Rapid Incubation Model for the Development of Micro and Small Enterprises in Sub-Saharan Africa

By Pralay Dey

Shridhar University, Rajasthan, India.

Abstract - Africa was called “The Dark Continent” by Europeans because little was known about it prior to European colonization. Sub-Saharan Africa region covering 48 countries refers to the area of the continent of Africa that lies south of the Sahara desert. Sub-Saharan Africa though having an agricultural base has all kinds of resources in the world in terms of vast availability of minerals, gold and diamond, crude oil and Uranium etc. like no other continent. Despite having so much resources, Sub-Saharan Africa continues to face longterm development challenges: poverty, dependence on a few primary commodities like agriculture and mining, low human capital, weak governance and non-existence of appropriate policies, low employment, low technology or processing capacity, low Investment, high cost of Finance, low empowerment of women, and climate change, non availability of cheap finance, etc.

Index terms : Micro and Small Enterprises, jobs, resources, Poverty, Rapid Incubation, Model, Incubator, Unemployment, Entrepreneur, Entrepreneurship, Hand holding support, projects, technology, Ideas, Finance, Marketing, business, economic, local, MSMEs, SMEs, Industry.

GJMBR-A Classification : FOR Code: 150314  JEL Code: L53, P12, L32
Rapid Incubation Model for the Development of Micro and Small Enterprises in Sub-Saharan Africa

Pralay Dey

Abstract - Africa was called "The Dark Continent" by Europeans because little was known about it prior to European colonization. Sub-Saharan Africa region covering 48 countries refers to the area of the continent of Africa that lies south of the Sahara desert. Sub-Saharan Africa though having an agricultural base has all kinds of resources in the world in terms of vast availability of minerals, gold and diamond, crude oil and Uranium etc. like no other continent. Despite having so much resources, Sub-Saharan Africa continues to face long term development challenges: poverty, dependence on a few primary commodities like agriculture and mining, low human capital, weak governance and non-existence of appropriate policies, low employment, low technology or processing capacity, low Investment, high cost of Finance, low empowerment of women, and climate change, non availability of cheap finance, etc.

Rapid Industrialization of Sub-Saharan Africa through establishment of Micro and Small Enterprises (MSEs) would be a signification step, addressing major challenges like distribution.

Establishing Micro and Small Enterprises (MSEs) is not a cake-walk despite having innovative inventions and ideas. It takes more than just having an idea of establishing a startup. Planning and arrangement of scarce resources like Finance, Infrastructure, Technology, Sourcing of raw materials, Marketplaces(buyers) and organizing Sales distribution channels are the major challenges for establishment and survival of any enterprise. Majority of startups fail in their first year of inception. Many of these failures can be prevented if entrepreneurs get handholding support by an Institution having specialized incubation programmers. An incubator’s main goal is to produce successful Micro and Small Enterprises with an array of targeted resources and services. These incubates have the potential to create jobs, develop technology for import substitution, commercialize new technologies, and strengthen local and national economies.

Rapid incubation model for the establishment of Micro/small enterprises is an unique way which transforms an unemployed youth even with scanty educational background, into a budding Entrepreneur quickly. This model envisages churning out a good number of entrepreneurs in limited time as compared to conventional incubators with relatively low investment. The model is also compatible with the existing environment of Sub-Saharan Africa and it has been already welcomed by several countries in this region to alleviate poverty.

Index terms : Micro and Small Enterprises, jobs, resources, Poverty, Rapid Incubation, Model, Incubator, Unemployment, Entrepreneur, Entrepreneurship, Hand holding support, projects, technology, Ideas, Finance, Marketing, business, economic, local, MSMEs, SMEs, Industry.

I. Introduction

Sub-Saharan Africa region lies south of the Sahara desert. There are 48 countries with a population of 841 million people and South Sudan is the latest entrant. Through this region of Africa is often called Sub-Saharan Africa but only few countries are actually within the Sahara Desert. The Sub-Saharan region is also known as Black Africa, in reference to its many black populations.

