Dining for Women Final Grant Report

Organization Name: Gardens for Health International
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Desired Outcomes

The mission of Gardens for Health International (GHI) is to provide lasting agricultural solutions to chronic childhood malnutrition. In Rwanda, where 44% of children under five - or approximately 900,000 - continue to suffer from malnutrition, we believe that this public health challenge can and should be met with solutions that are both environmentally sustainable as well built on the primacy of agriculture for long-term health. Rather than providing short-term aid, our approach has always been one of empowerment; of providing caregivers with the knowledge and tools they need to feed their families with dignity. With support from Dining for Women, GHI has been able to deliver our Health Center Program at Bumbogo Health Center as well as conduct community outreach in Gasabo District. Through this program and accompanying efforts, we aim to shift the paradigm of dependency to one of self-sufficiency by equipping vulnerable families with the tools and knowledge to grow their own nutritious food in the home.

In January 2012, the Government of Rwanda partnered with GHI to launch a nationwide effort to eliminate childhood malnutrition. By working directly with local health centers, we deliver targeted health and agriculture training to the most at-risk families who then go on to become changemakers in their own communities. In addition to delivering a holistic 14-week curriculum – including hygiene, family planning and HIV/AIDS – we also work with families to design and implement their own home gardens. At Bumbogo Health Center, Field Educators Esperance and Jean Luc Bosco partnered with clinical staff and Community Health Workers to conduct seasonal growth monitoring campaigns and

provide training on 13 health and 9 agriculture topics to a total of 120 families per year. The curriculum covers dietary diversity, home garden design, and intersectional health and social topics that influence a family's ability to provide nutritious food on a regular basis. Each cohort also receives a Home Garden Package consisting of seeds, seedlings and small livestock along with follow-up home visits for up to three seasons following graduation.

In addition to supporting Bumbogo HC, Dining for Women also provides funding for GHI's Demonstration and Innovation Farm in Ndera. The farm is where Agricultural Consultants, Farm Fellows and trained nutritionists test and refine our Home Garden Package for viability in Rwanda's changing topography and climate. The farm also serves as GHI's headquarters, serving a daily community lunch and employing 30 to 50 vulnerable women from the surrounding community each week. In addition to earning a competitive wage, Early Childhood Development Supervisors provide childcare and they receive training and empowerment support from our staff.

Key Accomplishments

In accordance with the terms of this agreement, the outcomes for Bumbogo HC are as follows:

- Participation in Community Growth Monitoring Campaigns;
- Seasonal enrollment of 40 families with malnourished children;
- Home Garden Package distribution to 40 families per season, with 80 additional families receiving agricultural inputs in follow-up to previous seasons;
- At least 80% attendance at all health and agriculture trainings, with a 75% increase in knowledge assessment scores;
- Hire 30-50 women per week in the communities surrounding Ndera, including the Bumbogo catchment area, to support farm operations.

From January 2015 to December 2016, GHI's partnership with Dining for Women supported four growth monitoring campaigns in the Bumbogo catchment area in which our team partnered with trained CHWs to screen more than 1,500 children, refer 338

vulnerable children to enrollment days and enroll 177 children from 160 families facing acute or chronic malnutrition.

During Rwanda' s dry season from April - June 2016, our team prepared to launch a new Antenatal Care (ANC) Program at Bumbogo HC, along with three other Health Centers in Gasabo, designed to target pregnant women with the training and resources to combat childhood malnutrition during the first 1000 days of life. Beginning with season 2017A in August we enrolled our first cohort of mothers in the ANC Program, 86 at Bumbogo alone, and graduated a total of 362 women in December. With an average of 90 caregivers per cohort, the ANC Program allows us to reach almost twice as many caregivers per season – as opposed to the 40 caregivers enrolled per season in the Health Center Program – and we are excited to leverage these results to affect community and systems-level behavior change in Gasabo District.

