

A conversation with Felix Brooks-church, September 10, 2019

Participants

- Felix Brooks-church – Co-Founder and CEO, Sanku-Project Healthy Children
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Note: These notes were compiled by GiveWell and give an overview of the major points made by Mr. Brooks-church.

Summary

GiveWell spoke with Mr. Brooks-church of Sanku-Project Healthy Children (Sanku-PHC) to learn more about its progress and future plans. Conversation topics included its current and future projects, organizational structure, recent hires, and budget.

Overview of Sanku-PHC's current work

Small-scale fortification

Dosifiers

Sanku-PHC fortifies flour by providing micronutrient premixes to millers and equipping mills with IT-enabled dosifier technology. Dosifiers add micronutrient premixes to flour according to nutrition standards recommended by the World Health Organization (WHO) and mandated by the Tanzanian government. To ensure that millers have the tools to fortify flour, Sanku-PHC continuously monitors the dosifiers' productivity remotely via a cellular link to each machine and repairs these machines as needed.

Zero margin and cost-neutralization models

Sanku-PHC helps millers fortify flour sustainably by following a zero margin business model. It purchases empty flour bags in bulk to sell to millers and uses this revenue to offset the cost of purchasing micronutrient premix, which allows the millers to fortify without extra cost. These bags have a distinct pink color to indicate that their contents have been fortified. Fortified products are sold at the same price as non-fortified products. This results in products that are more nutritious and visually attractive than competing products but equal in price. This allows consumers to consume fortified flour without requiring them to significantly change their purchasing behavior. Sanku-PHC tries to achieve as much market saturation as possible because fortification is most effective when all available flour is fortified.

Sanku-PHC's geographic priorities

Five years ago, Sanku-PHC prioritized an international footprint and started fortification projects in five different countries by reaching out to partner organizations. This past year, Sanku-PHC focused entirely on Tanzania and conducted its work in other countries through third party implementers. This supports the organization's short-term goal of proving that its business model works in Tanzania before continuing its expansion to other countries.

Sanku-PHC's impact and cost-effectiveness

Sanku-PHC measures its impact by the number of people that its fortified flour reaches. It currently reaches an estimated 2 million people. Sanku-PHC expects this to increase to 3-4 million people by the end of 2020. Dosifier machines stream production data to Sanku-PHC every five minutes, which gives it a very up-to-date understanding of how much flour is being fortified. It uses this data, along with an estimate of the amount of flour consumed per day per person, to roughly calculate its reach.

Sanku-PHC determines the annual cost to work at a single mill by dividing its expenditures by the total number of mills that it works with. It estimates an annual expenditure of \$1,000 to \$1,500 per mill and an annual reach of 5,000-6,000 people per mill on average. Annually, fortification costs are approximately \$0.53 per person reached.

Sanku-PHC's successes, challenges, and opportunities

Sanku-PHC's successes

Sanku-PHC's accomplishments over the past year include:

- **Doubling its number of dosifiers and expanding its reach** – Sanku-PHC's model has been attractive to millers. By the end of 2019, it will have doubled the number of mills it works with, its number of dosifiers, and the number of people reached. It intends to double these values again next year.
- **Improved dosifier design** – Each batch of new dosifier machines undergoes between six to twelve months of research and development (R&D) before they are delivered to Sanku-PHC, typically in the fall. Design iterations address flaws such as component failure and inaccurate dosing. Mr. Brooks-church says that Sanku-PHC's latest machine is its most effective model yet; the improvements reduce the frequency with which staff must visit a mill for repairs and the risk that a product will not be properly fortified, which lowers costs and increases impact.
- **Increasing cost-effectiveness** – Last year, the annual cost of fortification was an estimated \$0.82 per person. This has since decreased to an estimated cost of \$0.53 per person for fiscal year 2019 (Oct-Sep), and projected to remain in the \$0.50-\$0.60 range for the upcoming fiscal year 2020.

Sanku-PHC projects that this will decrease to closer to \$0.20 per person by the following fiscal year (2021).