Sub-Saharan Africa is home to various languages, in-numerable tribes, ethnic and social groups, some representing very large populations consisting of millions of people, others are smaller groups of a few thousands.

Sub-Saharan Africa

Despite the diversification, there are many similarities amongst these countries. Sub-Saharan Africa, though having predominantly an agricultural & livestock base has the most resources in the world in terms of vast availability of minerals, gold, copper and diamond, crude oil and Uranium etc. Inter-regional
exchange of goods and export of raw material are common in most countries.

Except a handful of countries like Nigeria, South Africa, Kenya and Botswana, most of the 48 countries are facing similar challenges e.g., poverty, dependence on a few primary commodities like agriculture and mining, low human capital, weak governance and non-existence of appropriate policies, low employment, low technology or processing capacity, low Investment, high cost of Finance, low empowerment of women, and climate change etc.

Agriculture dominates the economy of African countries and is a major factor in determining livelihood fortunes. But the performance of African agriculture over the last 25 years has generally been poor. As a result, the number of hungry people has increased by 20 per cent since 1990 and is now estimated at 32 per cent of the total population, the highest prevalence of any region.

In world’s macro regions, Sub Saharan Africa is the least industrialized. Colonials including the Donors from North in fact never allowed local industries to grow. Instead they had set up large capital-intensive concerns industries to feed their own countries. Even after getting independence, most of the Rulers of these countries were reluctant to promoting the growth of existing small-scale and micro-enterprises.

Plantsation of Banana in Mozambique has become a futile and expensive activity in absence of International buyers

However, these modern big production centers contributed hardly anything to the development of the Sub Saharan Africa economy and society. Table 1 shows how the sub Saharan Africa countries are classified on GNI per capita basis.

**Table 1**: Africa development Indicators 2011 by World bank

<table>
<thead>
<tr>
<th>Country</th>
<th>GNI per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nigeria</td>
<td>21,000</td>
</tr>
<tr>
<td>South Africa</td>
<td>20,000</td>
</tr>
<tr>
<td>Kenya</td>
<td>15,000</td>
</tr>
<tr>
<td>Botswana</td>
<td>12,000</td>
</tr>
<tr>
<td>Tanzania</td>
<td>8,000</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>6,000</td>
</tr>
<tr>
<td>Malawi</td>
<td>3,000</td>
</tr>
<tr>
<td>Mozambique</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Planned development of Micro & Small enterprises therefore has a crucial role to play in stimulating growth, generating employment and contributing to poverty alleviation in Sub Saharan African countries.

**II. Definition Of Micro & Small Enterprises In Sub Saharan Africa**

Micro & Small Enterprises in various countries of Sub Saharan Africa are defined based on several parameters, but mostly on size of employment.

---

However, in many of the countries, there is no clear definition available.

The Tanzanian government defines SMEs according to sector, employment size, and capital investment in machinery. Accordingly, SMEs are defined as micro, small, and medium-size enterprises in non-farm activities, including manufacturing, mining, commerce and services. A micro-enterprise is one with fewer than five employees, a small enterprise with 5-49 employees.

In Kenya, there is about 2.2 millions micro, small and medium enterprises, (Strategic Business Advisors Africa Ltd. – SME Banking Sector Report, 2007), of which 88 percent are non-registered. There is no standard definition of SME in Kenya. Often, they define SMEs as businesses with six to 50 employees or with annual revenues less than 50 million Kenyan shillings.

The definition of SME in Mozambique varies from sector to sector. However, most of the existing definitions are based on the number of employees and the initial investment capital. Industries with less than 25 are defined as Micro and more than 25 and less than 125 is as known small Industry.

Nigeria defines Small enterprise that has investment and working capital not exceeding N750,000.

Small and micro enterprises in Ethiopia are categorized using various methods, including their size, location, capital investment and number of employees. Small manufacturing establishments engage less than ten employees and use power-driven machines. Those which do not use power-driven machines are regarded as handicraft enterprises.

