



NUTRITIOUS FOOD FINANCING PROGRAM

Investment Opportunities in
Nutritious Foods Value Chains
in Kenya and Tanzania

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1

Executive Summary

This project is part of a wider initiative at GAIN on Innovative Finance and aims at assessing and sizing the financial needs of enterprises working along food value chains that could produce nutritious foods in Kenya and Tanzania with a particular focus on SMEs (small and medium sized enterprises) and food systems after the farm gate (including everything to get crops to markets and/or processing but not harvesting).¹ The scope of this project focused on assessing the financial needs and investment readiness of these SMEs through structured interviews. The gathering of this information led to the development of capital needs-based archetypes of enterprises working in or alongside these value chains.

First, iGravity narrowed down the potential value chains of interest by prioritizing those focused on by GAIN's Marketplace for Nutritious Foods program. Next, enterprises in or alongside these value chains were divided into two main categories: those mostly focused on traditional agribusiness activities and those that are providing services across different value chains. Finally, the overall value chain was divided into ten main segments, with iGravity identifying approximately 30 company "roles" across the ten segments.

In total, the 52 companies interviewed were categorized into five different archetypes that inform the financing needs of these companies: grants, outcomes-oriented finance, raw materials / inventory finance, productive asset finance, and high growth finance. Each company was interviewed with a structured questionnaire which captured the main aspects of each company's business model, market, financial history, and financing and technical assistance needs.

Analysis of the interview results revealed three major insights:

- Most of the companies interviewed fall under the Global Development Incubator's "Zebra" categorization of African SMEs. "Zebras" are typically defined as medium growth businesses in "bread and butter industries" with profit margins of 5-10%, and between 5-50 employees, are often family-owned businesses, and are unlikely to exit to third parties.²
- Many companies interviewed fall within multiple archetype categories, which is a reflection that most companies are in need of some sort of working capital financing, as well as a longer-term investment in productive assets to grow the company and improve efficiency or increase production.
- Investment needs for these enterprises are relatively small (below USD 1 million) and many enterprises indicated a desire for more flexible terms, such as longer tenors for loans. However, in general, mature agriprocessors that have healthy profits and (with collateral) are able to access financing from local banks but at terms that are not always favorable for their businesses.

In terms of the overall financing gap for companies within or alongside nutritious foods value chains, iGravity roughly calculates (with caveats regarding the lack of official data) that the total financing need for nutritious companies in Kenya is USD 4 billion, with the potential investable pipeline based on iGravity's funnel rate estimated at USD 94 million. Unfortunately, due to the aforementioned caveats, there was not enough data to make similar estimations for the Tanzanian market.

¹ Health systems are not part of this analysis.

² Global Development Indicator. "Impact investing and crowd-funding: Challenges and Opportunities." Presentation. May 2018. and "We hunt unicorns but must also value technology zebras." Financial Times. <https://www.ft.com/content/162c58c6-bb2f-11e4-b95c-00144feab7de>.

In terms of the availability of local financing for these SMEs, Kenya has the deepest financial markets in East Africa, including 42 commercial banks and 11 microfinance institutions, as compared to Tanzania’s 41 commercial banks and 4 deposit-taking microfinance institutions. However, younger Kenyan and Tanzanian SMEs noted many of the barriers to affordable finance that are common to other emerging markets, including prohibitively high interest rates, very high collateral requirements, lengthy application processes, repayment not linked to their cash flows and short durations of loans. Local banks often cite the main reasons for not lending to SMEs (including those in the agricultural sector) as lack of collateral, poor record keeping, and limited business acumen and experience.

Impact investors have grown as an important source of capital for SMEs in Africa, with the Initiative for Smallholder Finance assessing an inventory of 80 impact-oriented agribusiness funds and noting that approximately USD 19 billion in capital is available to execute strategies in agriculture and related sectors. Further, a 2016 FAO study noted 24 funds focused on agriculture in Africa. Impact investing funds particularly focused on these sectors with a local presence in Kenya and Tanzania include Grassroots Business Fund, DOB Equity, Voxtra, Novastar, and SEAF.

In terms of technical assistance, it seems that most forms of assistance cited as needs by the companies are available on the local market, although at price points that may be too high for small and growing businesses. The exceptions to this are technical knowledge on cage fishing and poultry husbandry, which may require international expertise.

Based on all of the above, iGravity’s main findings in relation to the development of a financing facility are:

- **Financing needs to be combined with technical and operational support** to strengthen systems and processes and create value.
- **There is a clear need for a strong localized investment team** to provide ongoing support and advice to portfolio companies.
- **There are potentially opportunities for a trade-off between an “investable strategy”** that delivers sound financial returns focusing on one or two specific archetypes and a selected set of (more mature and solid) enterprises **and a “nutritional outcomes strategy”** that emphasizes social return first and may invest across different archetypes and stages using a variety of instruments.



2 Project Scope

This report reflects iGravity's analysis and includes: (i) a description of proposed archetypes of companies with similar investment needs, (ii) an overview of the interview findings, (iii) a landscaping of the SME and agribusiness financing sector in both countries, (iv) an assessment of technical assistance available, and (v) and final observations and recommendations.

The findings in this report are based on interviews with companies working in and alongside the nutritious foods value chains, investors, technical assistance providers, and other ecosystem stakeholders during two visits to the subregion. For the interviews with companies, iGravity developed a segmented survey tool to systemically capture information to create a comparable data set, identify key constraints of local enterprises to improved performance or competitiveness, and identify patterns of enterprises that share similar constraints or needs.



3

Defining the Value Chain for Nutritious Foods

Noting the very wide scope that could encompass nutritious foods value chains, iGravity first narrowed the scope of the project to crop / input value chains that are prioritized by GAIN. As such, in an effort to make a distinction between traditional agribusiness and nutritious foods value chains, iGravity followed GAIN's Marketplace for Nutritious Foods criteria of examining value chains in which:

- The main crop or input is nutritious in and of itself (such as dark-green or orange vegetables and yellow/orange fruits, animal-source foods, pulses/legumes and nuts)
- Processed foods that contain significant amounts of relevant macronutrients (such as proteins) or micronutrients (such as iron, calcium, folate, vitamin A/D or other vitamins or minerals)
- Products targeting specific populations such as babies and young children or women of child bearing age

Additionally, iGravity attempted to target companies that focused on low income populations or met all national standards for food safety, but did not necessarily exclude promising companies that were not meeting these criteria.

General Company Categorization

Further, for the purposes of creating an initial segmentation between companies operating in primarily B2C or primarily B2B markets, iGravity made an initial distinction between actors in or alongside nutritious foods value chains that are more traditional agroprocessors (i.e. adding value to products ultimately meant for individual consumers) and those that provide value chain services (i.e. B2B services to other companies). While this does not have an impact on which financial needs 'archetype' a particular enterprise falls under, it can have implications on market size, competition, and cost structures that are important to keep in mind when evaluating investment opportunities.

CATEGORY	DESCRIPTION	EXAMPLES
Traditional Agroprocessors	Traditional agroprocessors are companies from all stages of the value chain across all crop / nutrition types (including horticulture, high-protein foods, animal-sourced foods as well as cereals, seeds, and extracted oils) that are likely to need more "traditional", regularized financial products such as asset financing and working capital with varying degrees of collateral.	Crop / animal-specific nutrition enhancing input providers, aggregators, processors, fortifiers, preservers, etc.
Value Chain Service Providers	Value chain service providers provide critical goods and services to different or multiple crop / nutrition value chains and are more likely to need more bespoke or flexible financial products.	Key equipment providers (such as solar powered refrigerators or dehydrators), stockage services, packaging for both perishable and durable goods, logistics, shipping, distribution, marketing, branding, IT support, etc.

Value Chain Stage

Further, iGravity divided the value chain for nutritious food into 10 different segments and identified approximately 30 main activities companies could partake in across the value chain.

It is important to note that many companies are participating in more than one activity within a value chain, with companies that participate in five or more activities (most notably sourcing their raw materials directly from smallholder farmers) being considered a firm with a highly integrated supply chain.