- **Maintaining high compliance** – Sanku-PHC continues to observe high compliance from mills. First, since launching activities in East Africa in 2015, Sanku-PHC has had a miller retention rate of over 98%. Also, through a partnership with Vodafone, Sanku-PHC's dosifiers are now *Smart*, being equipped with cellular-enabled technology. Sanku-PHC can now remotely monitor the compliance of its over 300 partner flour mills in real-time over the network and be alerted when a machine needs to be fixed or a mill restocked with nutrients. This increases cost-effectiveness because fewer staff are required for physical mill visits and machine servicing. Furthermore, Sanku-PHC has partnered with BioAnalyt, a German company specializing in fortification testing equipment, which helped Sanku-PHC launch a small field testing facility in Tanzania equipped with BioAnalyt's iCheck rapid test kit. Sanku-PHC can now test physical flour samples quantitatively in the field, achieving lab-quality results in under an hour, providing additional assurance that flour is being fortified according to standards. Of the 478 flour samples taken from millers to date, only 8% fell outside the fortification standard. Having these results rapidly available enabled Sanku-PHC to visit and address the issues at these specific mills, ensuring improved compliance.
- **Increasing staff** – Sanku-PHC has twenty-eight employees. It will probably add about twelve to fifteen employees this fiscal year 2020.

Sanku-PHC's challenges and opportunities

Keeping up with demand

Sanku-PHC has approached high demand for its product from a number of angles:

- **Manufacturing** – To match demand, Sanku-PHC has onboarded new manufacturers of flour bags. It is looking to add additional nutrient premix manufacturers and dosifier manufacturers as well. Sanku-PHC would like to have two or three manufacturers for all of its products. Retaining multiple manufacturers reduces production risks and leads to more cost-efficient, high-grade products due to increased competition between manufacturers. When deciding which manufacturers to work with, Sanku-PHC considers which ones would work well as partners when it works at larger scale in the future.
- **Mill selection** – Sanku-PHC ranks small-scale mills on the number of people they reach and its own ability to work with the mills cost-effectively.
 - **Size** – The organization works with small-scale mills of varying sizes but strongly prefers working with larger small-scale mills. Mr. Brooks-church says that bigger mills not only reach more people but tend to be more organized and are more likely to maintain a relationship with Sanku-PHC over the long term.

- Location – When selecting mills, Sanku-PHC also considers their geography and whether it can support the mills cost-effectively.

Other current projects

Collaboration with the Centers for Disease Control and Prevention (CDC)

Sanku-PHC's collaboration with CDC includes:

- **Mapping Sanku-PHC's fortification coverage** – Sanku-PHC has partnered with CDC in conducting mapping and coverage exercises. CDC is also actively assessing folate levels via blood tests in areas where Sanku-PHC has conducted folic acid fortification.
- **Researching the effect of folic acid intake** – Sanku-PHC is working with CDC to research the effect of folic acid intake and to conduct baseline surveys in areas that have not received fortified products in the past. Sanku-PHC produces the study's fortified flour while CDC provides funding for scaling up fortification. Testing and strategy for this study is housed under CDC and the Tanzanian government.

Tanzania National Food Fortification Program

In 2013, the Ministry of Health of Tanzania mandated that under the Tanzania National Food Fortification Program, staple foods such as wheat, maize flour, and edible oils must be fortified. Since not everyone consumes centrally-processed flour, the Tanzanian government reached out to Sanku-PHC to increase fortification at small-scale mills, which are less likely to have fortified products. Sanku-PHC has signed a memorandum of understanding that ensures that its actions are in line with the Ministry of Health's nutrition strategy. The national government helps Sanku-PHC with expansion into new regions and districts by facilitating relationships between Sanku-PHC and local governments.

Feed the Future Tanzania *Nafaka*

Sanku-PHC is partnered with Feed the Future Tanzania *Nafaka*, a USAID program, in the southern highlands of Tanzania. USAID provides farmers in this region with agricultural training and services to improve farm inputs, while Sanku-PHC works with mills that purchase maize from these farmers. USAID has provided Sanku-PHC with funding to equip thirty-five mills with dosifiers.

USAID is highly influential and is working with local governments to pass a mandatory school feeding program. Under this program, the flour that schools purchase must be fortified. The program is expanding district-by-district. Sanku-PHC and USAID are testing to see whether this can be turned into a national program.