Ghana defines a small enterprise as a firm with not more than 9 workers, and has plant and machinery (excluding land, buildings and vehicles) not exceeding 10 million Ghanaian cedi.

In Malawi, manufacturing enterprises having less than 50 employees are small enterprises.

a) Major Challenges Faced By Micro & Small Enterprises In Sub-Saharan Africa

Sub-Saharan Africa continues to face development challenges i.e., dependence on agriculture, a few primary commodities, low human capital, poor or non-existing governance and policies & corruption, unstable governments and war conflicts, low youth employment, low empowerment of women, natural disasters and climate change etc. Besides, the growth of small and medium enterprises are challenged by lack of finance, under-developed entrepreneurial culture, poor product quality, shortage of raw material supplies, under-developed markets, limited demand for products and services, and poor access to infrastructure and technology.

Sub-Saharan Africa needs to promote industrial development as Agricultural activities are no more profitable business and Mining activities are actually draining these countries, with some exceptions like South Africa and Botswana.

Small & Micro Industrial development will reduce unemployment and import dependency. But then, there need to be a holistic environment created which include good policies and their implementations, investment on infra-structure, developed entrepreneurial culture, easy credit facilitation and developed markets in each of these countries for the development and sustenance of Micro & Small Enterprises.

III. What Is Incubation Of Business?

According to the EU Centre for Strategy & 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, and clustering and networking opportunities. A successful business incubator will generate a steady flow of new businesses with above average job and wealth creation potential.

 EU Centre for Strategy & Evaluation Services
The UKBI (UK Business Incubation) definition states that: Incubation is a unique and highly flexible combination of business development processes, infrastructure and people, designed to nurture and grow new and small businesses by supporting them through early stages of development and change.

IV. IMPORTANCE OF INCUBATORS FOR ESTABLISHMENT OF MICRO & SMALL ENTERPRISES

Incubators are available in various types rendering a range of long and short-term assistances 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.

Technical Incubation Centre, NSIC, New Delhi, India

The definition of Incubators varies with their delivery of services. Many a times, they are known as business accelerator as they act as boot camps for freshers to start enterprises in their way they deliver their services, in their organizational structure and in the types of clients they serve. Highly adaptable, incubators have differing goals, including diversifying rural economies, providing employment for and increasing wealth of depressed inner cities, and transferring technology from universities and major corporations. Incubator clients are at the forefront of developing new and innovative technologies – creating products and services that improve the quality of our lives in communities around the world.

V. VARIOUS TYPES OF BUSINESS INCUBATORS

Adapted from “Best Practices for Managing Incubators”, Rahul Patwardan, IndiaCo

Several years back, the initial model of incubation programme was based on leasing out infrastructure and common facility equipment to the entrepreneurs, in few focused areas. However, in more recent years, new incubators have been set up in areas of ICT, food processing, light engineering, Health care technologies, packaging, ceramics technologies, arts and crafts, product design and knowledge management. Many of them provide an opportunity to first generation entrepreneurs to acquire skill for enterprise building and also incubating them to become successful small business owners. At these centers, exposure in all areas of business operations are being provided such as business skills development, identification of appropriate technology, hands on experience on working projects, project / product selection, opportunity guidance including commercial aspects of business.

VI. MODEL OF RAPID INCUBATOR

a) Objectives Of Establishment Of Rapid Incubation Programme In Sub-Saharan Africa

I. Self employment generation among aspiring start up entrepreneurs.
II. Accelerate the development of new entrepreneurs.
III. Integrated support by way of providing hands on training on working projects.
IV. To boost the development of small enterprises in the manufacturing sector.
V. Introduction of new indigenous products in Sub-Saharan Africa as import substitution.

