

# Fostering Entrepreneurship Development among Youth for Job Creation through Industrial Development: The Case of Zanzibar Technology and Business Incubator

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**Abstract:** Entrepreneurship development is recognized worldwide as one of the vehicle for job creation among youth and hence enhancing sustainable economic development. In this regards, many countries have taken various initiatives to promote Entrepreneurship through Technology and Business Incubators (TBIs). The experience shows that, most of prominent industries worldwide have originated from clusters or incubators. Like many developing countries, Zanzibar has high youth unemployment rate of 14.3%. In order to reduce the unemployment rate and to meet the development goals, the Revolutionary Government of Zanzibar through Ministry of Labour, Empowerment, Elders, Youth, Women and children in collaboration with COSTECH, Dar es Salaam established the first ZTBI incubator to spearhead entrepreneurship development in Zanzibar, foster entrepreneurial culture and nurture start up business among youth. This paper analyzed the potential of ZTBI in supporting entrepreneurship development and job creation in Zanzibar. It has highlighted the status of youth employment; the role of agribusiness and agro processing industry and analyzed linkages between ZTBI incubates with other sectors. The paper also presents the number of companies that has been established since its inception in 2015. The method used in this study was survey, observation and discussion. Finally, the paper revealed that, there are numbers of activities carried out including training of 779 youth on entrepreneurship skills, conducting outreach programme to support youth outside of the incubation centre to inculcate entrepreneurial mind-set. Moreover, it stimulated entrepreneurial mind-set among youth through business plan competitions and incubating 11 “companies” with 2-5 individuals in business. It further facilitated start up business and incubating start up business to increase their success rate and incubated companies create jobs, revitalized communities. It also found that, incubates activities have close linkages with many sectors, such as tourism. Lastly, this paper also contributes to enhance the knowledge transfer and strategic implementation of the ZTBIs incubator models and provides useful information to policy makers who are interested in starting new TBIs in other developing countries.

**Key words:** Entrepreneurship development, economic development, and Zanzibar technology and business incubation.

## INTRODUCTION

Entrepreneurship plays a pivotal role for economic development and key agents of innovation in market economies. In recent decades, the growing attention has been paid to the role of start-ups and small firms in fostering economic growth and employment by stimulating entrepreneurship and new business formation so as to ensure the creation of jobs to the society (Andersson and Noseleit, 2011). Moreover, the emphasis on industrialization has been made by our leader and has been taken as a county slogan that intends to transform our economy to semi industrialized by 2025. Hence fostering entrepreneurship and SMEs development has been advocated to enhance competition that generates employments to youth. It enhances the growth economy, innovation and aggregate productivity growth.

Youth employment issues have been well articulated in MKUZA II and development partners plans such as International Labour Organization (ILO) as one of the major means to reduce poverty and empower the people to be part of the social, economic and political progress (MKUZA II, 2005; ILO, 2011).

The current youth unemployment rate is 14.3%, which is posing a great threat to the Revolutionary Government of Zanzibar (RGOZ). The biggest drivers of Zanzibar's youth unemployment crises include: lack of jobs, lack of skills and experience, mismatch between supply and demand for labour (World Bank, 2010). This factor is largely prompted by numerous barriers to youth entrepreneurship Plethora and hence minimizes job creation in the public, private and nonprofit sectors. The Revolutionary government of Zanzibar has introduced various programmes including incubation and cluster programme to minimize the barriers that limit the inculcation of entrepreneurship mind in our community.

The aim of this paper is to assess the contribution of technology business incubation center in Zanzibar to foster entrepreneurship and industrial development among youth. The desk review and discussion were made that involved reviewing of various documents and discussion with incubatees at the center and youth out side of the center. It was also analysed the business model of the ZTBI incubator and the companied and job created since its establishment in the year 2015.

Based on analysed results, it was recommended that the business incubation center has proved to be a vehicle for job creation and it has a power of creating a number of micro industries. In this regard, in order for Zanzibar to reduce the challenge of youth unemployment, the government and private sector have to join the hands in establishment of business incubation to Zanzibar and recently to Pemba.