Refugee outreach

Year-long pilot in Rwanda

Sanku-PHC had funding for a year-long pilot in Rwanda to apply a market-based model towards flour fortification in refugee camps. However, Mr. Brooks-church says that politics prevented Sanku-PHC from using its resources most effectively in that country. Namely, Rwandan law requires food production equipment to be made of stainless steel. Small mills within refugee camps are typically made from inexpensive, non-food grade materials. In order to work with these mills, Sanku-PHC would have to pay for upgrades, which it could not afford. After funding for this pilot program ended, Sanku-PHC chose not to pursue additional funding for this project.

Collaboration with the World Food Programme (WFP) in Tanzania

Sanku-PHC works with WFP in Tanzania to provide fortified flour to 300,000 Burundian and Congolese refugees. This collaboration began when WFP (which was already using Sanku-PHC equipment in Kenya to feed 80,000 refugee children daily) approached Sanku-PHC to now equip its Tanzania mills with dosifiers. Within this joint work, Sanku-PHC's responsibilities include:

- **Equipping mills with dosifiers** – Sanku-PHC has equipped a WFP-owned mill and an outsourced complementary mill with eighteen dosifiers in total.
- **Monitoring and repairing dosifiers** – Sanku-PHC monitors the dosifiers via a cellular link and sends staff to the mills when a dosifier breaks or needs restocking.
- **Supporting mills** – Sanku-PHC provides micronutrient premix and employee training to the mills.

In return, Sanku-PHC uses WFP's distribution system to deliver fortified flour, which has allowed Sanku-PHC to reach refugees more cost-effectively in Tanzania relative to its work in Rwanda. Sanku-PHC's reach in Rwanda was an estimated 3,000 refugees, while in Tanzania, its reach is closer to 300,000 refugees.

Raising awareness of fortification among consumers

Sanku-PHC works with partners who have funding for educating people on the benefits of fortified products. These organizations include:

- **Feed the Future** – This organization is testing an awareness campaign that involves sending nutrition facts and updates to consumers by SMS.
- **Helen Keller International** – This organization visits individual stores and asks shop owners whether they recognize certain fortified products and whether they know why people should buy them. It then shares basic information on these products.
- **National Food Fortification Alliance (NFFA)** – Sanku-PHC is part of NFFA, which includes groups both in the public and private sector that are interested in fortification policy and advocacy. Advocacy work that NFFA

would like to see includes government-led public service announcements over the television and/or radio.

Sanku-PHC's organizational structure

Previously, Sanku-PHC had an organizational structure that was top- and bottom-heavy; people either worked in upper management or in the field. To improve communication across the organization, Sanku-PHC added middle management, which includes zone managers and a data coordinator. The new organizational structure is described as a zone model.

Zone managers

Zone managers relay information from the field, such as business problems and potential barriers. Receiving information in real-time has allowed Sanku-PHC to address problems in the field more quickly.

Organizational hierarchy

Regional managers work on the frontline of Sanku-PHC's work by representing the organization to mills. Eight regional managers report to three zone managers. The zone managers report to a country manager. The country manager reports to Mr. Brooks-church.

Sanku-PHC's hiring

Research team

Over the past year, Sanku-PHC has hired three employees to specifically work on research.

- **Director of R&D** – This position focuses on fundraising and research, such as developing a better understanding of the organization's impact.
- **Data Coordinator** – This employee analyzes and consolidates field data for operational purposes by building out dashboards. Their responsibilities include:
 - Field monitoring – Sanku-PHC monitors its dosifiers to set priorities for field monitoring schedules, such as which mills to visit and when. This role has streamlined operations and increased impact by minimizing the risk of leaving a machine unstocked or in need of repair.
 - Reach assessment – Sanku-PHC would like to determine whether its fortified flour still reaches areas where it has a small fortification footprint.
 - Donor relations – Data collected from the field automatically populates a dashboard, which is used to inform donors and help with donor retention.
 - Grant writing – The Data Coordinator helps the Director of R&D with grant proposals.

- **Lab Technician/Food Scientist** – This employee assesses whether flour samples from mills fall within government standards for iron levels.

Fundraising team

Previously, Mr. Brooks-church worked in both operations and fundraising for Sanku-PHC. To open up his and the rest of the organization's bandwidth, Sanku-PHC outsourced donor management and outreach to Smarter Good, a global services firm. Sanku-PHC now has an entire team that assists with proposal writing. The Director of R&D also helps with grant-writing.

