




Malnutrition Matters  
Seeks NGO Partners to Deploy  
“SoyaKit – Home Business in a Box”  
Platform

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**Malnutrition  
Matters**

FOOD TECHNOLOGY SOLUTIONS

A close-up photograph of a woman with dark skin and hair, wearing a black top, smiling as she feeds a baby. She is holding a bright blue plastic cup to the baby's mouth. The baby is wearing a grey patterned cardigan over a pink shirt. The background is a textured, light-colored wall.

“The solution to the undernutrition problem must involve cross-sectoral solutions including hyper-local availability of affordable, nutrient-dense food.

Malnutrition Matters solutions provide platforms for local entrepreneurs to produce these foods using locally grown produce.”

-- Hart Jansson, President of Malnutrition Matters

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[Website](#)  
[MM Capabilities Statement](#)  
[SoyaKit video](#)  
[MEDA GROW report: \(pp 18,19\)](#)  
[Sustainable Nutrition with the SoyaKit \(detailed report\)](#)  
[Testimonials from Entrepreneurs](#)



# Contents

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Section 1 - Overview (Slide 5)

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Section 2 - A Deep Dive: Malawi Case Study (Slide 25)

---

Section 3 - Deeper Dives: Stories of Individuals (Slide 33)

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Section 4 - Working with Malnutrition Matters (Slide 38)

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Section 5 - Background (Slide 43)

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# Section 1 - Overview

We are Malnutrition Matters.  
Our impact is in:

- empowerment of women and smallholder farmers
- sustainable micro-enterprises: rural and urban
- affordable, improved nutrition: rural and urban
- tenfold reduction in GHGs and land & water use

**Malnutrition  
Matters**  

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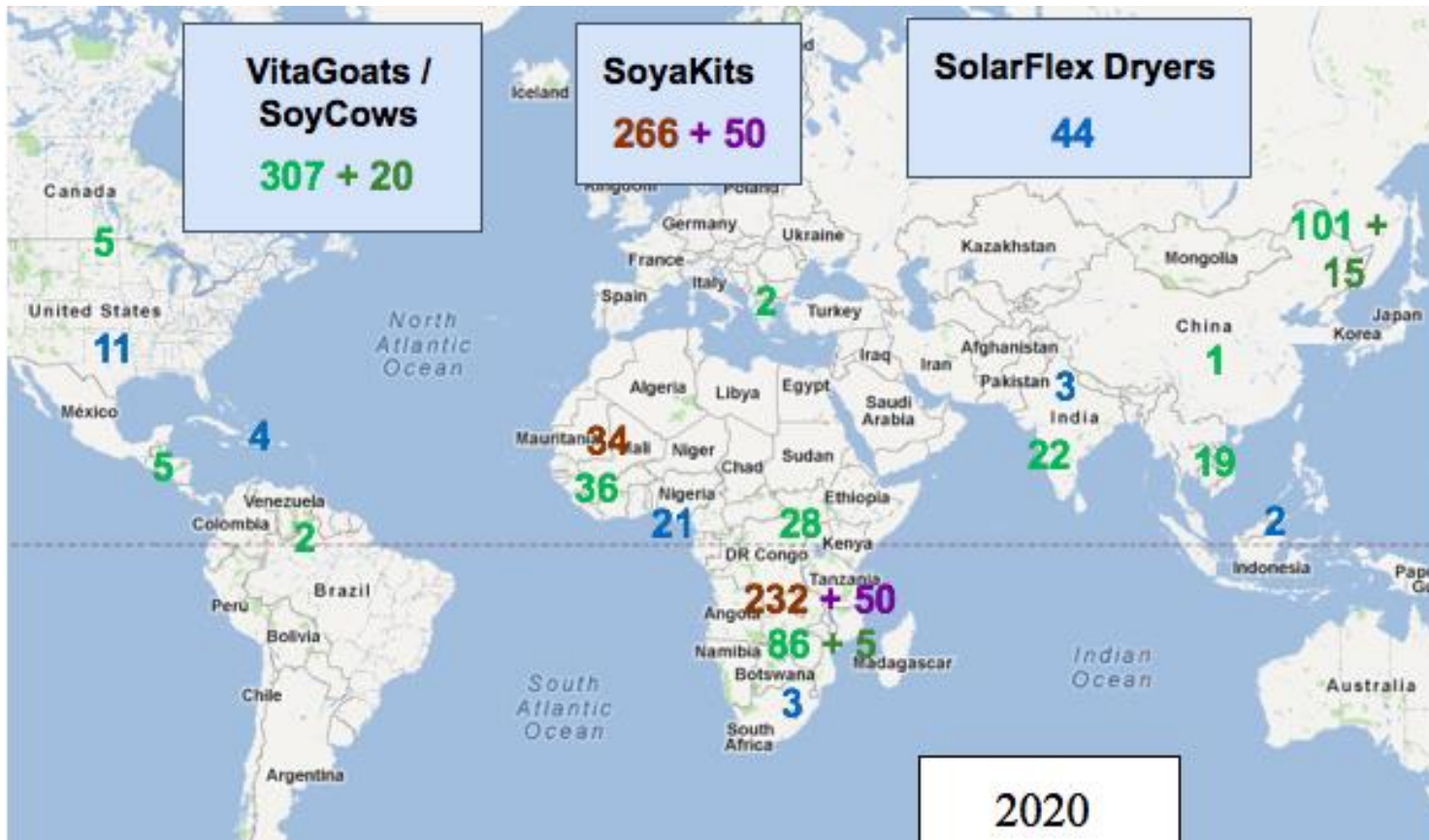
FOOD TECHNOLOGY SOLUTIONS



# Malnutrition Matters:

- is a social business that provides equipment and technical services to support sustainable small-scale production of affordable, nutrient-dense food to communities with high rates of malnutrition and poverty
- has been innovating in the field of global malnutrition since 2000
- pioneered 4 low-technology solutions for food production:
  - SoyCow (electric large batch soy milk production)
  - VitaGoat (non-electric large batch soy milk production)
  - SolarFlex Food Dryers (solar-only food preservers)
  - SoyaKit - Home Business in a Box (non-electric small batch soymilk production)





