THE ROLE OF YOUNG ENTREPRENEURS IN THE TRANSFORMATION OF AGRICULTURE AND FOOD SYSTEMS IN ZIMBABWE

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Abstract: This article describes the role of young entrepreneurs in the transformation of agriculture and food systems in Zimbabwe. The role was in response to Innovation Baraza, a novel initiative by Udugu Institute, and an emerging platform for entrepreneurs in Africa. Our featured idea recognized the need to focus on agriculture and food systems as well as energy access in order to redress poverty and hunger problems in Zimbabwe. Food security and energy access were the core components in the idea, which is premised on establishing linkages between agricultural and industrial development. The Business Model would pilot in Dora community of Mutare, Manicaland Province. The Model is youth-led and youth driven, and mobilises community members in the medium-to-long-term. Our Business Model had economic, environmental, and social impacts, all which made it unique. We argue that young entrepreneurs can offer practical solutions to persistent community problems when opportunity presents itself. We conclude that the transformation of agriculture and food systems via energy access must be pursued vigorously for what later turns out as successful solutions were once latent ideas.

Key words: Agriculture, Food Systems, Energy, Entrepreneurs, Transformation

Introduction
Globally, it is recognized that young people deeply care about persistent community problems, and are quick to take the initiative whenever an opportunity appears. Innovation Baraza (IB) is a novel initiative by Udugu Institute (UI) in Zimbabwe which seeks to showcase the best and brightest young entrepreneurs. The platform nurtures ideas from forward-thinking young people for action in their respective communities. IB works this way: entrepreneurs showcase their ideas to judges and the public for voting and selection. One of the premises in the
initiative is that excellent ideas can trigger the transformation processes in society. Agriculture and food systems are particularly important in the African context given the contribution of the field to food and nutrition security and livelihoods at household level.

According to Argwings-Kodhek, Minde and Jayne (2002), agricultural transformation is the process by which individual farms shift from highly diversified, subsistence-oriented production towards more specialized production oriented towards market or other systems of exchange (e.g., long-term contracts). The authors go on to state that the process involves a greater reliance on input and output delivery systems and increased integration of agriculture with other sectors of the domestic and international economies. Agricultural transformation is central to redressing Africa’s poverty and hunger problems, and is a prerequisite for broader structural transformation.

There was a nationwide call for submission of innovative ideas in the Innovation Baraza. Atta-Mensah (2015) argues that Africa has to be described by Africans. In this regard, forty finalists were selected from among submitted ideas to take part in the inaugural edition. The forty finalists squared against each other. Together with the judges' evaluations and public voting, 5 Top Team finalists were selected, and further competed in Kenya in October 2015. The objective of this article is to elaborate our featured idea in IB. The key research questions which underpin our Business Model are: Can energy security hold the key to food security? Can food security hold the key to energy access? We assert that this idea links agricultural and industrial development, a critical factor in addressing the complex challenges of our time.

ANALYSIS

Food Transformation in Africa

Atta–Mensah (2015) argues that Africa seeks to transform itself into a middle-income continent within a generation. He goes on to state that this will require a development agenda whose implementation is inclusive and is aimed at uplifting majority of citizenry from poverty as well as growing the middle class. Argwings-Kodhek, Minde and Jayne (2002) state that failure to invest in agriculture and the rest of the food system can choke off the process of structural transformation and hunger alleviation. Gabre-Madhin & Johnston (2002) argue that more broadly, structural transformation depends on the interactions among four key factors: the rate of agricultural productivity growth, the rate of non-farm employment growth, the extent of marketed agricultural surplus, and the growth of the total labour force. Argwings – Kodhek, Minde & Jayne (2002) observe that the food system provides a range of benefits that include creation of employment, generation of capital, inputs, and demand necessary for expansion of non-agricultural sectors.

Food is a matter of national interest to the Government of Zimbabwe, as agriculture is the backbone of the country’s economy. According to Moyo and Ngobese (1991), the agrarian question in Zimbabwe is central to agricultural development and employment creation. The agrarian reform programme initiated by the Government of Zimbabwe in the year 2000s, was in part meant to restore the means of food production to the black population, who were subjugated during the colonial period. Badiane (2002) opines that in order to sustain the
growth rates that are needed to reduce poverty and food security in the long run, countries will have to find a way of using the recovery in the agricultural sector and the rest of the rural economy to stimulate growth in the overall economy. This entails a shift in the income classes for which Atta-Mensah (2015) argues that there is a need for a better understanding of what constitutes structural economic transformation before the shift in income classes occurs. Thus, achieving food system transformation is not an end in itself.

