

Entrepreneurial Innovation: Small and Medium Scale Enterprises Health Research and Economic Development in Nigeria

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Abstract

The study examines innovation in the Nigerian traditional herbs by entrepreneurs with the objectives of identifying areas in which there can be coalition of efforts between the government and the entrepreneurs in order to increase the economic gain derivable from their activities. Findings revealed that the innovative efforts of those entrepreneurs had made consumers to shift their attention back to the traditional medicine without feeling embarrassed. It was recommended that the government should look into bringing those entrepreneurs together so that they can join forces (collaboration) with government agency coordinating their research and development which outcome can be commercialized and exported to other countries as practiced by the Asian countries.

Keywords: Innovation, Entrepreneur, Research and Development, Traditional Medicine, Herbs, Nigeria

1. Introduction

Entrepreneurship is the act of being an entrepreneur or 'one who undertakes innovations, finance business acumen in an effort to transform innovations into economic goods'. This may result in new organization or may be part of revitalizing mature organizations in response to a perceived opportunity. Entrepreneurs play a very important role in the development of a nation because they start business, provide jobs and use the indigenous resources of the country for better socio-economic growth (Junejo, et al 2008). Entrepreneurship has been considered a crucial mechanism of economic development (Acs and Armington 2006, Cheng, et al 2009).

It has been described as the engine propelling much of the growth of the business sector as well as driving force behind the rapid expansion of the social sector (Noruzi, et al 2010). Entrepreneurship as a branch of business has important roots in economics, behavioural sciences and sociology, it is a process that unfolds over time and moves through distinct but closely interrelated phases (Baron and Shane, 2008).

Entrepreneurial process cannot be divided in neat and easily distinguished stages, but in general, it involves generation of an idea for a new product or services and or recognition of an opportunity, assembling the resources needed to launch a new venture, launching the new centre, running and growing the business, and harnessing the rewards, which implies that individual, group, and societal factors influence all phases of the entrepreneurial process (Baron and Shane, 2008).

Entrepreneurial innovation whether in developed or undeveloped economy, is still hinged on creative ability of some individuals that apply their native intelligent to recreate or invent products that are novel. Steiner (1995) suggested that unconventional individuals, rather than conventional science or engineering, are central to innovation success. It can then be inferred that, many new products are babies of rich imaginative capability of those individual investors. Most people are capable of great inventiveness, their imaginative capacity is most powerfully activated only when they have been exposed to these pre-inventive forms; collecting the forms and bits and then messing with them in combinatorial play without a specific goal in mind. This invariably leads to inventions and insights that seem so elegant and resourceful in retrospect (Finke, 1990).

Innovation, according to Hisrich, *et al* (2008) is the key to the economic development of any company, region of a country, or country itself. However, creativity is the key ingredient ensuring that innovation is constantly occurring in the entrepreneurial company (Hisrich, 2004; Bubou et al, 2012). Also, innovation according to Nelson (1993 cited in Tsai, and Wang 2004) is considered as encompassing the processes by which firms masters, and gets into practice, products designs and manufacturing processes that are new to them, if not in the nation or even to the universe.

Bari and Ejaz (2012), opined that innovation have gained importance in the management agendas in both business and government. Hence, there is no clear consensus on how individual firms and regional and national governments should go about becoming more innovative and more globally competitive. To be creative, an idea must also be appropriate—useful and actionable.



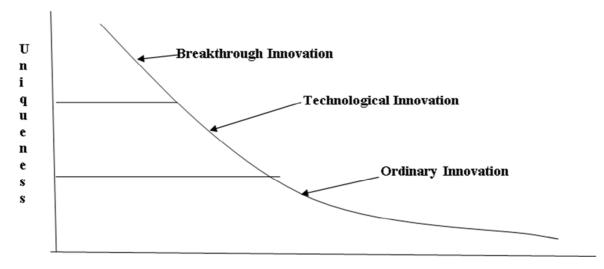
Numerous studies have demonstrated that innovative activities have a significant contributions to make into the technological progress or output performance (Wakelin, 2001; Stock, et al 2001; Gopalakrishnan, 2000; Hannel, 2000). This gives rise to the fact that, the governments of many countries are now adopting specific strategies aimed at stimulating innovation within firms and within industry as a whole (Tsai and Wang, 2004). Feinson (2003) in his own view, innovation system in developed economies serves the role of maintaining or improving an already established level of competitiveness and growth. But unfortunately, this does not apply, as developing countries are faced with the tasks of "catching-up".