- are currently directly impacting 170,000 lives
- have projects in 38 countries
- have a 3-year goal to equip and train 20,000 micro-entrepreneurs to provide protein to

# 1,000,000

of the world's most malnourished children and adults living in rural, urban and peri-urban regions of Africa and South Asia

Our scope is global. We:



# We partner with agencies such as:

- The African Development Bank
- Africare
- Alpro CVA
- Catholic Relief Services
- Child Haven International, India
- Donner Canadian Foundation
- Eden Social Development Foundation
- First Steps, Korea
- Ghana Rural Enterprise Program (REP III)
- Mennonite Economic Development Associates
- OIC International
- Palladium International
- Soybean Innovation Lab
- The Tropical Soil Biology and Fertility Institute of the International Centre for Tropical Agriculture (TSBF-CIAT)
- Various UN agencies
- Village Industrial Power
- The World Bank Development Marketplace
- World Initiative for Soy in Human Health (WISHH)
- Many other mid-sized NGOs and smaller PVOs

# We address the following UN Sustainable Development Goals:

- 1 No Poverty
- 2 Zero Hunger
- 3 Good Health and Wellbeing
- 4 Education (Indirectly)
- 5 Gender Equality
- 8 Decent Work and Economic Growth
- 10 Reduced Inequalities
- 11 Sustainable Cities and Communities
- 12 Responsible Consumption
- 13 Climate Change
- 17 Partnerships for the Goals



# We are looking for NGO partners to deploy our SoyaKits to:

- change the long term health status and life outcomes of the most malnourished people by providing them with high quality, highly digestible protein and micro-nutrients that is 1/3 the price of commercially available protein - as low as 1 cent retail / gram protein (SDG 2 and 3)
- create a food supply system that is in the control of rural, urban and peri-urban women serving their communities directly (SDG 1, 5, 8 and 11)
- shift profits from corporations to micro-entrepreneurs, enabling them to move from extreme poverty (<\$1.90/day) to an average of \$3 to \$9 profit/day based on 3 hours of production, enabling them to feed and school their children (SDG 1, 10 and indirectly, 4)
- dramatically reduce the greenhouse gas emissions and resource consumption associated with food production (SDG 12 and 13)





## We have a simple six step approach:

### Step 1

Local Partner Agencies (LPA) identify areas where soya beans are available near communities living with extreme poverty and malnourishment.

### Step 2

LPA identify women in those communities who show potential to become entrepreneurs.

### Step 3

LPA may help women obtain a micro-loan which can be paid back from profits within 3 to 9 months (loan amount depends on subsidy offered by LPA).

### Step 4

Using a train-the-trainer model, Malnutrition Matters train LPA to teach the entrepreneurs how to:

- produce good-tasting soy milk, tofu, soy yoghurt, soy porridge, regional specialties and more
- maintain safety, for themselves and their customers
- source supplies of soybeans and sugar at good prices
- keep business records and run their micro-enterprise

### Step 5

Malnutrition Matters provides each with a “SoyaKit – Home Business in a Box”.

### Step 6

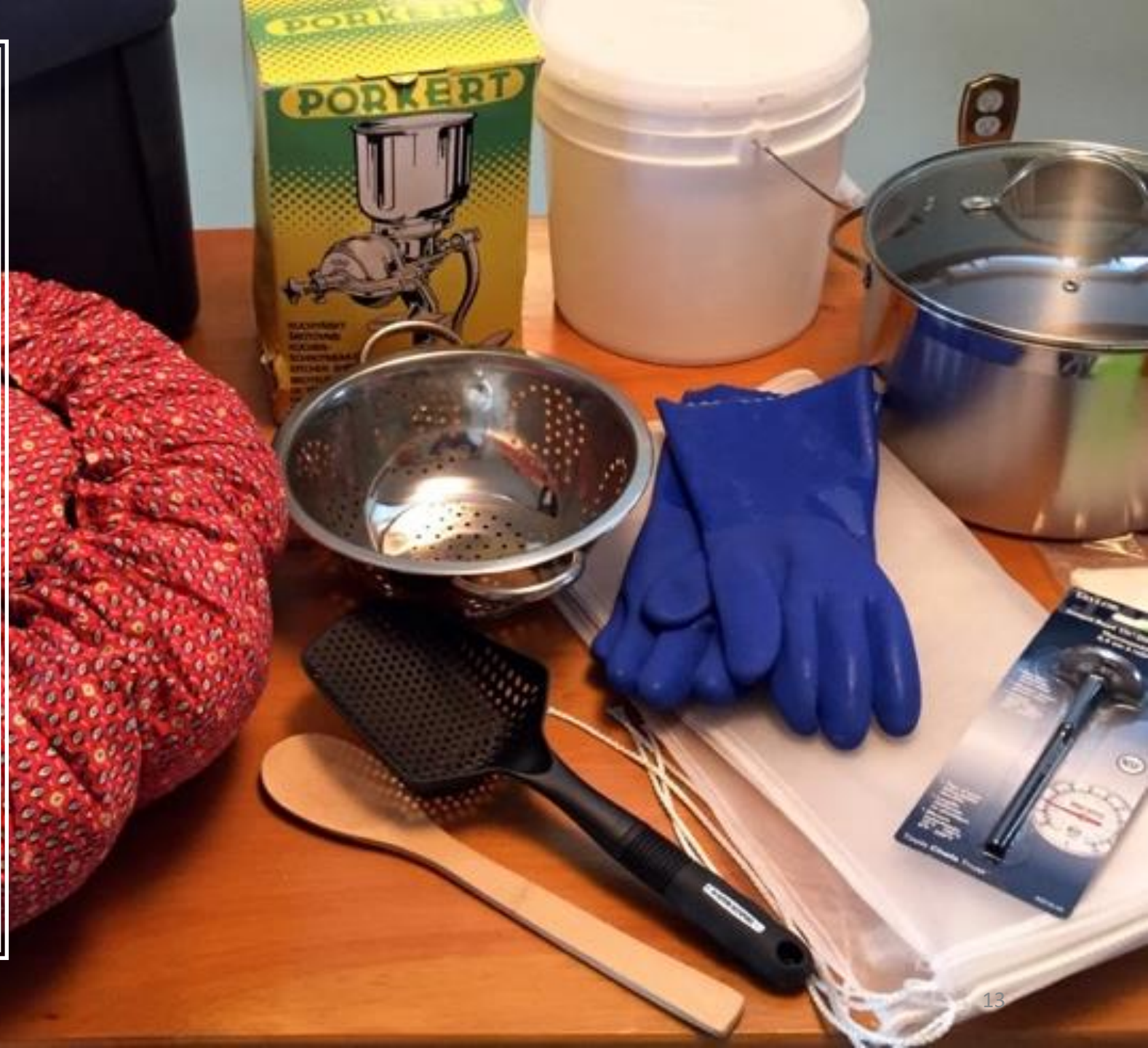
Malnutrition Matters guides LPA in providing the entrepreneurs with incubation support and monitoring.





