

An exploration of Agripreneurship

Scope, Actors and Prospects

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Executive Summary

This research was commissioned as a result of growing interest in the topic of youth-centred Agripreneurship and had the objective to identify the key actors particularly within Academia, Non-Government Organisations and the non-profit sector to help young unemployed, or under-employed, graduates in Africa, or other developing economies, to enter into entrepreneurship in agriculture or agribusiness.

The average age of farmers is increasing globally and encouraging a new generation of farmers and agribusinesses is crucial for the future of food and nutrition security. This is particularly critical in many developing countries where there are significant levels of migration of young people from rural to urban areas. Even where they stay in rural areas young people often do not have interest in agriculture as it is practiced today. This approach is also highly relevant within a wider global strategic framework that includes the Sustainable Development Goals, Agenda 2063, Lesser Developed Countries and the Paris Agreement on Climate Change.

The research model that was adopted for this project was pragmatic and adaptive, utilizing personal contacts and online research during the timeframe of December 2015 – April 2016. The step process that was used included:

- i. Identification of high ranking Universities using the Quacquarelli Symonds (QS) rankings for [Agriculture and Forestry 2015](#), ascertaining the top five Universities in each of North America, South America, Europe, Asia, Oceania and the top four in Africa. In addition, four other tertiary level institutions of interest were contacted
- ii. Identification of Funding Organisations and NGO's engaged in entrepreneurship or agripreneurship activities through online research
- iii. Identifying the key individual to contact in each organization with named email addresses
- iv. Emailing all named contacts with a timed request for assistance, followed by reminder email
- v. Undertaking semi-structured interviews in person, Skype or telephone
- vi. Undertaking online research to place agripreneurship within global context
- vii. Compiling submitted information and results of interviews into report.

The research received a very positive response from the individuals, universities and organisations that were contacted, with an initial response rate of 55%, details below.

Sector	Number Contacted	Number making an Initial Reply	Number of Conversations	Number of Submissions
Universities	33	17 (51%)	7 (21%)	10 (30%)
Non-Profit Sector	21	13 (62%)	10 (47%)	8 (38%)

Twenty-two universities and organisations are described, providing details on areas of interest and modus operandii. This provides a wealth of information and will allow the reader the opportunity to reflect upon their own interests and identify possible future opportunities for partnership. Details, drawn from web based research, are also provided on four case studies as well as a number of other organisations of interest. This report is certainly not exhaustive and does not encompass all the organisations that are active in this area, however it represents the state of our research to date.

It is hoped that this report will encourage future dialogue between organisations that share an area of interest and thus play a meaningful role in catalysing new partnerships to support the sustainable development of rural communities, building the resilience of food chains and creating wealth through the activities of dynamic young Agripreneurs.

1. Introduction

This report has been written in response to a request from Nestlé to support the development of thinking regarding the company's engagement with entrepreneurship in agriculture and agribusiness. This builds upon long engagement in value-chain systems and providing support to small-holder farmers who produce raw commodities that are important to the company's sustained future. Such activities have been located within the company's overarching principle of 'Creating Shared Value' and driven within such themes as Farmer Connect, the Nestlé Cocoa Plan, the Nescafé Plan and within the Dairy Empowerment Programmes (for example in India, Pakistan and East Africa) and the recent 'Rural Development Framework'. These activities are reflected upon within the [Nestlé in Society Report 2015](#).

This particular report, being released for public use and to those organisations involved within the research in particular, is issued in the hope and expectation that the information contained will help to inform and support the development of partnerships across the wide spectrum of organisations that are involved in promoting agripreneurship.

'Planting Seeds for the Future of Food' was a conference hosted by Nestlé R&D in June 2015. This event brought together stakeholders from a range of disciplines within Business, Academia and the Non-Profit Sector to focus on the challenges of feeding a growing population in a world that is experiencing climate change (NASA, 2015ⁱ), rural out-migration (Mendola, 2006ⁱⁱ) and challenges to agricultural productivity (Gornall et al, 2016ⁱⁱⁱ). The conference viewed these challenges as opportunities within three focal areas; Soil Health, Plant Science and the Future of Farming.

The future of farming was considered in the context that "the average age of farmers is increasing globally, a new generation of farmers and agribusinesses is needed for the future. This is particularly critical in many developing countries where there are significant levels of migration of young people from rural to urban areas. Even where they stay in rural areas young people often do not have interest in agriculture as it is practised today (Green et al, 2015^{iv})

Dr. Sanginga (Director) made a presentation on the work of the International Institute of Tropical Agriculture (IITA) which, in particular, demonstrated that through the provision of engagement, training and incubation support to unemployed graduates it is possible to bring in new young entrants into the broad sphere of entrepreneurship in agriculture and agribusiness (IITA, 2015^v). Dr Sanginga's presentation stimulated the work described in this report to explore how to encourage the growth of entrepreneurial activities in agriculture and agribusiness driven by young graduates in developing economies. This initial step is to identify the current state of play within the sector through a scoping exercise.

This report outlines the process and outcomes of the commissioned scoping exercise and provides Nestlé with the opportunity to consider its future engagement with this topic.

2. Mission Brief

The focus of the research was agripreneurship specifically in the context of empowering underemployed university graduates towards careers in market-oriented agriculture and agribusiness. This involves encouraging them to explore options for income generation and to develop business plans and enterprises around the most promising ideas, such as that pioneered by IITA in Nigeria.

Objective

To compile information relating to Agripreneurship with a specific focus on Africa.

Scope

To review examples and case studies of Agripreneurship in the developing world including:

- Definitions of the scope and context of Agripreneurship
- Sources of funding
- Assessment of level of success (or potential criteria that could be used)
- Identifying Universities in the developed world that could provide support in the form of curriculum, teachers etc.
- Identifying international organisations or NGOs active in this area

Expected outcomes from Agripreneurship

Social and economic benefits. Economically viable Agripreneurs provide their families sufficient safe and nutritious food that is affordable, medical care and schooling for their children. Poverty drains resources from families. Agripreneurship helps them to build resources.

Net income. They sell their quality produce to generate income and free cash flow to sustain their family and the growth of their business.

Sustainability. Agripreneurs continue to learn and can embrace sustainable farming methods, in this way becoming players in the cycle of the Agripreneurship system.

3. Introduction to Agripreneurship

This report focuses on the concept of encouraging young graduates to enter into entrepreneurship in the areas of agriculture and agribusiness. Such activities are increasingly being described using the term 'Agripreneur' and 'Agripreneurship', but what do these actually mean?

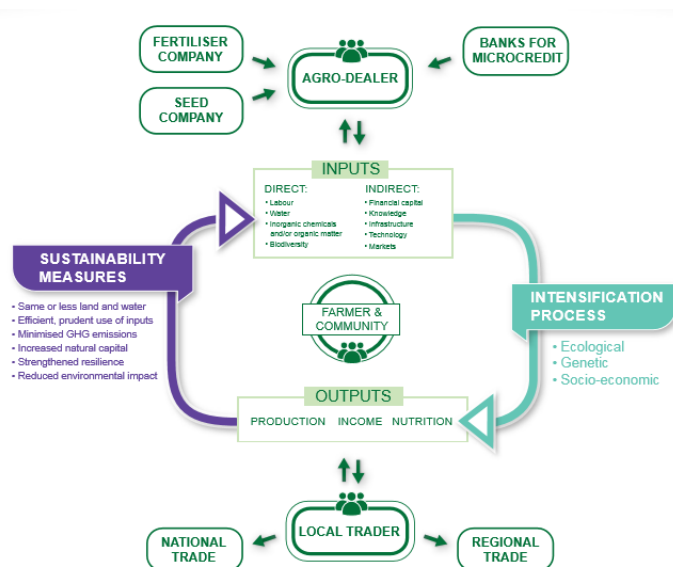
Sudharani defined agripreneurship as “generally sustainable, community oriented, directly marketed agriculture. Sustainable agriculture denotes a holistic, systems oriented approach to farming that focuses on the interrelationships of social, economic and environmental process”. (Uneze 2013^{vi}). While Dabson and Markley (2010^{vii}) define an Agripreneur as “an entrepreneur whose main business is agriculture or agriculture-related”.

We can therefore consider that an Agripreneur works within a food system, similar to that in Figure 1, located in but not necessarily limited to, a rural location. Also that an Agripreneur identifies an opportunity within a market to directly produce food

stuffs, such as vegetables, fruit, dairy, meat, fish and grains utilising innovative and sustainable production methods.

Such an approach provides an “opportunity to ‘leapfrog’ the environmentally unsustainable agriculture systems developed in industrialised countries and move straight to integrated systems that manage natural resources effectively and sustainably.” (BMZ^{viii})

Figure 1 Montpellier Panel 2013



However, the Agripreneur may look beyond production of food stuffs and can consider that “Livelihoods in any setting are immensely complex and have multiple dimensions. Rural livelihoods of course go beyond agriculture and farming to a range of off-farm activities including rural employment (Ian Scoones, 2015^{ix}).

Thus the Agripreneur may also consider the full range of 'agribusiness' opportunities within the extended food system that can include activities as diverse as processing, packaging, logistics, services, cooking and recycling waste (EAT in Sustania, 2015^x).

It is evident that “For young people agriculture is often seen as outdated, unprofitable and hard work. Yet, this is not the case. Agriculture is a dynamic sector, offering a multitude of opportunities for entrepreneurship along the entire agribusiness value chain” (Montpellier Panel, 2014^{xi}). However, one must consider the importance of “Reaching young people and making farming attractive to retain and attract young people into the industry needs more emphasis, especially as demographics and development draw young people to the cities” (Nestlé^{xii}).



Figure 2 Eat in Sustania 2015

There are significant challenges to the development of an Agripreneurial culture in developing economies, these “include a lack of information, skills, security, resources and infrastructure” (BMZ^{xiii}), without which it is difficult to establish new, vibrant and successful commercial enterprises. There is also “the need for more effective policies to promote small-scale agriculture and non-agricultural sectors, and to strengthen the synergies between them (UNCTAD, 2015^{xiv}).

It is important to recognise that within the rural context “there are many actors, of which Nestlé is just one, and in the context of the total global food supply is a small player. Whilst Nestlé can define individual interventions for its supply chains, the majority of the problems and challenges need collaborative action and partnerships. There is also a limit to the roles that a company or companies can play, and so actions by Governments are still crucial” (Nestlé, 2015^{xv}). Added to this is the complexity of relationships with organisations from the NGO sector, including International and local bodies that carry a range of interests including value chain propositions, human rights perspectives and environmental interests. Indeed, ultimately it is a national government that creates “an enabling environment is the sum total of the macroeconomic policies that favour markets and trade; the provision of inputs and related physical infrastructure (such as roads and irrigation) and social infrastructure (education and research etc.) together with the accompanying institutions and regulations” (Conway, 2012^{xvi})

For the young Agripreneur though, this complexity provides opportunity, particularly as over the last decade, this situation has changed dramatically due to economic liberalization, a reduced protection of agricultural markets, and a fast changing, more critical, society. Agricultural companies increasingly have to adapt to the vagaries of the market, changing consumer habits, enhanced environmental regulations, new requirements for product quality, chain management, food safety, sustainability, and so on. These changes have cleared the way for new entrants, innovation, and portfolio entrepreneurship” (Nagalakshmi and Sudhakar 2013^{xvii}). Importantly it can be recognised that the burgeoning global population carries with it opportunity particularly

in that “the growing urban population and middle classes are demanding more nutritious, varied and processed food, generating new jobs and entrepreneurial opportunities for farm households, rural communities and young people through expansion along the African agribusiness value chain” (Montpellier Panel, 2014^{xviii})

While for the private sector the establishment of “a shared value perspective focusing on improving growing techniques and strengthening the local cluster of supporting suppliers and other institutions in order to increase farmers’ efficiency, yields, product quality, and sustainability” (Porter and Kramer, 2011^{xix}), supporting the wider contextual ecosystem and thereby enhancing the resilience and sustainability of rural communities will provide long-term access to quality raw commodities and offers the potential of new markets for end products.

3.1 An example of Agripreneurship in action

The Youth Agripreneurs programme of the International institute for Tropical Agriculture (IITA) in Nigeria addresses this issue in a very innovative way by providing support and training for young graduates. The work of the IITA illustrates that focusing on agricultural concepts as core business plans, and involving the young people themselves, can be a successful strategy to mobilise the young workforce, increase incomes and meet the food requirements of the local population. The Youth Agripreneurs programme aims to educate young graduates with a range of backgrounds and attract them to agriculture as a business opportunity. Beginning with intensive training in agricultural techniques and business, the IITA facilitates partnerships between students and other parties including the private sector, local government and international organisations. The results from this programme have a positive domino effect. The core businesses created by the students not only provide a long-term source of income, but also the agricultural activities that they are implement are an important step forward in raising food and nutrition for the local population. Promising results have been achieved in a short period of time. One example is the [Aflasafe Project](#), which is developing and commercialising a biological control technology for aflatoxin (Green et al, 2015^{xx}).

The IITA ‘Youth Agripreneurs Group (YAG)’ was initially established at IITA in Nigeria, the project has now entered a second phase with a total student body across the two phases of 65 people between the ages of 24 – 33 years. The IITA YAG model has also been expanded to include other countries including:

- *IITA Kalambo Youth Agripreneurs (IKYA, DR Congo)*

This group started in June 2014 with 32 members (35% women) aged between 25 – 33 years. The group has explored horticulture and aquaculture and is developing value-added products from soya bean and cassava for the local market under the IKYA brand.

- *Kibwezi Hortipreneur Youth Group (KHYG, Kenya)*

This group, established in March 2015 is exploring irrigated vegetable farming and aquaculture in the semi-arid conditions of east Kenya. The group includes 12 members (58% women) between 23 – 29 years of age.



Elizabeth Mwikali amid healthy cucumbers in the KHYG greenhouse.

- *Tanzania Youth Agripreneurs (TYA, Tanzania)*

TYA was established in March 2014 initially with 48 members between 18 – 29 years of age, however this has now reduced to 8 people (50% women). The group packages high quality cassava flour under the label 'Mpishi Mkuu' for the local market and is involved in tomato production in irrigated greenhouses.

Figure 3 IITA 2015

- *Uganda Youth Agripreneurs (UYA, Uganda)*

UYA is the newest YAG starting in June 2015. The group has 18 members and is initially focusing on mixed vegetables and sweet potatoes (IITA 2015^{xxi}).

IITA is the lead agency in developing this model further and is working in partnership with a range of partners including Alliance for a Green Revolution in Africa (AGRA) and the Forum for Agricultural Research in Africa (FARA) to develop and implement an African Development Bank supported programme called 'Empowering Novel Agri-Business Led Employment for Youth in African Agriculture (ENABLE Youth).

This programme, which will operate in countries across Africa, aims to 'create decent and gainful employment and income generation for the youth in Africa through agriculture and agribusiness' and will engage 2.16 million young people between the years of 2016 – 2020 at a cost of US\$1.62 – US\$1.89 billion. The programme has two components, firstly the training of young Agripreneurs through incubation units and secondly the establishment of business development and finance structures to support the new enterprises established within the incubation units. A concept note on this programme can be viewed in full in [APPENDIX 1](#).

