Viability Document for Project Lishe

1) *Cost of solution: You don't need to have a specific budget, but you do need to have a reasonably good sense of what it will take to implement your solution. Consider typical line items such as: technology cost, people, marketing, customer acquisition, travel etc.*

Note: For a visual breakdown of our budget, please see slide 10 of our presentation.

Below, please find a copy of our preliminary budget. We expect that family contributions will average 3,000 Kenyan shillings per week based on these assumptions:

- Each member of a household costs approximately 100 Kenyan shillings per day to feed
- An average family size consists of 2 parents and 3 children
- The program will provide food for 6 days per week

This revenue will be put toward the salary of 2 certified agricultural suppliers affiliated with the program who will negotiate with wholesalers, 1 project manager who will supervise the different actors in the program half-time, and 1 nutrition assistant who will support the current nutritionist at the CDC. We also assume that up to 10% of the revenue will be dedicated to overhead expenses (e.g., office space for staff, laptops).

Our model does not assume grant funds for the program given the uncertainty surrounding the acquisition and timing of such funds. However, we do anticipate a 15 to 20% increase in revenue from grant funds from international sources (e.g., the Gates Foundation) and domestic sources (e.g., the Ministry of Agriculture in Kenya). These grant funds will allow for the increased purchase of food and will eventually allow for program costs (e.g., salary expenses) to be neutral and for all revenue from families to be dedicated to food procurement.

Without grant money, our model assumes that we can achieve a 20% discount in the cost of food vis a vis the prices that mothers in Kibera would otherwise be able to secure. Having analyzed the cost of bulk agricultural products in Kenya, we see that bulk purchases indeed represent a significant cost savings. For example, when purchased in bulk (a minimum of 40 kilograms), sesame seed oil in Kenya sells for 258 Ksh per kg. However, if each kg is purchased individually, it sells for at least 325 Ksh. The bulk purchase in this example represents a 21% cost savings.

Revenue items	**Amount (Kenyan Shillings)**
Number of families in program	30
Family contribution per week	3,000
Weeks per year	52
Revenue from families	**4,680,000**
Costs (Annual)	
Total agricultural supplier salary (2 FTE)	100,000
Total program manager salary (0.5 FTE)	125,000
Total nutrition assistant salary (1 FTE)	300,000
Total salary expenses	**525,000**
Overhead expenses (10% of Revenue)	**468,000**
Food purchasing budget	**3,687,000**

2) *Skills required: An important part of implementing solutions in emerging markets is to ensure that there are the right skill sets available to implement the solution. Include some statement of what the relevant skills are and why you think they will be available (through your partner organization or elsewhere).*

The implementation of our solution involves three key personnel - the nutrition assistant, the project manager, and the agricultural suppliers. Each role requires different skill sets and responsibilities.

The nutrition assistant must work closely with the CDC nutritionist to perform the following tasks: nutrition and health assessments, anthropometry measurements, food allocation prescriptions, and individual or group nutrition education. The nutrition assistant will receive minimal training by the CDC nutritionist, and he or she will assist

primarily with the administrative duties surrounding the "food by prescription" aspect of this program.

The project manager must have basic database management skills. S/he is responsible for creating a community centered on nutrition through event planning and regular communications with project participants, updating existing CDC databases with information from the families, supervising the nutrition assistant and the agricultural suppliers, obtaining community feedback regarding the program, improving the program, membership fee collection, and conducting scheduled and randomized spot checks to ensure program validity. The CDC International Emerging Infections Program (IEIP)'s HIV/AIDS Comprehensive Care Program project coordinator is Kevin Maina. The chief medical officer is Dr. William Mwiti. The CDC also employs database managers to maintain the IEIP database, which contains household disease surveillance data for approximately 27,000 households. The Project Lishe project manager could work with Kevin Maina, Dr. Mwiti, and the CDC database managers to perform her/his duties. The amount of time that will be needed on the part of the partners will be minimal given the program manager's use of existing databases and infrastructure, such as the Patient Care System (PCS), which the CDC uses to monitor the health of the Kibera catchment population.

The 2 CDC-CFK agricultural suppliers must have effective negotiation skills because they will be bargaining with agricultural wholesalers. They are responsible for accurately distributing the nutritional food allocations to the families. The mothers will be actively involved in identifying merchants whom they know and trust who will be selected as the 2 agricultural suppliers that will be fully dedicated to this program. Those high performance merchants will likely already have the negotiation skills needed for this program.