Each “SoyaKit – Home Business in a Box” needs only access to water and a heat source, and includes:

- soya bean grinder
- 8L SS pot
- heat retention cooking bag
- filter bags
- food-grade HDPE bucket
- utensils
- thermometer
- heat resistant gloves and a few other items
- note: grinder and cooking bag minimize cooking time and therefore fuel use by 50%.







## Our training for soy entrepreneurs includes:

- food processing safety, hygiene and sanitation
- health benefits of soy
- achieving product quality, experimentation, and producing diverse products such as soy milk, soy porridge, tofu and soy yoghurt
- fortifying with essential micronutrients (optional)
- finding markets
- small business basics such as monthly record-keeping and tracking production, sales, costs and profits; minimizing input costs; understanding, measuring and maximizing profits



## Best-practice for ongoing support includes:

- supporting new entrepreneurs, including a 'support line'
- experience-swapping and help from 'Achievers'
- peer mentoring from best performers
- sharing data on other entrepreneurs' sales and profits
- access to savings clubs, susu or equivalent  
Access to VS&L clubs or equivalent



An important part of the training is to help the entrepreneurs develop their own understanding of how to generate higher profits:

Example:

- 1 kg of soya beans produces 6.6L of soy milk, in 2 batches (about one hour)
- expenses including salt, sugar, soya beans and firewood total MK 760 or \$0.97
- selling 1 L at MK 300 (\$0.38), produces revenue of MK 2000 (\$2.56) and profit of MK1240 (\$1.60)

DATE	MONTH	KG	SALES	EXPENSES	PROFIT	NET PROFIT
28	MAY, 2018		4,850	2,772	2,078	2,078
26	JUNE, 2018		4,950	2,785	2,165	2,165
28	JULY, 2018		3,150	1,850	1,300	1,300
27	AUGUST, 2018		15,600	1,700	53	13,900
26	SEPTEMBER 2018		31,050	970	68	30,080
30	OCTOBER 2018		20,200	1,150	27	19,050
27	NOVEMBER 19		16,050	400	12	15,650
27	DECEMBER 2018		25,900	2,520	74	23,380
27	JANUARY 2019	3100	15,600	1,050	53	14,550
27	FEB 2019		10,200	840	34	9,360
28	MARCH 2019	3700	25,900	2,530	74	23,370
	APRIL 2019		16,050	1,200	12	14,850
	MAY 2019	5000	10,200	600	8 1/2	9,600
26	JUN 2019	1200	14,000	1,400	35	12,600
27	JULY 2019	1400	16,050	1,100	12	14,950



Cost / Profit table  
is enlightening  
when constructed  
by the  
entrepreneurs:



3 hours production  
6 batches

	VOL (L)	COST	Rev	PRO
MILK	<del>22</del> 22	21 16.5	44	(27)
PT	22	21 16.5	88	(71.5) 69
BAB x.2	3	10.5	24	13
DGE				
RA				
T BOTTLE	22	37 40.5	99	62 58

17





## Key benefits of “SoyaKit – Home Business in a Box” for entrepreneurs:

- confidence of having a turn-key business with training, support and mentors
- low-cost to start
- low-cost to run
- easily learned methods
- delicious product that can meet local tastes with various flavors
- can provide full- or part-time employment
- fast to revenue, quick payback of micro-loan (as required, payback 3 – 9 months), highly profitable very quickly
- predictability and much lower risk than agriculture or animal husbandry
- time-flexibility for the entrepreneurs, who typically have multiple/seasonal responsibilities
- ability to work from home and take care of dependants and other home duties
- safe, dignified work that elevates status as well as income
- independence, and the ability to support self and family
- ability to afford schooling for children creates intergenerational change

# Profitable micro-businesses change lives:

- average daily earning of women before becoming soy entrepreneurs: <\$1.90/day
- **daily earnings of women with SoyaKits: in Malawi, \$3 to \$9 per 3 hour day of production**
- **in Ghana, average profit is \$12 per 3 hour day of production**
- profitability increases with experience, mentorship and diversification of products
- newest (2020) data from Malawi shows that new entrepreneurs' average monthly profit is \$30 and as high as \$110.
- profits from soy milk sales can be reinvested in entrepreneurial activities, such as diversifying with livestock and buying farm inputs





# Reducing hunger and changing lives:

- we work with partners in communities where malnutrition rates are between 40 and 60%
- each SoyaKit entrepreneur has between 50 and 100 customers, each receiving 8 grams of protein per day that they could not otherwise afford
- the 300 SoyaKits installed globally so far serve approximately 20,000 customers
- local governments assess nutrition levels and note population health improvements
- SoyCow and VitaGoat installations serve an additional 170,000 malnourished people