4 Investee Archetypes

As one of the core components of the project, iGravity developed archetypes of businesses to roughly classify enterprises according to their financing needs. **The different archetypes focus on the type of capital required to support business operations which deliver or could potentially deliver nutritional outcomes.** Further, some companies subscribe to more than one archetype (for example, when a company needs working capital and capital to expand at the same time), or move

over time from one archetype to the other (e.g. starting with a grant and then move to high-growth finance once the business model is proven). The archetypes do not necessarily reveal much about the ‘investment-readiness’ and sophistication level of the companies, as that depends on both a detailed due diligence and the strategy of any potential investor.

Based on the field interviews, iGravity defined the investment archetypes as follows:

Archetype 1

Archetype 2

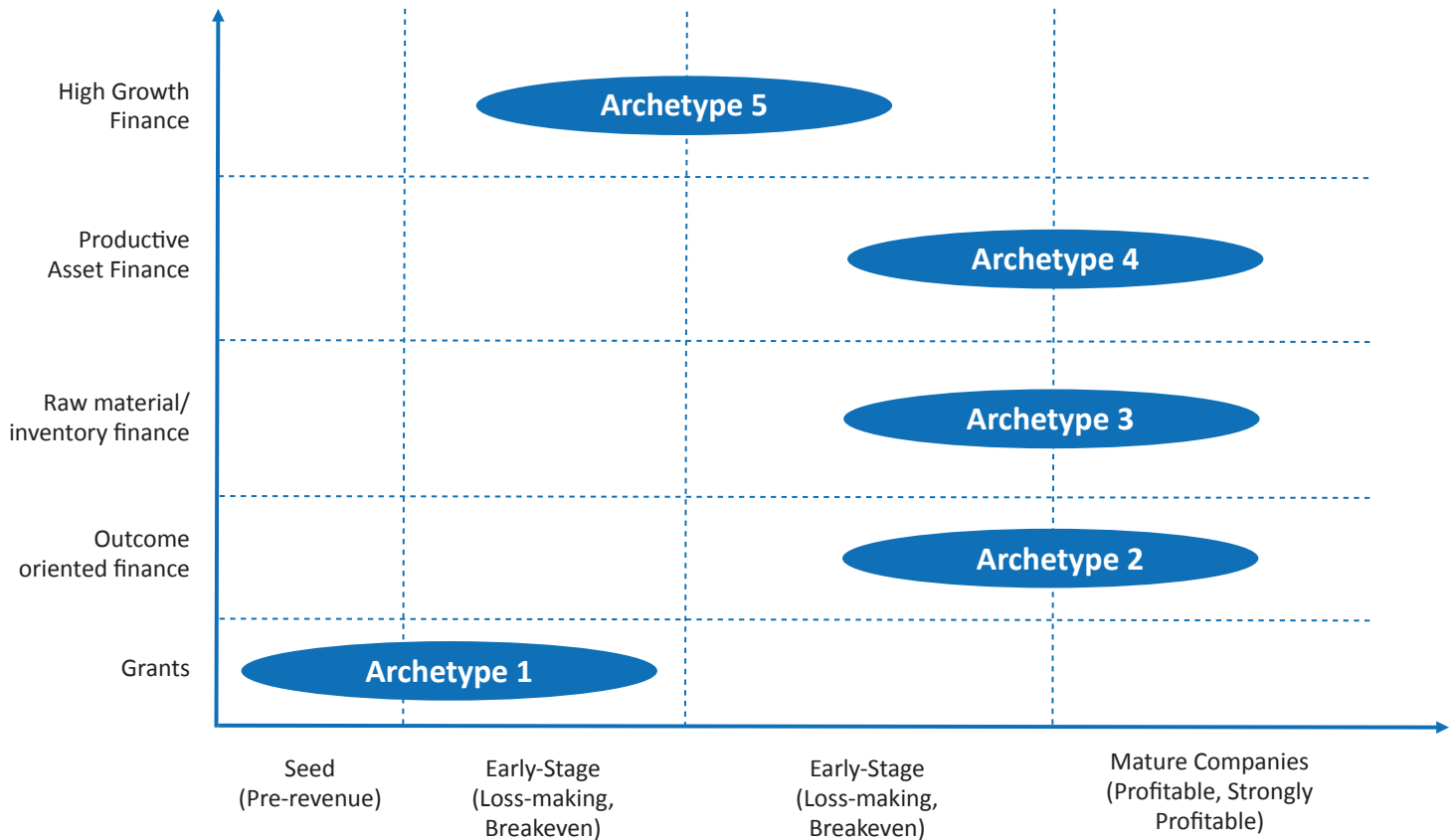
Archetype 3

Archetype 4

Archetype 5

Type of Finance	Uses of Capital	Company Type and Profiles	Stage (Illustrative)
Grants	Product development, market research, innovative collaboration	<p>Start-ups with potentially nutritious products across the value chain</p> <p>Non-nutrition companies that could be collaborative partners to advance specific nutrition-focused or nutrition-supporting goals</p>	<p>Seed stage, pre-revenues, pilot</p> <p>Early-stage but existing product/clients</p> <p>Later stage, high-growth but not yet profitable (willing to pilot a new initiative only through grants)</p> <p>Mature company, established and profitable with large client base/distribution network</p>
Outcomes oriented finance	Project dependent	Companies on the nutritional value chains extremities to develop nutrition-focused or nutrition-supporting products and services	Mature company , established and profitable with large client base/distribution network
Raw materials or inventory finance	Working capital and inventory purchase	Producers, farmer-input providers, cooperatives, processors, wholesalers, or traders working in value chains with seasonal or regular business cycles	<p>Maturing company with no access to bank financing (either not profitable or not sufficient collateral)</p> <p>Mature company with access to bank financing (thought possibly not at adequate terms and conditions)</p>
Productive asset finance	Construction or capital intensive current assets, equipment financing	<p>Processors, fortifiers, and preservers with asset intensive processing protocols or high sanitation requirements</p> <p>Fortifiers than enhance nutritional value of food through micronutrient additives</p> <p>Preservers that reduce food waste via canning, cooling, or drying</p>	<p>Maturing company with no access to bank financing (either not profitable or not sufficient collateral)</p> <p>Mature company with access to bank financing (thought possibly not at adequate terms and conditions)</p>
High growth finance	Technology development or business development	IT platforms or IT-enabled logistics / communications companies that connect different stages of the value chain	<p>Early-stage, but post proof of concept</p> <p>Later-stage, in need of growth capital</p>

Further, per the image below, specific archetypes are correlated with the development stage of different companies, which can provide additional context about where each financing archetype may be best utilized across the company maturity spectrum.



