How to be Self Sufficient in Production?
A Model for African Countries

Abstract
This paper focused on developing a model for Africa and how it would enhance self-sufficient production in this region. Production means the process of transforming raw materials into finished goods and services. African countries have been ranked as low developed economies or what may be termed as third world nation. Factors of production are land, entrepreneurship, labor, and capital. An economy with self-sufficient production does not depend much on imports; it sets quotas on imports, and increases tariffs. Entrepreneurship is an important economic indicator for self-sufficient production. Policy makers in Africa should focus more on reducing incidences where the government experiences budget deficits so as to promote self-sufficient production. Innovation in and of itself is a platform for self-sufficient production.

Keywords: Self-sufficient production, Africa, Entrepreneurship, Innovation

Kendine Yeterli Üretim Nasıl Olur?
Afrika Ülkeleri İçin Bir Model

Özet

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belirleyicileri, hükümetin bütçe açığı yaşadığı olayları azaltmak ve böylece kendineyen üretim teşvik etmek üzerinde odaklanmalıdır. Aslında yeniliğin kendisi, kendine yeten üretim yonelik bir platformdur.

Anahtar Kelimeler: Kendine yeten üretim, Afrika, Girişimeilik, Yenilik

1.0 INTRODUCTION

In this analysis the aim is to develop a model for Africa and how it would enhance self-sufficient production. African countries have been ranked as low developed economies or what may be termed as third world nation. This is why this study seeks to develop a model that would be applicable to Africa at the same time enhancing self-sufficient production processes.

1.1 Review of the main concepts

Production: - The term production means the process of transforming raw materials into finished goods and services. It is mainly carried out to satisfy human needs and wants. Therefore production is an activity of converting inputs into outputs (i.e. goods and services) (Hackman, 2008).

The principles of Self-Reliance include (Hackman, 2008):

Social affairs: - Social affairs hold that people should support one another, reinforce the community, uphold unity, and cultivate a learning process that has a strong foundation.

Natural resource and environment management: - The resources of a country have to be utilized efficiently and prudently to facilitate sustainable benefits and to enhance the nation’s progressive growth.

Technology: - Technological advancement should be utilized effectively and efficiently and at the time encourage other innovations and creativity.

Economic affairs: - This states that there has to be increase in earnings, minimize expenses, and improved standard of living.

1.1 Factors of production

This is an economic concept used to define the inputs that are utilized in the production of goods and services with the intention of making an economic profit. Factors of production are land, entrepreneurship, labor, and capital. Generally, entrepreneurship, land, capital, and labor incorporate the entire raw materials required for production of goods and services. Land consists of the entire natural resources, for instance, gold or timber utilized in the production of a product (Rasmussen, 2013). Labor entails the entire work that laborers undertake in all the stages of a firm, apart from the entrepreneur. The entrepreneur refers to the person who comes up with an idea and tries to create an economic gain from it through incorporating the overall factors of production (Rasmussen, 2013). The entrepreneur assumes the full risks and benefits of the business activity. Capital involves all the machinery and tools utilized to manufacture a good or service (Mankiw, 2012).

1.3 Self-sufficient Model

A paradigm shift is experienced in peoples’ way of life towards changing from an industrial culture to an information culture. A self-sufficient production serves as a situation where man is considered as a worker-consumer. This would require constructing a model where men are
placed at the center of the cosmos and get acquainted with appropriate skills; this includes capability to create what they require by utilizing resources from the natural environs (Nous, 2013). India, China and many Eastern European and African nations take on this strategy at one moment. The motive behind it is to safeguard local, inexperienced businesses from extensive and international competition. This also functions to make countries independent of the MDCs and TNCs (Nous, 2013).

**Elements of self-sufficiency approach**

1. Import-license requirements
2. Setting quotas on imports
3. Setting higher tariffs on imported products
4. Import control

1.4 Five Stages of Development

In this section the researcher aims to look at the different levels of development then formulate a model that would be useful for Africa in being self-sufficient in production.

