NATIONAL TECHNOLOGY INCUBATION POLICY AND TECHNOLOGY DEVELOPMENT IN NIGERIA

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ABSTRACT

Entrepreneurship has been recognized as a powerful engine of economic growth and wealth creation, and is crucial for improving the quality number and variety of employment opportunities for the poor. Historical research method was adopted for the paper. Data were collected from Journals, unpublished materials, newspapers, magazines and the internet site. Finding from the study reveals that, Technology Incubation Centres (TICs) are centres established by the Federal Government to support technology development in Nigeria. Finding from the study further reveals that, there are 33 centres with estimated 850 or more active Entrepreneurs. Survey of the entrepreneur’s technology development products at various centre includes; electro-planting engineering component, nails and metals, plastic bottle molding, grain processing plant, incubator and hatchery, integrated yoghurt processing machine, DC – AC auto control inverter, Diesel sludge extractors, tricycle, clutch lever, battery terminal and cassava processing machine. The study concludes that, Technology Incubation Centres support Entrepreneurs to create new enterprises, new commercial activities, and new economic sectors. Technology Incubation Centres also contribute to the socioeconomic and technological development of Nigeria by promoting technological entrepreneurship, eradicating poverty through wealth creation, enhancing Nigeria’s technological capability, thereby ultimately reducing her reliance on petroleum resources.

KEYWORDS: Technology Incubation Policy, Technology Incubation Program, Technology development, Technology Incubation Centres.

1. INTRODUCTION

The function of Technology Incubation Centres (TICs) is to implement National Policy on Technology Incubation with the aim of nurturing prospective incubatees to become successful firms by providing enabling environment to build business from conception to successful ventures. Therefore, the existing expectation of incubation-driven entrepreneurship is to provide training, nurturing and conducive environment for successful business. They provide incubatees with infrastructure, market linkage, financing, exposure to information and communication technologies (ICTs) and support to overcome business skills. A business qualifying for incubation must meet certain criteria. Some incubators have diversified interests, accepting different types of start-ups into the fold, whereas others concentrate in one particular area or business. Some special interest incubators exclusively support women and minority-owned businesses and others choose to focus on innovative products and medical applications. A variety of sponsors support incubators. Some incubators are supported by government and non-profit bodies. These incubators’ main goals are job creation, tax base expansion, and economic diversification. Other incubators are affiliated with universities and other research institutes that provide communities with
research and business opportunities. Nigeria’s Technology Incubation policy combines resources from government, private sector and international donors. The Technology Incubation Programme in Nigeria has every sector of the economy as stakeholder because of its multiplying effects. However, the major shareholders in technology Incubation programme include: The three tiers of government, private sector organizations, investors, research tertiary institutions, entrepreneurs and any other persons that are interested and contribute in one way or the other to the success of the programme. The policy focuses more on innovative products rather than petty business.

Successful economies, such as, the China, United Kingdom, Japan and the United States attain a high level of economic development because they encouraged invention and innovation through business incubation and the availability of venture capital. But in Nigeria, despite government effort toward implementation of National Policy on Technology Incubation for the purpose of providing the nation with indigenous innovative technologies and encourage skill acquisition among Nigerians, The country still depend on foreign technologies for both domestic and industrial uses. It is view of this; the study seeks to evaluate the extent at which implementation of Technology Incubation Policy enhanced technology development in Nigeria.

In line with research objective, this study seeks to answer the following research questions: What is the role of Technology incubation centres on technology development in Nigeria? What are the some of the innovative products developed from the implementation of National Incubation Policy in Nigeria?

1.0 CONCEPTUAL OVERVIEW

1.1. Technology Incubation Policy

There are several definitions and approaches to technology incubation Policy. Conceptually ‘incubation’ is a diligent and planned process of ‘co-location’ therefore needs careful attention to the problems of entrepreneurs extending well beyond providing infrastructure and office services (Siyanbola, Jesuleye, Adelowo & Egbetokun, 2012; Kiriden, 2011). But Implementation of National policy on Technology Incubation is all about supporting business development, the purpose of establishing these Centres is to help new companies begin operations in Nigeria by linking management, financial capital, technology, labour and resources to build commerce. The main objective is to develop veritable Institutional Mechanism for commercialization of Research and Development (R&D) results as well as provide integrated support programme designed to assist budding entrepreneurs in the development of new technology-based firms both start-up and fledglings by way of effectively link talent, technology, capital and know-how to leverage entrepreneurial talent in order to accelerate development of new companies and speedy commercialization of R&D and innovation.