Innovation, which is the bedrock of new product development focuses on the improvement and modification of the product which already exists in market and makes the psychological impact for obtaining higher customer satisfaction. Amabile (1998) stated that innovation or creativity is the capacity to put existing ideas together in new combinations. It must somehow influence the way business gets done—by improving a product, for instance, or by opening up a new way to approach a process.

According to Aswal and Kumar (2012), the best way to satisfy the customers is to emerge into the current market trend, which is technology based product. Research and development strategy activity should be kept for existing products so as to keep higher technological advantage for a long time. That is bearing in mind that consumers evaluate the product by value of service quality, performance and sustainability.

2. Types of Innovation

Going by Hisrich, *et al* (2008) classification, innovation are in three levels; breakthrough innovation, technology innovation and ordinary innovation. For an innovation to be tagged breakthrough, it must be extremely unique and has never been seen before, and can be a foundation upon which other development/innovations can be established. In this category can be found airplane, internet, penicillin and the computer. He further stated that fewer innovations are of the breakthrough type, that is an indication that most of entrepreneurial innovations are more or less market pull than technological push.



Number of Events

The second type of innovation, according to Hisrich, (2004) and Hisrich, et al (2008) is technological innovation, it occurs more frequently than breakthrough innovation and not at the same level of scientific discovery and achievement (not so radical and changes the basis of competition in an industry), however, there are usually need to protected them.

The third innovation is the ordinary innovation, it has the least disruptive effect on consumers and their lifestyles. It is the one that occurs most frequently (Hisrich, et al 2008). He further stressed that these innovations usually extend a technological innovation into a better product or service or one that has a different (usually better) market appeal. He opined that, in order to allow as much innovations as possible, the entrepreneur needs to understand that product innovation (products/services) as well as process innovation can come from a wide variety of sources, both internal and external to the company.

3. Development of Entrepreneurship in Nigeria



The evolution of small and medium scale industries in Nigeria began in 1946 when the seasonal paper No 24 of 1945 was issued. A ten years Plan of Development and Welfare for Nigeria was presented to the legislative council on 7th February 1946. The preliminary phase of the development plan was the emergence of a Nigeria Local Development Board which has the following duties:

- 1. Promoting and developing village crafts and industries and development of Nigeria industrial products.
- **2.** Setting up an operation of experimental undertaking for the testing of industrial or processing development of any Nigeria products.
- **3.** Other acceptable and beneficial projects approved by the Governor-in-Council.

The strategy for economic growth was found parallel to the intention of colonial administrations on the issue to plough back money generated from natural and economic resources. In 1952, the Aid to pioneer industries was introduced, under an ordinance, which gave certificates of recognition to specified industries. Two years exemption was granted for taxation. In order to buttress the legality of such exemption, the income tax ordinance was passed in the same year allowing companies accelerated amortization.

To further enhance and promote entrepreneurship development, the government introduced import relief tax to assist foreign companies and liberalized the granting of the pioneer certificates in 1957 and 1958 respectively. The issuance of certificates to such category of people makes the offers attractive and thus induced other investors. However, the political independence of 1960 brought many firms to Nigeria and encouraged those who were already established to expand. This led to Nigerian economy becoming heavily dominated by large foreign firms such as Paterson Zochonis, United African Company, John Holt, CFAO, SCOA and UTC.

The influence of the foreign firms became so much on economic decisions, as non could be taking without soliciting and procuring their cooperation. Their presence and aggressive entrepreneurial business abilities made entry much more difficult for the Nigerian entrepreneurs to benefit from governmental incentives. In essence, Nigerian entrepreneurs rely heavily on government for protection as they could not compete favourably with the expatriate entrepreneurs, thus, they needed among other things preference in the award of some contracts and reservation of certain sectors of the economy for their exclusive operation as well as control over the import and export of some consumer goods. Their complaints led to the 1977 Enterprises Promotion Act, which made possible some sectors of the national business exclusive reserve for the indigenous enterprise.