1. Traditional Society

This refers to a nation that has yet to start developing, where a great percentage of the citizens are engaged in agricultural activities and a great percentage of the wealth is invested in undertakings such as religion and military. It is viewed as “nonproductive” (Kanth, 1994). These are communities which own pre-scientific comprehensions of devices, and consider that gods or spirits make it possible to procure goods, rather than human being in his personal ingenuity.

2. Transitional Stage – AKA the preconditions for takeoff

In this model, the process of growth starts when the enlightened group starts innovations and engages in economic activities. Through the leadership of such well-educated people, the nation begins to invest in good infrastructure and technology, for instance, in transportation and water supplies. Such projects will finally stimulate productivity thus increasing the Gross Domestic Product. The other issues are that there is inadequate production function thus reduced output. The ineffective economic systems and restrictions form a limit of what can be generated. Enlarged specialization produces excesses for trading. An emergence of transport infrastructure comes to reinforce trade. Therefore, this creates more external trade especially for primary products (Rostow, 1990).

3. Takeoff

This implies a rapid growth which is produced in a restricted number of economic operations, for instance, food or textiles goods. Such takeoff industries attain technical progresses and turn to be very productive, while other sections of the economy continue being led by traditional practices (Nafziger, 2012). After taking-off, a nation will move to a period ranging from 50-100 years to attain maturity. At the international level, this phase took place through the Industrial Revolution. Industrialization expands, with employees shifting from agricultural activities to manufacturing industry (Nafziger, 2012). The status of investment attains over 10 percent of GNP. The development is self-sustaining due to the fact that investment brings increased income thus producing more savings for financing further investment (Nafziger, 2012).

4. Drive to maturity
Current technology earlier restrained to limited takeoff industries spreads to a broad diversity of industries which then witness rapid advancement equivalent to the takeoff industries (Rostow, 1990). Employees turn to be highly specialized and skilled. The economy diversifies into new places and it produces a wide variety of products and services thus depending little on imports (Rostow, 1990).

5. High Mass Consumption – AKA age of mass consumption

The economy moves from manufacturing of heavy industry, that is, energy and steel to consumer products such as refrigerators and motor vehicles. Of particular consideration is the issue that Rostow’s “Age of High Mass Consumption” fits together with Daniel Bell’s hypothesized “Post-Industrial Society” (Kanth, 1994). The Rostovian and Bell models together propose that economic progress certainly leads to job-growth; this is followed by wage increase in the secondary economic industry (i.e. manufacturing). Then it is followed by dramatic advancement in the tertiary economic industry (i.e. commerce and services) (Kanth, 1994).

1.5 Role of Corporate in promoting Economic Self Reliance

The individual level firms can come up with compensation (benefits and wages) as well training programs to create economic self-reliance. Firms can come up with wage levels at least beyond “living wages” that supply individuals with surplus financial returns required to produce stock of resources, or possess the basic strength to invest in training and education (Lutz, 2012). Educational benefits, for instance, advanced or basic educational subsidies or on-the-job training provide workers with opportunities to reinforce the prevailing sources of economic value. Health care attention and community-based training benefits generate additional gains in the sense that they help in creating demand in the local community for additional and quality services in terms of educational opportunities or health care programs (Lutz, 2012). Levi Straus’s and its “Global Sourcing and operating Guidelines” works as a proper example of how a firm can apply training packages and compensation to enable workers to make more than minimum wage levels, providing them the chance to improve their own economic self-reliance (Lutz, 2012).

From the community level, firms can form the efforts of strategic alliances, investments, or technology sharing in order to create or reinforce clusters.

Alliances with prevailing firms and technology sharing can enable local partners to establish firmer knots in a community-based cluster. Companies may come up with micro-enterprise loan capitals, or execute local purchasing policies, to fund and promote the advancement of upstream business operations and industries in the community. Firms should also take part in activities that reinforce vigorous markets, philanthropy activities to help in building the infrastructure. Ultimately, philanthropic investments in education, healthcare, and natural disaster alleviation can promote investments by societies in constructing the infrastructure that supports profitable business progress and growth. The company applies both entrepreneurship and micro-lending approaches to strengthen the local economies in various countries such as Kazakhstan and Angola (Lutz, 2012).

