STRENGTHENING THE AGRICULTURAL INNOVATION ECOSYSTEM IN KENYA

Background Paper

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1. What is an innovation ecosystem?

It is now widely recognized that achieving and sustaining any development outcome depends on the ability of multiple and interconnected actors – governments, civil society, the private sector, universities, individual entrepreneurs and others – to work together effectively. Each set of interconnected actors whose collective actions produce a particular development outcome is a local system (or ‘ecosystem’). Improving that development outcome therefore requires an ecosystems approach.¹

Although innovation is a means to improving how development goals are achieved rather than an outcome in itself, the same principles apply. For innovative ideas to be efficiently generated, developed, tested and ultimately scaled for development impact they also require the coordinated, collaborative action and resources of the actors noted above – collectively referred to as the ‘innovation ecosystem’.

The International Development Innovation Alliance (IDIA)² defines an ‘innovation ecosystem’ as comprising:

“enabling policies and regulations, accessibility of finance, informed human capital, supportive markets, energy, transport and communications infrastructure, a culture supportive of innovation and entrepreneurship, and networking assets, which together support productive relationships between different actors and other parts of the ecosystem.”³

Innovation ecosystems can operate at multiple levels (e.g. city, regional, national) and within multiple sectors (e.g. agriculture, health, education). Because of this breadth, it can be difficult to draw meaningful boundaries around who is or isn’t part of an innovation ecosystem. It is therefore helpful to focus first on the sector and problem that the innovation is seeking to address (e.g. “low attendance rates among girls at government-run primary schools in Nairobi”) and then consider the specific actors, resources and contextual factors that the innovation will need to engage, utilize or influence to be impactful. Adopting an ecosystems approach to innovation simply recognizes that:

- An innovation ecosystem is made up of different actors, relationships and resources who all play a role in taking a great idea to transformative impact at scale;

- The effectiveness of each part within the innovation ecosystem is moderated by other parts of the system (e.g. entrepreneurs depend on being able to access financing)

- A change to one part of the innovation ecosystem leads to changes in other parts of the innovation ecosystem (e.g. an increase in internet connectivity will accelerate the design and testing of new technologies)

Some innovation ecosystems will already be well-functioning and will require little support. Others will be problematic due to fragility, inequity, conflict, corruption, weak institutions or political stagnation. Because ecosystems are dynamic, traditionally strong ecosystems can also decline in response to external factors. But even when local systems are weak, contested or perverse, there will likely be actors or locations committed to reform. It is important to identify and find ways to support these nodes of reform, as they are the poles around which strong and sustainable systems can emerge.

² For a list of member agencies and IDIA publications, visit http://insights.globalinnovationexchange.org/
³ April 2017 IDIA Meeting, Toronto
2. How are innovation ecosystems relevant to IDIA?

The process of developing, testing and scaling innovation for sustainable impact cannot be undertaken by any one actor working in isolation. The support of a wide range of actors (including technical, financial and political support from local, national and sometimes international entities) across the value chain is typically required to successfully progress any innovation across the six stages of scaling identified by IDIA, as shown in Figure 1 below. Put simply, to tweak the adage that “it takes a village to raise a child”, it takes an ecosystem to scale an innovation.

Figure 1. Typical Ecosystem Actors & Resources along the IDIA Scaling Pathway

(Note: Positions are indicative relative to stages)

4 The IDIA Scaling Pathway refers to the six stages identified by IDIA members in their 2017 publication ‘Insights on Scaling Innovation’. For more description of these stages and other components within this scaling architecture, visit http://insights.globalinnovationexchange.org/
3. Why focus on agricultural innovation in Kenya?

Agriculture is a major driver of African economies with 70 per cent of the continent’s population relying on the sector for their livelihoods. Africa has 65 per cent of the world’s undeveloped arable land, yet the continent spends some US$ 35 billion on food imports annually thanks to stagnant agricultural productivity. In Kenya, agriculture remains the backbone of the national economy, directly contributing 24% of Kenya’s annual GDP and another 27% indirect contribution. But in 2017, parts of Kenya were reeling from the effects of probably the worst drought in the last 20 years. These droughts typically slow down programmes for adaptation and resilience-building and force a shift towards alleviating hunger and malnutrition-related crises.