According to the National Business Incubators Association (NBIA), “Business Incubation catalyses the process of starting and growing companies, providing entrepreneurs with the expertise, networks and tools they need to make their ventures successful. Incubation programmes diversify economies, commercialize technologies, create jobs, create wealth, nurturing skill acquisition and invention processes”. The term incubator is a device for nurturing immature phenomenon to maturity or self sustenance under a control environment but a business incubator is an initiative that systematizes the process of creating successful new enterprises, by providing entrepreneurs with a comprehensive and integrated range of services, which include floor-space made available on a flexible and affordable, but temporary basis; common services that include secretarial support and shared use of office equipment; hands-on business counselling; access to specialized assistance such as research and development support and venture capital; and networking activities operating as a reference point inside the premises among entrepreneurs and outside to the local community. According to Lalkaka (2009), business incubation is a means by which visions of new businesses are turned into reality with reduced risks. Incubators aspire to have a positive impact on a community’s economic health, by maximizing the success of emerging companies (Cassim, 2011). Business incubators have proved effective in many parts of the world.

According to Rice and Matthews (2015), only 10 business incubators existed in the United States in 1980. There were nearly 500 by 1995, meaning a new incubator has been opening every week. The technology incubators generally focus on nurturing technology intensive enterprises and knowledge-based ventures. The technology incubation system (TIs) is variously represented by entities such as Technopolis, Science Parks, Research Parks, Technology Parks, Technology and/or Business Incubators. These entities operate as separate organizations but are mostly integrated with other players in the innovation system. The terms Science Parks, Research Parks and Technology Parks as well as Technology Incubators (TIs),
Technology Innovation Centres (TICs) and Technology Business Incubators (TBIs) are used interchangeably in many countries depending on the level and type of interaction between R&D community, venture funding and industry (Lalkaka, 2009). Incubators are available in various types rendering a range of long and short-term assistance and they help in establishment of new enterprise in one way or other. Many of these provide only guidance, technical assistance and consulting to entrepreneurs and offer Business Development services. ICT incubators are major examples of these Incubators where clients access to appropriate rental space, shared basic business services and equipment. Few incubators assist only in developing new ideas and arrange for venture capital funding. Incubators are sometimes known as Business Accelerator as it accelerates start-ups by providing quick knowledge, support services and resources (Lewis, 2011).

Essentially, the incubation programme is to assist and support the transformation of selected, early stage businesses with high potentials, into self-sufficient, growing and profitable enterprises (Lewis, 2011). By reducing the risks during the early period of business formation, the incubation sustains the new enterprises that might otherwise fail due to lack of adequate support. In doing so, the incubation programme contributes to the economic growth by creating jobs and offering other socio-economic benefits. According to Adelowo and Egbetokun (2012), technology incubation programme can therefore be seen as an economic development tool designed to accelerate the success of high technology entrepreneurial enterprises through the provision of an array of technology business support resources and services in a controlled work environment. Promotion of small and medium scale development is yet another contribution of technology incubation programme to the economy, that is it assists in incubating knowledge-base skilled and unskilled workers, start-ups into commercially viable products/services by providing specialists in various area of endeavors, skilled training, guidance, critical support services, such as invention and innovation, financing, laboratory, library, networking/ ICT, quality control workshop support services to all tenants or small and medium scale businesses at each centre, and a conducive environment (affordable, well-equipped workspace) to entrepreneurs.

Defining some of the assistance given to entrepreneurs within the incubation centres, Onmonya (2011) said, once entrepreneurs are accepted into the business incubator, the business incubator analyzes their needs and designs a program to strengthen and accelerate the business. The business incubator is proactive in assisting the clients, and will offer assistance in areas that the entrepreneurs may not be prepared to deal with on their own. The business incubators may also require they incubate to take training courses to ensure a certain level of management knowledge. While the exact mix of services depends on what is needed in the local market, business incubators usually provide the following four types of service: i). an office space with meeting rooms, telecommunications, reliable electricity, and in some environments, security services. ii). Management issues, such as business planning, financial management, marketing and regulatory compliance on formal matters, such as applications for registration and licensing. iii). providing seed loans, or taking equity in the enterprise. iv). Experienced business professionals, knowledge sharing with like-minded entrepreneurs, and links to business relationships and opportunities. The value of a psychologically supportive environment cannot be overemphasized. Most of info-development's business incubators identified the contrast between entrepreneurship and local values as a key challenge for their clients, and many cited culture as their clients' most significant barrier. Therefore, it is not surprising that entrepreneurs cite the psychological support provided by incubation staff and fellow entrepreneurs in the incubator, who “believe in you and your ideas” as having especially high value. One grateful entrepreneur referred to his incubator as an “oasis of cultural safety.”

