

IDA Global Development 24 January 2018.



AGENDA

- Nordic Impact Funds
 - who we are and what we want to achieve?
- The opportunity
 - growth and market perspectives
- The solutions
 - trends and challenges
- The cases
 - examples from East Africa
- Discussion

NORDIC IMPACT FUNDS

NORDICIMPACTFUNDS

Creating a positive impact for more than a million lives in East Africa

by leveraging the best of the Nordics - governance, capital, technology, and expertise

and combining it with African presence, deal experience and local network



WHO ARE WE - PARTNERS

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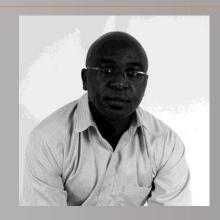
HUMPHREY WATTANGA LISBETH STAUSHOLM ZACHO



FOUNDER/CEO

- 10 years experience in international development from IMF, WB and NGO 10 years financial experience from the Danish central bank

- Experience in health, education and development programs
- Expertise in anticorruption, compliance, risk and financial management MSc Economics, MBA



PARTNER/CIO

- 15 years experience in structuring private equity and impact investment deals in East Africa
- Expert in innovative social finance and
- public private partnerships Structured social impact bond on early childhood education
- Lead advisor in the development of a pioneering government retail bond mobile blatform
- BSc Harvard, MBA Wharton

THIRD PARTNER

PARTNER

- Our third partner is currently working for another organization
- >15 years experience in investment transactions and project finance in developing countries
- +USD 3 billion deal flow all with positive returns
- Long track record from international development banks
- Experience from a pension fund as an investor in private equity funds

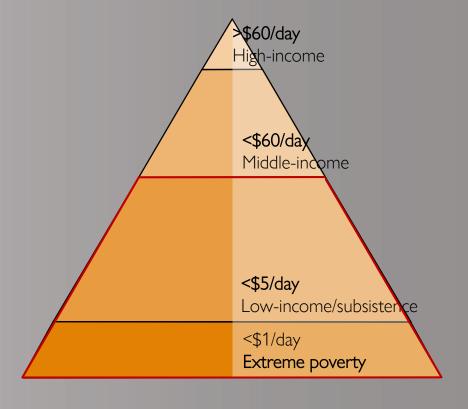
OUR MISSION

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MISSION

To improve the quality of life for low-income people in East Africa by capitalizing enterprises that have a scalable and economically viable model for **IMPACT**

- A dual bottom line of positive societal and financial returns!



THE OPPORTUNITY

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Fastest growing region in the World. Current and projected real GDP growth rates exceeding 5% in the region. EIU projects Kenya to be 7 times its current size in 2050.



Fairly stable political and macro-economic environments



Fast growing work force from a combined population of over 250 million of which majority lives for less than 5\$ a day



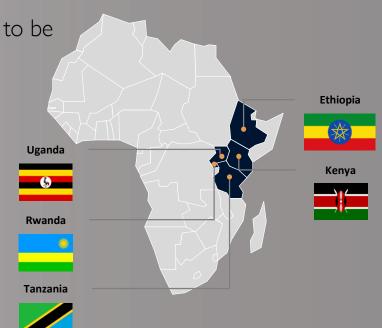
The low income segment comprises the mass market in East Africa



Broad industry diversification and low dependency on commodities



Improving environment for doing business and investment



GROWING WORKFORCE

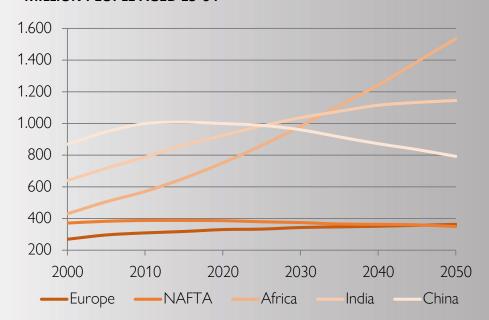
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IN AN AGING WORLD

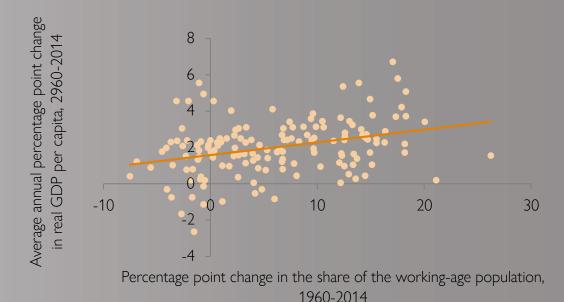
BY 2034, AFRICA'S WORKFORCE WILL BE LARGER THAN THAT OF CHINA AND INDIA AT 1.1 BILLION