## SoyaKits indirectly contribute to quality education:

- SoyaKit entrepreneurs earn enough to afford school fees, supplies and uniforms
- in some cases, SoyaKit entrepreneurs use their profits to transfer their children to private schools with higher standards
- SoyaKit producers serve school lunch programs, providing the nutrition necessary for cognition and brain development





# SoyaKits reduce pollution and greenhouse gas emissions!

By shifting to proteins that are:

- non-animal based
- made using manual equipment
- made with hyper-locally-sourced raw materials
- served often without any packaging
- delivered to customers who can be served on foot or by bicycle

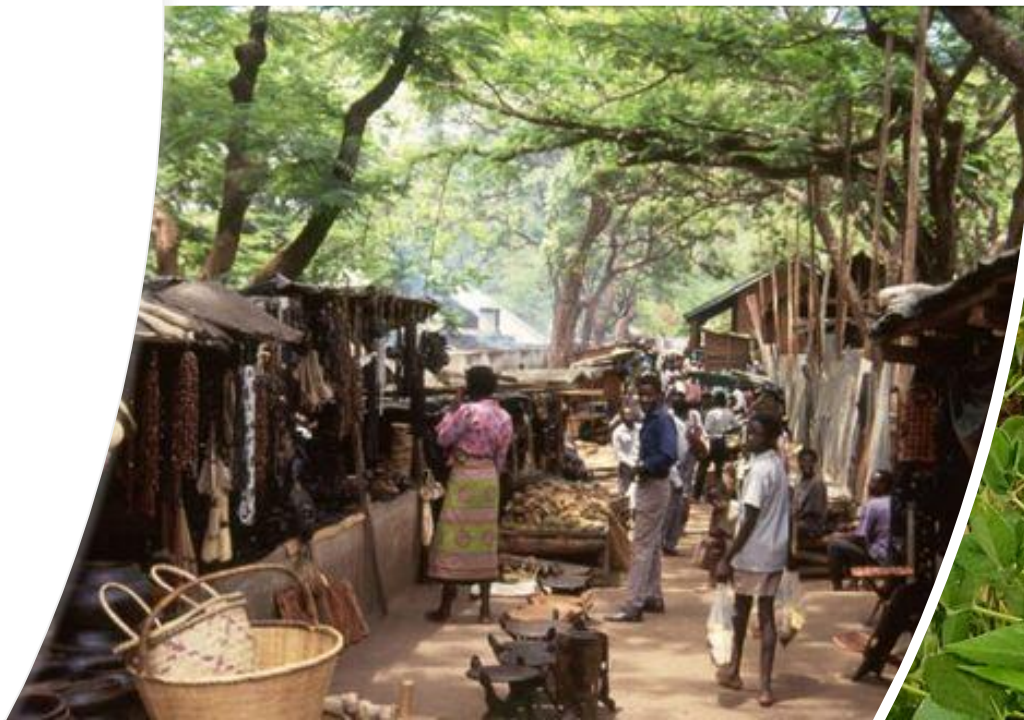
**this innovative project reduces the environmental impacts of feeding people by up to 95%.**





## Other indirect beneficiaries

- the health-care systems in the areas served, which have reduced burden
- local soya bean farmers who have reliable, local customers
- local businesses benefit from increased local spending





The best solution to malnutrition is a diverse diet with sufficient elements from all food groups.

This is not currently possible for the over 800M people who are food insecure.

Multiple strategies are needed to address chronic malnutrition.

SoyaKits form one key building block with clear advantages over other options alone:

- vegetable gardens are useful, but:
  - take weeks/months to get produce
  - pests, theft, animals and extreme weather can impact harvest
  - perishability leads to post-harvest loss
  - vegetables alone cannot supply adequate protein
- laying hens are helpful, however:
  - 300 laying hens would be needed to produce the same amount of protein as a SoyaKit can produce in 8 hours
  - egg protein is typically twice the price of local soymilk
  - disease, feed, and predators all impact on the efficiency of relying on hens alone for adequate protein
- livestock is another option, however:
  - requires many months for results
  - feed quality, predators, disease and theft reduce protein yield
  - spoilage can be both a health risk and a source of waste
  - animal sources of protein are much more harmful to the environment
- food-aid is an important crisis-intervention, however:
  - it does nothing to create self-sufficiency nor build resilience
  - it is reliant on the continued generosity of donors
- fortified staple foods can help provide specific micronutrients such as vitamins A and E, and iodine, however:
  - this strategy does nothing to address protein deficiency



## Section 2 – A Deep Dive: Malawi Case Study



In 2017, Palladium International partnered with Malnutrition Matters to provide the “SoyaKit – Home Business in a Box” to women in Malawi, as part of the USAID-funded Agricultural Diversification (AgDiv) project, in 3 phases:

**Phase 1:**

30 SoyaKits deployed in early 2018; notable success achieved

**Phase 2:**

200 SoyaKits deployed in January 2019; **basis of this case study for calendar 2019**

**Phase 3:**

scaling up to 4,000+ units with partners including Catholic Relief Services – **underway now!**

Note: over 80% of these entrepreneurs are women



In a 2019 study of 193 participants, Palladium concluded that SoyaKits provide deep impact at the base of the pyramid:

- solves chronic malnutrition with affordable, accessible nutrient-dense food at 1 cent / gram of protein (retail)
- provides a platform for local, sustainable micro-enterprises; women entrepreneurs earn \$3 - \$9 in profits per 3 hour day
- uses a simple supply chain: soybeans sugar and water – no infrastructure required
- empowers rural women and youth
- gives NGO's / government agencies a cross-sectoral solution to help achieve targets for SDG's 1, 2, 4 and 5