4. Traditional Medicine Practice in Africa

Traditional medicine (TM) is described as the total combination of knowledge and practice, whether explicable or not, used in diagnosis, preventing or eliminating a physical, mental or social disease and which may rely exclusively on past experience and observation handed down from generation to generation, verbally or in writing depending on the religion, socio-cultural belief and practices of the people. Gilmer (2008) stated that, the use of herbal medicine dated as far back as 500 years ago when the working class peasant had no hope of attaining medical care. She claimed that people in Europe and the American colonies when they needed medical care do go to the village healer typically an older woman who spent her entire life learning the folk healing plants and proper dosages.

According to Omo (2008) and Odukoya (2012), about 80 - 85 per cent of the people in the developing world depend on traditional medicine for their primary health care needs. In some cases, it is the main source of health care delivery available, accessible and affordable to many people in the community. This is due to the fact that orthodox medicine is mostly out of reach in physical terms as hospitals are far away from the rural populace and in financial terms, incidental to high level of poverty.

In July 2001 at the African Union (AU) Heads of State and Government summit held in Lusaka, Zambia, the AU Decade for African Medicine was declared to cover 2001 to 2010. WHO/AFRO provided technical support to AU and member states during the declaration of the Decade. The Decision is crucial to the political recognition of African Traditional Medicine and signifies tremendous support for its national development, improvement and integration into public health care system in the region (Odukoya 2012; Okubela and Idowu, 2012). They stated that the timing of the AU's decision is unique as the time coincide with the time that the developed countries have witnessed resurgence in the use of natural based products. During this meeting, the Inter African Experts Committee on African TM and medicinal plants was organized in Attusha, Tanzania from 15 - 17 January, 2002. The meeting according to Odukoya (2012) then recommended activities to be undertaken in the following areas:

• Information



- Education, Training and Research
- Networking
- Legislation
- Economic and production of activities, and
- Conservation of threatened species.

Azoma (2007) stated that World Health Organization (WHO) declared that, herbal medicine should be regarded as finished, labelled medicinal products containing as active ingredients aerial or underground parts of plants, or other plant material or combinations, thereof, whether in the crude state or as plant preparations. The plants materials includes juices, gums, fatty cells, essential oils and any other natural substitutes. He further stated that, there has been a significant increase in the use of herbal medicine as a result of WHO's promotion of TM in African countries.

5. Natural Herbal Medicine Practice in Nigeria

Although herbal medical practices and innovation in traditional health care delivery though no news in developed nations in most African countries it is a new phenomenon which to a great extent had thrown more light to our hither to unpopular cure for sickness and diseases. According to Azoma (2007) and Odukoya (2012), herbal medicine has origin everywhere including Africa, China, Japan, Pakistan, Indonesia and South Africa for decades; but in Nigeria, there is no doubt that the use of herbs has been in practice before the colonial era.

Traditional herbal medicine used to be the exclusive business of elderly men and women in South Western part of Nigeria. The widespread practice of hiding the names of ingredients used in herbal preparations contributed in fuelling the suspicion of people, which contributed to the misconception that herbal medicine is fetish (Omo, 2008). In view of this, many younger people could not engage in such trade, although most of those herbs are known by all, but due to modernization most people had stopped using them to cure diseases. To buttress this, Idowu (2012) stated that, although he was born into family of herbalists, because of superstition and mystery created into the practice, it became repulsive to his father and because of western education he stopped the practice altogether.

According to Omo (2008) and Yisau (2008), things have changed, and gone are the days when it is a taboo for people to use or practice herbal medicine openly. They said that, late Elizabeth Kafaru has been credited with helping to pioneer general knowledge about herbal medicine through her weekly newspaper column and books, there by popularizing it. She was believed to have opened up the secrets of nature to Nigerians and indeed the world. Within a short period few male entrepreneurs who claimed to have inherited the know-how of the herbal medicine business from their families started adding value to it. However, the last two decades had witnessed the emergences of well talented, educated and, versatile herbal doctors.

Odukoya (2012) opined that herbal medicine has been described as the original and real medicine, while orthodox or western medicine referred to as the alternative. She stated that there is no scientific evidence for believing that western or orthodox medicine is the only effective way of dealing with the health problems in our communities. The traditional system of medicine is engrained in our culture, and a large proportion of the Nigerian population depend on this indigenous system for relief. Corroborating this view, Omo (2012b) stated that during the recent strike of medical doctors in Lagos State (South Western Nigeria), when government-owned hospitals were shut against patients, many patients in Lagos State resorted to use of herbs to treat ailments. He further stated that, even though the doctors are back to work, Lagosian still patronise herbal clinics. In essence, herbal medicine product sellers are boldly displaying and promoting their wares in many parts of the city.