According to Abdullahi (2015) defined Technology Incubation programme is a veritable institutional mechanism for the commercialization of Research and Development results from the academia, specialist research centres and other innovative efforts targeted towards accelerating the economic and technological development of a nation. The above statement was corroborated by Lalkaka and Shaffer (2012) stated that the objective of an incubator is to help promote venture creation and economic development by providing affordable work space, shared facilities, counselling, training, information and access to professional networks.

From the definition above, we can deduce that, the aim of the policy is to commercialize technological-based inventions and innovations that emanate from universities, research institutions, colleges of education and even individual for the purpose of engendering entrepreneurship culture, create jobs and wealth for business owners. National Policy on Technology Incubation is an entrepreneurship developmental programme that deals with fostering the formation of new venture, fast-tracking research to industries linkages, facilitating innovation with the aims of creating jobs and wealth generation.
According to National Business Incubation Association (NBIA) (2012), Technology Incubation is the temporary, facilitative support program provided to start-up enterprises through the delivery of complex services and special environment with the aim of improving their chance of survival in the early stage of their business and establishing a sustainable business. The term incubation refers to the process of support, while incubator stands for the organization and infrastructure that are set up for these purposes. The Technology Incubation concept is an integrated support programme provided by the government with the intention of creating and nurturing of budding value-added and technology-based enterprises (NBIA, 2012). The researcher observe that, the concept of TIP and TICs were meant to speed up the commercialization of Research and Development (R&D) results by effectively linking talents, technology, capital and know-how in order to accelerate the development of new enterprises were not capture in the definition above.

According to Jibril (2012), the incubation process begins with the admission of a value-added technology based enterprise into a Technology Incubation Centres (TICs) and ends with graduation after three (3) years of resident incubation. Post incubation therefore, begins after the graduated entrepreneur has relocated to a synergy based industrial cluster, technology park or any organized set up were some of the subsidies in respect of facilities and capacity building as earlier enjoyed at the TI program can be extended to facilitate corporate survival (Mohammed, 2012:85). Technology Incubation Programme is an initiative of Nigerian Government to increase interest in fostering indigenous business development, particularly small startup business entrepreneurship as an economic development strategy and the desire to develop high-technology businesses in the era of globalization (Jibril, 2012:78).

This researcher argues that, TIP is not about fostering indigenous business development only, but to provide guidelines for Nigeria to maximally exploit the benefits of technology Incubation, which include local and regional economic development, job generation, wealth creation, technology acquisition and commercialization; and promotion of Techno-entrepreneurship culture, in order to attain global competitiveness. Thus, the development of the programme of this nature may be hampered by inconsistent funding, structural problems and poorly constructed linkages with relevant institutions. As such the formulation and implementation of National Policy on Technology Incubation is not only imperative but necessary (Obande, 2017).

But researcher argues that, Nigeria like many other developing nations has technological goals which must be strategized for short term benefits such as jobs and wealth creation in Nigeria. This objective was clearly missing in the above definition. The Technology Incubation Programme has every citizen as a stakeholder because of its multiplying effects. However, the major shareholders in technology Incubation programme include: The three tiers of government, private sector organizations, investors, research tertiary institutions, entrepreneurs and any other persons that are interested and contribute in one way or the other to the success of the programme. Successful economies, such as, the United Kingdom, Japan and the United States attain a high level of economic development because they encouraged invention and innovation through business incubation and the availability of venture capital (Abdullahi, 2015). In addition, the uniqueness of this programme is that, it provides very high subsidies compared to other known policy models (Abdullahi, 2015:8).

This research argues that, Technology Incubation Programme in Nigeria has other benefits apart from invention and innovation, these include; Promoting economic development, enhances the creation of entrepreneurial culture, provides facilitates, access to resources such as information technology, mentors loans, grants, raises business credibility, reduces business risks, facilitates products’ marketing and synergy between participants, Improve business skills, Promotes knowledge acquisition and global competitiveness of products, creates investment choice, Provides opportunity for research commercialization, fosters environment for interaction with industries, income generation and jobs creation.

