

Living Goods and BRAC Concept Note – DRAFT August 2014

Scaling a Proven Entrepreneurial Community Health Worker Model in Uganda and Beyond

Executive Summary

Across sub Saharan Africa and other developing countries millions of children continue to die needlessly from diseases treatable for less than the cost of a cup of coffee. To meet this need we must dramatically expand access to high-quality low-cost health products and services and create thousands of new jobs in the health sector. Endeavoring to address this challenge over the last five years, BRAC and Living Goods (LG) have collaborated in Uganda on an innovative sustainable approach for improving the health of families in need. Now we have solid evidence in hand that the model is working. The two organizations just completed a rigorous randomized control trial (RCT) that shows the model is reducing under-5 mortality by 25%. This initial phase supported roughly 1,000 agents serving 800,000 people. The model is showing strong sustainability too, generating revenues that pay for the products, providing motivating incomes for the agents, and covering much of the distribution costs. Now is the time to show that the model can work at national scale. Full-scale demonstration in Uganda will not only dramatically improve health outcomes in this needy country; it will be an exemplar for countries around the world. Taking the model to scale in Uganda will demonstrate to the global health community that an entrepreneurial, integrated community health network at scale can deliver deep impacts at very low cost. For this model to truly be transformative and embraced at a large scale in diverse settings, we need to demonstrate impact in multiple markets. Therefore, this proposal also supports Living Goods' replication team to help partners adapt and scale the model in two to three other countries.

In summary, we seek to:

1. Build on the success of the current model validated by the recent RCT results and fully scale up the existing successful CHP model in Uganda. We seek funding to take BRAC's health platform at full strength from 24 to 128 branches, growing to 4,000 CHPs.
2. Expand Living Goods Uganda from seven to 18 branches, growing to 2,500 CHPs, and provide ongoing technical support to BRAC.
3. Strengthen LG partnerships team to support replicators adapting the model in two to three other countries and establish a replication matching fund. See Draft Replication Strategy for more details.

Partnership History and Context

The BRAC-LG partnership in Uganda is built on BRAC's years of groundbreaking experience in microfinance and health, and in particular on BRAC's successful volunteer health worker system in Bangladesh. BRAC has grown into one of the world's largest, most effective and efficient integrated development organizations, operating in nine countries, serving millions of microfinance clients and supporting over 100,000 volunteer community health workers. Over the last several decades BRAC pioneered and scaled some of the most successful community health interventions including big wins in tackling diarrhea, TB and maternal care. BRAC and Living Goods have worked together since 2008 to build this entrepreneurial community health worker (CHW) model in Uganda. LG launched

its own network of CHPs in Uganda in 2009 as an engine of innovation to deepen the impact and sustainability of the model.

It's time to take this to proven model to scale in Uganda and beyond. BRAC has a branch network infrastructure and a basic health team in 104 additional branches, and with funding, is ready to scale the full entrepreneurial CHW model to all 128 branches, supporting over 4,000 CHPs and reaching more than three million people in need. LG's network in Uganda continues to be an engine of innovation driving both impact and sustainability. And with a population of over 30 million in Uganda, there is ample need and opportunity for LG to grow its CHP network from 500 to 2,500 CHPs, to further expand coverage and reach over two million more people.

To leverage this success LG has begun working with other global NGOs interested to adapt the model to deepen their impact and sustainability, and the new evidence base is already increasing both the interest and imperative to take this model to scale in other markets.

Results and Evidence

Rigorous measurement and evaluation is an integral part of our DNA. We use a thorough system for setting targets and tracking operating metrics linked to key impact areas. Using John Hopkins "Lived Saved Tool", LG and BRAC identified the key outputs necessary to achieve the outcome of 10-15% reduction in under 5 child mortality among the populations we serve in East Africa. From this we created and refined the log frame and eight key corresponding health metrics. Some of the key impact metrics tracked include, prompt treatments and follow ups for malaria and diarrhea, focusing on children under 5 and under 1, pregnancies supported, and post natal visits. The teams also carefully track in-stock rates, an area where we see public systems failing again and again. Agents report on key health activities via mobile, speeding up the collection of data and allowing real time access to impact data. Living Goods also uses randomized follow ups to improve quality control and monitoring of treatments.

The recent RCT evaluation results add validation to the impact strategy. The evaluation shows that Living Goods and BRAC are reducing under-5 mortality by more than 20% in the areas they operate compared to control sites. The data shows particular impact on mortality for newborns and under-1s. The research finds evidence of multiple channels for impact, across multiple disease areas and mechanisms including direct treatments, education and positive influence on other health providers. For example, the RCT shows a 17% increase in treatment of diarrhea with ORS and Zinc, a 72% increase in likelihood of home visits in the first seven days post natal, as well better access to knowledge and education in key health areas. In addition, mid-line research by the J-PAL evaluation researchers found dramatically lower counterfeit medicines and up to 17% lower prices among other private providers in areas where BRAC and LG CHPs operate, demonstrating a powerful positive influence on the market. We will further hone the impact strategy moving forward, focusing on those areas where the program was most impactful and strengthening areas where research shows opportunity to deliver even deeper impacts.