## **MATERIALS AND METHODS**

### **Overview of business Incubation**

According to the EU Centre for Strategy and Evaluation Services, "A business incubator is an organization that accelerates and systematizes the process of creating successful enterprises by providing them with a comprehensive and integrated range of support, including: incubator space, business support services, clustering and networking opportunities (CSES, 2014). It focuses on a range of services on clients that are designed to help them launch well managed businesses. This mix of services is generally drawn from: administrative services (photocopying, bookkeeping, etc); business advice services (coaching, counseling, mentoring, training), technical advice (access to expensive equipment, etc), financing, and networking opportunities (between clients, links to wider business community). Other services (loan & venture capital funds, lobbying for special services/bureaucratic treatment, etc.) are sometimes developed to help clients overcome specific problems in the given business environment. It facilitates entrepreneurs to grow from scratch.

Entrepreneurship can be described as "the process of bringing together creative and innovative ideas and coupling these with management and organizational skills in order to combine people, money resources to meet an identified need and create wealth Nwangwu (2007). Entrepreneurship is a process of bringing together the factors of production, which include land, labour and capital so as to provide products or services for public consumption. However, the operational definition of entrepreneurship is the willingness and ability of a person(s) to acquire educational skills to explore and exploit investment opportunities, establish and manage a successful business enterprise.

Incubates can be resident, non-resident or affiliated to the incubator. The services targeted on clients are costly in relation to many other types of business development services (training programmes, advice services) but are justified by supporters as investment in success because the

concentrated support services should lead to higher survival and growth rates of incubated businesses.

Prior to a business incubator admitting a business as a new client there is often a pre-incubation programme to support potential entrepreneurs define their business ideas and develop their plans to the point where they can be evaluated as a potential client. It is followed by intense incubation and post incubation for clear exit route for successful businesses, including after-care services that ensure both a smooth transition, and support for future growth, such as internationalization, and ongoing linkages back to current and new clients of the incubator.

An incubation centre provides a support structure and an adequate framework for enterprise creation which brings together specialized resources aimed at assisting companies before their setting up and/or during their initial years of operation. A business incubator offers an ideal environment for start-ups and entrepreneurs to transform their ideas into viable business ventures. Entrepreneurs and small businesses receive proper backup and guidance to be able to concretely market their business concepts, operate effectively and keep up with the pace of change whilst remaining competitive.

### **International Best Practices**

Strengthening of the MSMEs sector through business incubators has been a successful tool in achieving economic goals in many countries. In this study we took the experiences of India, South Africa, Rwanda and Tanzania Mainland in incubation.

In all countries business incubators provide focused support to entrepreneurs through a supportive environment that helps them establish their business ideas and develop their concepts into market ready products, supports the acquisition of business knowledge, facilitates the raising of necessary finance, introduces the entrepreneurs to business networks, all of which should substantially reduce the level of failure. The main objectives pursued by the respective national governments through business incubation were the following (Table 1).

**Table 1: Main objectives of the mentioned countries to set up Business Incubators**

	INDIA	RWANDA	TANZANIA MAINLAND	SOUTHAFRICA
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• Economic development, employment generation (targeting disadvantaged groups)</li> <li>• Technology Commercialization</li> </ul>	<ul style="list-style-type: none"> <li>• Employment creation among youth/women and to reduce high mortality rates of startup SMEs</li> </ul>	<ul style="list-style-type: none"> <li>• Technology transfer and Innovation</li> <li>• Creation and development of ICT start-ups</li> <li>• Turning idea into a profitable business by providing the valuable support services needed</li> </ul>	<ul style="list-style-type: none"> <li>• Technology transfer and Innovation</li> <li>• Creation and development of sustainable, globally competitive SMEs that contribute towards the accelerated growth of the South Africa economy</li> <li>• Supporting selected groups (i.e. women)</li> </ul>

(Source: *www.infodev.org*)