Note: data gathered and analyzed by Soybean Innovation Laboratory





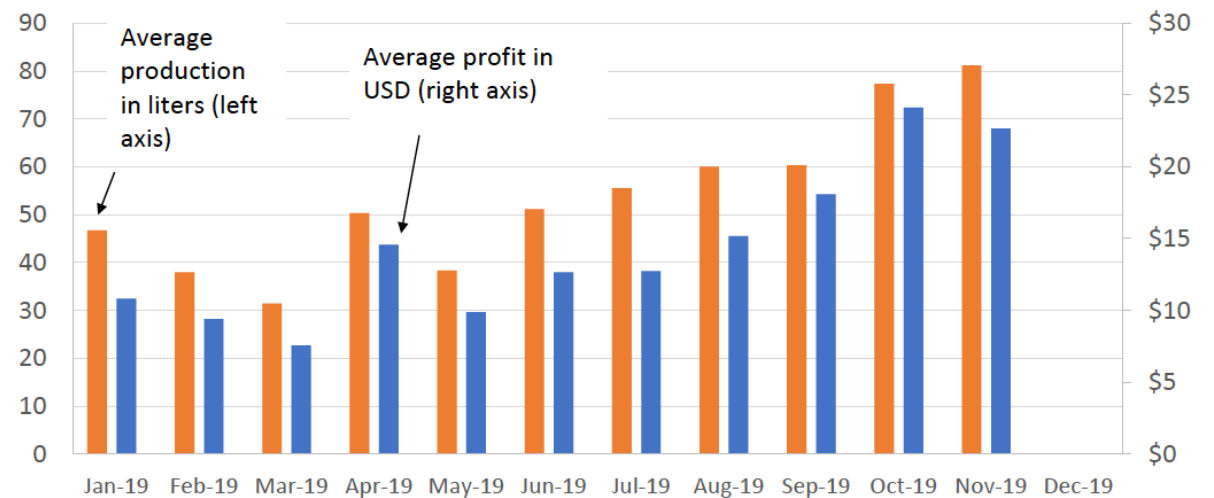
The study calculated the following profit targets based on 3 hours of SoyaKit production for each food type:

PRODUCT	COSTS	PRICE	PROFIT
Soy milk (21 L)	\$4.50	\$10.50	\$6.00
Soy Yoghurt (21 L)	\$5.00	\$21.00	\$16.00
Tofu Kebabs (3.6 kg)	\$4.25	\$12.40	\$8.15

(figures based on field experience, local costs in rural Africa & competitive retail pricing)

Profit women entrepreneurs achieved in Malawi in first year with SoyaKits:

Average Production and Profits by Month





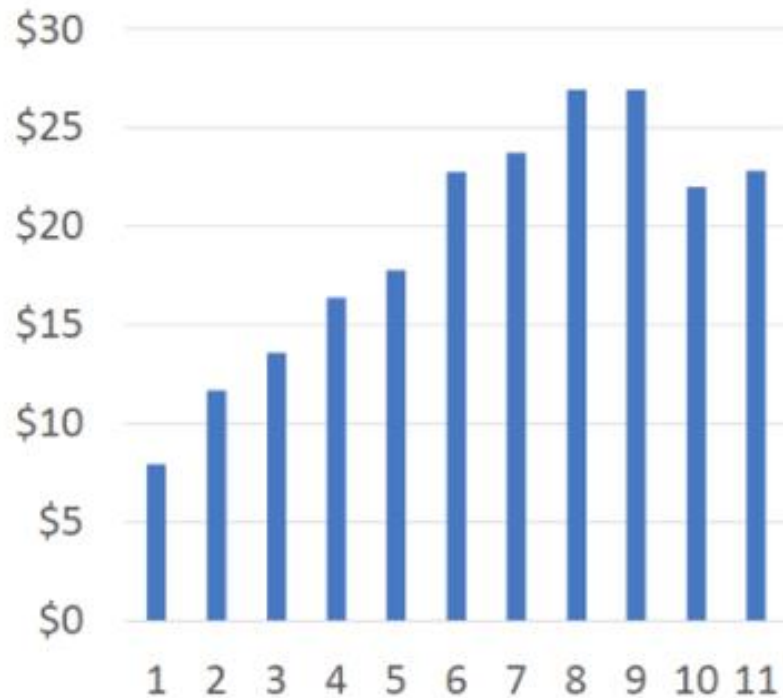
## Identifying factors in performance:

- no big differences by partner or district
- experience and scale of production correlated with higher profits
- report includes results from 56 entrepreneurs working with SoyCows instead of SoyaKits; these 56 are present in the lowest two rungs of average profit shown in the table
- data used to target extra support to lower-producing SoyaKit entrepreneurs, to increase their profitability