As the program expands to more families, we will try and maintain low salary and overhead expenses by leveraging scale instead of hiring additional employees. Periodic assessments of capacity utilization per employee will be conducted to ensure participating families are well served while our costs are maintained at a reasonable level.

3) *Customer Acquisition: How will your intended users access your service? "You may build it but they may not come." What is your plan to encourage users to adopt your service? How will they learn about it? And what will it cost them financially and in terms of time to adopt the service?*

Given the manageable scope of the pilot program with 30 families from within the CDC catchment and our partner organization, Stawi Senior and Junior Youth Orphans Centre, we will reach out to each family directly in a high-touch manner. We expect that the families will see value in this program given the clear value proposition:

- Higher quality foods tailored to the health needs
- Food delivered in a "one-stop shop" manner as opposed to visiting multiple merchants for the various goods needed

- The development of a community of similarly health-conscious mothers who are experiencing the same diseases

We expect these value propositions will attract more families over time as we expand beyond the pilot to 300 families over the next 2 years. While families may lose some measure of choice in selecting the foods they will consume, we will offer more nutritionally balanced food at a lower price, saving families health care costs further down the road. Moreover, there is a convenience factor to having food purchased for the mothers.

The key challenge will be in the initial uptake of these families. There is a strong level of faith that will be needed on the part of families to dedicate their entire weekly food budget to this program. The first two weeks that families participate in this program will therefore be critical.

4) Government Regulation: Are there any government or other regulations that may have a significant impact on your proposed solution?

The key government regulation is around tariffs and agricultural subsidies that affect the price of key agricultural commodities and products. Depending on the extent to which Kenya might open its agricultural market to greater export or import (both regionally and internationally), the price might fluctuate in such a way that discounts will be stronger (in the case of more open trade) or prices might steadily rise (in the case of more protectionist policies). Many of these regulations are dependent on how the next iteration of the Doha Rounds of international trade negotiations pan out in terms of US and EU subsidies that artificially dampen demand for African agricultural products.

5) Competition: Is anyone else providing a similar service today or has such a solution been deployed in a different country?

International Food Policy Research Institute (IFPRI), Rural Livelihoods and Food Security, the Regional Network on HIV/AIDS, and USAID conducted a short-term nutrition intervention study for 2,200 people living with HIV and AIDS in western Kenya. USAID and other foundations heavily subsidized the nutrition intervention. A production farm near the rural catchment population was established to provide nutritionist-prescribed food for the clients in the program. World Food Program and USAID also provided bulk food donations.

From this particular IFPRI case, there are several successes that we hope to similarly achieve and lessons that we draw that we have applied to the design of Project Lishe:

- Transitioning patients off of the completely subsidized food supplementation was the largest IFPRI programmatic challenge, so Project Lishe is built on a more sustainable model with collection fees and bulk discounts that will hopefully eliminate the need to transition people out of the program

- The steady flow of food from the IFPRI program lowered the stress caused by insufficient access to food and increased overall emotional well-being of the clients
- The IFPRI program helped clients gain the strength to adhere to the strict antiretroviral regimen

The Kibera Nutrition Project (KNP) is one example of an NGO who provides nutritional support for people living with HIV and AIDS. KNP is a project of the Kibera Community Youth Programme (KCYP) being funded by Positively Africa, an NGO from Canada. To encourage the members of KNP to be more self-reliant, the program donors subsidize the food by selling the food to members at 60% of the normal price. In 2008, the first year of the program, KCYP identified 100 HIV-positive patients living in the Kiberan village of Makina, but soon narrowed the scope of their program to recruit the most vulnerable demographic: widows, single mothers, or abandoned wives. The seed program enrolled 32 members, five of whom served as suppliers of the food that KNP purchased for the program. Members who could not pay for the food are given the food, but issued credit notes, which they are expected to pay once they are able to. To address the issue of variable incomes, KNP plans to expand their program by increasing the number of beneficiaries in the program and the need for more suppliers. They plan to provide the women with business training for these supplier positions. KNP members do not see a nutritionist on a regular basis, but Peggy Frank , the co-founder and executive director of Positively Africa whom we communicated with, expressed a wish for more funding to support this type of program expansion. KNP has demonstrated that a subsidized small nutrition program for PLWHA can be successful in the short term. However, when asked about long-term sustainability challenges, Peggy writes, "At the moment the group can see a much larger project being beneficial and positively AFRICA has not the resources to fund or manage it."