With the FAO reporting nearly 3.4 million people as food insecure in Kenya in 2017, the prognosis looks gloomy, with climate change and natural resource depletion set to pose even greater risks in the long term. Rising temperatures and unpredictable rainy seasons also threaten to destroy crop yield gains made in the recent past, and extreme weather events such as flooding, drought and pests are becoming more common. Up to three consecutive years of poor rains have also led to diminished food production and exhausted people’s coping capacities particularly in the North Eastern, Eastern and Coastal areas of Kenya. These factors all make production more difficult and spike food prices, hurting the prospects of reaching SDG 2 on ending hunger. In order to move people out of poverty, ending hunger and reducing inequality, improving agricultural practice is therefore central to achieving sustainable development outcomes.

Since the establishment in 2007 of its Vision 2030 long-term development agenda, which places significant importance on the role of innovation in agricultural transformation, Kenya has been making solid progress towards this goal through the combined contributions of formal institutions and individual entrepreneurs inspired by the success of innovations such as M-Pesa, iCow, Hello Tractor and M-Farm. Innovative approaches to developing better seeds, better storage, more water-efficient crops and technologies that put agricultural data into the hands of farmers to help them move towards ‘climate-smart’ agriculture are now gathering pace and some of the most successful are already scaling into neighboring countries. Although the country is just beginning its innovation journey, other emerging economies can still learn something from Kenya, including the benefits of using deliberate policy interventions; of leadership in government with an appetite for risk taking; of the construction of collaborations and partnerships with the private sector including multinational corporations; of increasing funding for research; and of the development of incubation centers across universities to foster innovation.

However, the agricultural innovation ecosystem in Kenya still faces a number of challenges. While many supportive policies now exist, they are not well coordinated and the relationships between research institutions and industry remain disjointed. There is also a need to review the education system to encourage the establishment of more business-friendly / vocational programs to build innovation-ready human capital across the pipeline from ideation through to sustainable scale.

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6 iCow is a SMS-based agricultural information service. For more, see www.icow.co.ke
7 Hello Tractor is reversing the trend of low mechanization by allowing farmers to hire affordable tractors to work their land, all through their mobile phones. For more, see www.hellotractor.com
8 M-Farm provides farmers with up-to-date market pricing via an app or SMS, and connects farmers directly with buyers, cutting out the middlemen. For more, see www.mfarm.co.ke
4. Learning from actors within the Kenyan ecosystem

The event on 24th May 2018 will focus on a particular innovation ecosystem (in this case agriculture) within a specific country context (Kenya). A wide range of innovation leaders from government, private sector, academia and civil society will convene to share their experiences, lessons and ideas around how they can best work together to use innovation to transform Kenyan agricultural policy and practice. They include:

- The International Centre for Insect Physiology and Ecology (ICIPE)
- The Kenya Climate Innovation Centre (KCIC)
- Endeavor Kenya
- Safi Organics
- Twiga Foods
- One Acre Fund
- Safaricom - Digifarm
- FSD-Kenya
- The Government of Kenya (various ministries)

These actors have been invited because of their innovative focus, product or approach, and because they have been recognized as trailblazers within Kenya and the East African region more broadly. While some have already benefited directly from the support of different IDIA agencies, this was not a determining factor in their selection.

As shown in Figure 2 below, these actors have been further clustered into three sub-groups loosely corresponding to where they fit along the IDIA Scaling Pathway, namely those involved in ‘Product Development, Incubation & Acceleration’ (ICIPE, KCIC and Endeavor Kenya); those who are already navigating different ‘Pathways to Scale’ (Safi Organics, Twiga Foods, One Acre Fund and Safaricom’s Digifarm initiative); and those who are engaged in creating the broader ‘Enabling Environment’ (including FSD-Kenya and representatives from different ministries within the Government of Kenya). Through a day of panel discussions and thematic roundtables at ICIPE on 24th May, these actors will work together to identify areas where the ecosystem is working well, and areas where change is needed for greater impact and smoother interaction.