2.0 MODEL ANALYSIS & DISCUSSIONS

The above findings have presented a few economic evaluations that touch in what makes an entity more productive at the same time having sustainability. As such the scope of the study has been to establish a model for African countries that would support self-sufficient
production. In looking at the principles of self-reliance it was established that one way for a region to be self-sufficient in production is by ensuring that the resources available are well utilized as a way to facilitate sustainable benefits. Another critical establishment in the findings included the need for increased earnings, reduced expenses, and innovation. On this backdrop one can deduce a holistic model that would be recommended to Africa as a platform for self-sufficient production.

**Figure 1:** Model 1 for Africa for self-sufficient production

![Model 1 for Africa for self-sufficient production](image)

**Source:** (Own design)

Well, the model may be used to connote many things especially when looking at Africa’s macro economy. However, the idea would be that policy makers in Africa should focus more on reducing incidences where the government experiences budget deficits so as to promote self-sufficient production. At this point what needs to be established is whether there exists any positive relationship between increased earnings or reduced expenses with self-sufficient production. This will not be tested in this current study but then it is a way forward in future research. The most critical point is that it is a model that would be recommended in Africa as a way to boost self-sufficient production.

In the same model the reader can see the concept of innovation which is very fundamental. In fact, inasmuch as it has been incorporated in model 1 above innovation in and of itself is a platform for self-sufficient production. Africa region needs to have more and constant innovation if it is to achieve authentic and self-sufficient production processes. This is actually the reason why the researcher touched on factors of production. Entrepreneurship, for instance, is an important economic indicator for self-sufficient production. In fact, from the word go one would conceive being self-sufficient in production as the possibility to develop or manufacture goods or services without depending on external entities. Besides a non-self-sufficient region in...
terms of production would always depend on imports and expatriates when it comes to transforming raw materials into finished goods and services.

Entrepreneurship is a booster when it comes to working on the raw materials to become finished goods. Moreover, entrepreneurship (innovation) as a factor of production is the soul of all activities geared towards transforming raw materials into finished goods and services. Therefore, the model in figure 3.1 above provides the main touch points that need to be taken into consideration when rethinking a model for Africa for self-sufficient production.

The second consideration for a model in Africa is that which will exert more activity to the main factors of production. This is why the researcher did an explanatory analysis on factors of production. In other words, policy makers must re-look to the main factors of production and ensure there is close monitoring on each one of them with the conscious motive of attaining self-sufficient production processes. Here, policy makers may also look into the possibility for specialization which would be an added value to self-sufficient production. Specialization may be defined as the concentration of activity in those lines of production where an entity (country) has some natural or acquired advantage (Mudida, 2012).

Sometimes Africa does not achieve self-sufficient production because it overly depends on other regions. Moreover, the government may put a lot of consideration to foreign intervention when it comes to acquisition of goods and services yet prevent the country from specializing on what best it has. This point says that specialization in Africa would be another model that ought to be considered when re-thinking about the strategies for self-sufficient production.

From the findings there was an explanatory review on the main elements of self-sufficiency. The Africa region can borrow a leaf from this especially by having policies that do not incline more to import of goods and services. Africa region needs to be an intransitive economy if it is to realize the fruits of a self-sufficient production. By intransitive economy it means the possibility for an entity or country to have its own inherent processes that promote economic sustainability and prosperity.

Lastly, is that Africa must aim to be at that level or stage of development where most processes support or involve self-production. In the first instance Africa should move away from the traditional society and stick at the transitional stage. This is because at this stage there are increased innovations where such emerged as a platform for self-sufficient production. Thus, the aim should be to ensure Africa reaches the highest stage of development because there would be automatic, necessary, and spontaneous processes that boost self-sufficient production.

3.0 CONCLUSION & RECOMMENDATIONS

With all said the researcher would still acknowledge that there could be other models that may be considered in addressing the possibilities for self-sufficient production in Africa. On the same note the proposed models still have their deficiencies although this was not explored in the current study.

The main recommendations, therefore, include:

1. A further analysis to assess the shortcomings of the models proposed in the study

2. An empirical investigation on at least one of the models and how it correlates to self-sufficient production
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