1.2 Technology Innovation/Development

Technology innovation is defined as the results of a creative process involving different actors from one or more organizations, which leads to a qualitatively new means-end combination that is introduced to the market or the operations of a firm for the first time (Gemünden & Salomo, 2014:505). Smith & Barfield (2006:21) stress the necessary introduction to the market that differentiates invention from innovation. The former does not make a direct economic contribution to an incumbent firm. Hauschildt & Salomo (2011:4) include in their definition of Technology innovation the need for “measureable” newness in terms of change compared to the status quo. Innovations can be categorized and analyzed according to the following dimensions, which will be expanded upon in the following sections (Hauschildt & Salomo 2011:5):
Process innovations represent new factor combinations through which production can be offered more efficiently (e.g., higher quality, safer, faster) (Hauschildt & Salomo 2011:5). Process-related view of innovations begins with an idea, includes a number of stages and ends with market introduction or, in some cases, early termination (Billing 2013, p.35). Innovation processes are characterized by the creation of value through the transformation of input to output. Due to the complexity of innovations, processes span a relatively long period of time. By dividing the process into stages, the necessary tasks at any given point in time become apparent (Billing 2013:35). Stages include a number of activities that can be performed simultaneously (Billing 2013:36).

The concept of product innovation is broader and includes changes in the utilization of a product or service in the market (Hauschildt & Salomo 2011:5). Product innovations impact effectiveness by providing the user with a new functionality or existing functionality performed in a new way (Hauschildt & Salomo 2011:5). Researchers further distinguish between organizational and business-related innovations (Hauschildt & Salomo 2011:8–9). Organizational innovations affect the internal structures, culture and systems of companies and provide a potentially positive impact on financial performance (Hauschildt & Salomo 2011:9). Business-related innovations are business model innovations defined by “the discovery of a fundamentally different business model in an existing business” (Markides 2016:20).

Radical innovations are characterized by a high degree of newness, which implies an elevated level of all dimensions (Garcia & Calantone 2012:120). Garcia & Calantone (2012:123) differentiate between radical, really new, Literature review 9 discontinuous and incremental innovations. They define radical innovations as innovations with a high degree of newness in technology- and market-related areas from simultaneous micro and macro perspectives.

Technological Innovation is defined in this study as a successful exploitation of new ideas. That is the development and commercial exploitation of a new idea for a product or process that contributes to wealth creation and profitability. The large-scale benefits of innovation come from the eventual wider diffusion of these new products and processes across the economy. Innovation takes many forms. It can be technological in nature (relating to new machinery or other form of equipment), organisational (relating to changing management practices or general structures) or even outside of these two main categories.

THEORETICAL FOUNDATION

Neo-classical economic theory assumes that markets are perfectly competitive, information is easily accessible, knowledge is freely available, and economic agents are rational actors who respond to disequilibriating forces to bring it back into equilibrium. However, a clear description of an entrepreneur remains elusive (Baumol, 1993). Definitions abound; he is an economic decision maker who is alert to exchange opportunities with profit potential and is the first to act (Kirzner, 1973), the initiator of an enterprise thus differentiated from an agent (or manager), an arbitrager who takes advantage of the profit opportunities created by information asymmetries and brings about changes in prices and quantities (Hayek, 1949). Hence, in neoclassical as well as the Austrian economic tradition (represented by economists, such as, Menger, Hayek, Mises and Kirzner), in a disequilibrated system entrepreneur is the seeker of imbalances in the economy, alert in identifying profit-making opportunities, acts on these opportunities and as a consequence entrepreneur restores equilibrium to the market and creates order.

Inertia is an inherent quality of physical as well as social and economic systems. Hence the question that has intrigued scholars is what drives entrepreneurs to act? Mises (1996: 290-91) observes that entrepreneurs, “are driven solely by the selfish interest in making profits and in acquiring wealth”, and “the only source from which an entrepreneur’s profit stem is his ability to anticipate better than other people the future demand of consumers”. There is basic distinct element in this conceptualization of entrepreneurial action.