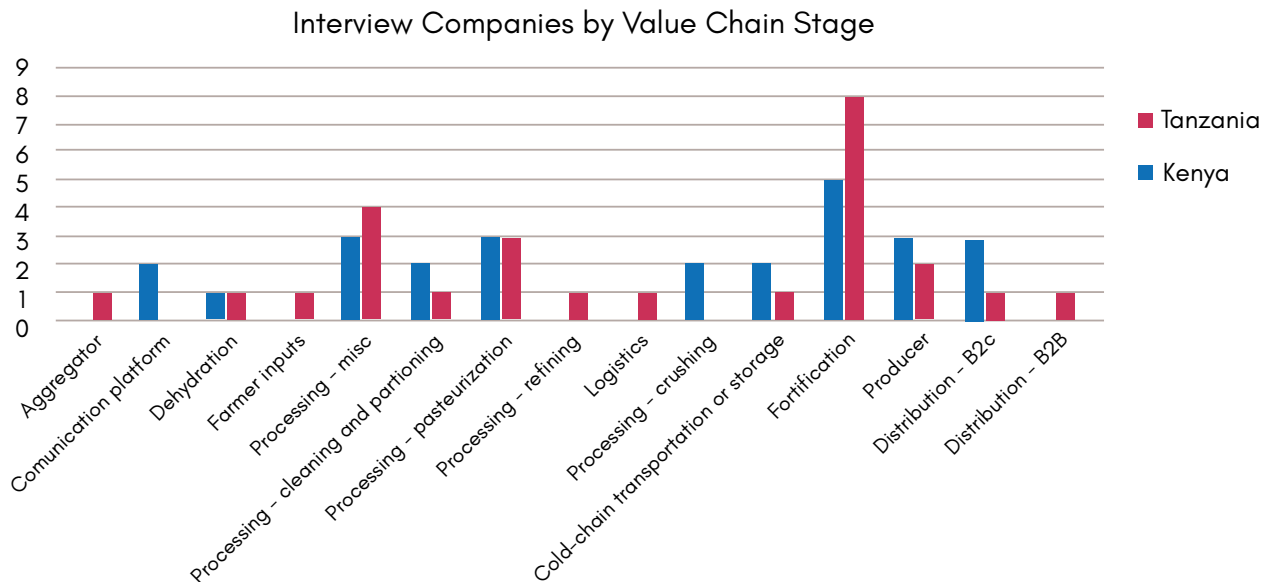
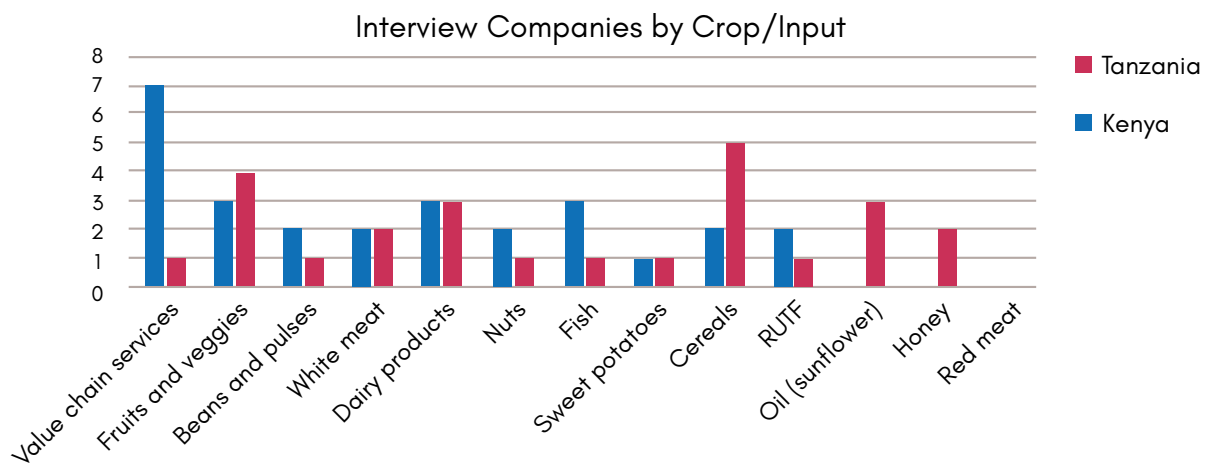
5

Survey Results

Breakdown of Companies Interviewed

5.1

iGravity completed 52 in-person interviews with companies in nutritious foods value chain in Kenya and Tanzania over a three-week period. The charts below display the interviewee companies by crop / input value chain and value chain stage.



Notably, of the 30 potential value chain stages identified by iGravity, only 15 were selected for interviews (most at various stages of 'processing'), which indicates that from our initial rapid assessment: (1) some stages of the value chain may not currently have any significant impact on nutrition (such as retailers, wholesalers, exporters, etc.), and (2) there are potentially significant gaps in the market. For the latter, it was especially difficult to identify companies engaged in cold chain transport or storage, dehydration, or canning (although at least one enterprise at each of these stages was interviewed). It is also notable that no companies were identified that work in the business development or branding / marketing stages, which are often overlooked but very important business services to SMEs in consumer-facing goods industries.

Interview Findings

5.2

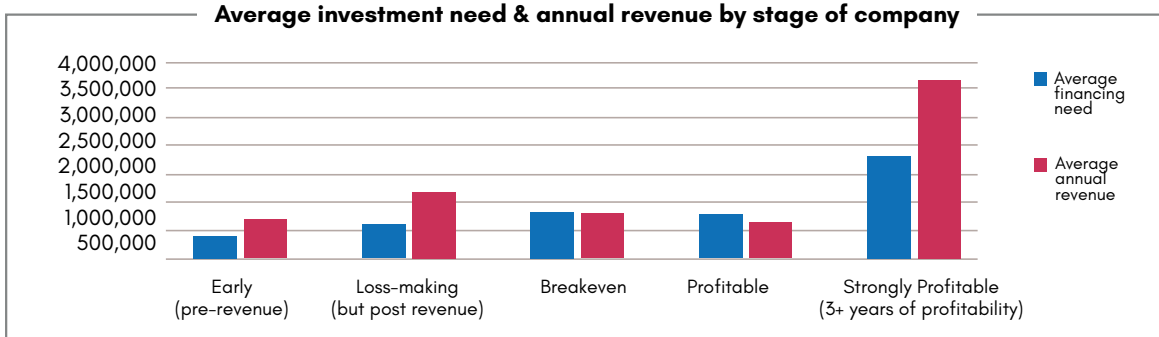
A summary of the main findings from the interviews for both countries are included below.

	KENYA	TANZANIA
Location	For the most part, Kenyan nutritious food value chains are located within or near Nairobi. Of the 26 interviews, 73% were located in the Nairobi region, with others locating in outskirts of Nairobi (Machakos, Thika, etc.), Nakuru, Kisumu, and Homa Bay. iGravity attempted to find a critical mass of companies that fit its criteria outside of Nairobi, which proved difficult with the obvious exception of Lake Victoria for aquaculture and fish farming.	Compared to Kenya, more of the nutritious food companies interviewed in Tanzania were outside of the main urban area, with only 30% residing in the Dar area, with other "hot spots" for companies identified in Dodoma, Arusha, Mwanza, and Tanga.
Company Size	Most companies fit the definition of SME by any measure, with 80% having under 50 employees. Specifically, 30% have less than 10 employees, 46% have 11-50 employees, 15% have 51-100 employees, and >10% had over 101 employees	Less than 1% of the companies had more than 50 employees, with 30% being as small as to have 10 or fewer employees and 57% having less than 50.
Management Team	Mirroring the differences seen in company size, 30% companies had either a single owner or were managed via a partnership, 34% had between 3-5 managers, and the remaining 36% had five or more managers.	57% of companies had either a single owner or were managed via a partnership, which reflects the generally small size of these companies. 34% had between 3-5 managers, and the remaining 7% had five or more managers.
Years in Operation	70% of firms have existed less than 10 years, with 23% having been founded in the last 1-2 years. Of the older firms, 20% are between 10-15 years old, and the remaining 14% are much older, having operated over 20 years.	70% of firms have existed less than 10 years, with only 7.5% having been founded in the last 1-2 years and a median firm age of 7.5 years.
Legal Form	A super majority are registered as limited liability companies.	A super majority are registered as limited liability companies.
CFO in Place	33% companies have CFOs in place, with a noted correlation between company size and the number of years in operation.	30% companies have CFOs in place.
Nutrition Information	50% of companies produce processed products, of which only 15% of them did not have the nutritional information of their products.	73% of Tanzanian companies produce processed products, of which over 50% of them do not have the nutritional information of their products.
Food Safety	All companies that are required to have food safety licenses have them, with the exception of one company that was undergoing renovations to correct problems to ensure their license remains in force.	All companies that are required to have food safety licenses have them, with the exception of one company.
Client Location	The main location of clients is evenly split among companies regarding those serving local, regional, national, and international customers.	The main location of clients are local clients, with the rest fairly evenly split between regional, national, and international clients.