In the context of limited resources for public health, we are building a system that is exceptionally cost effective, more attractive to key decision makers, and thus significantly scalable. Not only is the model now proven to robustly improve child survival, but it is also a highly cost effective approach relative to other options. **The model recoups 100% of the product costs, the CHPs earn a motivating income, and the wholesale margin for covers a good portion of the costs of running**

the network, allowing the model to deliver robust impacts for between \$1-\$2 per capita per year.

BRAC and LG plan to further improve the sustainability of the model over the next four years through joint direct sourcing, leveraging the fixed costs by increasing the number of agents and villages supported from each branch, and increasing the use of mobile tools for data collection, quality control and performance management.

Top Line Objectives of the Next Phase

- Reduce under-5 child mortality by at least 20% across our Uganda sites
- Serve a population of three million in Uganda
- Achieve exceptional cost effectiveness of net country cost per capita of under \$1.50 per year
- Help launch large-scale replication of the model with partners in two other countries. Attract the govt support and funding to achieve this.

Key Programmatic Components

The core operational strategy for this next phase will be rooted in the current model and methods driving the successful evaluation results. Thus, we will maintain a tight focus on treating children under 5 and under 1 for malaria and diarrhea, identifying and supporting pregnant women, and following up assiduously in the first days and weeks after birth. Using insights from the new RCT data, we are updating and refining the impact strategy, metrics and targets. We see a few targeted areas to increase focus and/or expand scope that are included the impact areas below.

N.B. During the first phase of the partnership BRAC and Living Goods experimented with differing variations in the operational model. For example BRAC invested more in staff time on ante-natal care, did more organized health talks, and kept costs lower. LG tested more new products, integrated use of mobile messaging and supported more agents per branch. These differences yielded powerful cross learnings and improved results overall. BRAC and LG will imbed these mutual learnings into the next phase. Importantly, LG and BRAC will continue to test differing operational innovations over time (including providing some flexible budget for this) and continue to learn from one another. Furthermore, no effective program is ever static. As always we will watch results diligently month to month, and make prompt course corrections based on challenges, successes, and insights gathered along the way.

Impact Areas/Activities:

- **Integrated Community Case Management of Childhood Diseases:** CHPs will provide home-based diagnosis, and treatment for malaria, and diarrhea. Agents will refer all acute / high-risk cases to qualified health centers, and follow up with treated patients. We will strengthen the overall ICCM approach and reduce mis-diagnosis by adding the use of rapid diagnostic tests for malaria, and integrating diagnosis and treatment for respiratory infection. (both of these have support from Uganda MoH)
- **Pregnancy and Newborn Care:** As they do now, agents will register pregnancies as early as in term as possible, provide basic ante natal care and encourage ANC visits at public health centers, deliver maternal vitamin supplements, help all mothers deliver in proper facilities, and importantly, ensure proper newborn care practices. All agents will be trained in identifying danger signs in pregnancy (including pre-existing conditions) and immediately referring at risk mothers to local health centers. Importantly, we will strengthen our focus on the first month

and year of life where the data is showing the greatest mortality. The program will improve performance on post-natal visits with attention to immediate breastfeeding, kangaroo care, cord care and rapid referrals for newborn illnesses. We will do further research on main causes of death in the first 30 days and incorporate findings in the CHPs priorities.

- ***New attention to Nutrition:*** With the aim of driving meaningful reductions in micronutrient deficiency in young children we will test products like micro nutrient powders and fortified porridge, and augment education on balanced diet. We will increase education on exclusive breastfeeding and will offer de-worming treatments. We will provide education and products to improve maternal nutrition in child-bearing years and pre-natal periods. The program will leverage LG's new fortified food product development, healthy foods from BRAC Uganda's agriculture program, and some of our partners' expert guidance on nutrition strategy. LG recently hired the former head of product development and sourcing for Sainsbury UK to help drive new products in this area.
- ***BRAC seeks to experiment on improving quality at local health facilities:*** Data show that obstetrical care at public facilities in Uganda is very weak, leading to high maternal mortality and risks to newborns. Once the core programmatic elements above have been effectively rolled out at the BRAC Uganda branches, BRAC will conduct tests to provide support at under-performing public Health Center 3 facilities near 10 BRAC branches in the form of training, check lists, and protocols around safe delivery.