While selected innovators will be offered the opportunity to share more of their work through exhibition booths, the focus of the May 24th event will not be on the details of any specific product or innovation per se (thereby avoiding a ‘pitch’ or marketing-style ‘show and tell’ approach). Rather, it will focus on contextualizing these actors and their initiatives within the wider agricultural innovation ecosystem to understand the different elements that are enabling or constraining their progress towards transformative impact. As a result, some of the key questions for discussion during the day are likely to include:

- What are the factors in the agricultural ecosystem that have led to the creation / persistence of the problem they are trying to address?
- Which other actors / resources do they depend on to enable their work and what are the factors that constrain or enable these relationships and their access to the resources they need?
- What are the priority gaps or weaknesses in their immediate ecosystem they want to address, and how?
- How does their work support / promote innovation among other ecosystem actors?
- What roles might innovation funders play in helping strengthen the agricultural innovation ecosystem that these actors depend on?
Figure 2. Actors transforming Kenyan agriculture along the IDIA Scaling Pathway

(Note: Positions are indicative relative to stages)
Headquartered in Nairobi, Kenya, icipe has a well-deserved global reputation not just as the only international institution in Africa working primarily on insects and related arthropods, but also as a centre of excellence in this field. For close to 50 years, icipe has maintained a commitment to producing world-class knowledge towards developing and disseminating environmentally friendly, accessible, affordable and easy-to-use solutions for communities most in need.

icipe delivers its goals through four thematic areas: human health, animal health, plant health and environmental health. The synergies between these four themes present a unique framework to tackle the interlinked problems of poverty, poor health, low agricultural productivity and environmental degradation in a comprehensive manner. The four themes approach also provides a platform to build the capacity and leadership of African scientists in a cross-cutting manner while facilitating collaboration with hundreds of researchers and partners across Africa and the world.

Ultimately, icipe's unique approach enables the effective transfer of technologies and strategies to end-users, thereby improving millions of lives in the continent. In addition, icipe receives up to 180 graduate students annually (working with 43 universities) from across Africa and elsewhere who are incorporated into the Centre’s research programmes, thus nurturing generations of highly trained scientists for the continent’s development.

In 2018, Dr Segenet Kelemu, the Director General of icipe, was selected as one of five ‘heroes in the field’ by leading philanthropist, Bill Gates, for using their talents to fight poverty, hunger and disease, while providing opportunities for the next generation.
www.kenyacic.org

The Kenya Climate Innovation Center (KCIC) provides holistic, country-driven support to accelerate the development, deployment and transfer of locally relevant climate and clean energy technologies. The KCIC provides incubation, capacity building services and financing to Kenyan entrepreneurs and new ventures that are developing innovative solutions in energy, water and agribusiness to address climate change challenges. The Kenya CIC is an initiative supported by the World Bank's infoDev and is the first in a global network of CICs being launched by infoDev's Climate Technology Program (CTP). The Kenya CIC is funded by the United Kingdom's UKaid and the Danish Ministry of Foreign Affairs.

Focusing on three areas – agribusiness, renewable energy and water management – the KCIC has the following goals:

- Providing flexible financing mechanisms that support entrepreneurs and new ventures at varying levels of innovation and scale
- Building innovation capacity through the delivery of advice, assistance and training products
- Enabling collaboration and developing policies that support an innovation ecosystem in East Africa
- Identifying and unlocking new opportunities through access to information and market intelligence
- Providing access to facilities that support business development through co-working and networking space and technical development for rapid design, adaptation, prototyping, testing and manufacturing