In addition to enrollment figures, our graduation reports indicate many positive long-term health trends. Our Agricultural Team helped establish on average 30 new home gardens per season, with an average 35% increase in health and agriculture knowledge assessment scores – achieving a 75% overall average score upon graduation – with a 77% increase in growth trajectories after 14 weeks. Average attendance rates at Bumbogo Health Center were 87%, with a 97% graduation rate. Given that many families live several hours' walk from the health center, these figures reflect high levels of engagement from within the Bumbogo community. Among our ANC cohort we saw an 11% increase in antenatal care healthcare visits, a 48% increase in health and knowledge assessment scores, and a 29% increase in percentage of women who met the threshold for minimum dietary diversity. We continue to employ between 30-50 women on our farm each week, and recently launched a new agricultural training program which will provide formal education and seeds in addition to income, childcare and a free community lunch.

The decision to move towards antenatal programming in Gasabo District is based on research that consistently shows the most important period for cognitive development is the first 1000 days of life, between conception and age two. This is the time that proper nutrition, or lack thereof, plays

the most critical role in a child's mental and physical development, with outcomes that can last a lifetime. Maternal undernutrition currently contributes to an estimated 800,000 infant mortalities per year[1], and is a proven risk factor for intrauterine growth restriction (IUGR). By addressing nutrition during pregnancy, we help mothers establish a strong foundation for positive health outcomes as early as possible. Furthermore, our ability to grow vegetables during Rwanda's dry season is often limited and unpredictable, so by working with pregnant women we can provide more continuous programming as well as reach a wider audience at a critical intervention stage.

What challenges did you face in connection with this project? How did you address these challenges?

Dry season continues to be a challenge for our team in Gasabo District. When we provide seeds, seedlings and small livestock to families we do everything in our power to make sure they reap a successful harvest, given the significant time and effort that go into planting a home garden. However, when we cannot guarantee a good harvest due to forces beyond our control, this presents a barrier for our team. Gasabo District also presents the challenge of high population density, with high rates of land scarcity that further limit our ability to implement home gardens.

By focusing on antenatal care during the dry season – a decision made in concert with recent restructuring efforts – we can continue to guarantee effective interventions during these dry months of the year. As a result of feedback gathered through community focus groups, our ANC Program was designed to prevent childhood malnutrition before it has a chance to begin. The curriculum emphasizes the importance of regular checkups during pregnancy, antenatal nutrition, hygiene and postnatal care, breastfeeding and complementary feeding. Our Field Agents also deliver GHI's signature cooking demonstrations, based on the 'One Pot One Hour' and four-color-wheel methodologies that have already been adopted at scale and distributed to more

[1] Maternal Nutrition and Birth Outcomes, Oxford Epidemiologic Reviews Volume 32 Issue 1, 2010 https://academic.oup.com/epirev/article/32/1/5/492553/Maternal-Nutrition-and-Birth-Outcomes

than 88,000 CHWs nationwide. In addition, we have invested in an irrigation system for our farm that will facilitate continued testing and growth as well as allow ongoing research trials year-round.

Is your organization or program situation different than presented in the approved proposal?

Since the time of the original proposal, we have expanded from 8 to 18 Partner Health Centers, now covering 100% of the health centers in Musanze District. Alongside this rapid growth, our Senior Leadership Team has made the decision to restructure our core program beginning with season 2017C in April. We believe that by making strategic changes to our staffing model, we will be able to deliver the same quality of service to the same number of families using a more cost-effective approach. As part of this effort, we will begin staffing one Field Educator per Health Center instead of two, as well as move our M&E Agents from full-time to part-time status. In addition, we will revisit how we fund transportation, communication and printing costs in order to ensure that our program is sustainable in the long-term. While adjustments like this are never easy, we strongly believe that taking these steps will enhance cost efficiency while also freeing up resources for further research, advocacy and thought leadership at the national and regional levels.