WORKING-AGE POPULATION IN LARGEST COUNTRIES AND REGIONS

MILLION PEOPLE AGED 15-64



A RISING WORKING-AGE POPULATION SHARE IS POSITIVELY CORRELATED WITH GDP PER CAPITA GROWTH



Source: McKinsey Global Institute, 2016

LOW CORRELATION

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WITH INTERNATIONAL MARKETS

African markets are weakly correlated with Europe and the US as well as internally amongst other African markets

Monthly correlation 2014-17	USA	Europe	MSCI FM	South Africa	Kenya	Nigeria	Rwanda	Tanzania	Uganda	Zambia
USA	1									
Europe	0.665	1								
MSCI FM	0.538	0.388	1							
South Africa	0.57	0.532	0.686	1						
Kenya ====	0.216	0.275	0.362	0.17	1					
Nigeria	0.165	-0.046	0.46	0.189	0.36	1				
Rwanda	0.005	0.057	0.259	0.057	0.225	0.161	1			
Tanzania	0.055	0.029	0.226	-0.042	0.433	0.009	0.395	1		
Uganda ——	0.074	0.182	0.224	0.126	0.751	0.16	0.252	0.498	1	
Zambia	0.117	0.175	0.129	0.054	0.345	0.141	0.233	0.187	0.322	1

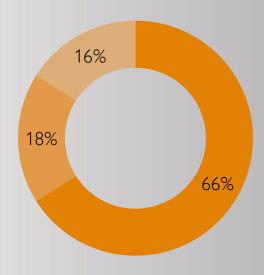
Sources: Investment Frontier (2017)

FINANCIAL RETURN

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EXPECTED RETURN

IMPACT FUNDS (N=209)

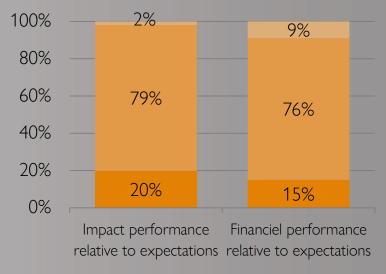


- **66%** Risk-adjusted market rate returns
- **18%** Close to market rate return
- **16%** Close to capital preservation

Gross return expectations for survey funds were on average **16,5** % (on equity) and **91%** are on or above target

PAST PERFORMANCE

IMPACT FUNDS (N=202)



- Outperforming
- In line
- Underperforming



SOLUTIONS

- TRENDS AND CHALLENGES

TRENDS:

- Mobile accessibility, payment, credit, info, communication, USSD
- PAYG Pay-as-you-go
- Solar home solar, off grid, mini grid, on grid ...for light, cooling, water pumps, storage, processing, kiosks etc.
- Data driven multiple information sources, uniting fragmented markets, using data to improve productivity, machine learning algorithms
- Blockchain for cross border payments, land rights, identity, legal contracts...
- Wallets digital wallets for education, health, insurance, savings, inputs etc

CHALLENGES:

- Need for physical structures, networks, distribution, partners
- Many solutions to same problems who is the winner or is the market big enough? Will some of the solutions be taken over by government?
- Many start-ups few mature businesses

ENEZA EDUCATION

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3.2 million KE, TZ, GH

E, TZ, GH & Cl

Growth stage

USD 3 million

Education

A MOBILE EDUCATION PLATFORM

- Eneza Education is a comprehensive virtual tutor, that provides universal access to affordable, quality, lifelong learning through ubiquitous mobile technology. As a social enterprise, Eneza reinvest its resources to educate low income earners at scale, 70% of them living in rural areas
- With over 3.2 million unique users, Eneza Education is undoubtedly Africa's #1 Mobile Learning Platform for 10 25-year-old learners in rural Africa
- Eneza offers a virtual tutor and teacher's assistant a way for both students and teachers to access courses and assessments while interacting with live instructors all through low-cost mobile phones
- Students can access locally-aligned tutorials, tips, and assessments, as well as a leaderboard, Wikipedia text and live teacher chat, an online web app, an offline desktop app, and an Android app
- Individual parents, students or teachers can buy a subscription to courses for a low weekly or monthly fee



BUSINESS MODEL

- Eneza aims to reach the masses through accessible and affordable products, and is thus considered a "base of the pyramid" business model
- All products are extremely low cost for the end user (students, teachers or parents) and range between \$1.20-\$7.20 a month
- Eneza furthermore sells web-based school accounts, SMS data reports and tips for parents and teachers