Entrepreneur’s desire for wealth drives them to search for profitable exchange opportunities. Entrepreneurship theory ascribes entrepreneurial action to profit motive, “material accomplishment” as Weber termed it (Max Weber in Gerth & Mills, 1946) and a significant body of entrepreneurship literature builds on this theme that, “Entrepreneurs operate their business purely with a view to maximizing profit they obtain from a given amount of effort” (Casson, 1982). The thesis that the desire for profits motivates entrepreneurs, which in turn drives economic growth, is well entrenched in the capitalist philosophy. If entrepreneur are those who “discover opportunities” the “opportunity” continues to be defined in terms of profit potential (Harper 1999, Shane & Venketaraman, 2000, 2001).
METHOD AND MATERIALS

Historical research method was adopted for the paper. That is, Some basic historical documents were relied upon for purposes of data collection for this study, this includes; National Science, Technology and Innovation Policy; 2011 -2015, Federal Ministry of Science and Technology “Official Pamphlet, 2014 – 2018, National Board for Technology Incubation (NBTI) strategic plan, Guideline and procedure for the registration of entrepreneur’s documents and technology incubation centres monthly progressive report form. Other data were collected from Journals, unpublished materials, newspapers, magazines and the internet site.

Findings

Technology Incubation Centres (TICs) are centres established by the Federal Government to support development in Nigeria. Finding from the study reveals that, there are 33 centres with estimated 850 or more active Entrepreneurs. Survey of the entrepreneur’s technology products at various centre includes; electroplanting engineering component, nails and metals, plastic bottle molding, grain processing plant, incubator and hatchery, integrated yoghurt processing machine, DC – AC auto control inverter, Diesel sludge extractors, tricycle, clutch lever, battery terminal, cassava processing machine, garri processing machine, milling machine, palm kernel crushing machine, industrial stabilizer, pharmaceutical syrups, soya nutria meal and fat control meals, wood stove, industrial welding machine, solar weed control system, moringa product, herbal scouring powder, multipurpose pounding machine, electric stove, cabinet oven, grinding machine, double and single burner, agro-processing machine, groundnut/soya bean extraction machine, solar inverter, grease/engine oil, wheat, plantain and bean flower, shea-butter cosmetics, Anti-mosquito repellant, natural fruit wine, anti-malaria herb drug, power bank, Acha processing machine, blood herb tea, leather industrial shoes, animal feed miller, rice thresher, dis-stoning rice machine, automatic switch over inverter, bread mixer, paint mixer, crushing machine for agro-related product, motorized stretcher, maize threshing machine, computer and electronic software, post harvest storage powder, bio-pesticides, organic minerals fertilizer, parboling, drying, cutting drilling machine, generator power booster, palm oil processing machine, wax based chalk, mobile fish pond, barite and calcium carbonate.

The breakdown of the product shows that, Technology Incubation Centre Kano (North-West Nigeria) has Nine (9) resident incubatees (entrepreneurs) and Three (3) non-resident incubatees with about 200 locally made technology products in the market with over 8,000 direct and indirect jobs created by the centre. As part of post – incubation programme, the centre has successfully graduated 15 resident incubatees. Technology Incubation Centre Nnewi (South-East Nigeria) has thirty (30) resident incubatees (entrepreneurs) with Ten (10) non-resident incubatees with about 50 locally made products in the market with over 1,000 direct and indirect jobs created by the centre. As part of post – incubation programme, the centre has successfully graduated Six (6) resident incubatees.

Technology Incubation Centre Benin (South-South Nigeria) has eleven (11) resident incubatees (entrepreneurs) with one (1) non-resident incubatees with about 63 locally made products in the market and over 500 direct and indirect jobs created by the centre. As part of post – incubation programme, the centre has successfully graduated Seven (7) resident incubatees. Technology Incubation Centre Jos (North-Central Nigeria) has Eight (8) resident incubatees (entrepreneurs) with four (4) non-resident incubatees with about 45 locally made products in the market and over 700 direct and indirect jobs created by the centre. As part of post – incubation programme, the centre has successfully graduated Four (4) resident incubatees.

Technology Incubation Centre Jaligo (North-East Nigeria) has Seven (7) resident incubatees (entrepreneurs) with Five (5) non-resident incubatees with about 63 locally made products in the market and over 900 direct and indirect jobs created by the centre. As part of post – incubation programme, the centre has successfully graduated Four (8) resident incubatees.
**Figure 1**  
Selected Technology Development Products