4. International Strategic Context

There is a plethora of national and international reports, strategies and policies that set the strategic context of agripreneurship amongst young graduates in developing economies. This report will consider the following:

- Transforming our world: the 2030 Agenda for Sustainable Development Goals
- The Least Developed Countries Report 2015: Transforming Rural Economies
- Agenda 2063
- FCCC Conference of the Parties: Adoption of the Paris Agreement 2015

Within all of these it is important to reiterate the specific issue of equality, particularly in relation to the roles of girls and women. “Women account for half the production of food in developing countries. In Sub-Saharan Africa, where women and men customarily farm separate plots, this figure is as high as 75%, with the men concentrating their efforts on cash crops. African women are responsible for 90% of the work involved in processing food. Women’s income also affects the food consumption of the household, since women typically spend a high proportion of their income on food and health care for children. Women are thus a critical link between food production, consumption and future progress on food security: they are farmers, mothers, educators and innovators” (Montpellier Panel, 2013^{xxii}). Therefore, any approach to agripreneurship must integrate a gendered approach that ensures that young women have equal access to opportunities. This must acknowledge that additional support may be needed to enable women to address issues such as cultural or institutional sexism that inhibit their engagement with such programmes and activities.

It can also be argued that “today, the global economy is not organised in a sustainable way. Many of us now realize that an unsustainable way of life threatens food security, our planet and our businesses” (Solidaridad, 2014^{xxiii}).

4.1 Sustainable Development Goals

The Sustainable Development Goals, or ‘Global Goals’ as they are also known, follow on from the Millennium Development Goals (2000 – 2015) and provide a set of 17 goals (Figure 4), encompassing 169 targets. The resolution was adopted by the United Nations on 25 September 2015 stating that “This Agenda is a plan of action for people, planet and prosperity. It also seeks to strengthen universal peace in larger freedom. We recognize that eradicating poverty in all its forms and dimensions, including extreme poverty, is the greatest global challenge and an indispensable requirement for sustainable development” (UN General Assembly 2015^{xxiv}).



Figure 4

The Sustainable Development Goals provide a strong context in which to develop Agripreneurship, identifying areas of synergy between the development of thriving rural economies based upon agricultural and agribusiness activities and one of the most ambitious globally agreed agendas. In particular one can refer to:

- SDG4 [Quality Education](#) – Ensure inclusive and equitable education and promote lifelong learning and opportunities for all
- SDG5 [Gender Equality](#) – Achieve gender equality and empower all women and girls
- SDG8 [Decent Work and Economic Growth](#) – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- SDG10 [Reduced Inequalities](#) – Reduce inequality within and among countries
- SDG15 [Life on Land](#) – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

4.2 The Least Developed Countries Report 2015: Transforming Rural Economies

The Least Developed Countries Report compares and contrasts all the world's countries against indicators of socio-economic development and the [Human Development Index](#). The report and ranking list is compiled by the Committee for Development Policy every three years and the committee may recommend cases of addition to the list, or graduation from LDC status. It should

be noted that since the report was first compiled in 1971 only four countries have ‘graduated’ from the list namely, Botswana (1995), Cape Verde (2007), Maldives (2011) and Samoa (2014).

The following three criteria were used by the Committee in the latest review of the list, in March 2015 (UNCTAD 2015^{xv}):

Forty-eight countries are currently designated by the United Nations as “least developed countries” (LDCs). These are: Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Lao People’s Democratic Republic, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Sudan, Timor-Leste, Togo, Tuvalu, Uganda, United Republic of Tanzania, Vanuatu, Yemen and Zambia.

A per capita income criterion, based on a three-year average estimate of the gross national income (GNI) per capita, with a threshold of \$1,035 for possible cases of addition to the list, and a threshold of \$1,242 for cases of graduation from LDC status.

A human assets criterion, involving a composite index (the Human Assets Index) based on indicators of: (i) nutrition (percentage of undernourished population); (ii) health (child mortality ratio); (iii) school enrolment (gross secondary school enrolment ratio); and (iv) literacy (adult literacy ratio).

Figure 5 Lesser Developed Countries 2015

An economic vulnerability criterion, involving a composite index (the Economic Vulnerability Index) based on indicators of: (i) natural shocks (index of instability of agricultural production; share of victims of natural disasters); (ii) trade-related shocks (index of instability of exports of goods and services); (iii) physical exposure to shocks (share of population living in low-lying areas); (iv) economic exposure to shocks (share of agriculture, forestry and fisheries in the gross domestic product (GDP); index of merchandise export concentration); (v) smallness (population in logarithm); and (vi) remoteness (index of remoteness).

Typically, rural people in Lesser Developed Countries are 50 per cent more likely than their urban counterparts not to have access to sanitation or to attend secondary school, twice as likely not to have access to electricity or to attend primary school, and more than four times as likely not to have access to clean water. Rural diversification is also a key driver and facilitator of productivity growth and upgrading in agriculture. Rising off-farm incomes provide additional financing for agricultural investment and technological upgrading and boost demand growth for agricultural produce; and the development of off-farm activities increases the supply of key inputs and services for agriculture. Improved vertical coordination is critical to achieving a timely flow of productivity enhancing inputs to farmers and of quality agricultural raw materials to agro-industry. And that there are factors that contribute to significant differences between male- and female-managed agricultural plots in terms of yields, harvested areas and crop losses. These

gender-based obstacles compound and interact with other market imperfections in rural areas to diminish women’s productivity and entrepreneurial potential, reducing the dynamic potential of rural economies and slowing their transformation” (UNCTAD, 2015^{xxvi}).

Agripreneurship within these countries therefore provides an opportunity for employment in, and the enrichment of, rural communities which can lead to the development of resilient, stable, sustainable and well-serviced societies. Thereby reducing rural out-migration and maintaining a viable supply-chain of quality raw commodities and the development of markets.

4.3 **Agenda 2063**

Because of the focus of this report on Agripreneurship, particularly relating to developing economies in general and the continent of Africa in particular, it is worth briefly reflecting upon Agenda 2063.

The African Union Summit held in January 2015 adopted the Agenda 2063 Framework as the basis for Africa’s long term socio-economic and integrative transformation. The Framework has seven aspirations which can be seen in below.

<hr/>		<p>These aspirations cover a wide range of ambition and activity. But key amongst them are the development of a “prosperous Africa, based on inclusive Growth and Sustainable Development: ending poverty, inequalities of income and opportunity; job creation, especially addressing youth unemployment; facing up to the challenges of rapid population growth and urbanization. The Framework sees such progress as being driven by people, relying on the potential of African people, especially its women and</p>
<i>The Seven Aspirations</i>		
<i>Aspiration 1: A prosperous Africa based on inclusive growth and sustainable development.</i>		
<i>Aspiration 2: An integrated continent; politically united and based on the ideals of Pan-Africanism and the vision of Africa’s Renaissance.</i>		
<i>Aspiration 3: An Africa of good governance, democracy, respect for human rights, justice and the rule of law.</i>		
<i>Aspiration 4: A peaceful and secure Africa.</i>		
<i>Aspiration 5: An Africa with a strong cultural identity, common heritage, shared values and ethics.</i>		
<i>Aspiration 6: An Africa, whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children.</i>		
<i>Aspiration 7: Africa as a strong, united, resilient and influential global player and partner.</i>	<hr/>	

youth, and caring for children: strengthening the role of Africa’s women through ensuring gender equality and parity in all spheres of life (African Union Commission 2015^{xxvii}).

Building upon the Framework, the African Union Commission has developed the first in a series of 10-year implementation plans for the period 2013 – 2023. Of the agreed actions it is important

to recognise that it is expected that agriculture will be productive, utilising a blend of science, technology, innovation and indigenous knowledge and that 15% of all new business will arise from young people, with a corresponding reduction in youth unemployment by 25% from the 2013 baseline. In particular, it is expected that the use of the hand hoe in agriculture will cease by 2025 and that agriculture will be an attractive proposition for young people (African Union Commission, 2015^{xxviii}).

Agenda 2063 provides a strong and appropriate context for aspirations in agripreneurship. The framework and action plan recognise that agriculture and agribusiness is not an attractive proposition for many young people, but it is a sector that has huge promise for those young men and women who are able to enter into and be supported to succeed, in entrepreneurship within the sector.

4.4 FCCC Conference of the Parties: Adoption of the Paris Agreement 2015

Climate change is one of the greatest threat that currently faces humanity and our planet. Projections have been made that suggest that without action climatic and weather patterns will change bringing more extreme conditions and that sea level rise may lead to the flooding of urban and rural settlements leading to migration. Such changes will challenge the ability of current food systems to provide sufficient nutritious food for the growing population. Climate change threatens the stability of the world, with the potential that its effects will lead to greater conflict, particularly in those areas most affected. For this reason, the 2015 United Nations Climate Change Conference was held in Paris from 30 November to 12 December 2015 and led to the signing of the 'Paris Agreement'. This is a global agreement on the reduction of climate change, reached through the consensus of 196 parties attending the conference. The agreement will become legally binding if joined by a minimum of 55 countries that represent 55% of global greenhouse emissions, between 22 April 2016 and 21 April 2017 and also adopt it within their own legal systems. The agreement states "Recognising that climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries, and their participation in an effective and appropriate international response, with a view to accelerating the reduction of global greenhouse gas emissions" (FCCC 2015^{xxix}).

Agripreneurship offers the potential development of innovative approaches within the food system that can pre-empt or adapt to the possible climatic changes that the world faces. This may include the development of urban farming systems, or the utilisation of climate resilient animal breeds such as that proposed by the Agripreneur [Nikki Pilania](#).

These four key documents share common themes, that the globe faces a series of threats and challenges related to human behaviour including climate change, population growth and an acknowledgement of environmental degradation. They all point to the opportunity that through the engagement of government, business and civil society, actions can be taken which can address or ameliorate these factors. The role of women and young people is emphasised and that the promotion of agripreneurship can play a positive part in environmental protection,

addressing inequality for women and reducing out-migration from rural areas. “Capitalism is an unparalleled vehicle for meeting human needs, improving efficiency, creating jobs, and building wealth. But a narrow conception of capitalism has prevented business from harnessing its full potential to meet society’s broader challenges. The opportunities have been there all along but have been overlooked. Businesses acting as businesses, not as charitable donors, are the most powerful force for addressing the pressing issues we face” (Porter and Kramer, 2011^{xxx}).

5. Key Questions on Agripreneurship

During the scoping exercise the researcher was asked on several occasions to clarify the scope of the exploration into agripreneurship, with specific inquiry regarding definition of the age range of interest and the meaning of ‘graduate’. This then is the purpose of this section, to provide clear guidance regarding the possible age range and definition of ‘graduate’ when discussing agripreneurship.

5.1 What is a ‘young person’?

There are many definitions of the age range of ‘youth’, indeed within a single country several definitions may be utilised by different arms of government including education and health and many of these definitions make no distinction between commonly used terms such as ‘child’, a ‘youth’, ‘young person’ or ‘young adult’. However, “The United Nations, for statistical purposes, defines ‘youth’, as those persons between the ages of 15 and 24 years, without prejudice to other definitions by Member States” (UNDESA^{xxxi}).

At the same time the UN recognises that different institutions and organisations, even within the UN family have alternate definitions as can be seen in Figure 6.

Entity/Instrument/ Organization	Age	Reference
UN Secretariat/UNESCO/ILO	Youth: 15-24	UN Instruments, Statistics
UN Habitat (Youth Fund)	Youth 15-32	Agenda 21 ⁷
UNICEF/WHO/UNFPA	Adolescent: 10-19, Young People: 10-24, Youth: 15-24	UNFPA ⁸
UNICEF /The Convention on Rights of the Child	Child until 18	UNICEF ⁹
The African Youth Charter	Youth: 15-35	African Union, 2006 ¹⁰

Figure 6 UNDESA

In conclusion, for the purpose of this report **the age range of a young person will be defined as being between 15 – 35 years**, following that of the African Youth Charter.

5.2 What is a 'graduate'?

The Institute of Statistics at UNESCO has developed a recognised framework on education which reflects the different education systems globally, providing the opportunity to compare and contrast different educational systems. This framework is called the International Standard Classification of Education (ISCED) 2011^{xxxii}) and it covers education from Early Childhood to Doctoral levels as follows:

- ISCED LEVEL 3 UPPER SECONDARY EDUCATION - Approx. 14 – 18 years Includes General and Vocational Education
- ISCED LEVEL 4 POST-SECONDARY NON-TERTIARY EDUCATION - typically designed to provide individuals who completed ISCED level 3 with non-tertiary qualifications required for progression to tertiary education or for employment when their ISCED level 3 qualification does not grant such access
- ISCED LEVEL 5 SHORT-CYCLE TERTIARY EDUCATION - designed to provide participants with professional knowledge, skills and competencies. Typically, they are practically based, occupationally-specific and prepare students to enter the labour market, minimum duration of two years and is typically but not always shorter than three years
- ISCED LEVEL 6 BACHELOR'S OR EQUIVALENT LEVEL - First degree programmes at this level typically have a duration of three to four years of full-time study at the tertiary level, often designed to provide participants with intermediate academic and/or professional knowledge, skills and competencies
- ISCED LEVEL 7 MASTER'S OR EQUIVALENT LEVEL - are often designed to provide participants with advanced academic and/or professional knowledge, skills and competencies).

The scoping exercise later describes a high level of activity with school students and those of school age who are out of school and those who may have completed ISCED Level 3. There appears to be limited activity, other than IITA's Youth Agripreneur Group that focuses on the unemployed or under-employed graduate sector. Thus, we consider the following definition: **a 'graduate' is a person who has successfully completed a course at ISCED Level 6 or above.**

5.3 A gendered approach?

As has been discussed, there are two groups that have been identified who are key players in the re-awakening of successful and resilient rural communities in developing economies, namely young people in general and young women in particular.

Africa is a continent of young people with those under 30 years of age making up 70% of the population. These young people offer hope for the future and are advocating for change to enable them to live better, more prosperous lives. This means that empowering youth is essential for sustainable economic growth and the sustainable management of the earth's resources (Ban Ki-moon, 2011^{xxxiii}).

"The achievement of full human potential and of sustainable development is not possible if one half of humanity continues to be denied its full human rights and opportunities. Women and girls must enjoy equal access to quality education, economic resources and political participation as well as equal opportunities with men and boys for employment, leadership and decision-making at all levels" (UN General Assembly, 2015).

There are many approaches that engage with children and young people to support their personal, social and educational development and it is not the purpose of this paper to undertake a review of the full range of educational pedagogies and paradigms that are available. But one can reflect that education and training opportunities for children and young people occur in either a formal setting such as schools and universities or that they can be provided within community settings utilising informal educational methodologies.

It is pertinent to specifically address how best to engage young women in light of gender based inequalities and the crucial need to adopt a gendered approach within agripreneurship.