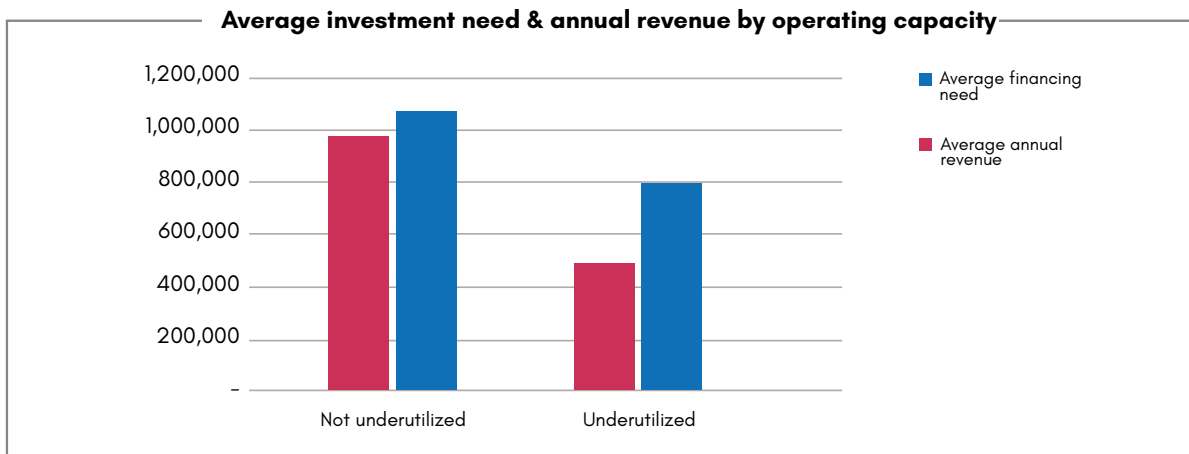
Links to Export Markets	45% of firms have linkages to export markets, with the exception of highly perishable foods such as meat and fish providers which were all focused on the domestic market.	Only 20% of firms have linkages to export markets, all of which were working in the horticulture sector.
Distribution Channels	76% of companies use either trucking or shipping for good delivery, with only one company utilizing agent-based networks. The only companies currently using cold chain trucking are dairies.	73% of companies use either rented or their own trucks for the distribution of goods to their clients, with two companies having outlets in Dar es Salaam.
Source of Initial Capital	87% of companies were initially financed by the entrepreneur or family and friends.	80% of companies were initially financed by the entrepreneur or family and friends.
Investment Track Record	Only 14% companies have not received any sort of external investment (whether that be grants, loans, or equity), two of which were founded in 2017. Of the 22 companies that have received some sort of financing, the investment types were fairly evenly split among investment instruments. Most of these investments were provided by either banks or professional investors and were under USD 250K in volume, with some companies receiving multiple rounds of financing.	23% companies have not received any sort of external investment (whether that be grants, loans, or equity). Most of these investments were provided by either banks or grants with 50% under USD 50K, with some companies receiving multiple rounds of financing.
External Shareholders	Only 26% of companies have external shareholders outside of the owner operators, which is not unusual for SMEs in emerging markets.	Only 23% of companies have external shareholders outside of the operator families.
Company Stage	60% of the companies interviewed are profitable, although they may have not yet reached the 'mature' stage. 14% of companies are breakeven and 23% are loss-making, but post revenue.	73% of the companies interviewed are profitable, although they may have not yet reached the 'mature' stage. 26% of companies are breakeven, loss-making, or pre revenue.
Profit Margins	In terms of the 19 companies working directly in the nutritional foods value chains, slightly less than 50% were profitable, with cited profit ranges between 5-30% and 36% citing profit margins of above 10%.	Of the profitable companies, only 20% had profit margins over 10%, with the majority having profit margins under 5%.
Revenue Growth	84% cited positive or strongly positive (greater than 10%) 3-year revenue growth rates, indicating that many of the enterprises that are not currently profitable could be on track to profitability. Only 15% companies noted stable, fluctuating, or negative 3-year revenue growth rates.	50% cited positive or strongly positive (greater than 10%) 3-year revenue growth rates, with a further 30% having negative or fluctuating growth rates.
Annual Revenue	The current annual revenue of the companies ranges from the very minimal of USD 12k to a very respectable USD 6 million, with 42% of companies have annual revenues of over USD 500k. The overall aggregate revenue of these companies is over USD 23 million.	The current annual revenue of the companies ranges from the very minimal of USD 4k to USD 7 million, with 23% of companies have annual revenues of over USD 500K. The overall aggregate revenue of these companies is over USD 18 million.
Core Assets	These companies have core assets from nil to USD 4 million, with an average of USD 615k and combined estimate core asset value of USD 16 million, comprised mostly of equipment and inventory (including animal stocks).	These companies have core assets from nil to USD 8 million, with an average of USD 815k and combined estimate core asset value of USD 19 million, comprised mostly of equipment and inventory (including animal stocks).

Based on the question responses, iGravity ran a series of correlation analysis to identify if any relationships exist between different variables. Key findings include:

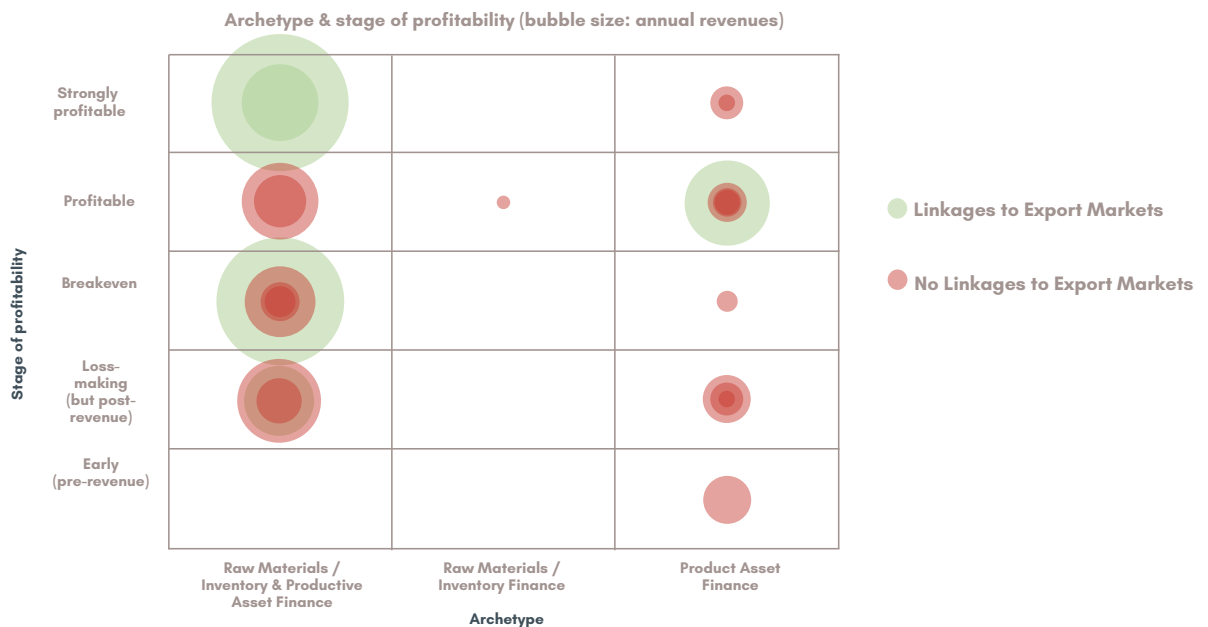
There is a positive correlation between annual revenues and higher financing needs.



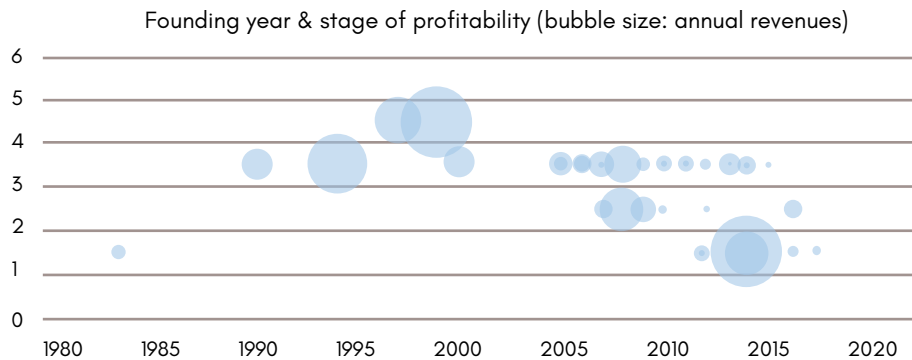
Companies operating at full capacity have higher average annual revenues and investment needs.