So far, the KCIC has provided incubation services, grants and seed funding to more than 166 Kenyan social enterprises with the purpose of scaling up innovations and supporting climate mitigation and adaptation. Most recently (in February 2018), the KCIC signed a Memorandum of Understanding with the Kenyan Government Vision 2030 Delivery Secretariat that recognizes the KCIC as the official implementing agency of the initiative ‘Promote climate technologies and innovation’ under the Medium-Term Plan for 2018-2022. The agreement also provides the institutional framework for cooperative activities in agribusiness that includes commercially viable research and development, commercialization of technologies, incubation of start-ups, in addition to creating an enabling environment.
Endeavor is a 20 year-old non-profit organization that is leading the global movement to facilitate long-term economic growth by selecting, mentoring, and accelerating the best high-impact entrepreneurs around the world. Founded in 1997 by Linda Rottenberg and Peter Kellner, Endeavor has helped over 1,400 of these entrepreneurs build more than 800 companies across 27 markets, which generated combined revenues of $8.1 billion in 2015. To date, companies led by Endeavor Entrepreneurs have created more than 600,000 jobs, and often go on to mentor and invest in the next generation of founders, or serve on the boards of Endeavor offices.

Endeavor’s model works in five parts to Launch, Select, Scaleup, Multiply and Reinvest the high-impact entrepreneurship movement worldwide:

- **LAUNCH** - Endeavor’s launch process typically takes 12-18 months. Initial “scoping trips” allow Endeavor to assess a country’s fit with our launch criteria, which look for strong macroeconomic conditions that enable entrepreneurship and markets that have a critical mass of innovative entrepreneurs who need a “jump start” to catalyze an environment favorable to new venture creation and the formation of mature capital markets.

- **SELECT** - Through a rigorous, multi-step selection process (12-18 months), candidates pass a series of local and regional interviews before presenting to panellists from our global business network at International Selection Panels held five to six times each year.

- **SCALEUP** - Once selected, entrepreneurs are provided with customized services from a volunteer network of more than a thousand global and local business leaders who serve as mentors, advisors, connectors, investors, and role models.

- **MULTIPLY** - In each country and city where Endeavor operates, we highlight our entrepreneurs as role models, helping them to transform social norms around entrepreneurship and to inspire future generations to innovate, take risks, and “think big” – the multiplier effect.

- **REINVEST** - In support of Endeavor’s long-term goal of sustainability, Endeavor Entrepreneurs are expected to give the organization an annual service fee and, in the event of an acquisition, are asked to donate 2% of their personal cash out to the organization.

In 2017, Endeavor launched a new office in Kenya as the first-ever Endeavor affiliate in Sub-Saharan Africa to help usher in a new era of growth and economic development driven by high-impact entrepreneurship in the country. Launching with strong support from local business leaders and impact investment firm Omidyar Network, Endeavor Kenya is supporting entrepreneurs and companies in the scale-up phase — enterprises that have passed through the initial start-up phase and who demonstrate the potential for rapid expansion.
Africa’s fertilizer price is 2-4 times more expensive than the world price because most fertilizers are manufactured using capital-intensive processes abroad and then imported. At the same time, by 2040, the world fertilizer price is predicted to rise by 500%. This adds to the cost of food production for farmers, driving them into a vicious cycle of poverty. The use of some fertilizers may even acidify the soil, leading to long-term yield loss.

Safi Organic’s “Safi Sarvi” solution relies on two innovative steps to break farmers’ dependence on imported fertilizers. First, by converting locally available farm waste, farmers can produce their own biochar, a carbon-rich solid material. Secondly, while biochar alone is insufficient as a fertilizer replacement, in conjunction with our unique fortifying recipe, it can replace chemical fertilizers at a cost 40% lower. Notably, our MIT-developed, field-tested biochar converter is designed for extreme affordability: it costs less than $20 to manufacture and can be repaired/replaced completely locally. In this way, Safi Organics enables every farmer to locally produce their own fertilizers under 30 minutes without relying on expensive imported fertilizers.