#### **ROLE OF ZANZIBAR GOVERNMENT IN SUPPORTING ENTREPRENEURSHIP AND JOB CREATION**

The Revolutionary Government of Zanzibar as part of international community is implementing the UN declaration on youth employment through national development plans and strategies to incorporate issues that address youth and women employment. Zanzibar initiated a number of reform programmes since 2010. These reforms are aimed at increasing the economic growth of the country and thereby generating employment opportunities and ultimately reduction of poverty. In an effort of supporting entrepreneurship development, the RGOZ has implemented a number of policies and programmes such as Poverty Reduction Plan (2002-2005) MKUZA I (2007-2010) & II (2010-2015) MKUZA II Successor Strategy (2016/17-2020/21), reviewing of industrial policy, SMEs policy, and Empowerment policy, Cooperative Policy etc.

Apart from the above formulated policies and programmes, the Revolutionary Government has recently finalized the Empowerment Policy, Entrepreneurship Development policy to promote entrepreneurship so as to reduce poverty and empower the people to be part of the social, economic and political progress. Among the initiative, Zanzibar Government through the Ministry of Labour, Empowerment, Elders, Youth, Women and Children together with Tanzanian Commission for Science and Technology have established ZTBI to address unemployment issues through creation of innovative business by youth/women. Despite

the Government efforts, there are still some factors, including the educational status, mindset, risk taking culture, lack of innovation, lack of start-up capital, entrepreneurial education and exposure that limit the growing sector. Therefore the aim of the establishment of the Incubation Centre was to address the above mentioned issues by changing the entrepreneurial mindset and hence increasing the job creation within Zanzibar's communities. ZTBI is creating entrepreneurial awareness among youth/women, incubates business idea, nurture and growth of startup business to sustainable business.

#### **METHODS**

The method used in this study include visit to the incubation center, discussion with incubator managers and incubates and discussion with number of MSMEs outside the center with the aim of gating their views on their development considering existence of the center but also understanding the gaps and barrier towards their development.

#### **RESULT AND DISCUSSION**

This section presents the status of Zanzibar technology and business incubator followed by its contribution and achievements. ZTBI is the first Technology business incubation established in Zanzibar. It is located at Karume Institute of science and Technology and it is under the parent Ministry of labour, economic empowerment youth, women and children. It incubates youth in ICT, Tourism and agribusiness. The incubator is using business model to accomplish its objective. The business model has 5 stages that is innovation space, pre incubation, and incubation stage 1, 2 and 3.

The incubator design model is somehow self-sustained in its operating cost, which allows win-win situation to youth incubates in ZTBI. Before the youth/women join the incubation, the entrepreneurial training are offered which is mandatory and after they joined in the center, they are given continuous training that assist them boost their entrepreneurial mindset. At each stage, ZTBI incubates pay subsidized fees which assist ZTBI sustainability but also it acts as indicator to show their commitment with the incubation activities.

For the incubator to perform its task of providing entrepreneurial environment to youth, it has to be sustained with a number of technologies that provide quality production environment. Hence for the incubator to access those technologies it approaches various public and private organizations such as COSTECH to fund the projects. Hence apart from the

Ministry, the incubator is working very closely with the stakeholders to increase the successful operation of the center.

### **ZTBI Contribution towards Creating Entrepreneurial Mindset**

It has been noted that, entrepreneurs in the incubation center have many benefit compared to those not in the center including access to advisory services, capacity building such as business training, mentoring, specialized technical training, linkages and networking; access to facilities, technology, markets and access to finance.

The ZTBI model has emphasized the training in every stage of incubation so as to make sure that, the incubates are capacitated with appropriate skills for developing business. The ZTBI case study revealed that ZTBI has trained a number of young men and women in entrepreneurship with practical orientation. ZTBI assists youth and women by providing them with business development support services as affordable space, office facilities, technological support, skills training and marketing and networking support. The ZTBI incubator has a dedicated programme to assist incubates in setting up of their own business, thus reducing overall the cost of business start-ups.