Companies with linkages to export markets tend to have higher annual revenues and are more profitable.

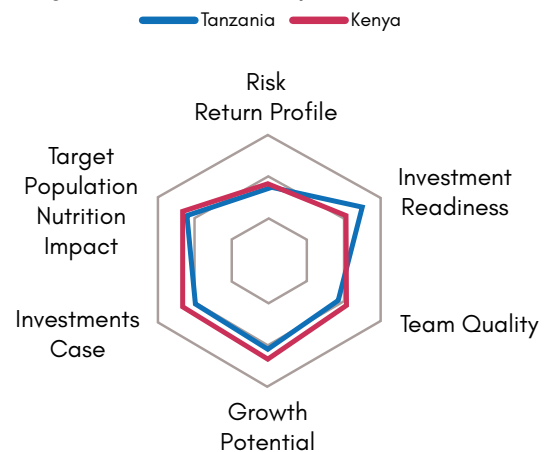


Older companies (with > 18 years of existence) generate higher annual revenues and are mostly profitable.



Finally, iGravity rated all companies interviewed on a variety of criteria, including risk return profile, investment readiness, financing needs, target population nutrition impact, growth potential, team quality, and overall investment case (which takes into account social impact in addition to financial risk factors). The chart below displays the rankings of the interviewed companies for these criteria. The higher “investment readiness” rating for Tanzania comes from the fact that the Kenyan cohort includes more companies from Archetype 2 (Outcomes-oriented), which lowered its overall investment readiness score.

Average Score on iGravity Criteria Per Country



Comparison of Country Interview Findings

While the survey results clearly indicate that there is no such thing as an “average” nutrition company – nor was that the purpose of the interviews – some generalized information of the parameters of the companies can be extrapolated for further investigation. Overall, for both countries, most of the companies interviewed fall under the “Zebra” categorization of African SMEs.³ “Zebras” are typically defined as medium growth businesses in “bread and butter industries” with profit margins of 5-10%, have between 5-50 employees, are often family-owned businesses, and are unlikely to exit to third parties.⁴ Deal sizes are likely on the lower end (below USD 1 million) and potential debt investors will face pressure on their returns as enterprises ask for lower rates and longer tenor.

In terms of variance between Kenyan and Tanzanian companies, the differences between the company size and maturity tend to be reflective of (or are the cause of) similar differences between the economies of the two countries. The Tanzanian companies are on average smaller than Kenyan companies in terms of number of employees, have less formal management structures, lower rates of external (i.e. non-family) shareholders, and lower rates of external investors. Interestingly, while a higher percentage of Tanzanian companies reported being profitable, the overall sample had, on average, lower amounts of annual revenue and lower profit margins. Noting these differences, Tanzania may benefit from a more structured technical assistance program to help these companies improve professionalism within the structure of a family-owned business.

³ Global Development Indicator. “Impact investing and crowd-funding: Challenges and Opportunities.” Presentation. May 2018.

⁴ Global Development Indicator. “Impact investing and crowd-funding: Challenges and Opportunities.” Presentation. May 2018.

Financing Needs

5.3

Given the wide scope of the interviewees for this report (noting few limitations on crop / input type and value chain size), the companies represent a diverse set of financing needs, as noted in the section on the archetypes. For example, an early stage company cited the need of USD 50k in grant financing for research while a late stage company is currently looking for USD 5 million to build the first of four factories to provide RUTFs and nutritious food products for the entire African continent. Despite the diversity of financing needs represented, some useful information regarding the financing needs of the sector can be derived:

- **Grants:** Certain companies in the nutritious foods space may be strong candidates for grant finance (similar to grants provided by the Marketplace for Nutritious Foods) for market research or product development due to the early-stage nature of the company. Additionally, there seem to be opportunities to collaborate with companies outside of the nutrition sector to advance specific goals such as consumer education.
- **Outcomes Oriented Finance:** Over the course of its interviews, iGravity also met with companies working on the extremities of nutritious foods value chains that could still serve as potentially valuable partners for GAIN in terms of meeting its organizational goals. Capital could be provided to these companies through a variety of financial instruments to fund certain nutrition “outcomes”, such as adding higher quality perishable goods to current B2C distribution platforms, prefinancing the purchase of home use premix, or capitalizing a special purpose vehicle to extend credit to businesses for the purchase of cold chain storage equipment.
- **Raw Materials or Inventory Finance:** A near majority of companies in the traditional agroprocessing space are seeking working capital financing for the purchase of raw materials inputs. Figures across countries were fairly uniform, with 42% of companies requesting working capital financing support

across both countries. More importantly than deal size, however, was the importance that these companies placed on the timing and predictability of working capital availability, noting that many are purchasing seasonal inputs and need capital at very specific times of the year. Similar to many working capital portfolios, this capital is needed on a short-term basis (i.e. 12-24 months) in local currency. Interestingly, most agroprocessors reported working way below capacity due to lack of working capital, and have therefore at least in theory significant scope to increase efficiency and profitability.

- **Productive Asset Finance:** Similar to the above, the vast majority of traditional agroprocessors are seeking longer-term, higher volume capital for either the construction / expansion of a factory, purchase of equipment, or purchase of other capital assets. It is noteworthy that many of these companies have already moved forward with the self-financing of productive assets using retained earnings, which have resulted in new factories or new equipment being added very slowly and in a piece-meal fashion which stagnates company growth. Unlike the short tenors of working capital finance, companies are seeking much longer term loans for productive asset finance (i.e. loans with a minimal tenor of five years), with an interest rate between 5-10%, in hard and local currency. Companies also requested favourable terms such as grace periods or cash flow-based repayment schemes. While some companies seemed open to equity for this type of financing, most preferred to use debt instruments if possible.
- **High Growth Finance:** Innovative, technology-based or technology-enabled SMEs often require growth capital in the form of equity investments. While this could be considered “high risk” financing, if successful, it could result in returns of over 20%.

Technical Assistance Needs **5.4**

The self-reported technical assistance needs of companies can generally be divided into four categories: technical knowledge (product and process), marketing and sales, accounting and governance, and producer outreach.

- **Technical Knowledge:** Companies cited the need for additional technical knowledge, both in terms of product development (for example, how to increase yields via cage fish farming, knowledge of the spoilage market, or improving packaging to reduce product spoilage) and process management (notably, factory floor planning, staff training, food safety best practices, and formalization of knowledge in manuals).
- **Marketing and Sales:** Companies indicated the need for marketing and sales support, especially in terms of distribution to low income / BOP markets. Many of the companies noted not having or having
- underdeveloped sales staff, due to spending most capital on either raw materials or productive assets, as well as complete lack of technical expertise in this space.
- **Accounting and Governance:** A minority of companies have a CFO on staff, while others mentioned needing accounting or governance technical assistance.
- **Producer Outreach:** Firms noted the need for technical assistance for small holder supplier support services, mostly focused on farmer training and education on the best methods to produce high quality raw materials for the company.
- **Procurement:** Certain companies - all located in Tanzania - requested specific support in procuring specific materials or equipment.



6

Aggregate Potential Financing Need

Aggregating the potential financing demand for nutritious foods companies is a difficult exercise because of a lack of reliable official data and difficulties defining and validating which firms within agricultural value chains currently deliver or could potentially deliver nutritional outcomes. Much more research is needed in order to accurately calculate the financing needs in this space. iGravity has developed a methodology for estimating demand, which should be taken as a first rough estimate and can certainly be further precised or improved upon based on future available data sets or methodological adjustments.