Operational Key Elements:

Recruitment, Selection, Training, and Management of CHPs: Consistent with the current method, BRAC and LG will focus on recruiting and selecting high performing agents, providing roughly two weeks of free interactive training on all the above health topics, basic business skills plus monthly training updates. All training will include pre and post testing. To expand reach and improve activity levels we will increase the overall density of agents – at BRAC agents per branch will grow to 30-35 on average and at LG branches will expand support 100-120 agents. Of course, where needed we will add branch staff to support the increase in agents. As we have before, BRAC and LG will coordinate together closely to plan geographic growth and optimize impact and coverage in Uganda. Both networks will carefully monitor agent performance and replace weak agents every four to six months. We will also implement annual testing and re-certification on basic health skills.

Reaching and Teaching our Customers: BRAC and LG agents go house-to-house, teaching families better health practices across the core impact areas noted above. Agents evaluate and advise homes on nutrition, family planning, hygiene practices, use of key preventative methods including bed nets, water treatment, clean stoves, and solar lights. During household visits agents check children's health and use ICCM guided assessment to address any illness. Agents provide all clients with their mobile phone number so customers may reach them promptly when a child is ill or they need health commodities. Agents provide community health education through regular community health talks, especially leveraging connections with local community groups, schools, places of worship, and support from local leaders and council members. We seek new ways of identifying high-risk families (eg where health knowledge is poor, the family size is large, or there are kids under 1 year) and ensure CHPs prioritize visiting these homes.

Using the RCT and ops data we will carefully assess CHP activity levels by branch and develop plans

to strengthen weak branches. Efforts will include increasing agent density, upgrading staff, replacing low performing agents, tightening CHP selection criteria, providing more working capital to agents, doing more community education events, and expanding use of mobile health messages.

Pregnancy and Newborn Care: As noted above, agents seek to identify and register and support pregnancies. LG and BRAC provide small financial incentives for each registration and for key pre and post-natal visits. CHPs make two to three ante natal visits to educate the expectant moms, check for danger signs and risk factors, encourage ANC checks at health centers, promote the use of iron folate and a healthy diet, prophylaxis for malaria, and help clients plan for their delivery and newborn care. We sell clean delivery kits to help prevent sepsis. As the majority of reported deaths are occurring in the first month, we will place a particular emphasis on post-natal visits and proper newborn care as noted above. Agents must visit the new moms as soon as possible after the delivery, and once more in the first week. We provide a free cozy cap to every new mom who notifies their CHP when they are in labor or within 24 hours of the birth to help ensure the PNCs happen promptly.

Product Offering: The product mix will remain largely the same as currently offered, covering health promotion, basic treatments, fortified foods, clean stoves, water filters and solar lights (see appendix). Throughout the project BRAC and LG will test new quality products that improve health outcomes, are poorly accessible, and enhance agent income and motivation. As volumes grow LG is gradually developing improved versions of some products and sourcing directly in order to provide better quality and value customers, and greater margin to improve sustainability. BRAC and LG will work closely together on improving sourcing to reduce product costs, improve quality, and ensure availability. As we do currently, we will aim always to maintain a 95% or better in stock rate on all key health products at every branch.

Mobile Technology Tools: LG and BRAC have already deployed basic mobile platforms to improve data collection, and reporting, BRAC's is focused on staff tools for pregnancy monitoring and LGs uses CHP tools for logging treatments, pregnancies and sending adherence reminders to clients. Going forward we will significantly expand and deepen the use of mobile technology to reduce the costs of data collection, enhance impact, provide better and cheaper monitoring and customer data, and deliver low-cost behavior change and marketing communications across our agent and client networks. We will develop and deploy mobile tools for both basic and smart phones that enable agents to register households, record all treatments, pregnancies and follow ups, and send automated SMS adherence reminders to both clients and agents. Within 18-24 months we hope to convert to a fully paperless reporting system. The system will provide real-time automated reports to branch staff, agents and management to better track and improve results. LG will also develop, test and roll-out CHP smartphone tools with menu guided ICCM assessment, dosage guidelines and automated treatment and pregnancy follow up reminders. Lastly we will enable and encourage agents to transact using mobile money, thus enabling them to place remote re-orders, and reducing the risks around cash control.