In addition, we have continued to expand and iterate around our core Health Center Program in order to reach new target audiences. Our Antenatal Care Program has already received positive
feedback from government partners within Gasabo District, and we are continuing to refine a new Men’ s Savings Group initiative to better engage with this important demographic when addressing

behavior change in the home. Despite its international position as a leader in gender rights – with 64% female parliamentarians[2] - gender disparities continue to exist in Rwandan households in terms of land ownership and crop allocation. In line with our mission to promote women's empowerment at every level, we feel that by engaging directly with men our team can help address these barriers in a proactive way.

Finally, as noted in our interim progress report, we have now fully transitioned to a mobile data collection software program for our M&E Team to enable more accurate data collection and reporting. Commcare enables real-time analysis and equips our team to make decisions based on current information as well as identify trends and troubleshoot issues in a timely manner.

What were the most important lessons learned?

Our team is always looking for opportunities to maximize impact. Through follow-up surveys and focus groups, we recognize the importance of direct community engagement for ongoing program design. Some of our key takeaways over the past two years have been around the importance of timing; of ensuring that our programming aligns with each growing season as well as with the unique needs of partner families. In late 2016, we modified our Home Garden Package to better address regional variations in soil and climate – providing specific and robust options for each zone in Musanze District. Furthermore, beginning in season 2017A we began providing Antenatal Care Programming in Gasabo District in place of our traditional Health Center Program. In this way, we ensure that the inputs and training we provide are both relevant as well as useful depending on location and time of year. Above all, engagement with our communities and caregivers provides the most valuable feedback, and during the course of this grant period formed the basis for moving towards antenatal care programming for pregnant women in line with Rwanda's 'first 1000 days' campaign and international best practice research.

What has changed within your organization as a result of this project?

[2] Inter-Parliamentary Union http://www.ipu.org/WMN-e/classif.htm

As a result of investing in Bumbogo Health Center and community outreach efforts, we were able to conduct a more accurate needs analysis and determine where our programming can be most effective. Given the nature of Gasabo District, with limited land and high vulnerability to climate change, focusing on pregnant women has been a logical move that allows us to reach more individuals per season as well as provide relevant and useful programming. Beginning with season 2017C, we will begin scaling our Antenatal Care Program across all Partner Health Centers for the first time in line with Rwanda' s dry season. We hope that by providing more timely interventions, we will be able to have the greatest level of impact within the Bumbogo community and beyond.

Describe the unexpected events and outcomes, including unexpected benefits.

In addition to launching antenatal care programming in Gasabo District, we have also begun to engage more directly with men. Through a combination of interviews and focus groups, we have
recognized that while Rwanda may be an international leader in gender rights at the national level, gender disparities continue to persist in the home. For example, land rights and crop decisions

continue to be controlled primarily by men, and traditional gender norms present a challenge for women who strive to make informed decisions around household management. As a result, we have begun exploring the role of Men' s Savings Groups as an additional entry point. These savings groups are an existing Rwandan social structure that encourage financial responsibility and serve as a communal gathering place. By tapping into these groups to provide nutritional training, we hope to improve buy-in that will help ensure the long-term success of our programming.

In September 2016 we launched this program alongside our 2017A cohort and enrolled 53 men from two savings groups in two catchment areas. While we experienced some challenges related

to incentivizing participation, the men who graduated saw immense value in the kind of knowledge gains that could improve the health of their families. They talked about how the trainings improved their understanding of our program and, as a result, were better able to support their partners. We hope that be targeting shared behavior change in the home, we can continue to improve retention and buy-in as well as gender equity at all levels of Rwandan society.

Did you change your strategy as a result of obstacles you encountered? How will you address these challenges in the future?