For Kenya, iGravity’s approach was to take a top-down approach to this analysis, starting with official statistics from the 2016 national survey of the overall SME / MSME population. Next, the percentage of these companies that are in the nutritious foods space was estimated by multiplying the available data for how many companies are in the agriculture, manufacturing and transportation and storage (with an estimated agriprocessing adjustment), and additional miscellaneous sectors. Next, these companies were divided into different categories based on their annual turnovers where the average financing need per cohort (taken from the 2015 Kenya Financial Sector Deepening Study) was applied. This resulted in an estimate for total demand, which was then reduced by iGravity’s “success rate” (which is the rate of “high” investment case versus the preliminary pipeline in the context of the project). Thus, based on this approach, iGravity calculates that the total financing need for nutritious companies in Kenya is USD 4 billion, with the potential investable pipeline based on iGravity’s funnel rate estimated at USD 94 million. Noting that the IFC has estimated a USD 18 billion financing need for SMEs in Kenya, iGravity’s calculation would indicate that 22% of this demand is potentially in the nutritious foods value chain.

Unfortunately for Tanzania, iGravity was unable to follow this same methodology due to limitations of official statistics in terms of the annual turnover and financing needs of SMEs and therefore no estimation of potential demand is available at this time.



7

Landscaping of SME & Agribusiness Financing Sector in Kenya and Tanzania

Kenya's Capital Markets

- **Though small by Western standards, Kenya's capital markets are the deepest and most sophisticated in East Africa**, with 42 commercial banks, four mobile money operators, 11 licensed deposit taking microfinance institutions, 49 insurance companies, the Post Office Savings Bank with a large network of branches around the country, 79 foreign exchange bureaus, three licensed credit reference bureaus, 14 money remittance providers and about 200 deposit-taking licensed savings and credit cooperative organizations with a membership of over three million Kenyans. Financial access in Kenya is already very high, especially when compared to other countries in Africa and Asia, with almost seven in 10 Kenyan adults holding a registered account with a formal financial institution.
- According to a recent World Bank report, credit growth has slowed significantly in Kenya since 2015 reflecting a series of shocks. **Private sector credit growth fell from its peak of about 25% in mid-2014 to 2.4% in January 2018**—its lowest level in over a decade. Furthermore, although many commercial banks and microfinance institutions in Kenya boast of having established agribusiness units or departments, the share of agriculture finance as a percentage of outstanding national credit not only remains below 5% but has shown little signs of improvement.
- **There is also a lot of liquidity in the Kenyan market, i.e. banks have a very large deposit base that could be used for on-lending to SMEs. However, in August 2016, President Kenyatta signed into law the Banking Act (2016), which caps the maximum interest rate banks can charge on loans at 4% above the CBK's (Central Bank of Kenya) benchmark lending rate. It further provides a floor for the deposit rate held in interest earning accounts**

to at least 70% of the CBK benchmark rate. As of April 2018, the CBK benchmark lending rate is at 9.50% and the interest rate cap is at 13.50%. The enactment of the interest rate caps in September 2016 made an already tough lending environment more difficult.

- **Although the interest rate cap was meant to reduce the cost of credit, thereby making credit accessible to a wider range of borrowers, after a year of implementation the decline in credit growth to the private sector has continued with several unintended negative consequences.** First, banks have shifted lending to corporate clients and government at the expense of small and medium sized enterprises and personal household loans. Second, the proportion of new borrowers has fallen by more than half, likely impacting entrepreneurship and new job creation. Third, the operating environment for banks has become more challenging for them to perform their financial intermediation role. Fourth, the interest rate cap has undermined monetary policy implementation with adverse implications for Central Bank's independence and ability to steer the economy.

The State of Small Business in Kenya

- A recent National Economic Survey report by the CBK indicate that SMEs constitute 98% of all business in Kenya, create 30% of the jobs annually as well as contribute 3% of the GDP. The majority of Kenyan SMEs state access to finance as a challenge and self-finance their business using retained earnings for financing fixed assets and for meeting their working capital demands. The lack of financing options is particularly problematic for SMEs in the so-called "missing middle", which refers to entrepreneurs that are too big for microfinance and informal investors, but that are too small or too risky for regular banks and private equity firms.

- As with the definitions, there is also inconsistency with estimates of the SME market size. According to a 2016 report of the Kenya National Bureau of Statistics (KNBS), there are about 7.4 million MSMEs in Kenya, including 1.56 million MSMEs licensed by the county governments, while the unlicensed businesses identified from the households were 5.85 million.

Sources of Finance for Kenyan Enterprises

Sources of financing for SMEs in Kenya include local financial institutions (commercial banks, microfinance institutions, etc.), government-sponsored programs, (impact) investment funds, and DFIs.

- Banks in Kenya had a gross outstanding loan portfolio of Ksh 2.4 trillion (over USD 24 billion) as of December 2017. Most banks in Kenya lend to SMEs in the agricultural space. According to the latest available (2016) Bank Supervision Annual Report published by the CBK, the agriculture sector holds 108'530 loan accounts compared to a total of 7.8 million loan accounts (whereof 7.2 million are personal/household loans) out of a Gross Loan Portfolio of Ksh 2'293 billion (USD 2.2 billion), agriculture makes up Ksh 93 billion (USD 930 million) (about 4%), while Non-Performing Loans in agriculture are at 4%, which is significantly lower than other sectors (e.g. Non-Performing Loans in trade is at 29%, in personal/household loans at 17%).
- Surprisingly enough, there are several guarantees in Kenya made available to local banks to encourage additional lending to the agricultural sector, though some of them are very narrowly focused (only certain crops, only women-led enterprises, etc.) and, in general, utilization rate seems to be low.
- There are at least 7 public sources of funding for Kenyan entrepreneurs and SMEs: the Youth Fund, Uwezo Fund, Women Enterprise Fund, ICDC, Kenya Industrial Estates, the Industrial Development Bank, and Agricultural Finance Corporation.
- There are also a number of specialized local funds providing equity and/or debt capital to SMEs, many of which cover both Kenya and Tanzania and are included in the

section on impact investment. The main Kenya-focused fund identified is the BPI Kenya SME Fund.

Tanzania's Capital Markets

- Tanzania's capital market is generally smaller than other emerging markets, but the government is putting in efforts to boost its growth. The financial sector is dominated by banks with deposits accounting for the majority of banking assets. As of June 2016, the banking sector was composed of 41 full-fledged commercial banks, 3 financial institutions, 12 community banks, 4 deposit taking microfinance banks, 3 financial leasing companies, and 2 private credit reference bureaus. Most of the banks are foreign-owned, while the domestically-owned banks are dominated by formerly state-owned banks that were privatized in the mid-1990s. Around 5 banks hold half of the total banking assets, with the top 10 holding around 70% of the total assets. CRDB is the largest bank by assets and market share, at USD 2.4 billion and 20% as at end 2015. National Microfinance Bank was the second largest, with assets of USD 2 billion and market share of around 17%, followed by NBC, Standard Chartered Tanzania and Stanbic Bank.
- The level of financial development in Tanzania is even lower than might be expected for a country at its current level of income and similar fundamentals, with market development particularly lagging. Access to financial services improved over the years for households but remain particularly challenging for SMEs. While nearly two-thirds of adults now have access to formal financial services, the picture for firms is less positive: **in the 2013 World Bank enterprise survey, almost 44% of firms in Tanzania claim to face difficulties in accessing finance, the highest proportion in the East African Community, with SMEs facing particularly acute challenges.** High collateral requirements negatively impact entrepreneurs with insufficient fixed assets, particularly women. In addition to access constraints, businesses face high loan costs and short tenures which are not suitable for investment purposes. Consequently, only 13% of small formal enterprises have a bank loan. The ratio of credit to private sector

over GDP is 15% for Tanzania, a very low level compared to other emerging economies and less than half of Kenya's 36%.

The State of Small Business in Tanzania

- 95% of the businesses in Tanzania are SMEs, and they represent about 35% of the country's GDP, according to the Tanzania Chamber of Commerce, Industry and Agriculture (TCCIA). In a study conducted in 2015, it was recorded that SME sector is dominated by micro and small enterprises. It is estimated that there are approximately 2.7 million enterprises in the country, out of which about 60% are located in the urban areas. The majority (98%) of these are micro enterprises (employing less than five people). The survival rate of these emerging SMEs is also low; only 60% survive the first five years of operation.
- According to the International Finance Corporation, there is a lending gap of up to USD 2.48 billion annually, with more than 4 million Tanzanian SMEs that represent 40% of employment. Key constraints for lending to SMEs include unfavorable legal and regulatory frameworks, undeveloped infrastructure, poor business development services, limited access to financing, and ineffective and poorly coordinated institutional support framework.⁵ Banks cite a lack of information and poor quality information as the biggest hindrances to SME lending, including the absence of third-party guarantees. A majority of banks also see business regulation as a significant impediment.

