Global Pharma Market

The overall total population of the world is approximately 7.45 billion, as of July 2016. Its overall population density is 50 people per km² (129.28 per sq. mile), excluding Antarctica. Nearly two-thirds of the population lives in Asia and is predominantly urban and suburban, with more than 2.5 billion in the countries of China and India combined. All global leaders are working to meet the basic needs (Food, Clothing, Medicine, Shelter, Education, Etc.) of this population. Among these basic needs food, clothing and shelters are designed according to the Geo-Economic and Social culture. But Education and Medicine is uniform for all the population irrespective polls, hemisphere or religion. One can survive few days without education but without medicine, in some case few minutes is difficult. Global medicine spending for this 7.45 billion (it is growing @ 1.09% per annum) will reach nearly $1.5 trillion by 2021 on an invoice price basis, up nearly $370 billion from the 2016 estimated spending level. Importantly for the outlook is that spending growth is slowing in 2016, declining from nearly 9% growth in 2014 and 2015 to just 4-7% CAGR over the next five years. The short-term rise in growth in 2014 and 2015 was driven by new medicines in hepatitis and cancer that contributed strongly to growth but will have a reduced impact through 2021. Most global spending growth, particularly in developed markets, will be driven by oncology, autoimmune and diabetes treatments where significant innovations are expected.

Exhibit 1: Global Market Spending and Growth 2007-2021

Source: IMS Market Prognosis, Sept 2016: QuintilesIMS Institute, Oct 2016
The U.S. (Population of 330 million consuming 46% of global medicine expenditure) will continue as the world’s largest pharmaceutical market and pharmerging markets will make up 9 of the top 20 markets. China will continue as the #2 market, a rank it has held since 2012. Developed market spending growth will be driven by original brands, while pharmerging markets will continue to be fueled by non-original products that make up an average 91% of pharmerging market volume and 78% of spending. On other hand the African continent is bearing 14% of global population (1,037 Million) with 40% of global diseases burden and produce 3% global production consumes only 7%-8% of global medicine supply. It is painful for any human mind but it is a blue ocean for Pharmaceuticals and health care business.

Pharmaceuticals Export from Bangladesh

Pharmaceutical industry mulls to export drug items to more & more destinations from the existing 127 countries by the next few years to give a big boost to the country’s export earnings. The pharmaceutical sector is the highest contributor to the national exchequer and the largest white collar labor intensive employment-giving sector of the country. Through exporting medicine Bangladesh earned USD 90.3 (732 crore) in 2016-17 financial year (Source: EPB, Bangladesh) and expects to earn much more in coming days.

African Pharma Market

Despite the efforts done in the last decade by governments and global organizations, about 2 million Africans have no access to essential medicines. 74% of drugs against HIV/AIDS are still under the monopoly of big pharmaceutical groups and 77% of Africans still lack access to treatment. As a result, tuberculosis, AIDS and malaria still kill more than 6 million people on the continent each year. A possible solution to this situation would be the production of generic drugs in the continent. Being 70-90% cheaper than brand name drugs, generic drugs are more affordable for a large majority of Africans.

The continent has 14% of the world population but produces only 3% of the world medicines. While the overall pharmaceutical market in sub-Saharan Africa is growing worth USD 3.8 billion annually, the pharmaceutical manufacturing sector in Africa contributes only 25-30 per cent of the continent’s needs. The production of life-saving drugs is furthermore concentrated in very few African countries: 70% of pharmaceutical manufacturing takes place in South Africa and an additional 20% in Nigeria, Ghana and Kenya. Apart from Morocco, more than 85% of drugs sold in Africa are imported. Senegal imports 80% of its medicines. Currently most generic come from India. Though they are cheap the high cost of transport makes it difficult for governments and national health systems to provide treatment for all those who need it.

Today no African country, whatever its size and level of economic development, is entirely self-sufficient in pharmaceuticals. This is a concern for governments and patients. To answer this need, in 2001 the 55 members of the African Union (AU) signed the Abuja Declaration to support the development of a plan for pharmaceutical
innovation in Africa. The 2005-AU Assembly decided to develop a Pharmaceutical Manufacturing Plan for Africa within the framework of NEPAD. The AU Conference of Ministers of Health that followed with the support of some partners decided took practical steps to produce generic medicines on the continent and to make full use of the flexibilities within the Trade and Related Aspects of Intellectual Property Rights (TRIPS) and DOHA Declaration on TRIPS and Public Health.

The 59th World Health Organization Regional meeting for Africa discussed the issue and the AU Commission in collaboration with the World Health Organization (WHO) conducted a drug production capacity mapping exercise. A series of questions were raised: was it better to strengthen local production of essential medicines or to import essential medicines from reputable sources? A realistic appraisal and analysis was needed before deciding on local manufacturing. A number of issues had to be taken into account: technical feasibility, financial viability, sound regulatory systems, market size necessary to ensure sustainability as well as technical and financial viability.

Current Production
Pharmaceutical production occurs at three levels:

1. **The primary level** includes the manufacture of active pharmaceutical ingredients and intermediates from basic chemical and biological substances.

2. **Secondary production** includes the production of finished dosage forms from raw materials and excipients.

3. **The tertiary level** is limited to packaging and labelling of finished products or repackaging of bulk finished products.

Out of the 46 countries in the WHO-African Region 37 have pharmaceutical industries, of them 34 have secondary level production and 25 have tertiary production. Only South Africa has limited primary production. Nine countries have no production capacity.

Medicines and international AID
The role played by the global health community has been decisive in the supply of affordable drugs to fight against neglected diseases. International Health organizations and Western governments have provided the majority of medicines that the continent needs. They have played an important part in the diminishing of deaths from malaria, HIV/AIDS and TB, and of the diminishing cases of river blindness among others. They have also contributed to the increasing number of HIV/AIDS patients treated by antiretroviral drugs (ARV). But these advantages bring with them some dangers. These International groups set up the agenda for health research and drug development in Africa. It is important that countries be allowed to set their own priorities and formulate their own strategies in order to meet the needs of their populations. They need to take measures not to rely so much on international aid.

The efforts towards medicine production
Till now in most African countries the production units were made up of subsidiaries of foreign pharmaceutical firms. They import almost all of the raw material. In the ECOWAS region there are 17 production units including 8 in Ivory Coast, and 4 in Senegal, but they ensure only 10% of the needs of the region.

Backed by the African Union (AU), several African countries have launched into the production of generic drugs for HIV/AIDS, tuberculosis, and malaria. Kenya, Nigeria, South Africa and Tanzania, among others, have adopted policies to invest into the development, production and procurement of drugs for their populations.

**Cameroon and Gabon** have developed their own production of generic drugs. In April 2010, Cinpharm-Cameroon opened a factory in Douala, which is the most modern pharmaceutical company in West and Central Africa. It will produce painkillers, antibiotics, anti-malarial, intestinal parasiticid, anti-inflammatory, antibiotics (repetition), antiretroviral and TB drugs. Eventually, the production should meet 25% of national needs.

With the help of the government Aspen Pharmacare in Port Elizabeth (**South Africa**) produces under license eight generic antiretroviral drugs. Aspen in (is) Africa’s largest pharmaceutical manufacturer and has become the world’s leading manufacturer of generic triple therapy and is also among the three producers of generic ARVs (the other two are Indian) approved by the World Health Organization (WHO). Aspen has four sites in South Africa, one in Kenya and one in Tanzania.

In November 2011, Universal Corporation, a **Kenyan** pharmaceutical company has been granted the prequalification (The prequalification means that the WHO has tested the safety, quality and efficacy of medicinal products before they are released to the public) certification by the World
A series of benefits are expected as a result of local production: save of foreign exchange; creation of jobs; increase of exports; technology transfer; raw materials produced locally will be cheaper; improvement of self-sufficiency in drug supply. The problem is that these benefits are not always there when drugs are produced. Local manufacturing is supposed to make the drugs cheaper, accessible to more people, thus resulting in significant savings for the government’s treatment programs, but sometimes the price cannot compete with those from India and China.

**Difficulties in the path to production and Initiatives to overcome**

A series of bottlenecks make difficult the production and the selling of medicines produced in Africa: lack of access to inputs and raw materials, strong competition from foreign laboratories, lack of research and development, a proven system of pharmacovigilance and qualified human resources. These factors are sometimes responsible of pharmaceutical production behind in Africa.