As a result of lessons learned around timing and entry points, we have made a concerted effort over the last year to iterate around our core Health Center Program model. In addition to providing regionally-adapted Home Garden Packages, we now also offer Antenatal Care Programming in addition to working with Men' s Savings Groups. Furthermore, we continue to provide Early Childhood Development support for mothers during each session so that they can focus on content while their children receive cognitive development training. Through the combination of these interventions we aim to achieve maximum impact, retention and follow-through. Going forward, we will continue to incorporate feedback loops and two-way communication channels to ensure that we respond to needs as they evolve.

One of the areas we anticipate will evolve more rapidly over the coming years is in regards to climate change; by fully transitioning to antenatal care programming during Rwanda' s dry season and investing in an irrigation system for our farm, we are proactively preparing for the climate and soil variations that families are likely to encounter. We also continue to conduct trials on our Demonstration and Innovation Farm that test seed varieties for viability and investigate best practices in international conservation agriculture. Finally, we will take all that we have learned through our community engagement and research to contribute to thought leadership around building national and regional frameworks for nutrition-focused agricultural intervention.

Approximately how many lives have been touched, both directly and indirectly, by the program?

With an average family size of 4.8, our team was able to reach an estimated 800 individuals within the Bumbogo community, graduating an average of 77% - or 624 – children on positive growth trajectories. In addition, the first cohort of our ANC Program graduated 362 pregnant women who
we anticipate will go on to deliver healthy babies. In 2016, our M&E Team conducted a follow-up survey of past graduates in Gasabo District, including Bumbogo HC, to track progress on long-term health outcomes. A total of 650 families participated in the survey who graduated from the

GHI program between 2012-2015. Results showed that 65% of children continued to be on a positive growth trajectory after two years, with the youngest child at a healthy height and weight for age in 44% of households.

One of the most exciting findings of this survey was that 50% of new children born after graduation were at a healthy height and weight, compared to less than 1% at enrollment in 2016. These results show that the impact of our interventions are both immediate and sustained, with positive outcomes that perpetuate over time. In addition, we continue to employ between 30-50 vulnerable women on our farm each week, reaching approximately 700 women per year.

Given this information, we estimate that the total number of lives touched at Bumbogo HC and the Bumbogo catchment area between 2015-2016 is more than 2,000 individuals, with that number expected to rise as new babies are born into the families that have been impacted by our trainings.

What are the measurements used to monitor success and how was this information measured? Be specific and include measurable results.

Rigorous monitoring and evaluation is critical to understanding key learnings as well as which areas of our model can be scaled more broadly. Our core Health Center Program was developed over two years with direct input from community leaders to ensure accurate understanding of context and need. Our KPIs reflect this input, and aim to track a complete set of outcomes related to knowledge retention, behavior change and long-

term health outcomes. At each growth monitoring campaign, child anthropometric measurements at taken in order to assess health status. The 40 most severe cases from these campaigns are then referred to our 14-week Health Center Program where we re-assess the children and collect baseline data related to demographics and knowledge. Upon graduation, we re-administer knowledge assessments to track retention and collect data around home gardens – including number established and vegetable varieties grown – as well as dietary diversity and micronutrient consumption. We also track attendance and graduation rates as a measure of engagement, and finally report on the percentage of children who graduate on improved growth trajectories.

Our ANC Program, which was launched at Bumbogo in September 2016, also tracks the percentage of women who attend antenatal care check-ups in addition to knowledge retention and dietary diversity. In addition to the achievements referenced earlier in this report, we saw an average 27% increase in children who met minimum dietary diversity thresholds[3], with the average number of vegetable varieties increasing by 0.86. Among our ANC cohort, check-up rates increased from 79% to 90% and dietary diversity scores increased from 51% to 80%, with a more than 10% increase in the percentage of women consuming iron or vitamin A-rich foods.

Following program completion, Field Educators and M&E Agents conduct home visits and administer follow-up surveys and health assessments at 12 and 36 months' post-graduation.
Please see previous discussion on follow-up survey results for Gasabo District on these survey outcomes. For each health center, we prepare a seasonal graduation report that summarizes this data and aggregate to the district level. The majority of this data is now collected on our mobile

platform, CommCare, which enables real-time reporting and analysis and alerts our team to any areas that need additional attention.