Training of local trainers for Technical & Vocational Training (TVT) colleges.

b) Rapid Incubation Programme Of NSIC

Entrepreneur development is one of the thrust areas for economic development of any country, which can be achieved by way of providing hand holding support to the budding entrepreneurs. National Small Industries Corporation (NSIC), A Government of India Enterprise under the aegis of Ministry of Micro, Small & Medium Enterprises, India has developed a unique model of Rapid technology incubation for setting up new small enterprises, creating self employment opportunities by imparting training in entrepreneurship building and skill development to unemployed person, who intend to set up their small enterprises or seek employment opportunities. The Incubators envisage transformation of an unemployed youth into budding entrepreneur in just 3 months time that is the reason why this carries a prefix ‘Rapid’. The Incubators intend to provide training in several trades in manufacturing of products and service sectors. Incubators provide an opportunity for first generation entrepreneurs to acquire skill on basic technical trades and gain exposure in all areas of business operation such as business skill development, identification of appropriate technology, hands on experience on working projects, project / product selection, opportunity guidance including commercial aspects of business etc. Supply of machinery and rendering easy credit support are arranged in this programmed to help the budding entrepreneurs to setup Micro and Small Enterprises. Once established, the entrepreneur also generates employment to others.

c) Training Curriculum for Rapid Incubation Programme

I) Counseling (1 Week)

Counseling is process of selection of candidates. The success of any enterprise establishment programmed largely depends on the selection of right participants having enough potential to start their enterprise after the training programmed. For selection of prospective entrepreneurs, the information can be disseminated to the people of identified town/village by way of any of the local media i.e. newspapers, pamphlets, awareness meetings and / or through professional and academic institutions. Therefore, the broad guidelines for selection of the potential candidates are:-

- The candidates should have adequate space to establish the enterprise, ability to provide margin money and possess basic entrepreneurial traits.
- Minimum qualification: The candidate should have at least Form – IV passed and of minimum 14 years of age.
- Preference to be extended to those with higher qualification particularly having some knowledge / technical background in industry/business.

II) Entrepreneurship Orientation (2 Weeks)

During this period the trainees are imparted knowledge on business process, Entrepreneurship quality and motivation, business law, accounting procedure etc. The course contents for the training cover the following:

- Definition of business and kinds of businesses.
- Local conditions for setting up the small enterprises such as availability of raw material, skills available, demand for various products and services, availability of infrastructure and logistics including transportation etc.
- Entrepreneurial quality and motivation
- Product selection and opportunity guidance
- Business laws
- General banking
- Basic book keeping and accounting
- Working capital management
- Product costing and pricing
- Role of Banks
- Role of Govt. institutions and other promotional agencies
- Procedures for setting up of enterprise
- Approvals needed for setting up new enterprises
- Guidance for project/profile report preparation

III) Hands on Training on machines in Rapid Incubation Programme (4 Weeks)

After completion of Entrepreneurship orientation programmed, each trainee could select one project of his/her interest which is intended to be established by the respective trainee. Hands on training are provided on the selected machine / project as detailed below:

- Hands on working on selected project thus gain detailed knowledge to operate the machines.
- Acquiring technical knowledge about the machines installed.
- Raw material availability and its consumption plan.
- Understanding the production process.
- Understand the quality control process of the finished products.
- Understanding packaging of the finished product.
- Understanding the basic maintenance needs of the machines.
- Understanding the preventive measures to be taken.

IV) Market Survey (1 Week)

- Visit to markets for raw materials and finish products
- Study the availability and quality of raw materials.
- Hold discussion with the bulk buyers and other purchasers.
- Understanding the competition in the market.
• Understanding the price and demand of the product in the market.
• Study the established market for finished product.
• Make a market survey report.

V) Project Report Preparation (1 Week)

During this week the trainees prepare the project report for the project by them. The project report should contain the following:

• Introduction
• Market Survey
• Details of project
• Plant, Machineries and other fixed assets
• Fixed Capital
• Working Capital (Raw material cost, salary and wages, utility and overheads)
• Breakeven point
• Cost of the project
• Sources of finance
• Profit and loss statement
• Cash flow statement
• Expected Balance Sheet for next 5 years
• Re-payment of loan statement

VI) Formal approvals and Registrations (1 Week)

• To establish the project, identification of various approvals such as Pollution control, special clearances in case of food product, quality control or any other approvals etc. wherever applicable.
• To discuss with the concerned authorities.
• Form filling and submission of application.
• Follow up for approvals.
• Submission of application & follow up with the bank for credit availability.