Hiring priorities

Sanku-PHC's previous Chief Operating Officer (COO) is now the organization's Director of R&D. It would like to hire a new COO to reduce the responsibilities placed on other employees.

Sanku-PHC's future plans

In the short term, Sanku-PHC does not plan on taking on new projects. It would like to instead focus on expanding its existing projects and re-proving its models.

Expanding to other countries

Next year, Sanku-PHC will consider expanding to one to three new countries, most likely Kenya and Ethiopia. It may pilot a program in a new country in 2020, but this is more likely to start in 2021. Sanku-PHC's rate of growth and expansion timeline depends on funding.

When expanding to other countries, Sanku-PHC is most interested in increasing the number of people it reaches. Consequently, the organization plans on selecting a working model for new countries on a case-by-case basis. Hybrid models could include outsourcing a certain component of what Sanku-PHC does, creating a franchise, or trusting a third party implementer entirely.

Conducting research projects

In 2020, Sanku-PHC would like to conduct a comparative study on iron and/or folate levels of approximately 700 to 800 women of reproductive age who receive either fortified or unfortified products. It is unlikely that Sanku-PHC will have the capacity to both fundraise the estimated \$250,000 needed for this study and conduct this research over the next six months.

Seasonal efforts at Sanku-PHC

Sanku-PHC focuses on fundraising at the beginning of the calendar year. It scales its fortification towards the end of the year as it receives new dosifiers. This spike in fortification is currently happening and is expected to last three months.

Sanku-PHC's budget and room for more funding

Current budget

Donations and grants

In the past year, Sanku-PHC raised an estimated \$2.2 million, which is double what it raised the previous year. Major funders include:

- **GiveWell** – GiveWell has recommended Sanku-PHC as a standout charity and donated \$100,000 to Sanku-PHC this past year. As a result, Sanku-PHC is also recommended by and receives funding from The Life You Can Save and the Centre for Effective Altruism.
- **US government agencies** – Sanku-PHC has received funding from CDC and USAID.
- **Family foundations** – Sanku-PHC has received funding from the Mulago Foundation, the David Weekley Foundation, and the Ray and Tye Noorda Foundation. It recently received record-size grants of \$760,000 from the James Percy Foundation and \$300,000 from King Philanthropies; these grants will be disbursed over three years.
- **Individual donors** – Sanku-PHC receives passive income from individual donors.
- **Prizes & Awards** - Sanku-PHC was the sole winner (of 2,100 applications from 130 countries) in the 2019 Zayed Sustainability Prize food category, receiving a \$600,000 grant. Fast Company also selected Sanku-PHC for its 2019 Most Innovative Companies in Africa list. Sanku-PHC was also selected out of more than 900 applicants for the World Food Program's SPRINT program, which comes along with a \$100,000 award to be donated by Cargill to expand Sanku-PHC's work in Tanzania.

Sanku-PHC intends to visit San Francisco and Skoll World Forum in Oxford, England to target new funding opportunities.

Revenue

Sanku-PHC generated an estimated \$700,000 from its cost-neutralization model last year. This value includes its premix sales to mills who solely purchase premix without bags. In upcoming years, it expects annual revenue to exceed at least \$1 million as it increases the number of mills it works with. Additional revenue depends on whether Sanku-PHC obtains large premix contracts.

Room for more funding

Sanku-PHC prefers to keep four to six months of its operating budget in the bank. Its target budget is approximately \$2.5 million, which is the maximum it can use in the upcoming year. It has secured more than \$1 million for next year and is seeking an additional \$3 million for FY2020 and partially towards FY2021. This goal is based on how quickly Sanku-PHC scales its staff and equipment. It would like to double its

budget in the following year to support an increase in staff and double its number of dosifiers yet again. Its budget will fluctuate depending on the size of its organization.

Sanku-PHC has a goal of reaching 100 million people by 2025 or 2026. By that point, Mr. Brooks-church says that Sanku-PHC's model will reach economies of scale and become self-sustaining. To reach this level, it will need \$25 million in philanthropic support across this time period.

All GiveWell conversations are available at
<http://www.givewell.org/research/conversations>