Sources of Finance for Tanzanian Enterprises

MSMEs are facing different challenges compared to largescale enterprises especially in accessing credits.

- Financial institutions that render services to MSMEs in Tanzania include Finca Tanzania

- Ltd and PRIDE Tanzania, which have recently graduated from microfinance institution to fully licensed microfinance bank. There are also a number of funds that render services to MSMEs and special groups, e.g. National Enterprises Development Fund, Presidential Trust Fund, SELF Microfinance Fund, Youth Development Fund, Women Development Fund, etc. These are mostly small with limited competencies and capabilities.
- Selected examples of private sector financial services targeted at agriculture or SME-based on primary research include CRBD, NMB, Equity Bank Tanzania, EFTA Equipment Loans, Tanzania National Microfinance Bank, AgriFin, Private Agricultural Sector Support Trust, ECLOF Tanzania, VisionFund Tanzania, and Farm Africa.
- There are at least six public sources of funding for Tanzanian farmers: the Agriculture Development Bank of Tanzania, Southern Agricultural Growth Corridor of Tanzania Program, Lending for African Farming Company, AccessBank, the Africa Enterprise Challenge Fund, and AGRA.
- There are also a number of specialized local funds providing equity and/or debt capital to SMEs, including Cheetah Development, Mkoba Private Equity Fund, Norfund, and the SME Impact Fund.



⁵ The World Bank. "Improving access to finance for SMEs in Tanzania: Learning from Malaysia's experience." Blog, December 2017.

8

Impact Investment as a Capital Source

Agribusiness in emerging markets has seen an increase in private equity and other forms of investment in the last 25 years, but the sector still forms a small fraction of the emerging market private equity industry. Investors have been slow to embrace the agriculture market because of high risks and uncertain returns, with relatively few funds focusing on small rural enterprises and smallholder farmers.⁶

When it comes to impact investments, according to the 2017 Global Impact Investor Survey from the Global Impact Investing Network (GIIN), out of 208 impact funds surveyed, 112 invested in food and agriculture. However, on average, agriculture still does not exceed 6-7% of the impact portfolio.⁷ Approximately 25% of respondents plan to grow their proportional allocations to food and agriculture.

A GIIN landscape study focused on East Africa identified at least 136 impact capital vehicles (excluding DFIs) active in Kenya, managed by

some 95 impact investors. Most impact investors in Kenya work in multiple countries, but at least USD 240 million has been committed specifically to investments in Kenya. Beyond these dedicated funds, there is nearly USD 2.5 billion in capital committed regionally that could be deployed in Kenya.⁸ Despite the volume of impact investing activity in Kenya, it represents a small part of the overall investment picture.

A 2016 FAO study titled Agricultural Investment Funds for Development reports 63 specialized agricultural funds, with a total capital of USD 7.1 billion, of which 24 funds focused on Africa.⁹ The landscape is dominated by larger scale funds pursuing market returns with equity as a common investment tool. Smaller funds have an emphasis on development impact with a mix of equity and debt investments supported by technical assistance grants. Common investment targets are on the higher end of “missing middle” – up to USD 5 million to pursue attractive financial return from established SMEs.

The latest research from the Initiative for Smallholder Finance assessed an inventory of 80 impact-oriented agribusiness funds with approximately USD 19 billion in capital available to execute unique strategies in agriculture and related sectors (e.g., forestry and conservation).¹⁰ While every fund is different, they identified five fund archetypes:

Archetypes	Strategy	Return Expectations	Examples
Wholesale multi-sector or agriculture funds	Moving large blended pools of capital into the sector, often through financial intermediation or large direct investments	Capital preservation or low returns	Green Climate Fund, IFC GAFSP, DFID Impact Fund, Arise, AATIF (KfW)
Niche impact funds	Specific niche such as value chains or climate and conservation, may reach smallholders in tight value chains	Market or slight discount	Althelia, Indoensia TLFF, Innovare Lease Financing Facility, Livelihoods Fund for Family Farming, Coffee Farmer Resilience Fund
Local or small regional funds	Local diversification, leveraging country knowledge and networks, opportunistic funding for ag SMEs or farmers	Market returns, or slight discount	AAF, LAFCO, Yield Uganda, Annona, Caspian
Early stage venture funds	Support and catalyze nascent but high impact enterprises through a combination of investment with capacity building or coaching	High risk, often subsidized	Factor(e), Africa Enterprise Challenge Fund, Accion Venture Lab, Grassroots Business Fund
Frontier plus agriculture funds	Mission focused on smallholders and SMEs, leveraging blended capital to reach underserved segments	Below market or negative	Root Capital, ResponsAbility, Rabobank Foundation and Rural Fund

⁶ Credit Suisse. “Private equity and emerging markets agribusiness: Building value through sustainability.” Report. May 2015.

⁷ GIIN. “Annual impact investor survey 2017.” Report. May 2017.

⁸ GIIN. “The landscape for impact investing in East Africa.” Report. August 2015.

⁹ Food and Agriculture Organization (FAO) of the United Nations. “Agricultural investment funds for development: Comparative analysis and lessons learnt.” Presentation. December 2016.

¹⁰ The Initiative for Smallholder Finance. “The fund manager perspective: moving the needle on inclusive agribusiness investment.” Briefing. May 2017.

There are some specialized impact investment managers that have either dedicated funds on agriculture or are making investments in the space. Example are responsAbility, Root Capital, Acumen, Incofin, LGT Venture Philanthropy, Grassroot Fund, AgDevCo, etc. The below table gives an overview of selected impact fund managers in food and agriculture and adjacent sectors.



Funds that are particularly active in the agriculture sector in Kenya and Tanzania include Grassroots Business Fund, SEAF, Novastar Ventures, Voxtra, and DOB Equity.

9

Nutrition Technical Assistance Providers

iGravity interviewed only a limited selection of technical assistance providers, noting that a comprehensive scoping of technical assistance providers is not a key focus of the project at this time. That said, it should be well noted that access to technical assistance in Kenya and Tanzania is rather limited to urban centers such as Nairobi and Dar es Salaam, so considerations will need to be made in how to make such services more available to enterprises in rural areas.

Technical Knowledge: Generally speaking, most technical knowledge assistance needs of the interviewed companies can be met with local experts, with the notable exceptions of non-native technologies (such as cage fishing, cold chain services and logistics, chicken husbandry, and commercial scale dehydration, and to a certain extent nut and dairy processing techniques). In Kenya, specific local companies providing these services include Streamlined Systems, SGS Kenya, some faculty at Jomo Kenyatta University of Agriculture and Technology, among others. In Tanzania, the preferred partners appear to be Technoserve and Lesotho Holdings. Multiple companies in both countries had already received product or process focused technical assistance from international consultants (including GAIN, of course, as well as PON). Thus, it seems that the main barrier to accessing quality product and process technical knowledge is cost, followed by issues in identifying a qualified provider. Regarding cost, noting that a highly qualified local is just as expensive as an international provider, many of the larger, more established enterprises indicated a willingness to cost share such expertise, if provided with upfront agreement on the costs and in certain cases the availability of pre-financing. When noting their technical assistance needs, others admitted knowing that the experts they need are available locally, just not in their networks.

Marketing and Sales: Despite the adequate number of providers for technical knowledge for product and processes, there seem to be a significantly more limited population of marketing and sales consultants in the

nutritious foods space - especially those with a focus on the lower income / BOP markets - with iGravity failing to identify a single actor operating in this space in either country, revealing a significant market gap.