Samuel Rigu, the founder and CEO of Safi Organics, now buys rice husks, maize combs and other agricultural waste from a local network of rice processors for almost nothing, around $30 per metric ton. Then he slow burns it and adds a mixture of minced limestone and other vegetal ingredients to create a sort of charcoal, which can be used as fertilizer. He sells the fertilizer back to local farmers for $15 per 50-kg (110-pound) bag, netting Rigu up to $200 for each processed ton.

Farmers who use it have seen their farm yields increase up to 30 percent, and their income by up to 50 percent. “The fertilizer has a higher retention of water and nutrients over time versus traditional fertilizers, and also is slightly alkaline, preventing soil acidification,” says Rigu. “Most important, for every acre of land that uses our product, 1.7 tons of CO2 equivalent are sequestered from the atmosphere.” Today, Safi Sarvi, is distributed in sacks of between two and 50 kilogrammes from the company’s factory in Mwea where he has set up the biomass converter units. Safi Organics has also installed nearly 100 converter units for farmers at Sh2,500 ($25) a piece, a cheaper alternative than the capital-intensive large-scale products. These smokeless biomass waste converters, which convert biomass waste into soil conditioner 2,000 times faster than the traditional composting process, are also entirely fabricated from locally available and replaceable parts.

In 2016, Rigu won the the Total Startupper of the Year award across 34 African countries, and placed second in the MIT Food and Agribusiness Innovation Prize.
Twiga is a mobile-based supply platform for Africa’s retail outlets, kiosks, and market stalls and is based on the desire for the goods in African markets to be cheaper, easier for vendors to get, and better quality. Launched in 2014, Twiga Foods uses technology to consolidate the fragmented purchasing power of urban retailers, saving them a trip to the market by delivering to their doorstep better quality and better priced stock and disrupting the current system in which the brokers are the largest beneficiaries rather than the farmers. Twiga’s platform then translates this aggregated purchasing power to farmers across the country, allowing them to access stable markets at better prices, while minimising post-harvest losses through efficient logistics. It is the largest distributor of a number of basic food staples in Kenya, having sold over 55 million bananas and delivering over 4,000 orders a week.

The main reason existing supply chains do not work in Nairobi is because they lack a proper market infrastructure to support the 5 million population in Nairobi. As a result, produce goes bad and there are massive delays at the markets. This means that the cost of the same gets passed to the customer. The cost of a banana in Nairobi which has come from Meru or Taveta is the same as the price of a banana in London, which has come from Guatemala - a fundamental flaw that points to an inefficiency that only technology can solve.

Twiga is essentially building a commodities marketplace to connect farmers with customers using a business to business model. As CEO Grant Brooke explains, “the problem with the supply side (the farmers) is futures. The farmer does not know the value of their produce prior to selling it. For instance, the price of tomatoes in Nairobi was Kshs. 36 a kilo, a month ago. The price of the same is Kshs. 18 owing to oversupply. What Twiga wants to do is use technology to fix this and make it more predictable,” he adds. Farmers send SMS to alert Twiga of their produce while the staff in the field make bookings on the produce when its ready. Twiga then uses this data to create a profile about the value of a certain commodity at a certain point in the future thereby creating an organized farmers market.

“On the market side of things, the vendors face a problem with liquidity which leads to food inflation,” says Grant. “Add other market bottlenecks and the price of food stuff will keep rising. This can be solved by an oversupply, where the vendor will not at any one time lack the necessary foodstuffs to sell to their market," he said. However, the mama mboga does not have enough cash for risk capital and so Twiga solves this by first ensuring a constant supply of the necessary vegetables and secondly offering trade credit to the customers. “Our average client orders their goods three times a week. So we give most of them a 48-hour line of credit until the next delivery. This not only allows them to sell more but helps them deal with liquidity issues,” he says. The startup primarily uses technology to score the vendors before deciding how much credit to give the vendor and this is still at the pilot stage.