From this KNP case, there are several lessons we draw that we have applied to the design of Project Lishe:

- Begin with a small pilot and expand from that position (this will allow for advertising of the program through word of mouth)
- Focus on a targeted subset of the population
- Provide business training to those people negotiating food discounts
- Avoid the high staff turnover that this NGO has experienced through its reliance on volunteers by having a core set of staff who receive a regular salary

We believe there is value in partnering with existing nutritional programs in Kibera because their group members could positively impact Project Lishe. These group members are highly motivated and supportive, and they could potentially serve as positive deviance households in the new CDC-CFK nutrition program. These positive deviance households could encourage and enable new members to adopt healthy eating habits. Peggy believes that KCYP may be interested in partnering with our group, she has referred us to Robert Kheyi, the KNP director. We are currently attempting to reach Robert.

6) Organization: What organization is going to carry the project forward? Does the organization have the capacity and motivation to take the project on and make it a success?

We envision that the CDC and CFK will partner with Stawi Senior and Junior Youth Orphans Centre to carry Project Lishe forward. Project Lishe is focused on improving the health and quality of life of one of the most vulnerable demographics in the CDC-CFK IEIP Kibera catchment, people living with HIV and AIDS. As of March 2011, there have been 632 people living with HIV AND AIDS enrolled in the CDC HIV/AIDS comprehensive care program, but only 359 active clients. Of these 359 active clients, 64 participate in CDC support groups that meet on a weekly or monthly basis. We are planning to offer voluntary enrollment to the members of these existing support groups for the initial Project Lishe pilot program. If the pilot is successful, then we will expand the program to include other vulnerable populations such as mothers with malnourished children, and eventually offer memberships to all participating families in the catchment area. The potential positive clinical outcomes (such as improved anthropometry measurements) of the Project Lishe pilot could provide the motivation for CDC and CFK to adopt the project and expand it. With initial seed funding for this project from potential international grants and training provided by various CDC employees described in Section 2 above, the CDC and CFK could hire the key personnel who will have the capacity to carry this project forward.

We are currently building a partnership with Stawi Senior and Junior Youth Orphans Centre. Stawi is a local NGO that helps to alleviate the plight of HIV-positive widows and orphans. They provide a Post Test Club support group for 25 widows and a counseling and feeding program for 40 orphans. We have communicated with Agneta Oluoch, the founder and director of the group, regarding their group's participation in Project Lishe, and she is excited about partnering with us and believes that Project Lishe could provide substantial health benefits for current Stawi members. It would be beneficial for Project Lishe to leverage the strengths of this vibrant community of women who already trust and support each other and encourage healthy habits (such as taking ARVs).

Below is an outline of the partnership we are proposing between CDC-CFK, Project Lishe, and Stawi:

- With our support, CDC-CFK will integrate the Project Lishe pilot program into their existing HIV/AIDS Comprehensive Care Program and their planned Nutrition program
- Interested members of Stawi and the CDC-CFK HIV/AIDS support groups will be enrolled in the Project Lishe pilot
- Members of the Stawi & CDC-CFK support groups will identify 2 merchants whom they trust to fulfill the role of agricultural supplier

- Stawi will elect 1 member and the CDC-CFK support groups will elect 1 member, and these 2 trusted members will collect the food funds and accompany the agricultural suppliers to bargain with the agricultural wholesaler
- Volunteers from both the Stawi and CDC-CFK support group will help distribute the food
- The Project Lishe nutrition assistant will monitor the nutritional health progress of all members of Project Lishe

7) Other stakeholders: Are there other companies/organizations that need to be part of the solution. For example, telephone service providers, banks, government agencies, etc. This won't be a complete analysis, but should highlight the main dependencies.

In addition to building a partnership between Stawi and CDC-CFK, as Project Lishe expands, we hope to partner with other local NGOs who provide support programs for HIV-positive patients and nutrition programs for clinically vulnerable populations. Currently, we are communicating with Positively Africa's Kibera Community Youth Programme (described in Section 5) regarding a potential partnership. Another potential partner that we have identified is Lea Toto, an HIV/AIDS comprehensive care NGO in Kibera.

Entrepreneurship trainers would also be beneficial for Project Lishe as it progresses in its mission to empower the most vulnerable populations it serves. Instead of buying food from the agricultural wholesalers, perhaps eventually some of the Project Lishe participants could receive training and start their own food selling businesses to become the main suppliers of the program (similar to the Kibera Nutrition Project described above).

Finally, we hope to partner with relevant government officials from national and regional Ministries of Agriculture. These government agencies have a mandate to not only ensure a safe and reliable agricultural ecosystem, but to also ensure quality, low cost access by Kenyans. To achieve this mandate, we may apply for favorable or interest-free loans from these government officials as well as any tax havens or direct subsidies.