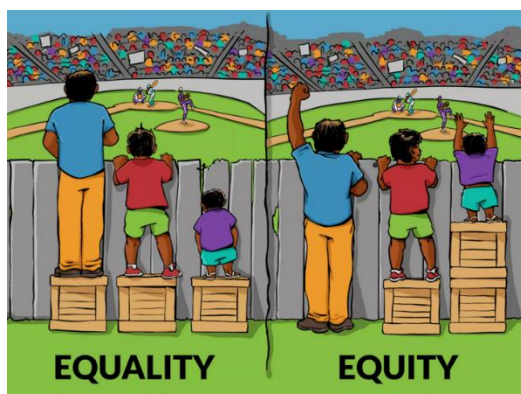


Figure 7 Interaction Institute for Social Change

In many ways the most straightforward approach to demonstrate equality is to set membership targets of any programme at 50% men and 50% women.

However, this simplistic approach does not necessarily recognise that in communities and settings in which sexism is embedded within institutions, communities, politics and law, it is much harder for young women, compared to young men of the same age, to be able to access opportunities that have been made available to their gender.

Any programmes therefore must address issues that block young women's participation e.g. low personal self-confidence, lack of engagement within the public sphere and being expected to conform with stereotypical roles, while engaging with men to create an environment conducive to equal opportunity. This should recognise that the principle of equity, wherein some people, including young women, may need more support than others to enable them to engage in an equal way, as Figure 7 clearly demonstrates, must be enshrined within any system of agripreneurial opportunity.

In conclusion, for the purpose of this paper, it will be considered that a graduate is an individual who has completed ISCED Level 6 or above and is a person between the ages of 15 and 35 years and that any agripreneurship programme should adopt a gendered approach.

6. Methodology

The research model that was adopted for this project was pragmatic and adaptive, utilizing personal contacts and online research, with the process being completed within the agreed time-frame of 18 December 2015 – April 2016. Thus it proved to be ‘fit for purpose’ (Denscombe 1998^{xxxiv}). The step process that was used included:

- i. Identification of high ranking Universities using the Quacquarelli Symonds (QS) rankings for [Agriculture and Forestry 2015](#), ascertaining the top five Universities in each of North America, South America, Europe, Asia, Oceania and the top four in Africa. In addition, four other tertiary level institutions of interest were identified (APPENDIX 2)
- ii. Identification of Funding Organisations and NGO’s engaged in entrepreneurship or agripreneurship activities through online research (APPENDIX 2)
- iii. Identifying the key individual to contact in each organization with named email addresses
- iv. Emailing all named contacts with a timed request for assistance, followed by reminder email
- v. Undertaking semi-structured interviews in person, Skype or telephone
- vi. Undertaking online research to place agripreneurship within global context
- vii. Compiling submitted information and results of interviews into the final report.

7 Responses

The research received a very positive response from the individuals, universities and organisations that were contacted, with an initial response rate of 55%, details below.

Sector	Number Contacted	Number making an Initial Reply	Number of Conversations	Number of Submissions
Universities	33	17 (51%)	7 (21%)	10 (30%)
Non-Profit Sector	21	13 (62%)	10 (47%)	8 (38%)

Using the responses, the Universities, funders and NGO’s can be categorised into one of the three following approaches, it should be recognised that these are not mutually exclusive, but this simplistic application based upon submissions, can assist in identifying which entities are best placed in having skills, knowledge or experience that supports the concept of graduate focused agripreneurship:

- Agripreneurship – work that includes supporting the development of new entrants into agriculture or agribusiness
- Entrepreneurship – work that focuses on developing new business across a broad spectrum of activity
- Extension Support – providing support to and enhancing the quality of rural communities and pre-existing enterprise within agriculture and agribusiness including small holder farmers.

Agripreneurship	Entrepreneurship	Extension Support
African Development Bank	African Management Initiative	Clinton-Giustra Partnership
AgroParis Tech	Aiducation	Jacobs Foundation
The MasterCard Foundation	Babson College	ETH Zurich
Swedish Uni. Agricultural Sciences	Prince's Trust International	Kinneret College
University of California, Davis		Purdue University
Wageningen University		Stellenbosch University
YPARD		TechnoServe
		University of KwaZulu Natal
		University of Pretoria
		University of Reading

The following provide a description of the responses made by Universities, funders and NGO's who responded to the research request, the descriptions are also informed by the semi-structured interviews that were undertaken. Descriptions are provided in alphabetical order.

7.1 African Development Bank

Contact: [Jonas Chianu](#). *Former Coordinator of Agribusiness for Youth Employment*

The African Development Bank (ADB) is a key funder of developmental activities in Africa, it is also a key partner within the development of the ENABLE Youth programme. The ADB has a number of reasons for supporting this programme including:

- i) African governments are very concerned about the issue of youth unemployment and societal consequences
- ii) African farming is increasingly practiced by older persons, undermining future growth and development of the sector
- iii) Youth aspire for better rural livelihood to escape from poverty
- iv) Enterprising youth often lack collateral to establish their own agribusinesses and are not considered creditworthy
- v) Empowering the youth to engage in market-oriented farming and agribusiness increases employment opportunities and stimulates the rural economies
- vi) The Bank, through its Agricultural Sector Strategy, places highest priority on food security and poverty reduction through agricultural transformation, and works with its Resource Mobilisation Coordinator and other partners to do so, tapping on regional integration resources. Furthermore, the goals and activities of this project directly contribute toward the objectives of Comprehensive Africa Agriculture Development Programme and the Millennium Development Goals, including food security, elimination of hunger, gender mainstreaming, and employment creation.
- vii) This Program contributes to the Bank's Ten Year Strategy (2013–2022) of 'inclusive growth (IITA et al, 2014^{xxxv}) and to the Bank's High 5s in the areas of Feed Africa, Industrialize Africa, and Improve the Quality of Life of Africans

ADB recognizes that a key mechanism to enable the development of new entrants into agriculture and agribusiness is access to finance, a particular difficulty for young entrepreneurs with limited capital and no track record. ADB is therefore establishing a dedicated thematic fund which will help address youth employment challenges and which will encourage and support the development of commercial banks providing financial services to this growth sector. Under the leadership of its President, the Bank, working with partners and its RMCs wishes to set up a dedicated thematic fund (toward addressing the youth employment challenge across the continent in a systematic manner) for job creation for youths. The ENABLE Youth Programme will form an important component (Chianu 2015^{xxxvi}).

7.2 African Management Initiative

Contact: [Rebecca Harrison](#), CEO

The Vision of the African Management Initiative (AMI) is 'An Africa transformed by one million managers performing, effectively and responsibly' (AMI, 2016^{xxxvii}). AMI is a social enterprise based in Nairobi that provides accessible and locally relevant (African based and developed) training programmes for individuals and organisations that empower managers and entrepreneurs through practical and accessible learning and development tools.



Figure 8 African Management Initiative

AMI designs training programmes for organisational clients from public and private sectors and has partnered with a diverse range of groups including the Rockefeller Foundation, the MasterCard Foundation and the US African Development Foundation. AMI also provides certified courses to the general public at a small fee of US\$25-40 per course, with some courses offered free of charge, although this is a small part of the organisations work.

In its programmes, AMI uses a four-step learning methodology:

- i. **Learn:** Currently offering 35 courses. These are online, video based, interactive lessons have been developed in partnership with African business schools.
- ii. **Connect:** Course participants attend locally facilitated 'learning labs' (workshops), facilitated by group workers, not topic experts. These provide support, develop contacts and promotes co-learning and maintain cost effectiveness.
- iii. **Apply:** Participants use the '360 iCoach' tool to identify targets and actions and are supported to meet own goals. An 'accountability partner' is assigned to support progress against targets through per review process.
- iv. **Perform:** Participants apply learning in real world situations and organisations can track the performance of individuals through AMI's data-platform.

AMI recognises the limitations of internet provision across the continent and knows that 30% of user's access courses through mobile devices. Courses are therefore designed 'light' with extensive use of animations to reduce bandwidth e.g. a lesson 'tutor' may have live coverage for just a few seconds but is then replaced with a recognisable cartoon avatar for the remainder of the lesson.

AMI believe that their ‘blended’ approach wherein the online content is supported by facilitated group work provides a positive context in which students can succeed. It has also been found that the online element of the programmes are data rich and it is possible to gain significant data that can be used for evaluation, particularly in the areas of knowledge, competence and performance.

7.3 [AgroParis Tech](#)

Contact: [Prof. Catherine Lecomte](#), *Coordinatrice itinéraire entrepreneuriat*

In September 2015 AgroParis Tech initiated an entrepreneurial track for its graduate students, to support creativity and enable graduates to start their own businesses on completion of their courses.

This step-based initiative takes the student through three phases, supported by their core studies:

In Phase 1 the student is sensitized to entrepreneurship and has the opportunity of working in a small group and pitching to a jury with the opportunity of winning a ‘Creativity Prize’.

Phase 2 allows students to refine their concept supported for 6 months by a coach, their idea can then be put forwards for the ‘Maturation Prize’.

Phase 3 is a pre-incubation route for successful projects and can last for 6 months to 2 years, ending in a competition called ‘Undertaking Prize’ which will allow successful ideas to enter into incubation.

The process supports a wide range of topic areas within agriculture and agribusiness and can include urban agriculture, biotechnology, environmental services and development of technologies for developing economies.

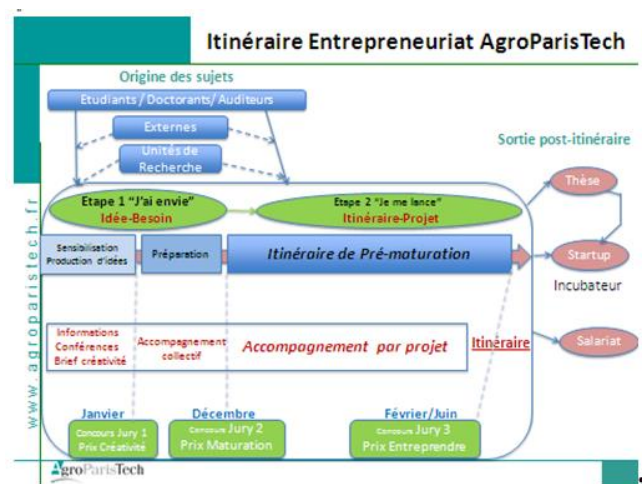


Figure 9 AgroParis Tech

7.4 [Aiducation](#)

Contact: [Florian Kapitza](#), CEO

Aiducation is a Swiss-based impact organisation established in 2007 and its key focus is to support young people in Kenya to access education through provision of sponsorships.

In addition to sponsorships the organization is now providing graduates with an opportunity to attend an 'Entrepreneurship Academy' facilitated in partnership with SwissRe. Each academy runs for the duration of five days and allows 30 – 50 participants to explore business ideas and work up a selection to full readiness to enter the market place. The structure of each academy is as follows:

Day 1 THINK	Day 2 PLAN	Day 3 FUND	Day 4 MARKET	Day 5 WIN
Pitching, Voting	Block 1: Customer Need, USP	Block 3: Basics of Bookkeeping & Creating Financial Statements	Block 4: Market Analysis	Final Presentations
Business Planning	Block 2: Business Model		Block 5: Sales	
Introduction to Swiss Re	Being well organized (time management)	Negotiation Skills		


 = Sessions/presentations delivered by Swiss Re Mentors (one for each block)

Figure 10 Aiducation

In addition to that, Aiducation established a Start-up Fund, which has provided access to equity for 11 of the most promising start-ups from the participants.

7.5 [Babson College](#)

Contact: [Sarah Schwartz](#), Operations Manager Youth Programmes and BELA

An independent, not-for-profit institution, Babson is accredited by the Association to Advance Collegiate Schools of Business (AACSB), the New England Association of Schools and Colleges, and the EFMD Quality Improvement System (EQUIS). In the 2014–2015 academic year, more than 2,100 undergraduate and 900 graduate students are attending Babson, representing more than 80 countries.

Of particular interest is the [Babson Entrepreneurial Leadership Academies](#). This programme has developed through Babson's long-term engagement with schools in Karatu district in Tanzania. This has developed in response to the setting of entrepreneurship' into the government's education curriculum, but with limited support or resources being provided to the schools to facilitate its teaching. Babson therefore has established itself within the district over 11 years and facilitates training with teachers and provision of the one week 'Academy' for students. The academy is taught by students from Babson in the USA which brings in elements of peer to peer learning and provides the Babson students with an opportunity for their own personal growth and learning.

Babson is in the process of establishing a permanent base in Karatu from which to further develop their relationship with the wider community.

The five-day Academy is based upon Babson's proprietary 'Entrepreneurial Thought and Action' approach. This is supported by a significant learning pack that encompasses approaches and exercises to develop an entrepreneurial mind-set in participants.

Babson is interested in further contact with Nestlé to discuss the synergies in their agripreneurship education mission and to further their awareness of issues such as water stewardship, environmental sustainability and nutrition in rural development practices.

Every good entrepreneur will have to revise their plans over and over again as they gain new insights. Remember to leave some space to come back, revisit your reflection, and add more thoughts as needed.



Figure 11 Babson College

7.6 [Clinton-Giustra Partnership](#)

Contact: [Anne-Reine Lapeyre](#), *Head of Distribution Enterprises Pilots and Projects* or [Robert Johnson](#), *Director, Supply Chain Enterprise Development*

The Clinton-Giustra Enterprise Partnership (CGEP) is pioneering an innovative approach to poverty alleviation. As impact entrepreneurs, CGEP creates new enterprises to generate both social impact and financial returns by addressing existing market gaps in developing countries' supply or distribution chains. CGEP works to provide underserved communities access to markets, jobs, and training by incorporating individuals into one of three market-driven models – Distribution Enterprises, Supply Chain Enterprises, and Training Centre Enterprises. Through these models, CGEP seeks to help people work themselves out of poverty.

[Distribution Enterprises](#)

Distribution enterprises provide essential consumer goods, food, and pro-poor innovations - like solar lamps or water filters - to women recruited from low-income communities. The women sell these products into their communities and increase their incomes in return. CGEP supplies the products at convenient meeting points and provide the training and coaching that the women need to be knowledgeable and confident salespeople. There are many other benefits from participating in these enterprises. It is found that the training provided (including topics such as inventory management, managing credit, and basic literacy) equips the women with the skill set for other business activities that they pursue. They often add other products or services to their product basket. Moreover, their participation in the enterprise creates a support network, an extended community, and a new identity including increased self-esteem. Retention is extremely high and it is not uncommon to double household income. Currently CGEP operates Distribution Enterprises in Haiti and Peru.

[Supply Chain Enterprises](#)

By removing all the barriers that smallholder farmers in developing countries typically face, Supply Chain Enterprises provide sustainable access to high value markets. CGEP sets up depots and collection centres around clusters of smallholder farmers and provides them with fertilizer, seeds, and other inputs at (scale leveraged) cost. The input costs are deducted from the payments farmers receive for their produce. This gets them out of their working capital trap. CGEP trains them in best agricultural practices and buys their produce. CGEP then aggregates this into quality controlled, reliable supply chains for large purchases under contract. It is not uncommon for CGEP to double or triple smallholder farmer yield and income. Currently CGEP operates in Colombia, El Salvador and Haiti.