<table>
<thead>
<tr>
<th>Name of Incubatees</th>
<th>TIC Products</th>
<th>Benefit/Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>baffa metal fabrication ltd</td>
<td>Tri cycles, Assorted Fabrications.</td>
<td>Transport of Agricultural Products &amp; other goods</td>
</tr>
<tr>
<td>AMSA Engineering Ltd</td>
<td></td>
<td>Metal cutting</td>
</tr>
<tr>
<td>King Nadis Industrial</td>
<td></td>
<td>Fabrication of Simple &amp; Complex Industrial</td>
</tr>
<tr>
<td>Aleb Pharmaceutical</td>
<td></td>
<td>Paracetamol syrup, 60ml, Chloroquine syrup 60ml, expectorant syrup.</td>
</tr>
<tr>
<td>Ade Polythene</td>
<td></td>
<td>Polythene Its use for packaging of hospital drips</td>
</tr>
<tr>
<td>Sarah Special</td>
<td></td>
<td>Plantain Flour, Wheat Flour, Yam flour and Pundo Yam Flour</td>
</tr>
<tr>
<td>Tendency Technical Services</td>
<td></td>
<td>Grain processing plant: Cruster edible oil extraction Mach</td>
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<tr>
<td>Bravo Plastics Nig. Limited</td>
<td>Low density polythene (LDP)</td>
<td>Polythene Bags and plastic for foods packages</td>
</tr>
<tr>
<td>A.F Technology</td>
<td>- Polythene Bags - Plastics</td>
<td>Alloy Rim, Impeller Cover, Water Pump, Coupling Puller</td>
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</tbody>
</table>
CONCLUSION AND RECOMMENDATIONS

The implementation of technology incubation policy is an innovative process (commercialization) aimed at production of technology related products. The agents of incubation are incubators. The Incubators are an economic decision maker who has opportunities to translate technology related ideas into profit potential ventures. Technology Incubation Centres support Entrepreneurs to create new enterprises, new commercial activities, and new economic sectors. Technology Incubation Centres also contribute to the socioeconomic and technological development of Nigeria by promoting technological entrepreneurship, eradicating poverty through wealth creation, enhancing Nigeria’s technological capability, thereby ultimately reducing her reliance on petroleum resources.

The study concludes that, Technology Incubation policy has accelerated the industrial development of Nigeria through the creation of new businesses, jobs, wealth with a corresponding reduction in poverty. Incubators use strategies such as increased access to capital, technical and business management training, contract procurement assistance, creating networking opportunities through clustering, creating access to credit facility, export and technology transfer assistance. These services are provided through collaboration, synergy and liaison with other entrepreneurship development organization within the same region.

Therefore, Technology Incubation policy is the agents of economic transformation and industrialization in Nigeria and the policy are implemented under the technology incubation programme (TIP).

Based on the above challenges facing TICs and its entrepreneurs, the following steps should be taken to advance the fortune of the centre and its entrepreneurs;

1. The government should create an enabling environment for innovation and entrepreneurship. The very nature of innovation means that entrepreneurs will either take advantage of existing gaps or forge into new territories. Either way, creating an enabling environment that lowers the barriers to market entry will certainly spur entrepreneurship. To achieve this objective, entrepreneurship should be integrated into the country’s economic development efforts by: Making entrepreneurship part of the explicit mission of the country’s economic development efforts;

2. Government and other stakeholder should Create support mechanisms for entrepreneurs through the establishment of economic development programs that target entrepreneurs, and using entrepreneurial capital, and research networks to deliver services for entrepreneurs. By integrating entrepreneurship into the country’s development efforts, government lends credibility and draws attention to the role of entrepreneurs allowing them to gather the momentum required to enable them actively participate in the transformation of the economy.

3. Government should Offer incentives to foster entrepreneurship, numerous examples indicate that access to reliable and steady sources of funding is essential to entrepreneurial growth and sustainability. By establishing a framework that encourages the funding of new ventures, government can help ensure those solutions that work will sustain and grow their impact. To achieve this objective, government needs not only to invest in diverse sources of risk capital to fund entrepreneurs, but also to provide the fiscal incentives for investors to provide funding by: Developing a rich base of early-stage capital options to fund entrepreneurs; supporting and incentivizing angel investors; ensuring that risk capital is available to the wider society to broaden and enhance entrepreneurial capacity.

4. There should be Encouragement by big firms to support entrepreneurs, since large firms generally have greater access to finance, they can be encouraged to assist smaller enterprises, particularly their suppliers, access finance. They can also provide other factors of production or guarantee loans made by financial institutions to the SMEs they work with, given that they already have an established relationship with these firms. The large firms can also assist SMEs to obtain export credits, similar to the experience of Zambia’s agro-food industry and in other countries that have developed such arrangements to address concerns.

REFERENCES:


