FEAPM Background Paper

Best Practice Examples of Implementing Industrial Policies to Support Local Pharmaceutical Manufacturing

A look at Ghana, Bangladesh and India

Background

This paper aims to give insights into best practice examples from developing countries or former developing countries that introduced measures and policy incentives for industrial policies to support local pharmaceutical manufacturing. In the following we will present examples from Ghana, Bangladesh and India; three examples that represent success stories of industrial policy for the local production of pharmaceuticals. They played a key role in increasing access to medicine and decreasing sub-standard and counterfeit medicines in their respective country.

Ghana

Before Ghana introduced a policy to incentivize pharmaceutical production, there were few active industries in Ghana. Up to the 1990s, the market was largely dominated by a state owned company. Other companies had low encouragement and incentives to enter the market. Several other companies existed, but produced on a very small scale. Additionally, dumping and the import of sub-standard and counterfeit medicines were big challenges for Ghana. Several countries had introduced export premiums to support their pharmaceutical industry (India for instance) which led to dumping into Ghana, also of substandard and counterfeit products. Imports mainly originated from China and India; countries that were identified to be the main countries of origin for sub-standard and counterfeit medicines. 70% of all locally available medicines were imported into Ghana in an unregulated manner.

In 1989 the Ghanaian government clearly committed to pharmaceutical manufacturing as a priority and set the following policy incentives:

- Established companies receive an exemption from corporate tax in the first three years after establishment;
- The government banned the import of about 44 medicines, which either can be locally manufactured or need to be regulated due to health reasons;
- Local pharmaceutical manufacturers are exempted from VAT (12.5%);

- In addition, 66 of the 200 basic materials required for production are exempt from import duty.

As an outcome of the policy mix of the Government of Ghana the share of local production increased from 10% to 30% with 39 local manufacturers in 2014 compared to just 9 in 1989. Through regulating manufacturing and thus controlling local production, quality of local products improved. While in 2008, 39% of all anti-malaria medication circulating in Ghana was sub-standard, this share decreased to 3% in 2013. Moreover, employment increased by more than ten times to currently about 6.500 jobs in the industry. Positive developments also include increased tax revenue for the government, an independent and self-sufficient pharmaceutical industry that can react to crisis and a decreased inflow of counterfeits[1].

Bangladesh

Before the National Drug Policy in 1982 was launched the countries drug market was dominated by multinational firms that were able to set very high prices for live-saving drugs because of their monopolistic power.

The National Drug Policy intended to lower prices to secure access to essential drugs for all and to reduce the power of MNCs by promoting local production of drugs. It included three main measures:

- Prohibition for multinational firms to sell antacids (which prevent acidity in the stomach) and vitamins, which were relatively easy to produce for local firms. Multinational firms were asked to instead concentrate on the development and production of innovative, sophisticated and high-tech products, such as antibiotics.
- Restriction of the import of substitutes for the finished drugs and intermediate inputs that were produced by two or more local firms.
- Promotion of the local drug industry through prohibition of those multinational firms without any production facilities in Bangladesh from marketing their products produced by other firms on a toll manufacturing basis. As a result, such multinational firms were forced to establish their own factories in Bangladesh.

Further measures included the elimination of product patents and a limitation of the use of process patents, regulation of technology transfer and licensing agreements with foreign collaborators and a price ceiling system.

An important factor for the success of the industrial policy in Bangladesh was the pharmaceutical education programs that already started in 1969. A lot of graduates from these programs worked for multinational companies were they acquired broader knowledge before

[1] Nixdorf, Lisa (2014): "Pharmaceutical Manufacturing in Ghana – Lessons learnt for the East African Community".

they shifted to local companies. It is therefore important to include an educational program or HR measures into the industrial policy.

Outcomes of the policy include the increase in local production from 30 to 80 per cent, the stabilization of drug prices, that increased by only 20 per cent, compared to an increase of 179 percent in the consumer price index. The drop in price in real terms made drugs more affordable for consumers. Furthermore Bangladesh companies increased their share of local production from 35 to more than 60 per cent—overall, local production increased by 217 per cent. Bangladesh was less dependent on imports and prioritization of useful products saved the country approximately US$ 600 million. The quality of products improved—the proportion of drugs tested which were found to be substandard fell from 36 per cent to 9 per cent[2].

India

After its independence in 1947 western multinationals (MNCs) held about 80% of the pharmaceutical market with the remainder being served by several Indian owned companies operating on a much smaller scale. No Indian company had manufacturing capabilities in either bulk drugs or formulations. There was heavy dependence on imported drugs, which were marketed directly by the MNCs established in India and local agents of MNCs that did not have a local presence. MNCs mainly formulated their drugs in India, importing the bulk drugs from their home countries; their contention being that the locally available bulk drugs were not of the desired quality. In the process, not only were technological externalities and knowledge transfer absolutely minimal but Indian drug prices were among the highest in the world. Indian consumers suffered from a shortage of essential drugs and a crisis in terms of healthcare provision[3].

To overcome this health crisis India introduced the following measures and incentives to develop the local pharmaceutical industry:

- Large Investments to establish public sector enterprises in order to reduce dependence on MNCs.
- Inward looking trade and investment policies: The ensuing ‘import substitution’ policy took the form of a complex system of price controls, high import duties and export subsidies.
- Indian pharmaceutical industry focused on reverse engineering and process innovation.
- Patent Act of 1970 included provisions for commercializing independently developed copies of branded drugs, if the production process was significantly different from that used to manufacture the branded product.
- Price control was introduced in 1970 for a long list of ‘notified’ drugs that were deemed essential → objective: to curb profit margins and promote access to drugs.

[2] Amin, Md. Nurul and Sonobe, Tetsushi (2013): “The success of the industrial development policy in the pharmaceutical industry in Bangladesh”.
[3] Guennif, Samira and Ramani, Shyama V. (2010): “Catching up in pharmaceuticals: a comparative study of India and Brazil”.

The industrial policy coupled with the dynamic response of local firms to acquire capabilities in all stages of drugs production led to a sharp reduction in import dependence and MNC domination. Favorable was that India was already equipped with scientific capabilities in the form of public laboratories skilled in creating new processes; and universities producing large numbers of science graduates. The demand side also supported the new trajectory as Indian consumers revealed themselves to be extremely price sensitive. Today, India is among the top 20 pharmaceutical exporting countries. Exports have grown at around 19% and Indian drugs are exported to around 200 countries in the world, including highly regulated markets like the USA, UK etc. Indians industry has been growing at an annual growth rate of 10 % while exports have been growing at about 20%. The industry currently employs about 450,000 people and has contributed significantly in creating a rich talent pool of researchers, scientists, doctors and project managers[4].

Concluding Policy Insight

There is strong evidence in other countries that an industrial policy for the support of local pharmaceutical manufacturing can be successful. The examples have schown that access to and availability of medicine was increased, sub-standard and counterfeit products and dependence on MNCs reduced and employment created. The EAC can learn from these best practice examples and FEAPM has already included those insights in their propositions for the "East African Model".

[4] Guennif, Samira and Ramani, Shyama V. (2010): "Catching up in pharmaceuticals: a comparative study of India and Brazil".