SUNCULTURE

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customers

Kenya

Growth stage

HEI PING FARMERS GROW MORE WHILE SPENDING LESS

Combining the energy efficiency of solar power with the effectiveness of drip irrigation

- 60% of land in Africa is suitable for farming, but only 6% is currently under irrigation, leaving 2 billion acres without irrigation
- SunCulture's RainMaker solar water pump system is a transformative internet connected system designed to help smallholder farmers in underserved communities improve agricultural productivity and profitability
- The RainMaker provides a long-lasting, low cost solution in low rainfall. The solar panels provide the pumps' power directly without the need for expensive batteries or inverters
- SunCulture offers a price point low enough that a Kenyan farmer can afford it and can save a farmer over \$10,000 per year and using the RainMaker can help boost a farmer's income to 1.2 million Kenyan Shillings (\$11,538) annually compared to less than 300,000 Kenyan Shillings (\$2,884) relying on rainfall
- Currently, SunCulture has had an impact on >1500 customers across East Africa

PRODUCTS

RAINMAKER SYSTEM

of 7000L of water/day

Developing a "pay as you grow"solution

DRIP IRRIGATION

Starting from 50,000 KES* for capacity Starting from 8,900 KES for a standard 1 Acre Kit

> Price dependent on farm layout, design and acreage

MIST IRRIGATION

Starting from 39,000 KES for a standard 1 Acre Kit

Price dependent on farm layout, design and acreage







MERU GREENS

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Kenya







40.000 smallholder farmers

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Agribusiness

EMPOWERING SMALL HOLDER FARMERS - ADDING VALUE LOCALLY

Combining procurement of crops from smallholder farmers with local value addition before exporting ensures gains for local smallholder farmers

- Farmers are organized in small groups for the different target crops then trained by a well tailored and result oriented MGH technical extension team
- Training entails GAP, adoption to farming technologies through smart agriculture on practical demonstration plots, climate shocks mitigation, conservation of flora and fauna, household nutrition, agri-business, post-harvest handling etc.
- Extension method through demonstrations and farm visits disseminate the new farming technologies
- Farmers produce is collected from the farms or from a designated collection centre by MGH staff for value addition and then brought to the European market
- Mentoring of Suppliers who aggregate from Small Scale farmers is also exercised to bring about growth and employment in the rural regions

BUSINESS MODEL

100% SOURCING FROM SMALL HOLDER FARMERS	TAKING VALUE ADDITION TO THE FARMERS	EXPORTING VALUE ADDED PRODUCTS TO EU CONSUMERS
Meru greens sources crops from 40.000 smallholder farmers, with 12.000 active at any given time	Farmers' produce is collected from the farms or from a designated collection center by MGH staff for value addition	700 women are employed at the factory where the products are fabricated and exported to European supermarkets





iProcure

RE-INVENTING DISTRIBUTION FOR RURAL AFRICA

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AN AGRICULTURAL SUPPLY CHAIN PLATFORM

iProcure is the largest agricultural supply chain platform in rural Africa

In addition to complete procurement and last mile distribution services, iProcure provide business intelligence and data-driven stock management across the supply chain



DATA-DRIVEN DISTRIBUTION

Through real-time data, iProcure provides an alternative distribution channel that ensures that the products of smallholder farmers gets all the way to the end consumer



BUSINESS INTELLIGENCE

iProcure provides complete supply chain visibility so that smallholder farmers can see who is buying, when and for how much — in real time



WAREHOUSING

iProcure's storage facilities are strategically located to ensure extensive reach to the rural consumer. The company's predictive algorithms ensure that essential commodities are never in short supply



LAST MILE

iProcure's supply chain platform enables rapid order fulfilment to wherever the customer is

PROBLEM

The market for agricultural inputs in Africa is broken:

- Manufacturers lack visibility and reach to the large but diffuse smallholder market
- Wholesalers and retailers lack the information and working capital to stock what is needed
- Smallholders suffer high prices and sporadic access to the right inputs

SOLUTION

Leveraging a proprietary ERP platform, mobile technology, and its own depots, iProcure operates a demand led, data-driven solution to these problems, connecting input manufacturers directly with smallholder farmers







FarmDrive

UNLOCKING ACCESS TO CREDIT FOR SMALLHOLDER FARMERS

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ALTERNATIVE CREDIT SCORING FOR SMALLHOLDER **FARMERS**

FarmDrive uses mobile phones, alternative data, and machine learning to close the critical data gap that prevents financial institutions from lending to creditworthy smallholder farmers



50 MILLION SMALLHOLDER FARMERS

Nearly 50 million smallholder farmers in Africa are struggling to support their families and communities through agri-business because less than 10% have their economic needs met by the financial sector. Without access to credit, they remain unable to purchase quality inputs, make productive investments, and improve their production and harvests



\$450 BILLION FINANCING GAP

Agriculture employs 65% of Africa's population and makes up 32% of its GDP. However, less than 1% of bank lending in Africa goes to agriculture. In absence of accurate and cost-effective methods for assessing small-scale agricultural lending risk, financial institutions choose not to lend to smallholder farmers, thereby contributing to the \$450 billion global agriculture financing gap



SOLUTION

FarmDrive collects and aggregates alternative datasets from multiple sources, in Kenya and around the world, to build credit scores for smallholder farmers in Africa



The alternative datasets are analysed by a machine learning algorithm to produce relevant credit scores for smallholder farmers, and decisioning tools that enable financial institutions to develop small-scale agriculture loan products



KUKU BORA

KUKU BORA EMPOWERS SMALL SCALE CHICKEN FARMERS

Kuku Bora is transforming farming of indigenous chicken into a viable economic activity

- Social and economic empowerment of over 50,000 small-scale rural households leading to better quality of life. Additional 500 jobs in hatchery, slaughterhouse, boda-boda riders etc.
- Increased productivity and access to market increased survival rate of chicks and guaranteed market
- Enabling climate smart benefits through lower carbon emissions, efficient water use and smaller land foot-print required to raise chicken;
- Strengthening the cluster/cooperative model of rural agricultural production
- Enabling out-grower scheme with mobile payments locking a certain share for re-investments in chicks, feed and vaccine.
- Improving product quality and nutrition for the consumer

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farmers

Kenya

Early/mid stage

Agribusiness





EMPOWER THE FARMER, SATISFY THE CONSUMER!



SANERGY

SANERGY AFFORDABLE HYGEINIC SANITATION

2.5 billion people lack access to hygienic sanitation - second largest cause of disease in the world. Sanergy makes hygienic sanitation affordable and accessible throughout Africa's informal settlements.

- Design and manufacture low-cost, high-quality sanitation facilities
- Network of Fresh Life Operators local residents who purchase and operate the hygienic sanitation facilities
- Collection of waste on a daily basis
- Conversion of the waste at a centralized facility into useful end-products such as organic fertilizer, insect-based animal feed, and renewable energy

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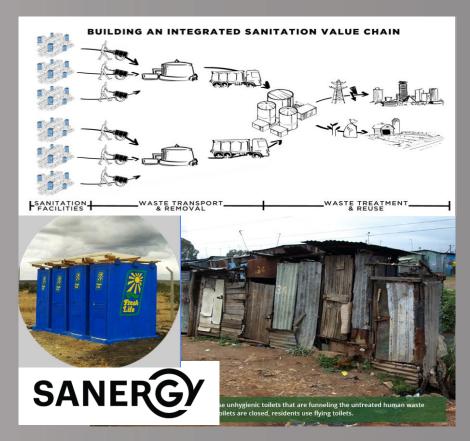
50,000

Kenya

Growth stage

USD 5 million

Water/ sanitation



BRIDGE ACADEMIES

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Affordable education

- Bridge International Academies runs more than 550 kindergartens and schools in Africa at low costs
- Bridge has developed a scalable model based on automated administration, digital learning programs, guides and curriculum for teachers

Bridge International Academies 2015 KCPE Results

- 776 Pupils scored above 300 marks
- 4 pupils scored above 400 marks
- 19 academies with a 100% pass rate
- 76 academies with a 70%+ pass rate
- 8 Counties with an entire country pass rate of 70% or greater
- 25 Academies with a mean score of 300+
- 154 Academies with a mean score of 250+
- Mean score of 264 nationwide
- The first Bridge International Academy opened in Mukuru Kwa Njenga in 2009. Results were 100% pass rate with a mean score of 329











10 million

East Africa

Growth stage

?

Education



Business model

- The model is based on scale in order to finance research, curriculum development, and technology
- On average, parents pay a monthly fee of \$6.60 for tuition, which can be paid on a flexible schedule. Fees vary depending on a student's grade and the location of the school. Parents pay a one-time registration fee
- School fees and staff salaries are paid via mobile money
- Bridge Academies is fixated on driving down costs at every point of its supply chain