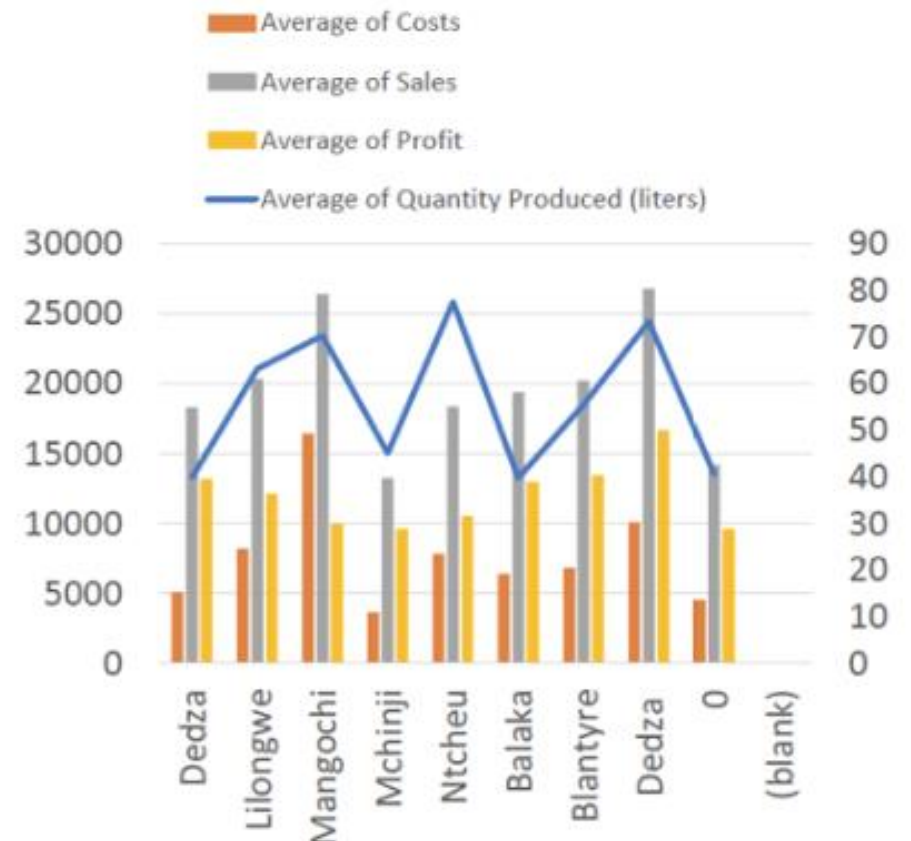
Average Profit	Number of Entrepreneurs
\$ -	11
\$ 6.85	55
\$ 13.70	84
\$ 20.55	43
\$ 27.40	25
\$ 34.25	12
\$ 41.10	4
\$ 47.95	7
\$ 54.79	4
\$ 61.64	1
\$ 68.49	1
More	2

# Data used to improve performance:

## Average Monthly Profit by Months of Experience

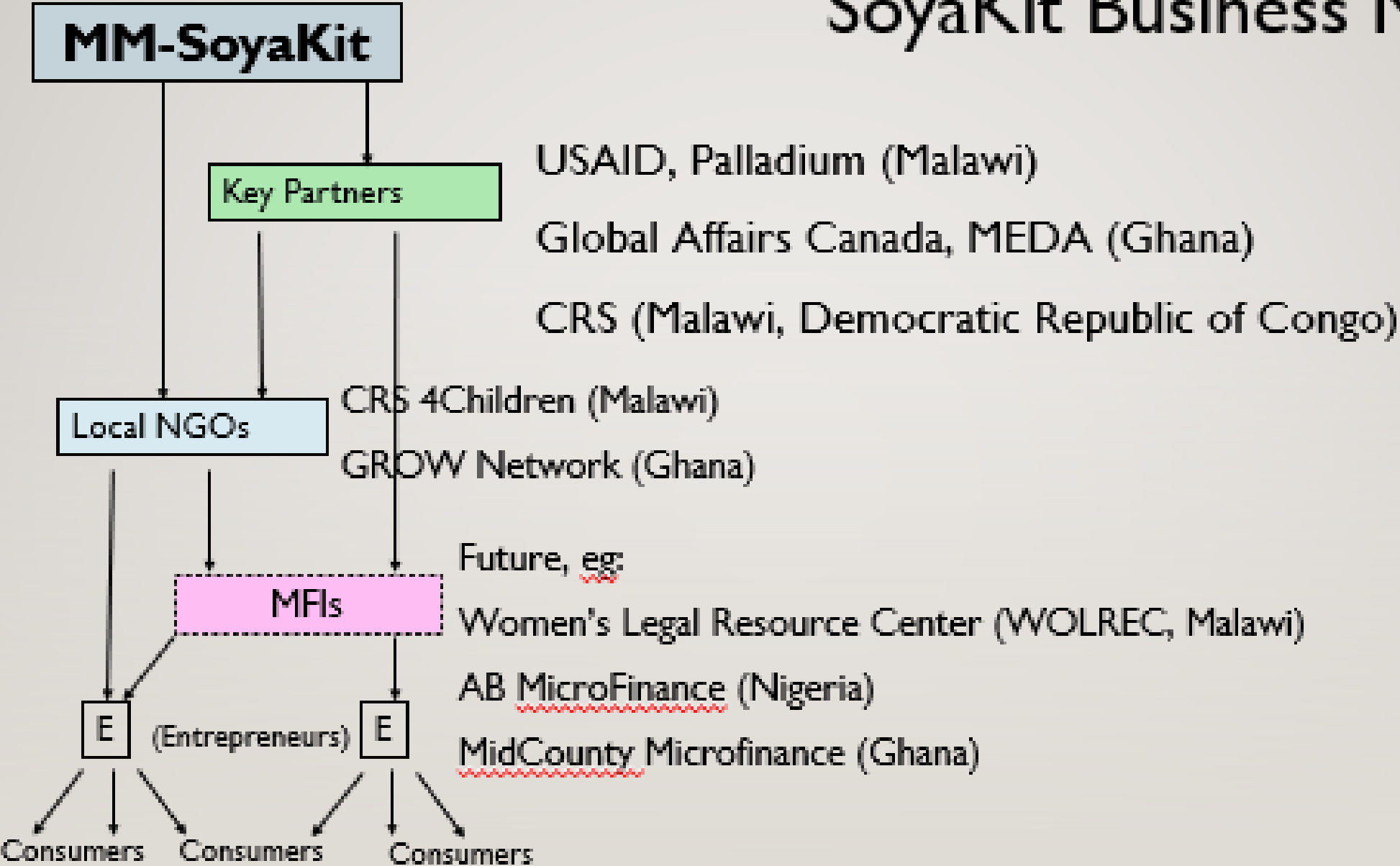


## Soy Kit Outcomes by District





# SoyaKit Business Model





## Section 3 – Deeper Dives: Individual Stories



# Alice Butao

- received a SoyaKit in May 2019; was making an average profit of about \$10.50 per month
- attended a networking event and visited a neighboring entrepreneur to help make her soy milk taste better
- adopted tips and conducted market testing of her new product; customers liked it
- increased her sales and her profits now average over \$90 per month
- has used her profits to expand her chicken rearing business, buy farming inputs, and pay for her grandchildren to get transport to school



# Zione Charles

- a single mother supporting 5 children in rural Malawi, sells food made with the SoyaKit
- profit of between \$25 and \$50/week from 12 to 16 liters of daily soymilk production and sales
- in her words:  
“I am now able to support the school-going children, in the past I could not even afford a notebook for a child to use in class. I could say that I was poor because sometimes my family could go without meals, but now things have changed a lot.”