Functioning as a mobile-based business-to-business food supply platform, Twiga Foods has already raised a US$ 10.3 million Series A funding round to enable it to increase the number of vendors it serves, diversify its product portfolio and introduce advanced supplier services. The US$10.3 million round was led by Wamda Capital and includes Omidyar Network, DOB Equity, Uqalo, 1776, Blue Haven Initiative, Alpha Mundi, and AHL, while Twiga has also secured US$2 million in grant funding from organisations such as USAID and the GSMA to support bolt-on farmer services, financial inclusion and domestic food safety initiatives.

In 2018, Twiga Foods was included in Fast Company’s list of “The World’s Most Innovative Companies”.
One Acre Fund is a non-profit social enterprise that supplies financing and training to help smallholders grow their way out of hunger and build lasting pathways to prosperity. When farmers improve their harvests, they pull themselves out of poverty. They also start producing surplus food for their neighbors. When farmers prosper, they eradicate poverty and hunger in their communities.

One Acre Fund is growing quickly and we are proud to soon represent Africa’s largest network of smallholder farmers. By 2020, we will serve at least 1 million farm families - with more than 5 million people living in those families. And the farmers we serve will produce enough surplus food to feed another 5 million of their neighbors. This is only the tip of the iceberg. When millions of farmers speak with one voice, we can more effectively pursue collaboration together with government and the private sector to broaden our reach.

Rural poverty is complex, and there is no single solution to the problems farmers face. That’s why One Acre Fund takes a holistic, long-term approach. We offer a complete bundle of services, using a market-based model that helps our organization remain financially sustainable and expand to reach more and more farmers every year. Here’s how our model works:

After first starting in Kenya in 2006, we’ve grown to now serve over 500,000 hardworking smallholder farmers across six countries in Eastern and Southern Africa.

One Acre Fund has a revenue-generating operating model: About 75% of our field expenses are financed through farmer loan repayments, with donor dollars covering the rest. Improving financial sustainability is a key component of our expansion strategy. We want to grow quickly, but we know that outside funding may not always keep pace. Technology is one way we’re boosting our efficiency. Putting Farmers First in every thing we do not only keeps us mission-aligned—it also helps us grow. Some of the principles that have driven our expansion over the past 10 years include:

- **A focus on Impact** - If our clients see reliably better harvests year after year, more people will want to enrol with us. We have well-developed innovation and impact measurement departments to ensure we’re consistently delivering high-quality products and services.
- **A focus on Outreach** – If we’re embedded in communities, our clients trust us, and they recommend us to their neighbors. That’s why our model relies on building strong relationships and person-to-person marketing.
- **A focus on Trust** - Integrity is one of our core values—we do what we say we’re going to do, and we’re committed to staying with communities for the long haul. The trust we’ve earned with clients, local governments, and community leaders is one of our biggest assets.
“Safaricom’s purpose is to transform lives through the use of mobile technology. We have a customer base of more than 26 million subscribers in Kenya. We’re therefore ideally positioned to leverage technologies that will empower Kenyans with opportunities and give them the right tools for economic growth.”

Fred Kiio, Head of Commercial Operations and Segments at Safaricom, is passionate when he talks about his company’s role in Kenya. When we look at the company’s ongoing achievements in the field of technology and innovation (amongst others, being the home of the renowned Mobile Money service – M-PESA), it is easy to see why Safaricom is acknowledged as Kenya’s leading communications service provider and important contributor towards the country’s economic growth by empowering people.

Digifarm – the company’s latest innovation using mobile technology in the field of agriculture – certainly supports this statement. This mobile phone-based solution allows government and service providers in the field of agriculture to interact with and offer agricultural-related services to smallholder farmers in Kenya who, previously, had no access to any support structures.

Digifarm development started in October 2016 and the pilot phase was introduced in three Kenyan counties a mere three months later in January 2017. The aim of the pilot phase was to get the solution ready for national adoption and to bring the ecosystem partners on board:

- Safaricom/Mezzanine for platform provision
- Iprocure Kenya for inputs provision
- Arifu for learning content provision
- Mercy Corps – Kenya (Agrifin) for bringing the smallholder farmers on board and to provide functionality insights.