[Training Centre Enterprises](#)

Vocational Training Centre Enterprises bridge the gap between local businesses that have unmet demand for trained labour and underserved youth from the local community. CGEP works closely

with high growth business sectors such as hospitality, retail, logistics, and business process outsourcing (call centres), to identify requirements and offer training programs based on job competencies and designed according to employers' needs. These alliances with the business sector help to guarantee formal employment and decent incomes for our Training Centre graduates. The Partnership targets placement rates of over 70% and focuses on training people from the lowest socioeconomic levels, with a specific focus on youth. Trained youth graduate with the skills to obtain higher pay and employment. These young people also achieve higher purchasing power that is able to boost local economies. CGEP currently operates a Training Centre in Colombia.

7.7 [ETH Zurich World Food Centre](#)

Contact: [Michelle Grant](#), Executive Director, [World Food Systems Centre](#)

Nestlé has an established relationship with ETH Zurich, in the scope of this the World Food Systems Centre presented information on the summer schools it runs annually that are open to students at the ETH and other higher education institutions around the world.



Impressions from the WFS Summer School 2015

Figure 12 ETH Zurich

Each two-week, intensive program brings together 20 to 25 university students who are selected in a competitive admissions process from a wide range of disciplines and nationalities. The curriculum is also interdisciplinary and multicultural, allowing students to work in diverse groups and in collaborative ways. The courses incorporate various pedagogic methodologies including, but not limited to; lectures, workshops, field trips, student presentations, small group and

plenary discussions, artistic and creative activities, and small-group case study and project work. This approach allows academic content and rigor to be blended within an immersive and experiential learning context to create a unique opportunity for the participants. A comprehensive selection process helps the Centre identify strong candidates who show potential to take initiative and bring innovative ideas to address the challenges of the world food system. An interdisciplinary faculty and core facilitation team guides the learning process throughout the entire program.

The program is made possible by the support of the Mercator Foundation Switzerland. The Mercator Program at ETH Zurich^{xxxviii} aims to explore the role and potential of organic production systems (certified and non-certified) to address global food security challenges. This question is a red thread in the summer school program.

7.8 [Jacobs Foundation](#)

Contact: [Fabio Segura](#), Head of International Programs

The Jacobs Foundation (JF) is one of the world's leading charitable foundations dedicated to facilitating innovations for child and youth development. The Foundation was established in 1989 by Klaus Jacobs and his family in an effort to benefit future generations by providing young people with better opportunities for development, so that they can become productive and socially responsible members of society. The Jacobs Foundation's role is to support research and scientific evidence, to serve as a basis for sound program and policy making and as a source of

Our Mission

As an internationally active organization, the Jacobs Foundation wants to contribute to improving the development of current and future generations of young people to enable them to become socially responsible members of society. We are committed to recognizing and strengthening the individual potential of children and youth and to developing and expanding their vocational skills. The goals of the Jacobs Foundation are to promote innovation in research and practice and to combine scientific findings with practical applications. In this regard, it is important to us that programs are evidence-based and achieve sustainable results. The foundation also wants to foster public dialogue and create networks to bring about social changes in the area of child and youth development.

ideas and innovation in the field of child and youth development. The Foundation is committed to contribute to social change towards better welfare, productivity and inclusion of current and future generations. The Foundation supports research and intervention of the highest quality leading to significant and vital outcomes for children and youth worldwide. It believes in the effectiveness of interlinking excellent research with practical intervention programs to better bridge the gap between existing challenges and aspired solutions. The Foundation also promotes public dialogue by connecting people from the fields of science, policy, society and economy, creating platforms for discussion and raising awareness for the needs and opportunities to improve the living conditions of next generations.

Figure 13 The Jacobs Foundation

The Jacobs Foundation applies a strength-based concept of child and youth development and takes an evidence-based approach aiming at proven excellence. It cooperates with partners (individuals, institutions, organizations) that are highly regarded in their respective fields. In all our activities, and strives for innovation and sustainable impact (Jacobs Foundation^{xxxix}).

The Jacobs Foundation is working as a partner of Nestlé focusing on education within the Grant Matching Mechanism (GMM) of the Transforming Education in Cocoa Communities (TRECC) Program in Cote d'Ivoire, a commitment of CHF 50 million from the foundation to increase quality education alongside the Cocoa Action commitment.

The TRECC Program focuses on quality education in all age tranches, including the following three pillars:

- Early Childhood Development and Care (ECDC) (0 – 5 years, established with the support of the Bernard Von Leer Foundation),
- Primary Education (7 – 14 years), and
- Labour Market Integration (14 – 24 years, to be established in 2016).

The foundation is currently in discussions with other philanthropic actors regarding the establishment of the youth labour market integration, vocational/technical training and entrepreneurship pillar, which it hopes to roll out in partnership with other companies and organisations such as Nestlé. This will be for the period 2016 – 2020.

As a learning organisation, the foundation has developed a Monitoring Toolkit and training programme to support work of other organisations. In addition to this there are plans to facilitate a Latin America, Europe, and Africa conference in Abidjan in October 25-26 2016, focusing on transferring lessons learnt on youth labour market integration. Nestlé will receive an invitation to this event.

JF has significant experience in Central and South America and has worked with range of local organisations on youth development programmes; success has varied, depending upon local context, focus and relative strength of local partners. The Inter-American Development Bank has supported a cost analysis of youth labour market integration interventions in the region and may fund phase two of the Fortalezas Program alongside other foundations, allowing the Jacobs Foundation to focus on support rather than delivery.

The foundation is also currently at an early stage in the development of plans for intervention in small holder coffee growing areas of South America modelled on the TRECC Program in which Cocoa Action and Nestlé has input. The Foundation hopes that such a project may interest the involvement of Nestlé through the Nescafé Plan.

7.9 [Kinneret College](#)

Contact: [Dody Manvich](#),

This college has a student body of 3,900 people across a range of subjects including courses that focus on agriculture and agronomy. The college facilitates a number of programmes for international students and supports work in developing countries including Nepal.

7.10 [The MasterCard Foundation](#)

Contact: [Alemayehu Konde](#), Senior Programme Manager

The MasterCard Foundation works with visionary organizations to provide greater access to education, skills training and financial services for people living in poverty, primarily in Africa. As one of the largest, private foundations, its work is guided by its mission to advance learning and promote financial inclusion to create an inclusive and equitable world. Based in Toronto, Canada, its independence was established by MasterCard when the Foundation was created in 2006. For more information and to sign up for the Foundation's newsletter, please visit www.mastercardfdn.org

Prioritizing Africa

The Foundation's programs have served more than 9.5 million people in 64 countries. Our funding and partnerships are concentrated in 31 countries in Africa and provide a combination of skills-building, education, employment and access to financial services.

The continent is home to the world's youngest population, seven of the world's 10 fastest growing economies, and an emerging movement of dynamic entrepreneurs. There are now 600 million people under the age of 25. By 2045, that number will double. This generation has an unprecedented opportunity to lead profound transformation.

However, challenges to realizing this potential remain. Tens of millions of people on the continent lack access to financial services, are unable to obtain quality education, or cannot take advantage of opportunities to move out of poverty. These women and men are unable to participate in the global economy.

Program Areas

As has been stated the Foundation has three key areas of focus:

- **Financial Inclusion**
The Financial Inclusion Program improves the well-being of people living in poverty by ensuring they have access to financial services.
- **Education and Learning**
The Education and Learning Program enables access to quality, relevant secondary and tertiary education for economically disadvantaged youth and to develop next-generation leaders who will support social and economic transformation.
- **Youth Livelihoods**
The Youth Livelihoods program enables young people to transition to employment. It provides out-of-school, unemployed young people with market-relevant skills, connections to employers and access to financial services.

As a part of the Youth Livelihoods Programme, the Foundation hosted a ['Youth Africa Works Summit'](#) in October 2015. The event brought together 200 high-level influencers from NGOs,

government, peer funders, and the private sector, as well as young people themselves to discuss strategies and solutions that will help young people to develop sustainable livelihoods across the agricultural value chain. The event has been an exciting opportunity to outline the Foundation's perspective on youth employment and entrepreneurship in agriculture and also to highlight what others are doing in the sector.

Within the scope of this report it is clear that the Foundation is the major funder of agripreneurship programmes in Africa.

7.11 [Prince's Trust International](#)

Contact [Ruth Ruderham](#), *Director of Development*

The Princes Trust is a well-established UK based charity that focuses on the development needs of disadvantaged and marginalised young people. Its programmes support participants to either gain employment or establish new start-up businesses. In November 2015, Princes Trust International was launched to build upon the work of the sister organisation with a focus on using the model developed to provide life changing opportunities to young people within developing economies, with a focus on member countries of the Commonwealth.

Princes Trust International is currently operating in Malta and Jordan and have also delivered consultancy work specifically around our youth entrepreneurship programme in Oman. Over the next 6 months the Trust is actively scoping and developing pilots in a further 5 countries – Australia, New Zealand, Canada, Barbados and India. Pakistan is being scoped in addition to this as a result of strong demand from local delivery partners, including Engro, with whom the work would focus on the agricultural sector as well as on technical skills development

7.12 [Purdue University](#)

Contact: [Prof. Steve Hallett](#), *Professor of Horticulture*, [Department of Horticulture and Landscape Architecture](#)

Purdue University hosts a range of agriculture and entrepreneurship based courses at graduate and post-graduate levels. The University has made a proposal as a part of this process to Nestlé requesting support for a short course developed in partnership with the University of Nairobi, focusing on existing small-holder farmers that would provide a blended, on-farm, workshop-based certificate course in horticulture that will serving two distinct client groups in an integrated way.

Certificate-seeking trainees would attend a week-long class that is taught through a sequence of morning classroom sessions and afternoon, on-farm workshops. Each individual workshop will be advertised separately to the local community so that farmers from that community can also attend. Thus, certificate-seeking trainees will attend a comprehensive program for which an appropriate fee will be charged while each individual workshop will be available to a number of

farmers at minimal cost. Each workshop will be conducted at a different farm, and in a different region, enabling the University to reach a large number of farmers.

The requests for support for this project would include, in their order of priority:

1. Scholarships,
2. Operating costs (materials, meals etc.)
3. Salary support.
4. Travel



Figure 16 Purdue Agriculture

The University also plays a significant role in the development of new technologies such as the 'Purdue Improved Cowpea Storage (PICS) bag' (Purdue Uni.^{xl}) that is being deployed by the Zasaka start-up in Zambia.

This bag hermetically stores crops such as cowpeas and maize inside a triple layer envelope that stops entry of air and moisture. This stops the growth and proliferation of any insects that may have

been stored with the crop, thus protecting the harvest for later sale or consumption.

7.13 [Solidaridad](#)

Contact: [Beatrice Moulianitaki](#), Programme Manager Cocoa Europe

Solidaridad is a well-established NGO based in the Netherlands with an international focus, based upon development of society through the value chains of commodities including cocoa, coffee, dairy, tea, fruit and vegetables, livestock, aquaculture, cotton, soy, palm oil, textiles and gold. As such, Solidaridad is a thought leader and front runner in systemic change and has led the process of certification to enhance the impact of global trading on the primary producer, this has included establishment of 'Fairtrade' and 'UTZ'.

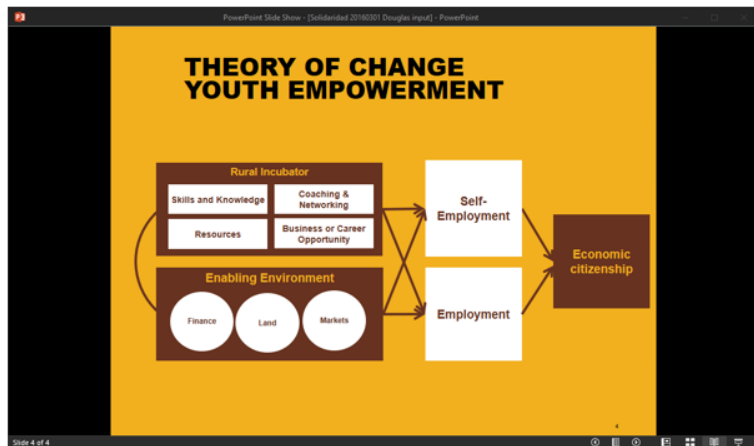


Figure 17 Solidaridad, 2016

A key element of the Solidaridad approach is to work in partnership with industry and the organisation already has a significant and positive relationship with Nestlé. This includes participation in a livelihood programme in Kenya and Ethiopia established in 2013 with a focus on food security through improved resilience of small-scale coffee farmers in Ethiopia and Kenya. Solidaridad also contributed to the development of Nestlé’s Rural Development Framework.

Solidaridad believes that although certification and the value-chain approach is an important tool within the creation of viable and resilient rural communities, it has not addressed all of the societal issues that continue to promote inequality, limit incomes and encourage rural out-migration. For this reason, Solidaridad is exploring the establishment of new projects that will encourage the development of enabling environments and building robust infrastructures (Figure 17), focusing primarily on the needs of young people and women. This approach will be initiated through a new youth incubation programme called MASO (2016-2020) funded by the MasterCard Foundation that includes a focus on entrepreneurial activities of 17-25 year olds in Ghana. Hereby creating self-employment and employment opportunities either as a professional farmer or as a service provider (SMEs) in cocoa growing communities, whilst simultaneously lowering the barriers to finance, land and markets. Part of the youth incubation model is the need to combine technical and life-skills, the latter including social skills, financial skills, business and leadership skills. “You need fertile soil before planting your seeds” (Beatrice Moulianitaki).

SOLIDARIDAD

ABOUT US

Solidaridad is an international civil society organization with more than 45 years of global experience in facilitating the development of socially responsible, ecologically sound and profitable supply chains. Solidaridad works across 12 supply chains and operates through 10 regional offices on 5 continents. Ensuring quality of life and a healthy planet for all of us requires continuous effort and mutual cooperation from all parties involved. It also means creating products and processes along supply chains that will help us transition towards a fully inclusive, sustainable economy.

MISSION

We bring together supply chain actors and engage them in innovative solutions to improve production, ensuring the transition to a sustainable and inclusive economy that maximizes the benefit for all.

VISION

We envision a world in which all we produce, and all we consume, can sustain us while respecting the planet, each other and the next generations.

This increases adoption rates, enhances successful attitudes and promotes long-term behavioural change.

A call for industry partners for this pre-competitive programme will be released within the next few months who will be able to participate in one of three levels within the programme structure:

- i. In-kind support to funded project during its implementation, not-diluting objectives and targets nor approved budget by the MasterCard Foundation
- ii. Financial and in-kind support to allow development of interventions not covered by the MASO programme, but will enhance its objectives and targets. For instance, the development of a land service agency or setting up a fund for young people to cover their GPS mapping costs and legal procedure to obtain land rights. Alternatively, for the identification of non-agro related products and services that can be delivered to communities via cocoa supply chain structures.
- iii. Financial and in-kind support to extrapolate the youth incubation model in other countries or other commodities. (Ivory Coast or for instance Central and Latin America) or integrating life skills development in existing Nestlé's farmer support programmes.

Solidaridad sees this model as focusing on technical and life-skills, the latter including business skills such as leadership and communication.