Accounting and Governance: In terms of accounting, noting the robustness of Kenya's capital markets as cited above, there is certainly no doubt of adequate numbers of accountants and consulting firms that can build internal accounting capacity available to companies in any sector, with the only question of making such services available at a price point that is attainable for the payer. Examples of providers in this space include the Big Four accounting firms, numerous mid-sized accounting firms the Kenya Institute of Business Training which provide more training-focused services, as well as newcomers such as the fintech start up TozzaPlus. This is slightly less true in Tanzania, with a smaller number of players, but reputable international firms including PwC and EY. In terms of providing generalized business support - such as setting appropriate governance and control systems - these are often processes that do not specifically require facilitation from outside groups, but if needed, could be provided by groups that have already been engaged by GAIN, such as East Africa Market Development Associates, or firms such as Open Capital Advisory or Growth Africa that are more focused on providing generalized business advice services in both countries.

Smallholder / Producer Outreach: Direct outreach to smallholder farmers and producers in terms of providing training or crop education is most often taken on by the aid industry (for example, USAID's Kenya Innovation Engine and Kenya Agricultural Value Chain Enterprises or the World Food Program) or in highly integrated supply chains (mostly for export crops) where the smallholders are often organized in some fashion to provide a consistent amount of quality crop / input for a given medium or large-scale customer. As this is significantly out of the scope of this project, no providers fitting this description were interviewed.

10 Main Findings

Most companies in the nutritious foods space are “Zebras” - meaning family-founded and operated, medium growth companies that are unlikely to receive large equity investments or exit to third parties.

With cited profit ranges between 5–30% across all different stages of the value chain and for different crop / inputs, this suggests that perhaps no particular “sweet spot” exists in terms of nutritious foods value chain investing, although opportunities for themed funds (such as a fortification fund) do seem to be available.

Many companies interviewed fall within multiple archetype categories, which is a reflection that most companies are in need of some sort of working capital financing, as well as a longer-term investment in productive assets to grow the company and improve efficiency or increase production.

Overall, inefficiencies in the production or company processes seem to be a common place. It is noteworthy that many of these companies have already moved forward with the self-financing of productive assets using retained earnings, which have resulted in new factories or new equipment being added very slowly and in a piece-meal fashion which can cause a mismatch in equipment processing sizes and stagnate company growth. The 2015 study #ClosingTheGapKenya, Update on Key Challenges for the “Missing Middle” confirms that 68% SMEs in Kenya use retained earnings to finance their businesses.

Certain company types among nutritious food value chains - such as aggregators, storage providers or wholesalers - provide few measurable nutrition improvements.

Certain crop / input types - such as dried fruits and certain nuts - have cost structures that make it very difficult for them to develop nutritious products at a price point that is affordable for BoP markets. Thus, it would not be recommended to include these companies as high targets from a nutrition impact perspective, but these sectors may still want to remain under consideration for the purpose of diversification based on risk mitigation as well as positive impact on the incomes of smallholder farmers that supply raw materials.

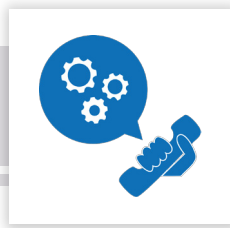
SMEs in Kenya and Tanzania overall face the following challenges:

- **High interest rates and high level of collateral required** by the banks is the primary barrier for access to finance
- **SMEs cite working capital as one of two areas of greatest unmet need**, and most can clearly articulate how the lack of working capital has translated into lost opportunities for growth. For example, firms may get a “big break” in the form of a game-changing purchase order, but not be able to fill the order because of a lack of cash. Or they may miss an opportunity to make a large purchase of inputs or equipment at a favorable price
- **Lack of financial and business management capacity**, which is on its own a constraint to SME success, but can also preclude access to, and effective usage of, finance
- **Banks are also reluctant to lend at longer maturities**

In general, mature agriprocessors that have healthy profits and with collateral are able to access financing from local banks but at terms that are not always favorable for their businesses. They usually complain about high interest rates, low flexibility, high collateral requirements, long-decision making and lower loan amounts that they would effectively need. These are the businesses that would normally be targeted by an “investable” nutrition strategy, where impact investors would commit money with the expectation of both financial and social return (however these will be defined). Such a fund or facility could offer more flexible and attractive terms to these enterprises (lower interest rates, longer tenor, less collateral, mix of financial instruments, etc.).

At the same time, there is a larger number of younger and smaller companies, in some cases profitable in others not, usually without sufficient collateral, that struggle to receive financing from local banks and obviously represent a much riskier segment, but could develop into the mature, profitable companies as described above. These enterprises definitively need strong technical and managerial support next to financing in order to strengthen the management team, as well as introduce more sophisticated systems and processes.

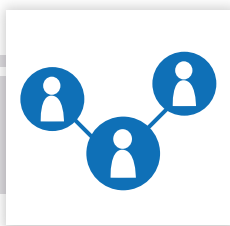
Overall, the final conclusions for GAIN are:



Financing needs to be combined with technical and operational support to strengthen systems and processes and create value. As such, any initiative should either combine an investment fund with a technical assistance facility, or follow the venture capital approach where the manager spends considerable time with portfolio companies. Operational support is needed across a number of areas as noted earlier, including accounting and finance, marketing and sales, technical knowledge and outreach/training smallholder farmers.



Deal sizes are likely on the lower end (below USD 1 million) and potential (debt) investors will face pressure on their returns as enterprises ask for lower rates and longer tenor. In addition, transaction costs will probably be relatively high, as it's usually the case for SME finance. There is probably an opportunity to use more innovative financial instruments like mezzanine finance that incorporate elements of debt and equity and initially put less pressure on the operational cash flows whilst providing a financial upside over time to investors.



There is a clear need for a strong localized team to provide ongoing support and advice to portfolio companies. The team needs to have robust local networks with private sector and donor community and deep expertise on BOP markets, finance and nutrition. This is not something that can be done effectively flying in and out from the outside.



There are potentially opportunities for a trade-off between an "investable strategy" that delivers sound financial returns focusing on one or two specific archetypes and a selected set of (more mature and solid) enterprises **and a "nutritional outcomes strategy"** that emphasizes social return first and may invest across different archetypes and stages using a variety of instruments.

11

Recommendations

The interviews evidence a clear need for financing from most of the enterprises in the nutritional foods value chains. As we have seen, demand for both working capital and productive assets is mostly in local currency and at an interest rate between 5-10% below market. However, it is clear that financing alone is not sufficient and needs to be paired with targeted technical assistance.

in regards to a potential financing facility. The ultimate set-up, strategy and features of such a facility will depend on a number of parameters as highlighted below - with key decisions focused on the source of capital / target investors which have additional impacts on other aspects such as the investment strategy and portfolio focus - that need to be defined in the design phase.

There are a few options for GAIN to consider based on iGravity's field work and assessment

Source of Capital/ Target Investors	Investment Strategy	Portfolio Focus	Investee Stage	Financial Instruments	Target Return
DFIs, bilateral donors, foundations	Nutrition Outcomes Focused (Impact first)	All Archetypes in Specific Value Chains	Proof of Concept	Grants	
			Early Stage	Concessional Debt	Below Market Rate
Institutional impact investors	Investable Nutrition Strategy (Finance first)	Selected Archetypes Across All Value Chains	Later Stage	Debt	Market Rate
			Mature	Mezzanine	
				Equity	

This report has been commissioned by GAIN. The Nutritious Foods Financing Program catalyses private sector finance to help scale up locally produced nutritious foods in Africa and Asia. The program aims to fill gaps in capital and debt markets available to small and medium sized food producing companies, and facilitates the cooperation between governments and companies to build a more enabling environment required to speed up the roll out of new nutritious food products.

The program facilitates multi-stakeholder engagement processes, knowledge of capital markets and financing tools, and broad networks within the investment and finance communities to attract investment capital and design initiatives that will contribute to reducing malnutrition through:

- Alleviating constraints and creating incentives for large and small companies to focus on and invest in nutrition;
- Building on and maintaining the medium- and long-term sustainability and predictability of resource flows to the nutrition sector;
- Creating an opportunity for investors seeking new themes for investment which improve development outcomes.

This public report is a condensed version from the original report.

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