# Promise Silesi

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My name is Promise Silesi. I am 35. I am a single mother of two children. There are five members in our household, my two sisters, my two children and myself.

I am the breadwinner of the family since our mother died. I started the soy milk making business in March 2019. Since I started the soymilk making business till now I have managed to do a couple of things that I never imagined I would be able to achieve.

I have made a profit of about MK160 000 (\$US 200) from the month of March to this month of May (2019). The MK160 000 is the profit that I have made so far when I deduct all the investments I have put it in. In March alone I made about MK87 000 (\$US 109) and in the first two weeks of May I made an amount close to K80 000 (\$US 100) but the total was K160 000.

When they SoyaKit came, I was already engaging in another business of selling plastic shoes. But These two businesses are different, the soy milk business is a daily cash enterprise, I make more money because people want milk on daily basis. Shoes on the other hand are only bought based on need. Every morning I make door-to-door deliveries and in the in the evening, I go back to collect payment.



# Ethel Reuben

*SoyKit Entrepreneur*

I am an  
*entrepreneur*

"I produce soy dairy products in my own kitchen using the soybeans farmed on my own land. With the income I have earned from my small business I have been able to make improvements to my home and help support my family."

#HerImpact #EndHunger



## Section 4 – Working with Malnutrition Matters



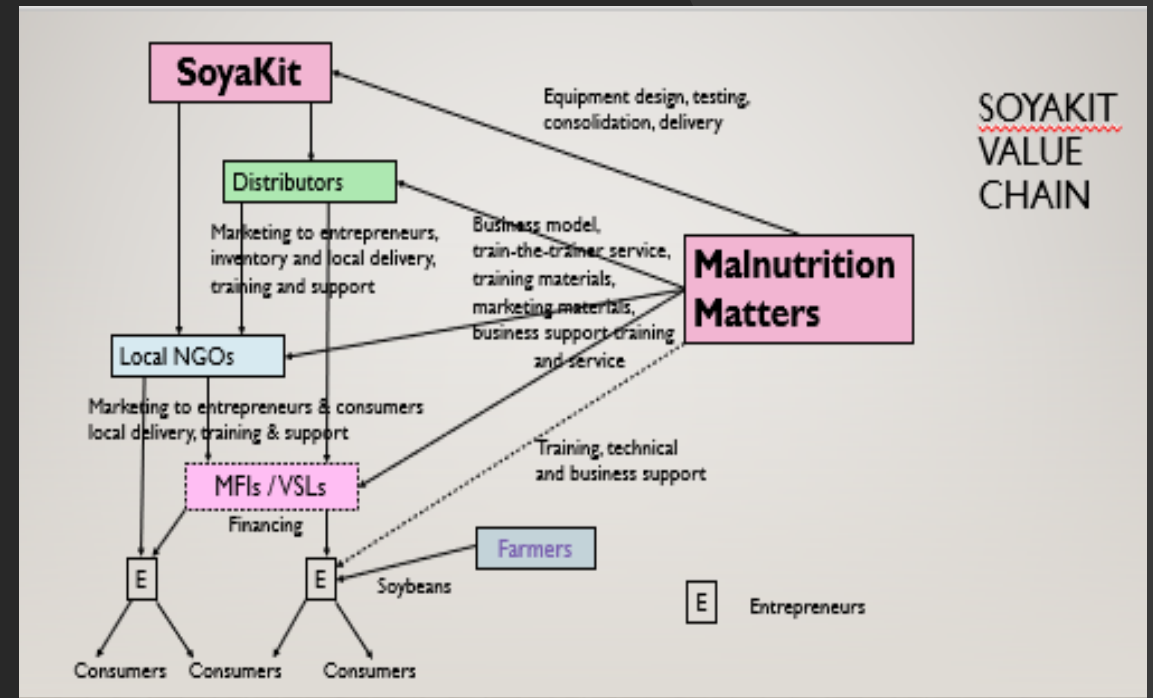
# We help you meet your goals:

- You need a proven vehicle to empower women or youth (SDG 5) ✓
- You need easily learned methods that can produce earnings in the most basic environments (SDG 8 and 10) ✓
- You need a low cost, low-tech way to improve nutrition in under-nourished areas (SDG 2 and 3) ✓
- You want cross-sectoral solutions (SDG 17) ✓
- You want to include micro-enterprises (SDG 8) ✓
- You want solutions that are flexible to seasonal and other duties (SDG 8 and 10) ✓
- You want to demonstrate environmental protection and responsible consumption (SDG 12) ✓
- You want to achieve reductions of greenhouse gasses (SDG 13) ✓
- You want to improve school attendance or school nutrition (SDG 4) ✓



# Malnutrition Matters' business model includes:

- customers and partners that work in various developing countries
- larger agency partners who purchase the SoyaKit equipment and MM's training and monitoring services
- certified contract staff in different regions of Africa and Asia, providing high-quality installation and training services
- local trainers trained by MM's staff who then recruit and train entrepreneurs



# Involve us in your projects:

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- Project design phase:
  - SoyaKits provide a deep impact with relatively simple, scalable, sustainable system
  - our project data can be used to set clear and deliverable project goals
- Project adaptation phase:
  - SoyaKits can be added to existing projects to improve impacts and outcomes





# Pricing:

- in volumes of 400 or more, the SoyaKit can be provided at a landed cost of \$200 or less in most African and Asian countries
- smaller volume of 50 or more SoyaKits will have a higher per unit cost, depending on exact numbers and destination country
- detailed processing, preservation and packaging guide is available





## Section 5 - Background

# The Team:

Our founders are Canadians Hart Jansson and Frank Daller, who have 20 years' experience in implementing small-scale food processing technology with women entrepreneurs in rural Africa and Asia.

