaranth, and providing farmers with training on seed selection in areas where crossing with wild types could be an issue.

In terms of building staff capacity, the evaluation provided key learning opportunities for eight World Renew staff, staff from four of World Renew's partners, and numerous farmers. The evaluation team also became well-versed in the use of Participatory Learning and Action (PLA) tools, an approach for learning from and engaging with



Village-level amaranth products: grain, popped, and flour

communities. In Uganda, after hearing the stories of success of amaranth in neighbouring Kenya, farmers told the evaluation team that they had "woken up" to some of the potential benefits of amaranth that they had not yet pursued.

Results of the evaluation were shared broadly, and it is anticipated that the lessons from this learning event will be incorporated widely within World Renew programming and beyond.

9.0 Grant Allocation Summary

A total of \$47,322.74 in SAFS funding was granted in 2013-2014. Six programming grants totaling \$40,997.74 funded projects in five countries directly benefiting 1,601 participants and 6,783 indirect participants, enabling communities to experiment with innovative agriculture solutions towards sustainable food security (figure 1).



Figure 1. Distribution of Project Funds

In addition, \$6,325.00 was used to fund three learning and capacity building events directly benefiting World Renew staff and their implementing partners in six countries (figure 2).



10.0 Conclusion

The programs implemented through the SAFS Grant in 2013-2014 have successfully helped communities to further their goals of food security through small-scale sustainable agriculture. Within the context of a changing climate, characterized by heavy rains, flooding, drought, and unpredictable seasons, smallholder farmers are facing significant challenges in producing enough food to feed their families. Sustainable agriculture practices not only hold promise for helping farmers produce enough food for today, but they also ensure that farmers in future generations will inherit productive, fertile land.

The importance of the funding made available to World Renew's staff and partners through the SAFS Grant cannot be underestimated. Farming around the world depends on the ability of farmers to adapt their practices to changing conditions by experimenting with new seeds, tools, and techniques and by gaining an intimate knowledge of the land on which they farm. The unique challenges faced by the smallholder farmers with whom World Renew works have diminished their capacity to experiment and adapt. Through the SAFS Grant and the support of World Renew's local partners, communities of small-holders in five

countries were given the opportunity to safely experiment with new methods, seeds, and savings structures, leading to improvements in production, soil health, and farmer confidence in experimenting on their own.

Funding provided through the SAFS Grant has not only had an incredible impact on the beneficiaries of the programs, but has also allowed World Renew's partners to gain grant management experience resulting in their ability to successfully apply for grants with mid-sized funding organizations, creating even further impact. For example, the SAFS vegetable production programming in



Honduras has now been expanded through funding from Canada's Department of Foreign Affairs, Trade and Development. It is estimated that through this funding and the foundations laid through the SAFS Grant over the last two years, World Renew's partner Harvest will now reach an additional 175 people with vegetable gardening training. Similarly, based on the successes of the SAFS programming in Uganda managed by World Renew's partner CoU Nebbi, indigenous chicken rearing programming is now being ramped up through funding received by the Canadian Foodgrains Bank.

Being given the opportunity to test new and innovative agricultural methods and gain grant management experience has been highly valued by World Renew and its partners, with the impact of the SAFS Grant being felt far beyond the programs themselves.