7.14 [Stellenbosch University](#)

Contact: [Prof. Johann van Rooyen](#), Director, [Standard Bank Centre for Agribusiness Development and Leadership](#)

Stellenbosch University hosts the 'Standard Bank Centre for Agribusiness Development' which was established in 2010 to "support new thinking and leadership on transformation and leadership capacity development in the agricultural environment"^{xli}

The Centre focuses on academic teaching and outreach services to existing businesses as well as playing an important role in promoting dialogue between formal/informal leaders, top officials and leading opinion makers in the agricultural transformation environment. The four key areas of focus for the Centre include:

- Creating new knowledge
- Interacting with the wider community
- The Agri-Leadership Programme
- International Agribusiness Networking

7.15 [Swedish University of Agricultural Sciences](#)

Contact: [Prof. Teun Dekker](#), [SLU Global](#)

SLU Global is a programme within the University that is tasked to provide an international development perspective into the work of the entire organization. Its mission is to pursue knowledge of biological resources and their sustainable utilization through education and research, as well as environmental monitoring and assessment and it is to implement the university's strategy for global development and poverty alleviation.

SLU-Global programme's specific tasks are to:

- On a national and international level, disperse information of SLU's areas of scientific expertise and of initiatives within the sphere of international aid.
- Increase within SLU the knowledge of, and engagement in, the on-going world-wide policy discussions that concern global development.
- Coordinate five multidisciplinary thematic research areas and capacity-building programmes and other university-spanning programmes with relevance to Policy for Global Development
- Establish international alliances with the purpose of increasing resources for development cooperation initiatives where SLU is an integral part^{xlii}.
- Increase global aspects and awareness of sustainability issues at all levels in the educational programmes at SLU and interlinking educational programmes globally with emphasis on developing countries.

SLU Global has an established relationship with IITA and the Youth Agripreneurs Group. In August 2015 staff and four students visited IITA to explore and share issues around agriculture and agribusiness and it became evident that IITA's strengths are in technical skills training rather than enhancing the business skills of its students. SLU Global believes that facilitating opportunities for students to share (peer to peer learning) is advantageous in that Swedish students gain a global perspective whilst IITA YAG members have an opportunity to gain from the strong business acumen of their Swedish colleagues. SLU Global is also developing links with the University of Ibadan and the Agricultural university of Abeokuta, which may lead to the development of university accredited training opportunities for agripreneurs at IITA.

7.16 [TechnoServe](#)

Contact: [Juan Thomas](#), Entrepreneurship Director and [Dashiel Douglas](#), Regional Project Director, STRYDE

TechnoServe is a leader in harnessing the power of the private sector to help people lift themselves out of poverty. A non-profit organization operating in 29 countries, it works with enterprising men and women in the developing world to build competitive farms, businesses and industries. By linking people to information, capital and markets, it has helped millions to create lasting prosperity for their families and communities

TechnoServe has an established relationship with Nestlé, launching a programme with Nespresso in 2013 to extend its AAA Sustainable Quality programme with small holder coffee growers in Ethiopia and Kenya (TechnoServe^{xliii}) as well as encouraging the sector in South Sudan.

The Strengthening Rural Youth Development through Enterprise ([STRYDE](#)) program started in 2011, targeting young people in Kenya, Uganda and Rwanda. The overall program goal for STRYDE phase 1 was to sustainably improve livelihoods for rural youth and their households. The target of STRYDE 1 was to impact the lives of 15,000 rural youth and their households. Based on the successes and lessons learned in STRYDE 1, the program has now entered a second phase, where it will work with an additional 48,015 youth and include new geographies (Northern Uganda and Tanzania)^{xliv}.

STRYDE 2 is a five-year program funded by the MasterCard Foundation and costing US\$25,929,561 that will run from August 2014 to July 2019.

The programme targets vulnerable youth who have difficulty entering work, i.e. 40% participants have completed high school while 60% have only completed primary school. The age range of participants is 18-30 years (18-24 years 75%, 25-30 years 25%). In Phase 1 there was no formal gender targets, however this has been adopted within phase 2, with 50% of participants to be women. The programme includes three months training at 2 days per week that focuses on personal effectiveness, agribusiness and entrepreneurship. Those who pass training (80% attendance) enter 9 months of after-care including competition based access to grants, job fairs, learning trips, linkage to suppliers and markets, and individualized business advisory services provided by business counsellors.



Figure 18 TechnoServe 2011-2015

7.17 [University of California Davis](#)

Contact: [Josette Lewis](#), World Food Centre and [Justis Cleveland](#), [Child Family Institute for Innovation and Entrepreneurship](#)

The Child Family Institute for Innovation and Entrepreneurship is a Centre for Excellence in the UC Davis Graduate School of Management. The institute is led by Cleveland Justis, (Executive Director) and runs a series of programmes across the academic year. These programmes, in part, focus on agricultural entrepreneurship and encourage the development of start-ups that integrate science and business for social benefit.

Key Programmes include:

[Ag Innovation Entrepreneurship Academy](#)

The Ag Innovation Entrepreneurship Academy is a three day long annual event designed for upper-division undergrads, graduate students, postdoctoral researchers and faculty working in food and agriculture-related fields. The event includes speakers from industry and academia and the opportunity to engage with mentors. Previous key note speakers include Harold Schmitz (CSO Mars) in 2013 with the presentation “On a Mission from Mars: The Business of Chocolate” that can be found [here](#) and in 2015 Daniel McKinnon of 3D Robotics. This academy is modelled upon a similar format to other entrepreneurship academies that the centre facilitates over the course of the year, each is then supported by sector specific inputs. The 2016 academy was held April 25-27 at the Walter A. Buehler Alumni Centre on the UC Davis main campus.

[Sustainable AgTech Innovation Centre](#)

The UC Davis Sustainable AgTech Innovation Centre (SATIC) supports the commercialization of clean agricultural technologies by identifying and accelerating new ventures that promote sustainability in the agricultural field with a focus on the Sacramento region.

[Keller Pathway Fellowship Programme](#)

This year-long program provides a multi-faceted opportunity for university innovators and entrepreneurs to engage with the institute’s full entrepreneurship academy experience.

Also of interest at UC Davies

[D-Lab](#)

[International Agricultural Development Graduate Group](#)

It is useful to note that the UC Davis system has led to the creation of Zasaska, an Agripreneurial start-up established by a graduate of International Agricultural Development in partnership with a Zambian graduate.

7.18 [University of KwaZulu Natal](#)

Contact: [Christine Cuenod](#), Networking Facilitator, [School of Agricultural, Earth & Environmental Sciences](#)

The University of Kwa-Zulu has a range of graduate and post-graduate courses in agriculture and agribusiness with a large number of graduates finding employment in the rich NGO sector based in Pietermaritzburg. The University has a number of outreach and extension programmes supporting local farmers and agribusinesses.

University students have recently established a group called 'Agri-Groomers' which aims to equip students for careers in agriculture (University of KwaZulu Natal, 2015^{xlv}). Agri-Groomers' activities concentrate on three main areas: Agricultural Learning and Skills Development; Personal Development and Character Building, and Connect, which comprise the 3D, Agri-Games and Green Actions programmes.

- Agricultural Learning and Skills Development focuses on the building of technical skills through hands-on experience and in-service training with relevant stakeholders,
- Personal Development and Character Building focuses on the honing of soft skills such as leadership and self-awareness to improve employability.
- The Connect aspect includes Discussions, Debate and Dialogues (3D), interactions set up to engage youth in research and public speaking so that their messages reach decision makers. The Agri-Games component promotes participatory learning in a relaxed environment and also serves as a catalyst for team building. The "Green Actions" feature is online-based software under construction which the group intends to be used by stakeholders across the agricultural sector, from NGOs to extension workers to governmental agencies who require access to research and information to inform their activities.

7.19 [University of Pretoria](#)

Contact: [Prof. Johann Kirsten](#), Head of Department, [Agricultural Economics, Extension and Rural Development](#)

The University of Pretoria offers a range of graduate and post graduate courses to students in Africa focusing on entering employment within large corporations and family business and as such does not focus on entrepreneurship within the Agriculture or Agribusiness settings. The University has expressed interest in gaining the support of Nestlé to further its incubation units and provide short courses in entrepreneurship to its own student population. The University also feels that it is in a position, if required, to provide introductions to a range of stakeholders within the South African agriculture and food system.

In addition, 'Enterprises of University of Pretoria Ltd' has made a proposal as a part of this process for provision of a course in entrepreneurship. This is a five-day course with the following structure:

- Day One Setting my Agri-scene
- Day Two MY Agri-idea
- Day Three Activating MY customer

- Day Four MY wealth
- Day Five MY Agri-business plan

On successful completion of this course, students are awarded a certificate of completion from the University and have access to online learning in soft skills including computer literacy, personal branding, and business writing and negotiation skills.

7.20 [University of Reading](#)

Contact: [Prof. Julian Park](#), Head of School, [School of Agriculture, Policy and Development](#)

The University is one of the world's leading agricultural universities and focuses on taught courses and research.

7.21 [Wageningen University](#)

Contact: [Femke Gordijn](#), Capacity Development Expert, [Centre for Development Innovation](#)

The Centre for Development Innovation (CDI) is a distinct entity within Wageningen University and is quoted as “Creating Capacities for Change: we work on processes of innovation and change through facilitating innovation, brokering knowledge and supporting capacity development” (CDI^{xlvi}). CDI has an existing interest in youth-centred entrepreneurship within developing economies as demonstrated by its curricular and by innovative practise such as recent workshops on ‘The Future of our Food’ facilitated in December 2015 and January 2016 which looked at international perspective’s and experience in youth agripreneurship.

Some of the postgraduate regular courses in which CDI addresses agripreneurship (for example farmers as entrepreneurs, stimulating entrepreneurship in the agribusiness sector, youth in agriculture/agribusiness, etc.) include:

- Market Access for Food Security, towards pro-poor & inclusive market development
- Local Economic Development, towards local agribusiness cluster development – Catalysing vibrant rural economies’, on location in Midrand, South Africa in collaboration with the Agricultural Research Council (ARC)
- Rural Entrepreneurship - Driving innovations in Agri-food value chains: on location in Kumasi, Ghana in collaboration with the Bureau of Integrated Rural Development (BIRD) of KNUST, Ghana
- Organised Farmers as Partners in Agribusiness’ – Optimising the performance of producer organisations
- Innovation and Agri-entrepreneurship for food security.

Generic models & approaches that are used within the curricula and CDI programs and projects include:

- Chain-wide Learning methodology to improve the performance of agri-food value chains
- Cigar-Box tool to assess the performance of existing small & medium agribusinesses, and the soundness of new ventures
- 'It Takes Two to Trade' tool to improve farmer-firm relationships
- Inclusive Business for SMEs model and curricula.

Wageningen University has organised various '[Hackathons](#)', pressure-cooker events in which a large number of people meet to engage in collaborative exercise to explore the development of new business, based upon the concept of the 'Hackathon' within the Information Communications Technology sector.

Wageningen University student entrepreneurs have their own 'incubator' on the campus. [StartHub](#) Wageningen offers office and lab space to student start-ups, some of which are benefitting from a microcredit. In addition to this CDI and Wageningen University have a well-established network of partnerships with external organisations located within the Netherlands and internationally. Last but not least, CDI has a vast alumni network (over 22.000) which can be mobilise anytime needed, mostly from Africa and all other parts of the world.

7.22 [Young Professionals for Agricultural Development \(YPARD\)](#)

Contact: [Courtney Paisley](#), Director

The rationale to create YPARD was motivated by the need for creating the next generation of agricultural leaders, thinkers, and entrepreneurs, address critical development issues and to create greater access to resources for young food system leaders. It strives to overcome the challenges of increasing lack of interest in agriculture, insufficient participation of young professionals in dialogues addressing critical development issues, and inadequate access to resources to address these problems. The founders of YPARD are convinced that a responsible agriculture, able to meet global needs without depleting its resources, can only become a reality if young professionals are actively engaged in shaping the sector's future.

YPARD's vision is sustainably improved livelihoods worldwide where young professionals are proactively contributing to innovative agricultural development. Its mission is to serve as the collective global platform enabling young professionals to realize their full potential and contribute towards innovative agricultural development

The four primary objectives of YPARD are:

1. Opportunities for young professionals to contribute to strategic policy debates in agricultural development created
2. Agriculture promoted among young people

3. Young Professionals connected across disciplines, professions, age, and regions and exchange of information and knowledge facilitated
4. Access to resource and capacity building opportunities facilitated

YPARD (Young Professionals for Agricultural Development) is a network organization hosted by GFAR in FAO with the overarching aim of attracting youth to the agricultural sector. YPARD focuses on:

- Youth engagement in Policy development
- Capacity Development of youth in agriculture through which mentoring (including Young Agripreneurs Project) is a key part
- Networking and sharing opportunities among young people in agricultural development

YPARD works at global, regional and national level for mobilising youth and promoting locally relevant activities for youth in agricultural development. It also has a very active social media channels, (e.g. Facebook, Twitter and LinkedIn) as key tools in the dissemination of information and the provision of support.

Current work includes the 'Youth Agripreneurs Project' in partnership with GFAR, a global competition to encourage young entrepreneurs to establish or develop enterprises within the agricultural and agribusiness sectors. Entrants to the project post their applications onto the blog and public voting assists in the selection process. Finalists are awarded with a prize to the value of \$7,500 which includes attendance to the [GCARD3](#) conference, mentor support and a cash award of \$5,000 paid in three tranches over the 12 months of the project.

On Friday 18 March 2016 YPARD announced the [results](#) of the Youth Agripreneurs Project. The winning projects include:

- [Self-Help Business Model in Harmony](#) with Nature by Jony Girma, Ethiopia
- [Climate Resilient Indian Cattle](#) by Nikki Pilania, India
- [The African Desert Greenhouse](#) by Lillian Beattah, Kenya
- [Smart Krishi mobile app](#) by Anil Regmi, Nepal
- [Mechanical Pest Removal](#) by Josine Macaspac, Philippines
- [From Farm to Face: The Journey to Natural Skin Care](#) by Kellyann Allicot, Barbados

Further details of the winners of YPARD and GFAR's Youth Agripreneurs Project can be seen in [APPENDIX 3](#).

7.23 Analysis

The twenty-one organisations that participated in conversations or submitted information to this research and outlined above, represent a vast reservoir of knowledge skills and experience in the associated realms of Agripreneurship, Entrepreneurship and Extension Support. These organisations represent Universities, Funding Organisations and NGO's that have very different scales and focus, ranging from provision of programmes to their own students through to global scale levels of activity. Many of these organisations have direct relevance to the support of unemployed or underemployed graduates to enter into entrepreneurial activities in agriculture and agribusiness. But even those organisations that have no immediate connection have the potential to engage further with or inform the development of such work, all have the potential to become actors within this endeavour.

8. Case Studies

The following four case studies, drawn from publicly available information on the world wide web, briefly illustrate the impact that a young agripreneur may have, both in terms of supporting their own lives, but also in relation to wider societal impact and the ability to inspire other people to become agripreneurs.

8.1 [Africa Rabbit Centre](#)

[Laetitia Mukungu](#) established the African Rabbit Centre at the age of 14 in response to poverty in her rural community in western Kenya. Laetitia Mukungu was nominated for the Azisha Prize in 2012 and was a key speaker at the [Youth Africa Works Summit 2015](#) and is a MasterCard Foundation Scholar at Earth University in Costa Rica.



