

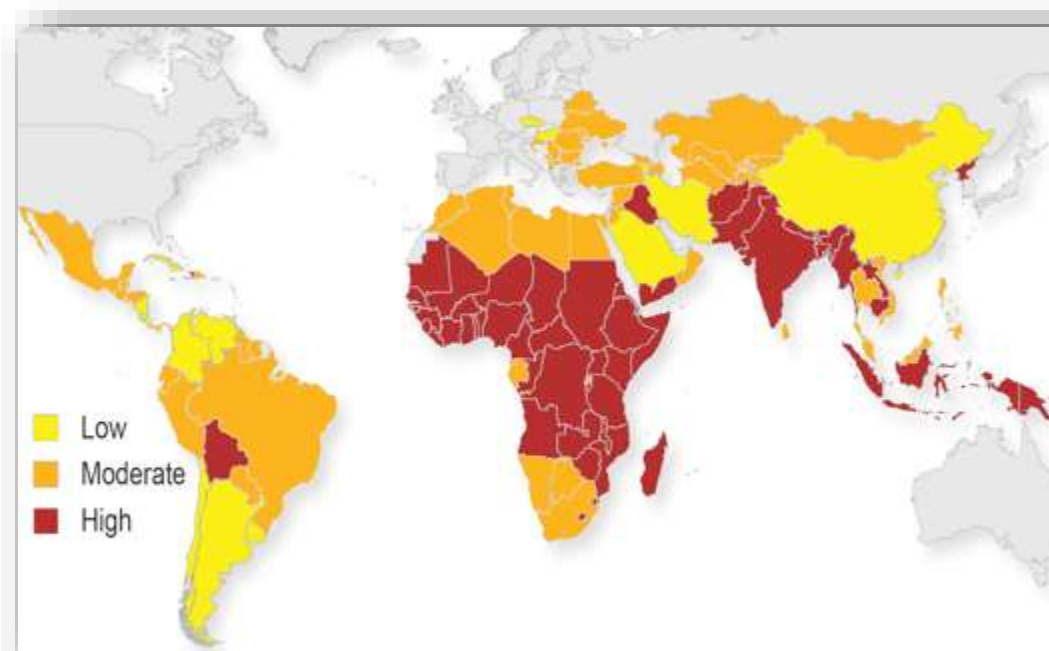
BEYOND FORTIFICATION OF CENTRALLY PROCESSED MAIZE:

Extending fortification technology and effective monitoring to small and medium scale millers



The Problem

- Two and a half billion people in the world are micronutrient malnourished.
- Over one-third (approximately one billion people) ***do not have access to centrally processed foods.***
- These populations are the most vulnerable and in the greatest need of strategies to combat micronutrient malnutrition.



Global Prevalence of Micronutrient Deficiencies

Who Are We?

- Sanku is a socially driven, invention-based initiative of Project Healthy Children (a US based NGO providing large-scale fortification TA).
- Designed to fill the gap among those not accessing centrally processed foods.
- Works closely with village millers, NGOs and governments.
- Equips at-risk communities with fortification technology and nutrient premix.
- Working to overcome the barriers to small-scale fortification monitoring.



Prior attempts



Hand Scoop



Blender



Crank

- ❑ Prior attempts fell short in terms of:
 - ❑ Scalable automated technology solution
 - ❑ Sustainable business model to support millers
 - ❑ Effective monitoring mechanism

Technology Solution

- Quality control is insured through complete data capture of the milling process.
- This allows real time access to data.
- Able to monitor:
 - Miller compliance rate
 - Stock versus production
 - Over/under fortification
 - How much reach is affective reach
- Minimizes ongoing monitoring costs by avoiding need for regular inspector visits.
- Click [link](#) to view Sanku Dosifier video



Monitoring Data

- ❑ LED on rear of dosifier displays weight reading and data.
- ❑ By the push of a button, 5 **DAILY REPORT** items for the current day are obtained by the miller.
 - 1) **DEVICE ID**
 - 2) **TODAYS DATE**
 - 3) **ACTIVE HOURS & MINUTES**
 - 4) **GRAIN LOSS IN METRIC TONS**
 - 5) **PREMIX DISPENSED IN KILOGRAMS**
- ❑ Stored **CUMULATIVE REPORT**.
- ❑ Internal real-time clock.



Current program

- Working with USAID and Tanzania Food and Drug Authority.
- 8 devices are installed throughout 3 regions:
 - ▣ Morogoro
 - ▣ Dodoma
 - ▣ Manyara
- 11 Regions reached in total.
- Exporting to 6 countries.



Example of actual data

- Monitor's data report from November 2014.
- Representing 8 mills.

		Cumulative data reports from Dosifier						
	Mill Name	Monitor date	Days since install	Total active days	Total active hours	Total MT flour	Total Kg premix	Population reach per day
1	Mkude's Milling	12/11/14	188	45	184	53.17	53.99	1414
2	Kindai Superembe	4/11/14	187	105	484	314.9	314.9	8420
3	Kibaigwa Flour Supply	5/11/14	160	47	96	47.22	46.69	1476
4	Gabe Super Samba	12/11/14	184	82	116	28.37	28.27	771
5	Rahisi Group Mills	12/11/14	178	76	299	88.09	87.99	2474
6	Kilonda Mills	4/11/14	169	48	179	76.02	76.02	2249
7	Katundu Traders Ltd	17/9/14	112	53	325	132.9	132.9	5933
8	2pm Milling	13/11/14	31	15	44	15.23	15.22	2456
		TOTALS	1209	471	1727	756	756	25,193

- Produced 756MT of fortified flour in 6 month
- Reaching 25,000 people per day

Real time, remote data

- ❑ 21 African nations have mandatory fortification.
- ❑ Sanku has had inquiries from over 20 organizations.
- ❑ Future cellular capabilities for sending data:
 - ❑ Automatically relay logged data directly to the internet via GSM or Wi-Fi.
 - ❑ Will assist in distribution models for premix.
 - ❑ Allow for a national mapping tool for rural flour production and consumption.
 - ❑ Specifically design standards based on targeted regional differences in consumption.

“No village too remote.”



Business Model Solution

- Sanku and financier/donor provide the device at very little to no cost to the end user.
- In return, the miller purchases premix through our Sanku partnership program.
- The investment of the device is recovered over time through the sales of premix.



Recognitions

- 2013 Grand Prize winner in the Ashoka Changemaker's Nutrients for All competition.
- After 3 years of rigorous testing, in 2014, the Global Alliance for Improved Nutrition (GAIN) officially approved and recommended the use of the **Sanku Dosifier** for small and medium scale applications.
 - Fortified flour results fall within the +/- 10% coefficient of variation (CoV) range, which is the universally accepted industry standard.



2013 Award Finalist



Sanku's Goal



- 200 million people by the year 2020