Sustainability – Cost Effectiveness: The lack of adequate funding for community health workers and access to medicines across the highest child mortality countries represents a towering obstacle to improving health outcomes. Thus a core foundational element of our model is a sustainable entrepreneurial platform. We support networks of health entrepreneurs who earn a reasonable margin on the life-improving products they provide, and thus are effectively paid for results. Like

any wholesaler, BRAC and LG also earn a margin on the products sold to agents. In this way the system recovers 100% of the cost of medicines, agents earn a motivating income (that the state often cannot afford), and the network operators earn margin to cover some of the costs to support the platform. Agents who serve their customers well over time earn loyalty, repeat business, make more money, and drive significant health outcomes. Importantly the RCT results demonstrate that charging reasonable fees is consistent with driving significant reductions in child mortality. And importantly, the data show that the clients are equally distributed across economic strata – so the model does not bias serving the better off. Perhaps this is because the agents are providing a truly better value. While drugs are free in public facilities, the cost of transport often exceeds the price we charge, so because we deliver to the client’s doorstep the model technically ‘cheaper than free’. Customers are glad to pay for the convenience of home delivery. (That transport cost is often lost altogether as the public dispensaries suffer high stock out rates.) Customers also value LG and BRAC over many private providers where they know the risk of counterfeits is high.

Here is the bottom line. The twenty top OECD countries spend \$3-7,000 per capita annually on health. In the 10 worst off countries spending runs a paltry \$30-50 per year. At the full scale proposed here this model would cost less than \$1.50 per person annually. That represents an exceptional value for a system that reduces child deaths by as much as 25% - a value proposition that leading practitioners in public across the world should embrace.

Measurement and Evaluation

Consistent with the success of the RCT and the fundamental continuity of this next phase we expect to retain much the basic log frame and key metrics. Of course we will use the RCT analysis to update the impact log frame, adjust and add key performance indicators, and re-assess targets. BRAC and LG will monitor progress monthly and quarterly against the KPI targets, and adjust course as necessary. BRAC and LG will also develop an approach to measure the impact of the model on nutritional outcomes. BRAC’s robust monitoring unit will help develop new quality assurance methods taking advantage of the new mobile tools and expanded data collection. The complete proposal will also outline our operations research plans. With CIFF and ELMA’s support we will develop a new independent evaluation approach to provide external assessment of program outcomes along the way (scope and costs to be determined).

Key Metrics - Draft:

- Under-5 and under 1 treatments for malaria, diarrhea, respiratory infection
- Treatment follow-up rate (Consider increased focus on acute/high risk cases like children under 1 and under 2 months)
- Pregnancies registered and supported
- % facility delivery
- % newborn visits within first 48 hours
- # children 6-24 months reached with MNPs, fortified porridge
- Inventory in stock rate
- Cost per capita and financial sustainability at the distribution and country levels

Government Partnership

LG and BRAC enjoy a strong cooperative relationship with the Uganda MoH. We have partnership agreements at the ministry level and with local officials in most districts where we work. Going

forward will continue to ensure close partnership and support from host country government leadership. Due mostly to inadequate financing, the government health workers, known as Village Health Teams (VHTs), do not receive consistent support in the form of medicines, training, or oversight. As a result, there is little evidence of their effectiveness in many areas. LG and BRAC have made an effort to conscript and support these pre-trained health workers where they are available, interested and meet our standards. As a result, roughly 30% of existing CHPs are VHT trained. Thus key MoH leaders have come to view LG and BRAC as the de-facto government VHT support system. BRAC and LG will increase and deepen working partnerships with district health officers and create closer referral and reporting linkages between our branches and local health centers, ensuring the MoH has clear visibility on the services we deliver. We will work closely with government, participate in key health working groups, as well as support important MoH initiatives such as immunization campaigns. LG will deepen its local advisory board, further helping to strengthen its government and key stakeholder relationships.

Replication and Advocacy

This proposal will support LG's work to partner with visionary NGOs and governments to adapt and scale the model in new markets. Importantly LG will focus considerable effort advocacy efforts on disseminating the strong evidence from the RCT among key global health stakeholders and funders including bi-laterals, multi-laterals, target country governments, and large private foundations – with the aim encouraging them to build their funding strategies and program design around sustainable, high impact integrated models like ours. Over the four-year period, LG will adapt and scale the model with partners in two to three other countries – targeting major bi-lateral backing. LG will focus on high engagement collaboration with exceptional partners to maximize the potential for impact, sustainability and scale. LG will focus on countries optimal for the model based on need/impact potential, scale opportunity for reach and sustainability, economic/demographic factors, and regulatory context. LG is closely evaluating five to 10 high potential markets including Ghana, Nigeria, and India. This year Living Goods is helping PSI launch an entrepreneurial CHW network in Myanmar with backing from the MDG3 Fund. Through these collaborations LG's partners will reach millions more underserved customers. We hope this will be just the beginning. See detailed Replication Strategy Document for more details.

Budget Notes

At this stage we estimate the cost to operate the programs outlined here will be approximately \$9-10 million per year. These are preliminary estimates pending refinement of detailed budgets.