Within 45 days of launching, 90,000 farmers had registered on DigiFarm, and now there are more than 800,000 farmers on the platform. Meanwhile, Safaricom’s parent company, Vodafone, is looking to copy the Digifarm template in other markets where it operates, including Egypt, Tanzania, and India. Given that there are more than 500 million smallholder farms in the world, there’s plenty of market to go after.
FSD Kenya was established in 2005 by the UK’s Department for International Development to support the development of inclusive financial markets in Kenya. The conceptual underpinning of FSD’s work is the “making markets work for the poor” (M4P) approach, which allows agencies to build on a detailed understanding of market systems and a clear vision of the future to address systemic constraints and bring about large-scale, sustainable change.

FSD’s long-term goal since its inception has been to generate sustainable improvements in the livelihoods of lower-income households through reduced vulnerability to shocks, increased incomes and employment. Our strategy focuses on three core elements through which value is created by financial inclusion: use, cost and trust. There has long been an implicit assumption that the only important constraint is cost. This certainly remains a significant factor but it is unlikely to be sufficient. We believe that realising the promise of inclusion depends on developing financial solutions which address real world problems. In other words, we need financial services which do useful things for people and businesses.

FSD works with a wide range of partners in Kenya to address systemic constraints that hinder financial markets from benefiting poor people. Our stakeholders include policymakers and regulators, notably the National Treasury and Central Bank of Kenya, key industry associations such as the Kenya Bankers’ Association, to small and large innovators in the financial sector. We try to stimulate change in a variety of ways – though policy advice, technical assistance, applied research, co-funding, risk-sharing and very occasionally early stage investment. Ultimately, whatever approach we take is driven less by the particular instruments we have available and more by what is needed to address a particular market development problem or opportunity.

FSD Kenya is committed to becoming a thought leader in understanding the opportunities and constraints in Kenya’s financial sector and working with stakeholders to help define a vision of how it can and should develop. Today, the idea of a fully inclusive financial system, while still some way from being achieved, no longer seems fanciful. The potential for finance to become a more effective tool for stimulating development and poverty reduction is stronger than it has ever been.
Kenya’s Vision 2030 is the national long-term development policy that aims to transform Kenya into a newly industrializing, middle-income country providing a high quality of life to all its citizens by 2030 in a clean and secure environment. Innovation is at the heart of Vision 2030, as is the recovery and growth of the agricultural sector. To spearhead the innovation agenda, a comprehensive policy on Science, Technology, Innovation Policy and Strategy (STIPS) was created in 2009 to mainstream innovation across all sectors, with agriculture as one of the top priorities. Since then, various Ministries have introduced different policies supporting the agricultural innovation ecosystem, including:

**National Youth Agribusiness Strategy**

Agriculture is also recognized as a sector with great capacity to absorb many of the young people in Kenya, who make up 35% of the population but have an unemployment rate of 67%. National policies, especially Kenya Vision 2030, acknowledge the role of agriculture as a key economic driver and advocate for the involvement of youth, but the majority of those engaged in agricultural activities in Kenya are aged between 50 and 65 years, and still predominantly practice traditional and subsistence farming. As a result, in July 2017, the Government launched the National Youth Agribusiness Strategy (2017-2021) to support agricultural entrepreneurship, technology development and processes to enable new agribusiness markets to be accessible to (and driven by) Kenyan youth.

**African Intergovernmental Network on Open Data for Agriculture and Nutrition**

The government of Kenya is championing data revolution as the key to unlock the potential of many sectors, but in agriculture in particular. The Ministry of Agriculture, Livestock and Fisheries and partners have embarked on efforts to leverage innovative approaches geared to solving these unique data and demographic challenges. This included a [Global Open Data for Agriculture and Nutrition (Godan) ministerial conference](https://www.fao.org/godan) in Nairobi in June 2017 to champion data-driven agriculture, and the subsequent creation of an African Intergovernmental Network on Open Data for Agriculture and Nutrition bringing together Congo, Ghana, Kenya, Uganda and Rwanda. Support will be provided by the Food and Agriculture Organisation (FAO) and the Alliance for a Green Revolution (Agra). This network will nurture an inclusive multi-stakeholder ecosystem that includes small-scale farmers, aggregators, processors, and marketers.