**Young Entrepreneurs in Africa**

According to de Soto (2013), people are, by nature, entrepreneurial – particularly the poor, who typically have no alternative for feeding their families other than going into business for themselves, as street vendors or shantytown entrepreneurs. Elumelu (2015) argues that entrepreneurs are connected to their communities; have deep insights into local consumer demand and development gaps; and often discover inventive ways to meet social and economic needs. He goes on to state that it is not unusual in the African context to hear stories of entrepreneurs whose business ideas were inspired by the struggles of those closest to them prompting them to develop, for example, new healthcare delivery units, adaptive models of agricultural processing and web-based trading platforms accessible on smartphones.

UI took the time to orient the selected forty finalists through a series of training workshops prior to the inaugural edition of IB. Topics covered included: intellectual property rights, research and marketing, branding of business, and the pitching of business idea to potential investors. This is particularly important in protecting the innovator’s ideas and preparing them for the ‘rules’ of the business environment (de Soto 2013). de Soto (2013) argue that to do all the things that entrepreneurs in developed countries take for granted – like dividing labour, using property as collateral, protecting personal assets, expanding markets, or creating economies of scale – entrepreneurs in developing nations need the standards that only legal institutions can provide. He adds that institutions are crucial to facilitating the creation of wealth through entrepreneurship.

Government of Zimbabwe’s rural electrification programme has not adequately covered all the areas, which creates space for enthusiastic entrepreneurs. The energy frontier presents an opportunity for rural communities to leapfrog to cleaner energy forms. Research indicates that household waste can be used to make fuel briquettes. By so doing, rural communities are able to transform themselves to become centers of social and economic transformation.

**BUSINESS MODEL**
**Problem Identification and Proposed Solution**

We suggested the establishment of a free-range indigenous chicken production coupled with bio gas generation for Dora community in Mutare District, Manicaland Province (Business Model, Figure 1). In the model there is biological conversion of methane (gas produced in bio digester) to methanol (industrial development). We believe this is a sustainable, cost-effective and co-operative solution with multiple benefits to community members. Dora is characterized by; *inter alia*, severe dry spells, soil erosion, low water retention, low crop yields, and a high risk of crop failure. There is deforestation because of lack of adequate wood fuel. The
households face nutrition and agricultural productivity challenges, empowerment issues among women and youth and lack of income.

**Figure 1: Business Model**

Uniqueness of Business Model and its Impacts

Waste is a resource with value in our outlined business model. The Business Model is premised on the fact that there will be mobilization of the young people in Dora in favor of the shared goals and outcomes. The Business Model also provides for clean households and environment.

**Economic Impacts**
- Multiple uses of the products generated (e.g. slurry can be dried up and used as fertilizer or sold to generate income); and
- Value addition which opens new opportunities as well as markets in rural areas.

**Environmental Impacts**
- Clean and smoke-free environment; and
- The use of biogas (as an alternative energy source) will complement the afforestation efforts in Dora.

**Social Impacts**
- Promotes food and nutrition security among the rural dwellers;
- Leads to empowerment of women and young people; and
• Reduces migration of the young people to urban centers in search of better opportunities.

Discussion
We argue for new ways to view the rural communities in Zimbabwe versus the negative stereotypes (e.g. backward and unintelligent) associated with rural areas. Locally available resources can be turned into wealth which can be used by the targeted communities, in our case, Dora. The Business Model would be youth-led and youth-driven. In order to arrive at the numbers that would make it viable as a business entity, we further suggested the use of co-operatives among the members interested in the idea. We contend that the agriculture and food dimension within the broad idea is manageable at small scale but the energy dimension needs more numbers of community members in order to be viable on a commercial basis. Furthermore, the designs of the equipment needed for the bio gas digester and methanol collections are low-cost engineering designs, which can be used in remote communities during the up scaling process.

Conclusion
Young entrepreneurs can create jobs and wealth in their communities and this is a catalyst to transforming the rural economy in Africa. Innovations in food and agriculture as well as the energy sector are critical to changing the fortunes of the rural dwellers. Soft skills are also important in order for the young entrepreneurs to succeed in their Business Models. Innovation Baraza is a market place of ideas, and enables such to achieve the impossible. The energy from the young entrepreneurs and the wisdom from the old is also an important mix which can lead to new behaviors in agriculture and food systems. Lastly, an innovative idea is but a step in a series of steps to redress poverty and hunger problems in Africa.

References

Supplementary Information
Our Business Model is a product of imaginative collaboration among Long Cliffe Agriculture, Young Professionals for Agricultural Development (Zimbabwe Chapter), and the open-minded Independent Energy Specialist, Tawanda Chitiyo, in response to the call from Innovation Baraza for submission of innovative ideas.
Innovation Baraza: www.innovationbaraza.com
2015 Innovators: http://www.innovationbaraza.com/2015innovators/