Figure 19 Anzisha Prize

ARC was established by Laetitia to improve the livelihoods of rural women, many of who were living in poverty by producing an alternative source of income through the sale of rabbit meat. As such ARC aims to be able to support 20,000 women across Kenya to become economically empowered by 2033.

ARC was established in 2009 when Principal of the Bukura Educational Complex provided Laetitia with a start-up loan of US\$500, this enabled Laetitia to purchase breeding stock, equipment and allowed her to recruit others to her cooperative enterprise. Rabbits provide an ideal meat animal for a small holder in a rural environment for the following reasons:

- Rabbits are the most productive of domestic livestock.
- A rabbit only takes 6 months to grow. Their gestation period is only 30 days and a female rabbit on average, gives birth to 30 young ones per year
- They are very cheap and easy to feed as they mainly feed local weeds and water
- They occupy little space hence suitable for most rural farmers who are small scale
- They are quiet animals that can be raised in any environment
- They rarely get sick unless kept in unhygienic conditions thus appropriate for rural women who have no money to spend on disease treatment
- Their meat is white, high in protein and low in fat and cholesterol. Its health advantages make it high on demand especially in restaurants, hospitals and hotels
- Rabbit farming is not complicated and requires no professional skills, which makes it suitable for rural women who are largely uneducated
- Rabbit farming is also very convenient for the women's location because they are enough resources in terms of land and rabbit food (green vegetation) in the rural areas.
- Rabbit farming will provide employment to these women and part of the money from the sales will support their children in school thus removing the burden of school fees from their shoulder. The high rabbit productivity and ready market demand will ensure a continuous flow of income for the women (ARC^{xlvii}).

ARC trains local women in rabbit farming and support them start their own micro-rabbit farms. They raise and sell live rabbits to restaurants and other rabbit suppliers in Kenya. The different breeds include New Zealand White and Californian White and ARC has a central rabbit farm where around 150 rabbits are produced annually.

8.2 [HoneyCare Africa](#)

HoneyCare Africa is an East African fair trade honey company established by the entrepreneur and Ashoka Fellow Madison Ayer, working with 35,000 farmers in South Sudan that won the Nestlé CSV Prize in 2014.



Figure 20 HoneyCare

HoneyCare Africa aims “To build a portfolio of high quality and affordable pure, natural, authentic honey-based snacks that consumers love. We contribute to economic development by increasing rural farming families’ incomes through a sustainable supply chain producing high quality honey and agricultural outputs, which we buy at fair market prices” (HoneyCare Africa^{xlviii}).

The company has a range of honey brands, differentiated by locality of production e.g. South Sudanese Honey, or by the main forage crop for the bees e.g. Acacia Honey. HoneyCare Africa also offers a blended honey and peanut butter product.

HoneyCare Africa works to ensure that production is sustainable, the company views that sustainable economic development means creating financial value, improving social conditions and working in a way that supports the environment. The company supports rural development, and Responsible Sourcing, Environmental Conservation and Education and Training to ensure that production is sustainable and that all stakeholders in the process gain value.

It should be noted that Madison Ayer also has another company, based in Kenya [‘Farm Shop’](#) works on a franchise model to support extension services to small holder farmers.

8.3 [Reel Gardening](#)

Reel Gardening was developed in 2002 by Claire Reid at the age of 16 to solve the problems she encountered when starting her own vegetable garden. Claire was encouraged by her teachers to enter her then newspaper and flour invention into the Eskom Expo for young scientists. Claire won a gold medal at the national finals in Pretoria. She was asked how much water the product saved so she conducted a series of tests which concluded that Reel Gardening saves 80% water in the germination phase.

The Department of Water Affairs selected Claire as the South African Youth Water Prize winner and she was sent to Stockholm in 2003 to represent South Africa and The Stockholm Junior Water Prize. Claire was the first South African to win the international award, beating 28 other countries and receiving the award from HRH princess Victoria of Sweden.



Figure 21 CNBC Africa

Claire then went onto win the Women in Water award for scientific research below the age of 35. Claire was also a finalist in the Shorpite Checkers Woman of the Year award in the science and technology category. Claire secured a start-up loan through Anglo Zimile and Reel Gardening began research and development in 2008. Reel Gardening opened the doors of its first Business premise in Illovo Johannesburg on the 12th of February 2010. Reel Gardening now operates from its own premise in Blairgowrie Johannesburg, where trial gardens are conducted and anyone is welcome to pop by (Reel Gardening^{xlix}).



Figure 22 Reel Gardening

The company's product is a range of vegetable seeds that are presented in paper strips that carry a depth indicator and contain fertilizer (Figure 25). These seed strips are presented in range of mixed boxes that include Herb Garden, Soup Garden, Summer Vegetable Garden etc. For example, the Summer Vegetable Garden Box costs US\$5 and contains 5 varieties of seeds including Lettuce, Beans, Beetroot, Green Pepper and Tomato that require a 2m² plot.

The company also produces a larger product called the [School Garden in a Box](#) that can support a school or community to utilise a 10m² gardening plot, providing a "holistic and sustainable food security alternative".

8.4 [Zasaska](#)

Operating in Zambia, Zasaska was established as a partnership between [Carl Jensen](#), a graduate of the Master's degree in International Agricultural Development at UC Davis and [Sunday Silungwe](#), a graduate of the Zambia Catholic University and an alumni of the International Development Design Summit.

The business focuses on three core elements, Crops, Training and Technology.

Crops works to improve soil health through diversification, with the introduction of inter-cropping, mixing maize with cow-peas, the fertility of the soil improves and the yield increases. The company also exchanges maize from previous harvest for fertilizer and higher yielding seed. Zasaska also identifies markets and packages and processes crops to add-value and deliver more income to the farmer.

In **Training** Zasaska has adopted a lead farmer of 'extension-preneur' approach where an existing farmer is employed to help farmers, in their own communities, by answering the "how's" and "whys" of farming. He will receive training, run trial plots, design and test experiments, and deliver trainings to farmers. He will also work with every farmer he serves to create a custom plan for reaching that farmer's goals. Currently Zasaska has one 'extension-preneur' working with 40 farmers but aims in 2015-16 to increase this to 10 people supporting 440 farmers.

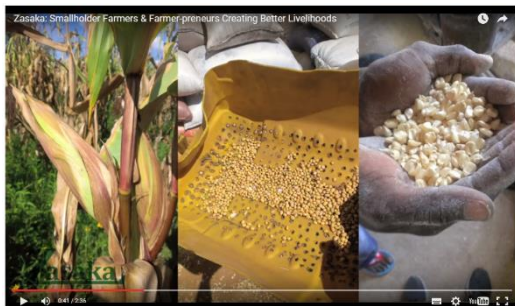


Figure 23 Zasaka

Technologies, Zasaka promote technologies that help farmers produce, process and secure food, this includes selling the Purdue Improved Crop Storage (PICS) bag discussed previously, developed at Purdue, which protects grain without chemicals for just US\$2.50 per 100 kilograms. As well as a hand crank maize sheller, a universal nut sheller and solar lighting. These 'simple' technologies are cost

effective and labour saving, increasing the productivity of the farmer.

These four case studies represent the different approaches that can be taken by the agripreneur, from primary production of meat (African Rabbit Centre), establishing a value chain based product or working within extension services in agriculture and horticulture. Each of these agripreneurs identified a social need or market opportunity and developed a business model that provides sustainability and value to all their stakeholders.

ZASAKA

OUR MISSION

Zasaka helps small holder farmers generate lasting income

OUR MODEL:

Zasaka takes a systems approach to business and development. We introduce affordable, appropriate technologies and work with farmers to grow and market diverse, high-value crops through local entrepreneurs. We categorize this approach into Crops, Trainings, and Technologies

9. Supplementary Information

This section includes a number of organisations that have been identified late in the research process and who have not been contacted directly, instead the contents of this section are based upon information accessible to the public on the internet. As such, this is a 'mixed bag' of actors and opportunities, which while seemingly random, provide additional context to agripreneurship or offer to add value to possible future actions.

9.1 [Global Entrepreneurship Congress](#)

The annual Global Entrepreneurship Congress brings together thousands of entrepreneurs, investors, researchers, policymakers and other start up champions from more than 160 countries to identify new ways of helping founders start and scale new ventures around the world. At the weeklong event, delegates have the opportunity to make connections, gain insights, learn about new research, and leave ready to renew their programs, policy ideas or firm founder skills. The 2016 event was held in Medellin, Columbia on 14-17 March. The programme included a range of topics on entrepreneurship and includes the finals of the Future Agro Challenge (below) and consideration on the potentials held within the area of youth entrepreneurship.

9.2 [Future Agro Challenge](#)

Future Agro Challenge (FAC) is the largest global competition that discovers innovative fundable food, agtech, and agriculture ventures from various corners of the globe addressing national, regional and global challenges. FAC provides key tools and opportunities to help them grow their business and expand them into new markets. FAC is working to make a difference on a global level by increasing interaction among agro innovators, entrepreneurs and stakeholders, by addressing national policies and challenges.

In two years, FAC has received more than 2,000 applications from more than 40 countries on five continents. FAC has offered a podium to 20 start-ups to pitch their idea live in front of a global audience, while it has already awarded more than 10 innovative start-ups with US\$500,000 of private funding.

Below are listed the 2016 finalists from 10 different countries: Chile, Greece, Israel, Kyrgyzstan, Morocco, Pakistan, Palestine, Peru, Russia and Sudan. One of these finalists will be awarded "Agribusiness of the Year."

FUTURE AGRO CHALLENGE

We live on the edge of food scarcity and are slowly agitating our water and land creating a volatile environment to growing crops. The increase in food demand is driven by population growth combined with economic development and diet changes driving changes in diet composition and consumption levels. The global challenge will be to increase food production through raising agricultural productivity efficiently, whilst decreasing our environmental footprint.

<http://futureagrochallenge.com/fac/why-we-do-it>

- *VACuCh* is an antibacterial milk liner that mitigates Bovine Mastitis and reduces the amount of bacteria in milk.
- *CowLar* is a smart collar for cows designed to help farmers improve dairy herd health, optimize operations and boost milk yields, which has a positive impact on farmer incomes.
- *CropXis* the world's first fully-automated software-as-a-service solution that boosts crop yield and saves water, applying just the right amount of water to different parts of the same field.
- *Jashyl Charba* is a system which allows users to remotely follow the temperature, humidity and air atmosphere in a greenhouse.
- *Evaptainers* is the world's first mobile "zero-energy" refrigeration systems that are ideal for low-income, off-grid areas.
- *Ava's Farm* is a business-to-peer (B2P) e-commerce website, focused on small-scale productions of food products.
- *Kuchara* is a mobile app where with just one touch, consumers can order organic food, freshly harvested, directly from the farmer.
- *Elementaree* is a service that creates personalized food plans based on customer's taste, biological and health needs, lifestyle and then delivers all the ingredients needed for the food plan, already washed and cut.
- *Harvesting* is a harvesting machine specialized to harvest Gum hashab.

9.3 [International Crops Research Institute for the Semi-Arid Tropics \(ICRISAT\)](#)

ICRISAT is an international non-profit organization that undertakes scientific research for development. Adopting an inclusive market-driven approaches, the centre focuses on dryland crops including Chickpea, Pidgeon Pea, Groundnut, Sorghum, Pearl Millet and Finger Millet.



Across these crops ICRASAT builds expertise across the value chain, conserving, analysing, breeding, understanding on-farm management practises, processing and agribusiness opportunities.

Figure 24 ICRASAT

In light of this, ICRASAT has recently established the 'Mali Agribusiness Incubation Hub' which will promote young entrepreneurs in agro processing products; cereals and fruits; and seed business through skills and services based opportunities. The hub, which will include a Youth Business Incubation, an Agro Processing Business Incubation and a Seed Business Incubation Units will attract youth to the agriculture sector by transforming it into a business and offering them new avenues and opportunities to engage along the agriculture value chain. The hub will operate in a public private partnership mode and will serve the Francophone African countries. It has a 'hub and spoke'

model located in three institutes: ICRISAT-Mali, Institut d'Economie Rurale (IER), Sotuba and Institut Polytechnique Rural (IPR), Katibougou" (ICRISAT, 2016').

9.4 Kiva

Kiva is a non-profit organization with a mission to connect people through lending to alleviate poverty. Leveraging the internet and a worldwide network of microfinance institutions, Kiva lets individuals lend as little as \$25 to help create opportunity around the world. Since Kiva was founded in 2005:

- 1,393,996 Kiva lenders
- US\$826,906 in loans
- 98.38% repayment rate
- Working with 299 Field Partners
- 450 volunteers around the world
- Operating in 84 different countries

Kiva envisions a world where all people, even in the most remote areas of the globe, hold the power to create opportunity for themselves and others.

The organisation believes that by providing safe, affordable access to capital to those in need helps people create better lives for themselves and their families. The organisation works with microfinance institutions on five continents to provide loans to people without access to traditional banking systems. One hundred percent of a loan is sent to these microfinance institutions, which are called Field Partners, who administer the loans in the field. Kiva relies on a worldwide network of over 450 volunteers who work with the Field Partners, edit and translate borrower stories, and ensure the smooth operation of countless other Kiva programs. 100% of every dollar that is lent on Kiva goes directly towards funding loans; Kiva does not take a cut. Furthermore, Kiva does not charge interest to the Field Partners who administer the loans. However, Field Partners can charge interest to the creditors and rates (calculated as APR or PY) in excess of 30% are admissible. Kiva is primarily funded through the support of lenders making optional donations. Kiva also raise funds through grants, corporate sponsors, and foundations.



Figure 25 Kiva

9.5 Teach a man to fish

Teach a man to fish is a UK based NGO that believes that education is the key to tackling youth unemployment and poverty worldwide. The organisation works with schools to set up school businesses. These businesses are both educational and profitable, teaching students business and entrepreneurial skills and generating much-needed income for schools.



Figure 26 Teach a Man to Fish

Providing a relevant education, that bridges the gap between school and work, means students leave school ready to get a good job or set up their own business, and reach their full potential in life.

The organisation works through training, competitions and working with partners has helped thousands of schools to set up businesses as diverse as a car mechanic workshop in Honduras, egg production in Uganda and handicrafts in India.

Teach a man to fish offers a wide range of individually tailored training and consultancy services to support schools to set up profitable and educational school businesses, and run a free, online Members' Network; a place where those interested in sustainable, practical education can connect, collaborate and share resources.

An interesting facet of their work is a series of four [business guides](#) including:

- Brick Making Business Guide
- Dried Fruit Business Guide (Figure 27)
- Fruit Juice and Jam Making Guide
- Solar Cooker Business Guide

Each guide includes a start-up business plan with technology descriptions, opportunities and threats, cost of a start-up and potential return.

9.6 Virgin StartUp

Virgin StartUp is a not-for-profit organisation that helps entrepreneurs aged 18 and over in England get the funding, resources and advice they'll need to make their business idea a reality. The main focus is to help individuals get the support needed to turn a great idea in to a successful and sustainable business. Virgin Startup helps develop business plans and applications for funding. Their business advisors will then help with the development of marketing plans and financial projections.