**Infrastructure.** Unreliable water and electricity supplies, difficulties of transport, the need to import machinery, packaging, and active pharmaceutical ingredients (APIs) result of a weak chemical production in many African countries are constant difficulties that contribute to making the product more expensive. Furthermore the business environment in Africa has many deficits. But the Kenya, the Ethiopia, the Uganda and some other African nations providing very economic and reliable source of water and electricity for production facility. According to World Bank report some African Nations are more ahead of us in ease of doing business ranking. E. g. Mauritius 49th, Rwanda 56th Uganda-115th and Kenya 92th according to World Bank doing Business report 2017.

**Quality.** The big challenge is to produce high quality drugs. The operating environment can be difficult and the weaknesses at plant level in reaching and maintaining quality standards in line with established international standards (WHO) can be hard. This can be easily resolved by bringing in Tech know how from abroad.

**Human Resources.** The production of good medicines and the maintenance of the facilities
needs pharmaceutical experts and technical personnel with high and specialized skills that are missing in many African countries. The lack of high quality education at university is the main cause. Another difficulty is the lack of expertise and of means in drug regulatory authorities, responsible for approving the marketing of these drugs. To succeed in the production of medicines Africa needs good pharmacists, biologists, chemists, doctors, and technicians. It is also available in rest of the world.

**Legislation.** The lack of regulation and of clear political will does not allow an investment security. The pharmaceutical sector lacks effective support functions among others by regulatory authorities and quality control labs. Some nations are proving Guarantee to investors for safety, disinvestment, no future government acquisition and even citizenship for investors.

**Small domestic markets.** In Africa markets are small because the countries are small and the many in the population do not have the means of buying the medicines. The small size of domestic markets diminishes the prospects for achieving optimal production efficacy. E.g. Uganda has a population of 30 million, not enough market for a production unit. The creation of bigger markets like the East African Community (EAC) of 65 countries, Common Market for Eastern and Southern Africa (COMESA) of 19 countries, Southern African Development Community (SADC) of 15 countries and Economic and monetary Community of Central Africa (CEMAC) can be a solution. By this time EAC, COMESA and SADC entered into a tripartite agreement for economic development and common market sharing. It is a market of 26 countries Price.
Manufacturers in Africa face a multitude of expenses: high cost of inputs (expatriates salary, packaging), transport and imported commodities, together with small volumes produced raise the cost of medicines beyond those from India and China. But African Countries are providing Quota facility for Price (+15%) and Quantity (+15%) in national Purchase for local manufacturers. WHO and All donors are also facilitating local manufacturers.

Economic viability of local production is hard particularly where the production is undertaken by private entrepreneurs as a commercial venture. The sustainability of the production will depend on factors such as the size of the market and the demand for the produced medicine, as well as the ability to export such medicines. Manufacturing in African countries is tax exempted for first 10 year and loss carry forwarded for next 10 years and African Continent receives AGOA Quota facility from USA and Preferential trade facility with EU.

Opportunity for Bangladeshi Pharmaceuticals Investment

Export from Bangladesh to African Market: Top five Bangladeshi Pharmaceuticals manufacturing companies are exporting medicine to the following countries of Africa in last 15 years and Bangladeshi medicines are very well accepted in Africa;


Investment in Facility Development in Africa: Bangladeshi pharmaceuticals products are well accepted in Africa. After tripartite agreement among EAC, COMESA and SADC the market is now more lucrative than ever. Square Pharmaceuticals Limited is exporting medicine to Africa in last 14 years to Kenya. Square Pharmaceuticals Limited is in the process of investing an amount of USD 20 Million in Athi River EPZ, Nairobi, Kenya to put up a Pharmaceuticals manufacturing Facility. This facility shall cover EAC, COMESA and SADC market. The market is about USD 34 Billion in 2020. It is a blue ocean shift for Square Pharmaceuticals Limited.

Conclusion

Despite the difficulties met by the production of medicines in Africa, the adventure continues and Africa is developing its own production of generic drugs. This is a sign of hope for all those who care for a better health for the African people. For the local production of pharmaceuticals to be effective and efficient, African countries, donors and International Health Institutions need not only words, but the political will, investments and actions that will lead to a local production of essential generic medicines of quality in the continent, so that all Africans may have access to medicines of quality. Africa is a blue ocean for Pharmaceuticals investment.

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