- Hart's initial experience small-scale food technologies was as a volunteer project manager. He has spent the last 18 years as a project designer/manager and executive leader with Malnutrition Matters, using the skills from he previous 25-year experience as a founder/executive in the telecom software industry to form the partnerships necessary to implement over 500 installations in 40 countries with a very small core team. Our international team consists of certified trainers who are locally based in the regions where SoyaKits are being implemented.
- Frank has 10 additional years of experience in commercial-scale food processing equipment and marketing, primarily in the soyfoods market and 20 additional years in other private sector marketing.





# Malnutrition Matters from 2000 to 2020

*Innovating for 20 Years*

<b>2020</b>	Lives Impacted	<b>210,000 (projected based on current funding)</b>
<b>2019</b>	In the News	<a href="#">Soybean Innovation Lab Newsletter September 13</a>
	In the News	<a href="#">Soybean Innovation Lab Newsletter "Feed the Future Week"</a>
	Key Milestone	Over 200 SoyaKits installed
	Lives Impacted	170,000
<b>2018</b>	In the News	<a href="#">Winnua</a>
	Key Partnership	Catholic Relief Services (Malawi, DR Congo)
	Recognition Received	<a href="#">Nestle / Ashoka Changemakers Creating Shared Value Prize finalist</a>
	Lives Impacted	140,000

<b>2017</b>	<b>In the News</b>	<a href="#">Soy Dairy Businesses in Ghana Improve Nutrition and Create Jobs</a>
	Key Partnerships	USAID Feed the Future Program Malawi; University of Guelph
	Lives Impacted	125,000
<b>2016</b>	<b>In the News</b>	<a href="#">U of Illinois Soybean Innovation Lab</a>
	Innovation Created	SoyaKit (non-electric) home-kitchen soy milk maker
	Key Partnerships	Mennonite Economic Development Association / IFDC (Ghana)
	New Country Implemented In	Nigeria
	Lives Impacted	110,000
<b>2015</b>	<b>In the News</b>	<a href="#">U of Illinois Soybean Innovation Newsletter April</a>
	<b>In the News</b>	<a href="#">U of Illinois Soybean Innovation Newsletter</a>
	Key Partnership	USDA-funded Soybean Innovation Laboratory
	New Country - Fabricators	Myanmar
	New Countries Implemented In	St. Lucia; Thailand
	Lives Impacted	90,000
<b>2014</b>	<b>In the News</b>	<a href="#">First Steps Canada Newsletter</a>
	Key Partnerships	EU / World Concern (Myanmar); African Development Bank (Ghana); Government of Ghana (Ministry of Trade and Industry , REP III project)
	New Countries Implemented In	Guatemala; Myanmar; USA; Ethiopia
	Lives Impacted	75,000

<b>2013</b>	<b>NEW COUNTRIES IMPLEMENTED IN</b>	<b>GHANA; BRAZIL; CANADA; HONDURAS</b>
	Lives Impacted	<b>65,000</b>
<b>2012</b>	In the News	<a href="#">Myanmar Times</a>
	Innovation Created	SC-30 (all electric) small scale soy milk maker, an 80L / hr system
	New Countries Implemented In	Democratic Republic of Congo; Kenya; Belize; Malawi
	<b>Lives Impacted</b>	<b>60,000</b>
<b>2011</b>	Innovation Created	SolarFlex food dryers (non-electric) : Small Farm model and larger Quad model
	Key Partnership	Humana People-to-People (Malawi, Mozambique)
	New Country - Fabricators	China
	New Country Implemented In	Mozambique
	Key Milestone	Over 200 SoyCows installed
	<b>Lives Impacted</b>	<b>50,000</b>
<b>2010</b>	Innovation Created	PedalPro food grinder, water pump and electrical generator
	Key Partnership	Bill & Melinda Gates Foundation; CGIAR/TSBF in Kenya; USAID Food for Peace OIC International (Liberia , HANDS project 2010 -2 105)
	New Countries Implemented In	South Africa; Uganda; Liberia; Benin
	Recognition Received	<a href="#">Global Alliance for Improved Nutrition Social Entrepreneur</a>
	<b>Lives Impacted</b>	<b>39,000</b>



<b>2008</b>	<b>New Country - Fabricators</b>	<b>Thailand</b>
	New Countries Implemented In	Tanzania; Zimbabwe
	Lives Impacted	25,000
<b>2007</b>	Key Partnerships	World Bank Development Marketplace; WISHH (American Soybean Assoc'n)
	New Countries Implemented In	North Korea; India
	Recognition Received	World Bank Development Marketplace Winner
	Lives Impacted	20,000
<b>2006</b>	New Country Implemented In	Burkina Faso
	Lives Impacted	15,000
<b>2005</b>	Key Partnerships	Child Haven –Donner Canadian Foundation; First Steps Canada, in North Korea
	New Country - Fabricators	India
	New Countries Implemented In	Botswana
	Recognition Received	Accenture Economic Development award from the Tech Museum
	Lives Impacted	12,000

2004	Key Partnerships New Countries Implemented In <b>Lives Impacted</b>	Alpro; Africare Chad, Guinea <b>10,000</b>
2003	Innovation Created <b>Lives Impacted</b>	VitaGoat (non-electric) small scale soy milk maker <b>7,000</b>
2002	<b>Lives Impacted</b>	<b>5,000</b>
2001	<b>Lives Impacted</b>	<b>3,000</b>
2000	Founding New Country - Fabricators <b>Lives Impacted</b>	Malnutrition Matters formed Russia <b>1,000</b>

# Malnutrition Matters

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FOOD TECHNOLOGY SOLUTIONS

We look forward to  
working with you!

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