If successful in securing funding Virgin Startup will continue to provide support in the form of training, workshops, master classes, peer-to-peer networking and one-to-one mentoring. Virgin Startup has also developed a mentoring platform to help match young entrepreneurs with an experienced business mentor, both in the short and long term.

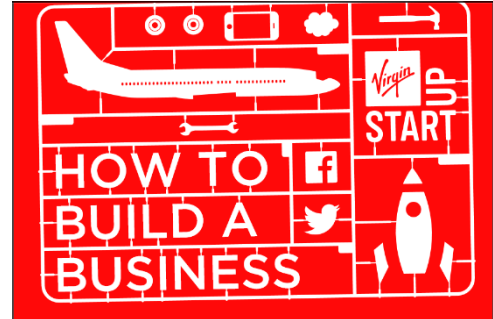


Figure 28 Virgin Startup

Virgin Startup has a range of accessible tools on its website including a useful downloadable 'how to build a business guide' (Figure 28), that could prove to be a model upon which to build an agripreneurship digital tool.

The website has a range of other resources and links, including a very inspiration recommendation of the [top 10 ted talks for start-ups](#).

It is also worth noting that the Virgin Group also supports youth-centred entrepreneurship centres in the [Caribbean](#) and [South Africa](#).

10. Assessing Success

How to measure success is a key question and one which a number of the organisations included within this report have attempted to address within their own work, however this area is complex and there is no consistent understanding or approach to measuring success in entrepreneurship (Alberti et al 2004^{li}) and agripreneurship by extension. How does one decide what defines success and what strategies and tools are then used to gather that information?

Key to this is identifying what defines success. Ahmad and Hoffman (2004)^{lii} have attempted to create a framework that can be used at micro and macro levels ([APPENDIX 4](#)), acknowledging that "the measures, and the framework, need to indicate not only the levels of entrepreneurship, but also the factors that determine these levels, and, ultimately, the role or impact that the entrepreneurial activity has in meeting policy targets". This model explores the Determinants, the Entrepreneurial Performance and Impact that entrepreneurship programmes may have.

Within Agripreneurial Training Programmes one can imagine that there are three parts to the curricula, Life-skills, Technical Skills and Business Skills (Figure 29) that mutually benefit each other to support the development of the young Agripreneur.

Technical skills provide the student with the practical tools that they need to engage in their chosen business, this could include agronomy, horticulture, animal husbandry, aquaculture or research skills.

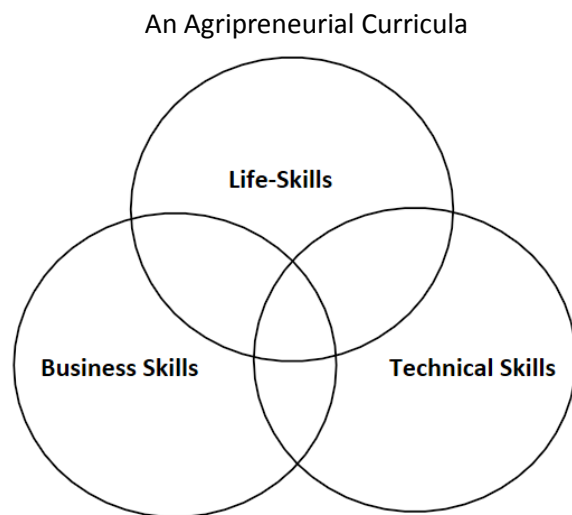


Figure 27 Steven Carr

Business Skills provide the student with the necessary toolkit to manage a successful start-up. This includes acquiring a range of skills including managing finance, analysing a market, presenting ideas, promoting a product, negotiating bureaucracy and managing staff.

Life-skills are the bedrock upon which Technical skills and Business Skills can be built, but they are also harder to define. The Jacobs Foundation (2011)^{liii} describes them thusly, “life skills are considered to be those abilities that help promote well-being, positive health outcomes, and productive development. They

comprise a set of core skills that empower young people to take positive steps to promote health, positive social relationships, and positive contributions to society”.

In the research process two organisations in particular discussed the out-workings of their monitoring and evaluation systems, these were the African Managers Initiative and STRYDE (TechnoServe).

The African Managers Initiative recognised that online learning provides a wealth of qualitative and quantitative data on course participants. Baselines are taken against which knowledge acquisition can be measured, course participation is easily monitored and a key target of the number of participants successfully completing a course can be identified. AMI also felt that their system of ‘buddy-learning’ where each student nominates a coach to support their learning and the use of facilitated group work also provides observational and third party data that can be used for monitoring and evaluation.

STRYDE provide very clear information outlining success in their work with disadvantaged young people in East Africa, with their processes having clear quantitative goals for example the number of women participating on the courses (50%), defining successful completion of a programme as having attended 80% of the course and being able to collect data on overall completion rates. The second stage of the programme where a ‘graduate’ is provided support to enact their business idea through a dedicated coach also brings a longitudinal element to data capture and

can then identify, over the course of the 9 months' support, the immediate success of a start-up or the ability of an individual to move into employment.



Figure 28 The Jacobs Foundation

Both of these examples demonstrate the relative ease with which the acquisition of skills and knowledge can be measured. But how does one approach an assessment of life-skills and what tools are used to capture such data? The Jacobs Foundation have developed a significant resource relating to this particular challenge, a Monitoring and Evaluation Guidebook and a separate Monitoring and Evaluation Toolkit, both released in 2001. These two documents provide a clear and articulate approach to this area and illustrate a range of strategies and provide resources and tools that can be used. These tools cover the areas of Observation, Discussion and Documents (Figure 28).

It can be regarded then that the monitoring and evaluation, measuring success, of participants within a training programme is achievable. But, Ahmad and Hoffman (2004)^{iv} also identified that the long term impact of entrepreneurial activity should also be measured to identify the success or failure of start-up enterprises and their wider impact upon the community in which they are based, for example the number of jobs created and wealth accrued. This then requires the adoption of a longitudinal research strategy that tracks agripreneurs for several years after completion of a training and support programme. Such a long-term research project may be of interest to Nestlé's academic partners.

11. Conclusion

The purpose of this research project was to explore the concept of agripreneurship, identifying the context for this developing topic and the Universities, Funders and NGO's who are working within this field of endeavour.

The research methodology for this project involved identifying and contacting 54 universities, funders and non-governmental organisations who, through desk research, appeared to have competencies or involvement in the topic of agripreneurship, of whom 30 replied. This resulted in 17 semi-structured interviews and a further 17 submissions of information.

The information provided within this report demonstrates the diversity of approaches across a range of Universities and organisations within the not-for profit and for-profit sectors. The report provides an outline of the work of several of these organisations as well as limited case studies drawn from the World Wide Web

It is hoped that this particular report, being released for public use and to those organisations involved within the research in particular, will help to inform and catalyse the development of new partnerships across the wide spectrum of organisations that are involved in promoting

agripreneurship. This work has already led Nestlé to initiate some new, concrete actions and we hope that the information in this report will stimulate others to do the same.

APPENDIX 1

Empowering Novel Agri-Business-Led Employment for Youth in African Agriculture (ENABLE Youth): A Concept Note

December 2015

Presented by Jonas Chianu, African Development Bank on 8/2/2016

Background Information: Africa is experiencing rapid social and economic growth. Many economies are growing by more than 6% a year. However, large disparities in income distribution persist both within and among countries. As a result, rural households seek to escape poverty by engaging in market-oriented farming but with limited success due to lack of innovative solutions to production and marketing constraints as well as other agribusiness related constraints. Ironically, educational services have expanded considerably in Africa without due consideration of the quality of education offered. This has resulted in the paradox whereby a large number of graduates ill equipped to be absorbed into employment upon graduation co-exists with several unfilled vacancies in Small and Medium Enterprises (SMEs) simply because they do not possess skills that increase employability. Besides, the formal sectors of employment where most graduates seek employment cannot absorb the large number of graduates, resulting in a large number of educated yet unemployed youth whose efforts are key to achieving agricultural and rural transformation. The resigned idleness of rural youth is in evidence across Africa where incentives to better one's life through hard work are poor, especially in the rural areas. In response, many youths migrate to urban centres in search of employment, but find only menial jobs at best, depriving rural communities of their most energetic and best educated members.

The ENABLE Youth program is premised on linking skill development in agribusiness management with financial structuring that will empower the trained youths with the necessary financial resources to go straight into agribusiness as a career and employers of labour. It is not the traditional skill development but a purpose driven approach to job creation.

Program Rationale: Youth unemployment is a major problem in African countries. The problem is exacerbated by the apparent mismatch between vocational training offered in tertiary institutions and industry human resource requirements. Education curricula that are oriented towards white collar employment rather than self-employment and employment creation are also problematic in an environment without requisite expansion of the formal employment sectors. Indifference among rural youth toward careers in agriculture remains a severe constraint in agricultural and rural transformation and the realization of the widely acclaimed potential of agriculture in Africa because those with the greatest education, enthusiasm and strength have too few opportunities to apply their talents. In response, youths resort to livelihoods that make poor, even destructive use of agricultural resources, adopt lifestyles of resigned idleness or migrate to urban areas. Too often, rural development projects address the special needs of women, poor and the vulnerable without also including the most dynamic members of rural communities, the youth. Given opportunities and incentives, and mindset change, rural youth can profitably be redirected toward agribusiness, service provision and market-oriented

agriculture, with a huge impact upon the community. A stepwise strategy offers youth learning in agriculture and agribusiness and provides internship opportunities with mentors and champions, resources and incentives required to develop and execute viable business plans and loan applications based on bankable projects. Possibility of some of the mentors also providing funding to the trainees will also be explored in each country.

Development goal and program objectives: The overall goal is to *"create decent and gainful employment and income generation for the youth in Africa through agriculture and agribusiness"*.

Program description and implementation arrangements: As agribusiness incubations are initiated through ENABLE Youth, the Program will explore and initiate a suite of actions assuring the success of its departing or weaned off interns or incubates that have also prepared and produced sound agribusiness plans, agribusiness proposals, and commercial loan applications. A system of modest, in-kind departure packages is sufficient to launch some completing youth into higher-value crop production and other agriculture and agribusiness value chains, using modern agriculture and agribusiness methods, provided they have access to land, fair and well-functioning markets, and enabling environment, including financial services and risk mitigation options such as insurance. In some cases, these ventures may rely upon market collection points developed during the agribusiness incubation itself, or be grouped into commercial youth agricultural parks organized with local authorities. In other cases, successful enterprises developed by interns during the agribusiness incubation may be privatized to them at the conclusion of their program.

Enspire Africa (EA) has developed an alternative credit score system, customized to the informal sector (especially those not meeting the traditional requirements for loan application). This model shall be studied and important elements, such as building the capacity of relevant financial institutions and potential clients to ensure establishment of functional funding mechanism, incorporated into the ENABLE Youth Program.

Given the critical importance of greater gender equity within rural communities, its mainstreaming is integrated into each component of the overall ENABLE Youth Program. Gender equity includes fair access to Program and Project participation, mentoring and coaching, staffing and farm inputs and commodity markets, and will be reflected in the constitution of the Program Steering Committee (PSC) and measurement of outcomes. Gender disaggregation including age disaggregation is also considered. The Program design is such that each donor has the latitude to support activities of interest to it. The components are described below.

Component 1: Training through the Incubation Platform. This will take place in 18 months. Part of the 18 months should include training on how to write proposal. Training should emphasize business management (not really agriculture). Business management skills to raise agricultural and agribusiness productivity and value addition through agribusiness value chains. Training should not limit the trainees, but a broad menu of agriculture and agribusiness related options. Each country should aim at training and incubating 1000 to 1500 youths in selected centers such as IITA. When weaned off from incubation, each of these 1000 to 1500 is expected to run

businesses with US\$ 200,000 to US\$ 300,000 (which could be sourced from various credit facilities put up in support of the program and from a minimum of US\$ 30 million that each country is expected to borrow from the Bank for this program) and capable of hiring and providing decent jobs to 3 to 5 persons (graduates and non-graduates alike). The last three (3) months of the 18-month long incubation should be devoted to business plans development, market research, and further gains in functional knowledge. During this period, they also need to be mentored by business champions. Activities include: i) establish 54 agribusiness incubators and develop business incubation strategies; ii) exploration and expansion of the novel approaches toward youth empowerment; iii) training on returns to agriculture and agribusiness investment; iv) introducing trained youth to new, profitable agricultural and agribusiness ventures; v) assistance in business plan development, agribusiness proposal and loan application, including the development of departure incentives that interface with lending institutions; vi) collaboration with national and local governments, and the private sector to stimulate profitable, sustainable and wealth-generating agriculture/agribusinesses; vii) introduction to practical skills on market-oriented agriculture and agribusiness enterprises in curricula of educational institutions using readily available frameworks; viii) replicate/scale-up of models of agribusiness incubation across Africa; ix) train journalists and youths to become specialized in agricultural affairs to document youth's entrepreneurial initiatives and promote their services; x) training on the use of ICT and social media in agribusiness development; xi) strengthen youth linkages with farmer organizations; xii) train youth agripreneurs in financial services provisions and management linked to banking institutions; xiii) training on the use of video clips to document successful youth agribusiness for sharing to the wider public, particularly through social media and news coverage; xiv) training on issues of risk mitigation options such as insurance; xv) establish country mechanisms through stakeholder consultation; xvi) launch National Agribusiness Youth Centres; xvii) place interns with private agribusinesses and incubators for on-the-job training and skills upgrading; xviii) training on business management; xix) internship for hands-on experience.

Component 2: Business Development and Financing.

Five (5) or more Business Development centres will be required in a country. Emphasis will be on demand and market aspects and on what the market wants, including technical issues. Business development also entails ensuring that the money put in leverages more funds and expand the envelope and work on conditionality's that will make the youth to really use available funds. With respect to finance, the issue of using the opportunities in agriculture and agribusiness to contribute in addressing the problem of youth in Africa has been recognized by various African governments. The governments have also been coming up with programs to address this. However, the major constraints has been the inability of the various governments to adequately and sustainably address the financial aspects of such endeavours. The financial resources to empower the youths to set up their own businesses are often not accessible at terms specific to their situations of zero-equity. Under the ENABLE Youth programme, transition to post-incubation or post-training period is critical and greatly contributes to the ability of the trained youth in running a successful business. At the country operational level, financial empowerment is critical for effective transition after the incubation component focusing on training of young graduates as business men and women in agribusiness (not as farmers) for 18 months, using the

IITA and other relevant models. After the training, graduating students will come up with bankable proposals of the projects/businesses they want to pursue. A good financial structuring is critical for a successful and smooth transition. The menu in the steps being taken to address the issue of financial services are presented in Annex 3. Activities include: i) identify/explore promising technologies, innovations or ventures for commercialization; ii) track agribusiness start-ups to assess best practices/economic viability/expansion; iii) establish demonstration farms/agribusinesses as centres for profitable innovation; iv) mainstream proven opportunities into financial institutions and government investments; v) advocate for necessary policies to reinforce and support youth engagement; vi) develop a registry of youth agribusiness operators and facilitate their linkage with markets and finance; vii) Convene and engage policymakers, financial institutions and mass media in support of agribusiness development, including the involvement of youth and women entrepreneurs; viii) structure and offer incentives to attract trained youth into agribusiness entrepreneurship; ix) offer trained youth incentives for own ventures; x) promote better networking among young agripreneurs; x) develop Program website and link it to other social media, and monitor user interests; xi) register and post a database of AGRIPRENEURS and other youth ventures; xii) conduct media events and grassroots actions that popularize and highlight youth achievements and emerging opportunities; xiii) promote the program within educational institutions; and xiv) create of a network of specialized agricultural journalists able to exchange news, views and experiences on the empowerment of youth and women through innovative agribusiness start-ups.