VII) Monitoring and Follow up

The passed out trainees is monitored continuously and a report is maintained as the following format:

<table>
<thead>
<tr>
<th>#</th>
<th>Name of the Trainee</th>
<th>Name of the Project</th>
<th>Value of the Project</th>
<th>Status of order to Machinery</th>
<th>Receipt of Machinery</th>
<th>Installation of Machinery</th>
<th>Working Capital Availability status</th>
<th>Whether production started</th>
<th>Employment status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Trainees learning how to make furniture using bamboo and cane in an Incubator at Sao Tome & Principe

Trainee learning production techniques in Technology Incubator in Tanzania

VIII. Conclusion

Establishing a micro or small enterprise or perse any business, is not an easy task. There is a great amount of entrepreneurship skill and knowledge needed for sustenance and growth. It takes several months to years to gather information, garner knowledge, skills and resources to start and run any micro or small enterprise.

Generally this is achieved by peer surveys, talking to other business owners within the same
industry who can give practical advice. Conduct of
independent research to find out appropriate
technology, marketing intelligence, sources of Finance,
Supply chain identification, demand assessment &
forecasting, raw material availability etc. helps
entrepreneur in decision making. However, all these are
difficult inputs to acquire but imperative for any
enterprise to become successful.

Unemployment is a colossal problem in Sub-Saharan Africa. Self-employment generation is perhaps
the fastest process by which one gets employed and
also employs other unemployed youths in their small
to-

ers.

Rapid Incubation for Small Enterprise Establishment is an innovative process that incubates
and transforms an ordinary, even unemployed with very
little educational background into a budding
entrepreneur in just three months time. The major
components of the Incubation process are Entrepreneur Skill Development, Project/Product selection and
opportunity guidance, Hands-on practical training on
working projects/training modules, Facilitation of funds
through banks, Facilitation on setting up an enterprise,
Support services to run small business. The technology
used in this incubation process is low cost, appropriate,
and any easy to maintain. This process can incubate
any youth / person aged between 18-60 years. The
process is applicable to all parts of the country and
suitable for addressing unemployment issues of many
least developed and developing countries. A private
partner can also become an incubator under this. Start-
ups can quickly learn and obtain support services as
mentioned above through an emulated environment of
an Incubator.

REFERENCES RÉFÉRENCES REFERENCIAS

1. SMEs key to economic growth, recovery by Taka Munyanyiwa, Kenya
2. 4th Census report, Ministry of MSME India.
4. Centre for SME studies, IIFT, India
5. (Types of business risks, Business portal of India, National Informatics Centre),
6. (US Small Business Association website)
7. EU Centre for Strategy & Evaluation Services
8. UKBI (UK Business Incubation)
13. Policies and Support for Promotion of Business and Technology Incubation in India by Mr. P.K.B. Menon, Head, Department of Science and Technology, Ministry of Science and Technology, New Delhi, India, and Mr. Pradeep Bavadekar, Managing Director, Mitcon Consultancy Services Limited, Pune, Maharashtra.
15. Impact of Business Incubation in The Lessons for Developing Countries, National Business Incubation Association USA.
17. The U.S. Small Business Administration Administers The Small Business Development Center (SBDC).
19. Africa’s Aborted Industrialization Modernization
Strategies Impede Organic Industrial Growth by Wolfgang Schneider-Barthold.
20. NATURAL RESOURCES IN SUB-SAHARAN AFRICA: ASSETS AND VULNERABILITIES by Johan Holmberg.
22. NATURAL RESOURCES IN SUB-SAHARAN AFRICA: ASSETS AND VULNERABILITIES by Johan Holmberg.