### **Industrial Development through Zanzibar Technology and Business Incubator**

ZTBI incubates entrepreneur with business idea in ICT, agribusiness and tourism. Agribusiness and and tourism entrepreneurs in ZTBI perform a number of small scale production using the small scale machines purchased by the incubator. The incubator has purchased a number of machines and installed them to assist youth/women to make small scale industrial production. In addition, youth are trained on how to operate the machines. The purchased machine includes milk processing machines, fruits and vegetable production, solar drier, soap making machines, candles and honey processing. Incubates processing products in a certain machine are facilitated with the machine guideline and operating procedures which was created by SUA experts. This allows the incubates to follow during the operation.



(Source: [www.ztbi.org](http://www.ztbi.org))

**Figure: Some products made in the incubation center: ZTBI Agribusiness Incubator**

## FINDINGS

### Training provided by ZTBI

Since its inception on 11<sup>th</sup> January 2015, ZTBI has trained 770 youth entrepreneurs among them 85% are female and 15% are male.

**Table 2: A number of youth trained by ZTBI**

S/N	Training	Female	Male	Total
1.	Youth/women trained on entrepreneurship/practical training on agribusiness skills (till Dec 2016)	664	115	779
	Total	664	115	779
	Percentage of Male Vs Female	85%	15%	100%

(Source: ZTBI)

### Company formed through ZTBI Incubation Support and employment generated

**Table 3: A number of companies formed through ZTBI Support**

ZTBI GROUPS ( INCUBATION)	Sector of Business	Female (Owner)	Male (Owner)	Employees	Total	Location
Precious Technology	ICT	-	1	1	2	ZSSF Building
Mudray Technologies	ICT	1	1	2	4	Malindi
Tayman Group	Dairy	2	-	-	2	ZTBI
Momar Enterprises	Dairy	2	-	-	2	ZTBI
IMAA Dairy	Dairy	1	2	-	3	ZTBI
OWEN Enterprises	Garlic Sauce	1	1	1	3	ZTBI

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ZTBI GROUPS (INCUBATION)	Sector of Business	Female (Owner)	Male (Owner)	Employees	Total	Location
ASILIA Fruit Juice	Juice/Jam	2	0	-	2	ZTBI
MtuleAmcos	Tomato sauce	5	5	-	10	Mtule
SOS Company	Soap (Liquid, Powder, Bar)	14	0	-	14	Mwanawerekwe
HARM Candles	Candles	4	0	-	4	Mpendae
MAARIFA	Soap	9	4	-	13	Mkoni, Pemba
Total employment created (59)		41	14	4	59	

*(Source: ZTBI)*

**ZTBI Support to Start Ups with Initial Funding**

In the effort of reducing the challenge to support youth at ZTBI solve the problem of capital to start and improve their business development and growth. ZTBI in collaboration with Milele Zanzibar Foundation has created Revolving fund with an initial capital of TZS 100 Million. It is aimed at provision of seed capital for youth to start their own businesses. The objectives of this fund is to support the youth startup entrepreneurs with initial funding through increased access to funding opportunity for youth startup entrepreneurs, reduction of startup business failures due to lack of funding; increasing a number of formal enterprises, contribution to the Government mission for Result for prosperity (R4P). The target groups for this fund are ZTBI incubates. The company that has received loan till January 2017 is shown in Table 4.

**Table 4: Number of companies received loan from ZTBI**

S/N	Name of Enterprise	Amount of Loan given	Sector
1.	Owens Enterprises	4.5 Million Tsh	Agribusiness
2.	Asilia Juice	4.5 Million Tsh	Agribusiness
3.	Tyman Dairy	5 Million Tsh	Agribusiness
4	Momar Enterprises	3.5 Million Tsh	Agribusiness
5.	Mudray Enterprises	4.5 Million Tsh	ICT
6.	IMAA Dairy	5.0 Million Tsh	Agribusiness

*(Source: ZTBI)*

## DISCUSSION

A business incubator is an economic and social development entity designed to advise potential startup companies, help them to establish, and accelerate their growth and success through a comprehensive business assistance programme.