Implementation Arrangements: IITA is the lead agency of the ENABLE Youth Program, providing Coordination and Technical Assistance (TA) support and will lead M&E in collaboration with other partners, including AGRA, FARA, and selected Sub-Regional Organizations (SROs). In collaboration with IITA, FARA through its AAIN Program will provide some TA on the establishment of agribusiness incubators. Similarly, AGRA, in collaboration with IITA, will provide specialized services in agribusiness incubation areas where they have comparative advantage, for example in seed systems. Other key collaborators such as CommodAfric, SNV Development Organization of Netherland, and FAO will play roles that will be defined as the different country level CNs and PARs are elaborated. A strong relationship between CGIAR Centres and their technical competence with the Bank and its investment capacity provides a win-win situation for the attainment of the objectives of the ENABLE Youth program.

Each of the participating RMCs would rely on existing agencies to implement the Program. IITA will serve as TA providing training. Each IITA hub or trusted partner institution will administer regional Program activities. The National Agribusiness Youth Centres (NAYCs) will be strategically located in-country and will play a pivotal role in fostering actions necessary to fill gaps in the value chain, and orient youth toward those opportunities. Relevant regional/national bodies in Africa shall be identified to assist with program implementation. Final decision on this shall be made during appraisal. Various ENABLE Youth projects will be conducted over five years (e.g., 2016–2020, for instance) depending on funding and speed of lessons learnt.

Program Cost: The ENABLE Youth Program requires UA 1.62 billion to UA 1.89 billion in 54 RMCs and over five years (2016 through 2020). Individual country projects are expected to cost a

minimum of UA 30 million but could be much more through the crowding in of contributions from commercial banks and through other innovation financing mechanisms such as Venture Capital, Patient Funds, and Angel Investments. Donors and private sector businesses and commercial banks are expected to finance parts of the Program.

Expected benefits: In total, a minimum of 2.16 million youths will be empowered across the RMCs.

Baseline information and data collection. A gender and age disaggregated baseline survey will be conducted in the first year to ascertain benchmarks for measurable indicators of progress. The development of a baseline and the establishment of a strong M&E system are of crucial importance. Survey tools and data bases useful in monitoring its youth groups are currently being tested by IITA. Key indicators reflecting shortcomings and achievements shall be captured, and will be progressively revised based on lessons learned from implementation. Early and program impacts will be assessed in Years 3 and 5, respectively. As the Program relates to improved opportunities and profitable agriculture and agribusinesses in different settings, case study approaches hold special promise.

Preparation of detailed designs: For a Program of this scope, more detailed planning will be conducted prior to commencement of actual implementation. During preparation of this CN, a detailed list of specific activities and tasks were prepared and developed for purposes of preliminary budgeting and may readily be expanded into a work plan and milestones. A draft of these activities, tasks and milestones will be prepared in advance for consideration at the Program Inception meeting. Some detailed plans are required at the Program-level. Examples include placement of the NAYCs and the Agribusiness Incubation Centers (ABICs). These will be conducted immediately after Program approval. Other detailed designs are specific to the Hubs and the RMCs. Each Hub must organize an ABIC to reorient large numbers of youth, while each country must organize a NAYC, allowing specific agriculture and agribusiness ventures to be launched. These needs form a major agenda item at Program Inception meeting.

Monitoring Arrangements: The Program relies upon a participatory M&E framework that requires regular assessment of achievements against indicators, introduce interim adjustments, and generate feedback for greater success. This M&E framework will include development of an overall project interpretive database built through surveys of clients. Implementing partners will be trained in these monitoring tools and reporting needs and held responsible for data collection, synthesis and reporting at country and regional levels. The Program Headquarters will then inspect and compile this information into annual Program reports and other publications.

Potential risks and mitigation measures: These include: **Risk:** Counterproductive mind-set that youths are disillusioned and lack sufficient experience and enthusiasm to serve as mechanisms for rural transformation. **Mitigation:** *Include diverse communications that highlights youth achievements and opportunities.* **Risk:** Difficulty in recruiting youths because many continue to migrate to urban areas and avoid agriculture. **Mitigation:** *Lifestyle advantages within transforming rural areas must be highlighted throughout Program communication strategy.* **Risk:**

Reluctance by private sector businesses to serve as mentors or sponsor interns because concerns that trained youth become their competitors **Mitigation:** *Conduct agribusiness incubation away from target ventures; introduce interns as possible employees. Issue widespread call for mentors rather than select them in an ad hoc manner.* **Risk:** Necessary infrastructure and enabling policies continue to impede rural enterprise development. **Mitigation:** *Locations must be identified where agribusiness ventures have greater chances of success, particularly through access to fair and top-end markets. Departure incentives will be developed and evaluated that launch basic agribusiness start-up and serve as collateral or loan guarantees. Finally, policy advocacy is included within this Program.* **Risk:** Some cultural values regard young women as less equal, and deny them educational and economic opportunities. **Mitigation:** *Assure women equal representation within all Program activities.* **Risk:** African financial institutions continue to regard youth as credit risks. **Mitigation:** *Program training must emphasize the critical importance of convincing business plans and timely repayment of loans. The African Agribusiness Innovation fund further supports financing of youth-led SMEs, youth and ENABLE will link with this and similar opportunities.*

APPENDIX 2

List of Universities and Agencies

African Development Bank	Stellenbosch University
African Managers Initiative	Swedish University of Agricultural Sciences
AgroParis Tech	SwissRe Foundation
Aiducation	Tamil Nadu Agricultural University
Ashoka Changemakers	TechnoServe
Askham Bryan College	The Aspen Institute
ATID International	The Australian National University
Babson College	The MasterCard Foundation
Beijing Forestry University	The Princes Trust International
Branson Centre for Entrepreneurship	The University of Melbourne
Caribbean	The University of Queensland
Branson Centre for Entrepreneurship SA	The University of Sydney
China Agricultural University	The University of Tokyo
Clinton-Giustra Partnership	Toyota Kenya Foundation
Cornell University	Universidad Chile
Entrepreneur Bootcamp	Universidad de Buenos Aires
ETH Zurich	Universidade de Sao Paulo
IFAD	Universidade Estadual de Campinas
Jacobs Foundation	University of California, Berkeley
Kasetsart University	University of California, Davis
Kinneret College	University of Cape Town
Kyoto University	University of KwaZulu-Natal
Massey University	University of Pretoria
NewForesight	University of Reading
Portificia Universidad Catolica de Chile	University of Wisconsin-Madison
Purdue University	Wageningen University
SEED	YPARD
Solidaridad	

APPENDIX 3

Winners of the YPARD Young Agripreneurs Project 2016

<http://www.farmingfirst.org/2016/04/meet-the-prize-winning-young-agripreneurs-at-gcard3/>

Jony Girma: No trees, no bees. No honey, no honey!

Ethiopia has huge potential for supplying high value bee products like honey, beeswax, and propolis. There are an estimated 5.15 million hives in Ethiopia, almost all of which are maintained entirely by traditional methods by approximately 1.4–1.7 million beekeeping households. Beekeeping does not require fertile land, a large area, or much initial capital. This makes the sector attractive for small farmers with limited resources. However, despite its potential role in the development of the rural economy, the beekeeping sector faces a number of problems,



such as lack of beekeeping skills, inappropriate production technologies, weak market access, weak price incentive systems, and limited financial capacity of beekeepers. Jony has been working with beekeepers to combat these challenges. With his \$5,000 prize money, he intends to establish a modern, well-organized apiary site and construct a training room and information centre for local beekeepers. He will also purchase beekeeping equipment which he

will loan to beekeepers. “Unless beekeepers enjoy an income, they don’t have an interest in supplying honey,” Jony comments. “I have planned to train and certify 2,000 beekeepers as suppliers of bee products. Each beekeeper will plant and grow multipurpose trees ten times the number of beehives they have. As a result of this approach I will have certified beekeepers who can generate income to improve their livelihood and conserve the natural forest.”

Nikki Pilania Chaudhary: The future of Indian cattle



Nikki has been involved in dairy farming since 2011 at her family farm in the rural part of the North West Indian State Uttar Pradesh – she manages a dairy unit of 50 “exotic” Holstien Friesian and Jersey Cross cows. However, she soon realised that these cows require a very closely controlled environment, in order to produce the increased amount of milk they were purchased for. Her family’s farm has a modern dairy shed comprising of fans, foggers, an automatic milking unit and all other facilities for efficient operations. But Nikki realises this may not be an option for many smaller farmers. She will therefore use her start up seed money to examine the high yielding *Gir* breed of cattle which is native to India, and is used in markets from Australia to Brazil for their resilient qualities such as tick resistance, heat tolerance and the ability to flourish even with inadequate feeds.



Lillian Beuttah: The African Desert Greenhouse



Lillian Beuttah is a civil engineer turned social entrepreneur and intends to find sustainable solutions to feed Africa. She wants to build “desert greenhouses” based on Terrarium Crop Cultivation Technology. The Terrarium is a glass unit containing an engineered soil layer that is closed off entirely to the natural elements. Within the unit, water vapour is transpired and condensed on the glass surface producing water that enables plants to live. This cyclic water generating process works well, as the humid atmospheric conditions within this artificial ecosystem mimics that of the earth creating viable crop growing conditions that require a minimal amount of water. TCCT is designed specifically for low maintenance and intensive farming practices making it suitable for those nomadic inhabitants of ASALs with little to no agricultural expertise.



“We are currently at a development phase that includes rapid prototyping and testing using small-scale terrarium replica models, through which establishment of the most favourable crop growing conditions in terms of temperature, humidity and soil type is being undertaken,” says Lillian. Her seed start-up money will be used to move the research and development stage forward. The result could mean that harvests can take place in dry regions 3-4 times a year, instead of twice a year.

Anil Regmi – Ag info at just a touch



Anil is only 24, but the app he has developed has already been downloaded 17,000 times. Smart Krishi is a mobile app that serves as a platform for farmers and any citizens interested in agriculture to get information with a single touch. Using a Wi-Fi/3G connection, the app automatically syncs with the latest information in the Smart Krishi database. In places with no internet connectivity, the contents can be easily viewed in offline mode. This feature eliminates the need of having a 24-hour internet connection in technology-limited settings. Farmers can send their location and can get location-specific information on crop and farming techniques. They can also tailor the app to follow and subscribe to the latest news and market prices of agricultural and horticultural products. With the seed start-up money, Anil wants to action some of the suggestions he has had from farmers using the app. This includes redesigning user interface of the app and content to address illiterate users in underdeveloped countries, designing services to automatically fetch the daily market price of agricultural products, and an interactive discussion portal.



Josine Macaspac – Saying goodbye to pests in the Philippines



In the Philippines, losses from post-harvest and storage due to pests for corn can reach as high as 50%, resulting in massive reduction in total yield and profits especially in rural areas where storage facilities do not have adequate protection against these pests. Current methods to combat this are expensive, which is why Josine has developed a Mechanical Post-Harvest Pest Removal System. “The mechanics of the device is simple,” she explains. “The farmer loads the produce (grain / corn / etc.) into the device through a hopper and using a foot pedal, power the device. The produce will be kept in a large compartment with adjustable perforations at the bottom, so that it can be used for a variety of grains, as well as corn. When the machine is operated through pedal power, the main compartment will start vibrating the produce, effectively dislodging the pests, which will then fall through the holes and into a collection tray below”. With the help of this device, a farmer can effectively clean 600 kilos of rice or 12 sacks of produce in a single hour without the use of electricity or expensive fuel.

Kellyann Allicot – Skincare from the farm to the face



Kellyann loves nature, agriculture, science, and business. Equipped with a Degree in Chemistry and Biology, and a Diploma in Cosmetic Science – she is now ready to combine those passions by setting up her own skincare brand. Kellyann wants to support farmers to grow herbs that can be distilled for the production of hydrosols and essential oils. “The passion and motivation to execute this project stems from the desire to illustrate that

agriculture is one of the necessary pillars, in industries which may seem unrelated,” comments Kellyann. “It’s also to provide new revenue streams for farmers both locally and regionally. Moreover, the project wishes to attract youth and more women in Barbados and the Caribbean to this arena, through the provision of a more interesting spin on the endless possibilities agriculture provides”. Kellyann will use her start up seed money to purchase the distiller, procure the necessary raw materials and train farmers. The remaining money will be used to set up a website for her brand: Ibis Wellness Inc.



APPENDIX 4

[A Framework for Addressing and Measuring Entrepreneurship](#) OECD Statistics Working Paper Nadim Ahmad and Anders N. Hoffmann January 2008

Figure 4: The OECD/EUROSTAT framework for Entrepreneurship indicators – adding indicators to the categories for entrepreneurial performance

Entrepreneurial Performance		
Firms	Employment	Wealth
Employer Enterprise Birth rates	High Growth Firm rates by Employment	High Growth Firm rates by Turnover
Employer Enterprise Death rates	Gazelle rates by Employment	Gazelle rates by Turnover
Business Churn	Business Ownership Start-Up rates	Value-Added by Young or Small Firms
Net Business Population Growth	Business Ownership rates	Productivity Contribution, Young or Small firms
Survival rates at 3 and 5 Years	Employment in 3 and 5 Year Old Firms	Innovation Performance, Young or Small firms
Proportion of 3 and 5 Year Old Firms	Average Firm Size after 3 and 5 Years	Export Performance, Young or Small firms

Figure 6: The OECD/EUROSTAT framework for Entrepreneurship indicators – adding policy areas for entrepreneurial determinants

Determinants						Entrepreneurial Performance	Impact
Regulatory Framework	Market Conditions	Access to Finance	R&D and Technology	Entrepreneurial Capabilities	Culture	Firms	Job Creation
Administrative Burdens for Entry	Anti-Trust Laws	Access to Debt Financing	R&D Investment	Training and experience of entrepreneurs	Risk Attitude in Society	Employment	Economic Growth
Administrative Burdens for Growth	Competition	Business Angels	University/ Industry Interface	Business and Entrepreneurship Education (skills)	Attitudes Towards Entrepreneurs	Wealth	Poverty Reduction
Bankruptcy Regulations	Access to the Domestic Market	Access to VC	Technological Cooperation Between Firms	Entrepreneurship Infrastructure	Desire for Business Ownership		Formalising the Informal Sector
Safety, Health and Environmental Regulations	Access to Foreign Markets	Access to Other Types of Equity	Technology Diffusion	Immigration	Entrepreneurship Education (mindset)		
Product Regulation	Degree of Public Involvement	Stock Markets	Broadband Access				
Labour Market Regulation	Public Procurement		Patent System; Standards				
Court & Legal Framework							
Social and Health Security							
Income taxes; Wealth/Bequest Taxes							
Business and Capital Taxes							

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