**Kenya Innovation & Entrepreneurship Project (KIEP)**

A partnership between the Ministry of Industry, Trade & Cooperatives and The World Bank Group, KIEP is a project originating under Vision 2030 and is designed to increase innovation and productivity in select private sector firms. Over the course of 2017, the Project Implementation Unit held consultations with over 200 private sector stakeholders (in addition to other government departments) to identify ways to strengthen the innovation and entrepreneurship ecosystem. Subject to final World Bank Board Approval in May 2018, the project will then invest in a range of initiatives designed to support incubators, accelerators and hubs; strengthen rapid tech skills training providers; and invest in platforms to better connect academia to industry and industry to start-ups.

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10 Source: Daily Nation (Kenya) ‘Youth Friendly policy to bring ‘the cool’ into agriculture’, 18 July 2017.
6. Enhancing the contribution of Innovation Funders

One of the three overarching goals of IDIA as agreed by its members is that “IDIA supports and catalyzes development innovation among other ecosystem players, especially in-country stakeholders.” This requires IDIA members to strengthen the capacity, connectivity, resourcing and regulatory environment of local actors so that innovation can emerge organically and be efficiently developed, tested and scaled through locally owned processes and resources.

The day after the event at ICIPE, a workshop will be convened for IDIA members move to reflect on what they have learned and discuss the role(s) they are / could / should be playing to strengthen local innovation ecosystems in their countries of interest – whether individually or collaboratively through a platform such as IDIA. Members will review the ecosystem recommendations / areas for change emerging from the previous day and explore the implications for their innovation strategies both at HQ and country levels. Local Kenyan-based teams from IDIA members agencies will also share challenges they experience in being able to support innovation and strengthen ecosystems at the local level, as well as opportunities for greater alignment and shared impact between HQ and country level innovation investment.

Development partners such as IDIA agencies recognize that innovation ecosystems must be designed, driven and owned by local actors, and that the relevance and scope of their potential contribution will change according to the context and needs of different countries. However, some of the potential ways innovation funders might be helpful in catalyzing and strengthening local innovation ecosystems include lighter-touch efforts focused on generating greater profile and interest around innovation ecosystems, to more resource-intensive collaborative testing of different systems-strengthening interventions in a developing country context (see Figure 3 below).

![Figure 3. Potential options for IDIA in strengthening local innovation ecosystems](image-url)
The overarching objective for this final workshop is for IDIA members to **identify opportunities for how they and other innovation funders might work together to advance and strengthen innovation ecosystems.** This does mean committing to all of the potential activities listed in Figure 3 above, but to use their insights from the Kenya meeting to identify where the different strengths, weaknesses, capacities and interests of IDIA members lie with regard to strengthening local innovation ecosystems and acting upon this important IDIA mandate in a more intentional way.

It will also involve challenging members to interrogate the extent to which their agency’s current approaches to supporting innovation are contributing to (or perhaps undermining) the goal of strengthening locally-owned and driven innovation ecosystems. As discussed in their previous meetings, some IDIA members already explicitly take a systems-strengthening approach within their innovation programming, such as Sida, whose ‘triple-helix’ model focuses on building relationships between universities, private sector actors and government at different levels in developing countries to promote the more efficient flow of innovation from idea to product / policy between these actors. The World Bank has also developed a range of tools for assessing the strength of innovation ecosystems in different industries and country contexts. For other IDIA members, while the intentionality to engage at a systems-level may be less explicit in their innovation investments, the latter will still likely be contributing to system-level impacts when viewed within an ecosystems lens.

By convening their May 2018 meeting in Kenya and learning from the experiences and insights of a range of actors within the agricultural innovation ecosystem, innovation funders such as IDIA and others from government, private sector, civil society and academia can find new approaches and partnerships to build and strengthen innovation ecosystems for the benefit of communities all around the world.