Chandra (2007) discusses a comprehensive study of business incubation in the United States, China and Brazil in order to provide an understanding of the similarities and differences in incubation systems. It is revealed that business incubation is an institutional environments for new business creation.

The technology and business incubator experiences gained by Mathew and Vijay (2012) from China developed Torch Program in 1988 to the creation of TBIs. The impact of Chinese incubators makes the largest developing countries in the field of incubation and third largest in the world after the United States and Germany. As of 2000, about 37 percent of China's 21,000 high-tech companies in development areas were located in incubators.

Mubaraki and Buslar (2013) summarize the effect of business incubators in developing countries for job creation in some countries such as Bahrain, Jordan, Morocco and Syria which shows incubators programme created 2,123 jobs with 609 graduated companies, Bahrain incubators programme created 35 jobs with 30 graduated firms, Jordan incubators program created 6 jobs with 3 graduated firms, Morocco incubators programme created 8 jobs with 4 graduated firms and Syrian Arabic Republic incubators programme created 7 jobs with 6 graduated firms. In summary, the total number of job created by the case studies was 2,179 with 652 graduate firms. They found that (i) business incubators provide support for start-up companies, (ii) graduated companies tend to have a greater probability of success and (iii) graduated companies have a significant positive impact on economic development (Mubaraki and Buslar, 2013).

Aggarwal *et al.* (2012) analyze the potential of technology and business incubation as a potential for promoting technology entrepreneurship and innovation in Rwanda as a tool for creating sustainable businesses in Rwanda. Their analysis focused on examining how university graduates succeeded to become successful entrepreneurs with the support they received from Technology and Business Incubation Facility (TBIF). It was revealed that, TBIF Rwanda established in 2005 supported 64 startups, various sectors and graduated 58 companies and after 3 years 56 company were still operational. The centre has also trained around 1,532 people in

entrepreneurship training and these companies created employment to 164 people.

As mentioned by other authors, this paper shows the importance of fostering entrepreneurship development for job creation. The Zanzibar Technology and Business Incubator as entrepreneurial development tool assisting the Government of Zanzibar to develop required entrepreneurial skills necessary for accelerated growth, reduce unemployment and poverty. In this regards, business incubation has shown the potential in accelerating the required level of entrepreneurship, enterprises and industrialization. It is therefore strategic and wise for Zanzibar to assign a significant and increasing business incubation centers in their effort to revamp the economy.

This will change the mind set of young people to embrace self-employment rather than waiting for non-existing government jobs. There is the need to ensure that those with innovative ideas are provided with the financial support to translate such ideas into reality. Finally, the paper revealed that, there are number a of activities carried out by ZTBI including training of 779 youth on entrepreneurship skills, incubated 11 companies employing 59 youth and provide loan to 6 companies. Moreover, it also stimulated entrepreneurial mind-set among youth through 2,016 business plan competitions.

It further facilitated start up business and incubating start up business to increase their success rate and incubated companies creates jobs, revitalize communities. It was also found that, incubates activities have close linkages with many sectors, such as tourism. We found that (i) business incubators provide support for start-up companies, (ii) graduated companies tend to have a greater probability of success and (iii) graduated companies have a significant positive impact on economic development.

#### **CONCLUSIONS AND RECOMMENDATIONS**

This paper shows the strategic implementation of the ZTBI incubator models and provides useful information to policy makers, academician and others who are interested in starting new TBIs in other developing countries. It has revealed that business incubator has a big contribution in job creation and industrial development which leads to reduction in unemployment and hence poverty reduction. So far there is only one business incubator in Zanzibar. In this regards it is recommended that the

Government, private sector, academia can establish business incubation in order to create innovative mindset among the youth.

It is prudent to mention here that the Government has initiated the process of establishing the Pemba Agribusiness Incubation Centre along with COSTECH in order to promote entrepreneurship that bridge the unemployment gap in Pemba Island. So far the feasibility study has been conducted and a plot has been identified and construction is under way. The Ministry has approached various development partners for implementation of this project including the financial support by the Revolutionary Government of Zanzibar.

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