[3] Based on consuming 4+ food groups the previous day

If the program is ongoing, provide plans and expected results, including projected timeframe.

Beginning with season 2017C, which runs April - June 2017, we plan to scale our ANC Program across all Partner Health Centers in line with Rwanda' s dry season. With this transition we will be able to provide more effective and targeted training, as well as reach more individuals, with an expected cohort of 750 women. Over the next three months, we look forward to assessing the impact of this program with a wider audience while also looking inward to ensure we make all

aspects of our programming are as efficient and impactful as possible. Over the next 12 to 18 months, we also plan to expand our external trainings and partnerships with peer NGOs around key aspects of our model. Finally, we plan to conduct external research in order to establish an evidence base around our model and contribute to multilateral frameworks and publications.

In addition to expanding on core programming, we have also reimagined the way that we empower the vulnerable women from Bumbogo and surrounding areas on our farm. In the past, we have provided a daily wage, childcare and free community lunch while going forward we will also provide formal agriculture education and seeds. By equipping these women to grow their own kitchen gardens, we aim to increase our reach and impact within these communities even further.

Provide a detailed list of all expenses incurred during the grant cycle which have been paid for with the Dining for Women grant.

Dining for Women provided a generous grant of $43,847 to support the work Gardens for Health is doing at Bumbogo Health Center, as well as the community employment program that we run on our demonstration and innovation farm in Ndera, Rwanda. DFW support covered 47% of the total costs associated with those two programs in 2015 and 2016. The remaining costs were covered by unrestricted donations from individual donors.

In 2015, our Health Center Program at Bumbogo cost $33,074. Of those costs, $11,548 were in salaries and $21,562 were in associated program delivery costs (seeds, livestock, training materials, etc.) In 2016, our costs at Bumbogo were significantly higher, at $39,356. This increase was driven by an organization-wide salary adjustment that increased salaries across the board, and focused primarily on providing major increases to our Field Staff. Program Delivery costs decreased slightly in 2016, largely as a result of the transition to ANC programming in Season 2017A (September – November 2016).

In 2015, our Farm Employment Program cost $11,327. In 2016, those costs decreased slightly, to $9,249. This was due to our Farm Manager taking on full oversight for this program in 2016 and our Agriculture Training Manger no longer dedicating significant time to designing the education and employment opportunities for vulnerable women who work on our farm. Those elements were designed in 2015, allowing our Farm Manager to take full leadership of the program in 2016.

Did this grant and relationship with DFW assist your organization in obtaining further funding, partnerships with other organizations, or public recognition in some capacity?

Our partnership with DFW has helped position Gardens for Health to raise awareness for our work with potential new supporters in the United States. At the Clinton Global Initiative 2016 conference, we made a commitment to action for ‘Nutrition in the First 1,000 Days: Healthy Mothers and Babies’ where we pledged to improve maternal nutrition in Rwanda. We also recently engaged in a new partnership with Child Relief International to provide a series of trainings at Kigeme refugee camp, home to 18,000 Congolese refugees in Rwanda. With the transition from aid packages to cash transfers, the goal of these trainings is to educate residents on nutritional best practices using our proven ‘one pot one hour’ and ‘four-color wheel’ nutrition behavior change methodologies.

In Rwanda, we continue to enhance our partnerships with the International Institute for Tropical Agriculture (IITA) HumidTropics initiative and Bioversity International to carry

out research trials and develop regional variations of our Home Garden Package on our farm. Finally, we recently participated in a two-day workshop hosted by the Ministry of Agriculture (MINAGRI) around developing national standards for home kitchen gardens. Our ability to provide recommendations around national nutrition frameworks demonstrates how far we have come over the last two years, and positions our organization to achieve even greater scale and impact in the years to come.