The World Health Organization (WHO) launched a comprehensive traditional medicine strategy in 2002, emphasizing on the documentation, development and promotion of traditional medicines, herbal remedies and medicinal plants through research and development of stronger evidence based on safety, efficacy and quality of the traditional products and practices. In Nigeria, efforts of the traditional medicine practitioners to get the practice integrated into the health care systems have not yielded much as there is yet to be put in place a concrete regulatory policy framework that will bring about needed national recognition. What is needed by the traditional medicine practitioner is legislation that will enable them to practice side by side the orthodox medicine as it is being done in China, India and South Africa.



Although, African Union (AU) has developed a pharmaceutical manufacturing/plan for Africa, capacity especially in Nigeria has been systematically harnessed to promote local health innovation efforts. In recent time TM has started wearing a new look in Nigeria as serious research and development are being undertaking for their biological activities so as to enable the herbal products to conform with the acceptable standard world-wide. Recently at a new herbal product launch, the concerted efforts of researchers collaborating together was commended; where it was stated that, only joint resolve and focus of the traditional medical practitioners can ensure that they comply with approved scientific models as established by WHO guidelines for herbal research. In essence, the research and development should be guided by the ethics of scientific research, which if given adequate support by the Federal Ministry of Science and Technology will enable both TM and some pockets of entrepreneurs (see appendix) to apply new technologies to ancient/traditional African herbal extracts of plants sourced in their locality.

The establishment of National Agency for Food and Drug Administration and Control (NAFDAC) and the Nigeria Natural Medicine Development Agency by the federal government had further enhanced the promotion of research activities.

Aside from this, research and development on local traditional herbs for health care delivery are in the hands of some entrepreneurs who have succeeded in modernizing the abandoned traditional and untapped medicine by compounding it into capsules and tablets. Investigations revealed that most of their products are registered by the National Agency for Food and Drug Administration and Control (NAFDAC); however the potency or the claims of cure by those entrepreneurs were never examined by the agency. The agency only focused on the toxicity of the products; that is as long as they are not harmful for human consumption the agency allow them to market the products.

6. Health Research and Economic Development

In accordance with African Network for Drugs and Diagnostic Innovation (ANDI), the direct link between health and development has been established and accepted within medical, public health and other scientific circles. The creation of knowledge through research and its translation into products and processes appropriate to socioeconomic conditions is a major factor in overall development. The importance of research to development is underscored by the fact that every year, the Organization for Economic Cooperation and Development (OECD) member countries together spend about 1.5 times more on research and development than the value of the entire economic output of sub-Saharan Africa. Increasing research and development skills and capacities in a variety of science and technology disciplines have supported the advancement of emerging economics such as China, India, Malaysia, Singapore and South Korea, and South Africa. In addition, macroeconomic evidence suggests that countries with the weakest conditions of health and education have a much harder time achieving sustained growth than those countries with better conditions of health and education.

Here in Nigeria, those entrepreneurs that had ventured into traditional herbal medicine products cannot be said to lack market for their products; with teeming population and traditional beliefs on the efficacy of the herbal product. Large number of those entrepreneurs plant their herbs, thereby reducing the danger of systematic disafforestation and at the same time providing jobs for both literate and illiterate Nigerian as well.

Those new crop of entrepreneurs had started exporting their products to other African countries and majority of them had even diversified their businesses into other areas such as schools, hotels and tourism. What they actually lack are more incentives to support health innovation research and development (R&D). It is to be noted that individual entrepreneur cannot single handedly carry out research on traditional medicine

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AppendixList of some of the Traditional Herbal Medicine Entrepreneurs

List of some of the Traditional Tierout Wedleme Entrepreneurs	
1.	Esoma Herbal Research Institute
2.	Temitayo Awosika Herb Foundation (TAHF)
3.	YEMKEM International natural Health Products
4.	Iris Medical Foundation
5.	De-Fayus International (Okooloyun Worldwide)
6.	D-One Health Care Nigeria Ltd.
7.	Dumec Nutraceutical
8.	Healthcare Herbal Products
9.	Lahaola Salashi Heritage Health Centre
10.	Quincy Herbal Slimmers
11.	Ayodele Health Farm
12.	Oroki Herbal Medicine