



Growth of Bangladesh's Pharma Industry: Some Implications

Skills for Industry Policy Brief Bangladesh #1 (2019)

About

This policy brief presents the initial findings from a company survey carried out in Bangladesh's pharmaceutical industry as well as some policy implications resulting from the findings. The survey was undertaken in January 2019, as part of the "Skills for Industry" research project. The aim of the research project is to understand the contribution of vocational skills development (VSD) to inclusive industrial growth and transformation in six selected countries in Asia and Africa. Data for the survey were collected from 61 randomly selected pharmaceutical companies out of 142 listed operational companies located in Dhaka city and its surrounding areas. Trends in employment, salaries and sales volumes are considered as indicators of company growth in this study. Similarly, the production of advanced products, the adoption of new technologies and the change in organizational management indicate transformation.

Background of the Bangladesh Pharmaceutical Industry

The Bangladesh economy has been transforming over the past couple of decades, from primarily an agricultural economy, into one with major manufacturing and services sectors. According to the latest data from the Bangladesh Bureau of Statistics (BBS), the contribution of exports to GDP increased from 5% in the fiscal year 1972-1973 to 13.37% in the fiscal year 2017-18.

The pharmaceutical sub-sector is one of the most technologically advanced and dynamic segments of the economy. It recorded a cumulative annual growth rate (CAGR) of 21% from 2014 to 2017. With its current contribution to GDP of 1.9%, this sub-sector is relatively small. But it is seen to be a promising sub-sector in terms of industrial growth and transformation.

Recognising its promise, the government applied import restrictions to encourage local manufacturing and also to ensure drug availability at a reasonable price.

The first National Drug Policy was formulated in 1982 with a focus on drug safety, quality and price control.

The policy objectives included promoting Good Manufacturing Practices (GMP) and maintaining a qualified workforce – including pharmacists – in the drug manufacturing process. A new drug policy introduced in 2016 further emphasized the employment of skilled staff and their regular training to support

Key general findings

- More than 85% of companies have registered growth and some form of transformation over the last five years, resulting in the virtual disappearance of small companies in the sub-sector.
- Large- and unknown-sized companies reported higher levels of transformation than medium-sized companies.
- In the recruitment of workers at all levels, from general workers to supervisors, most of the companies look at work experience rather than VSD certificates. As a result, VSD programs are not popular or even widely known to the job seekers.
- At the same time, companies in the sub-sector have faced a shortage of skilled technicians, however, firms rarely provided in-employment training for workers.

GMP in the industry.

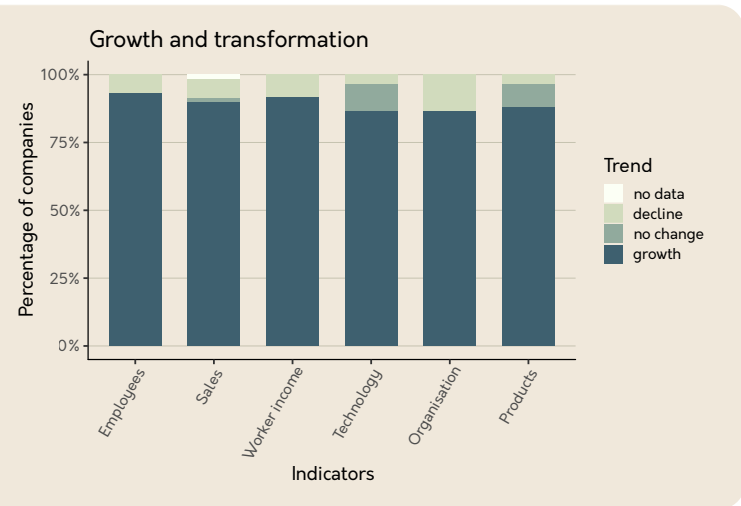
According to the Bangladesh Association of Pharmaceutical Industries (BAPI) and the Directorate General of Drug Administration (DGDA), there are currently 257 licensed pharmaceutical manufacturers with about 150 pharmaceutical units under operation (EBL Securities Ltd., 2018).

Bangladesh is the largest producer of formulated drugs among the UN-designated Least Developed Countries (LDCs). The quality of the products has created a huge demand for Bangladeshi drugs in the global market. Bangladesh exports drugs to more than 127 countries and meets 97% of the domestic demand. The drug industry's contribution to the GDP has been increasing every year (Islam, Rahman, & Al-Mahmoon, 2018).

According to industry analysts, the market size of pharmaceuticals may reach about BDT 330,000 million by 2020 (EBL Securities Ltd., 2018). However, this growth is dependent on fulfilling the industry's demands for a growing number of skilled workers at different levels.

Positive growth and transformation trends

Most of the companies showed a positive change in the indicators. More than 90% of companies reported that the number of employees and the volume of sales increased by more than 33%. During the last five years (2012-17), 92% of companies reported staff salary increases (at different rates), with 77% reporting increases of more than 33%.

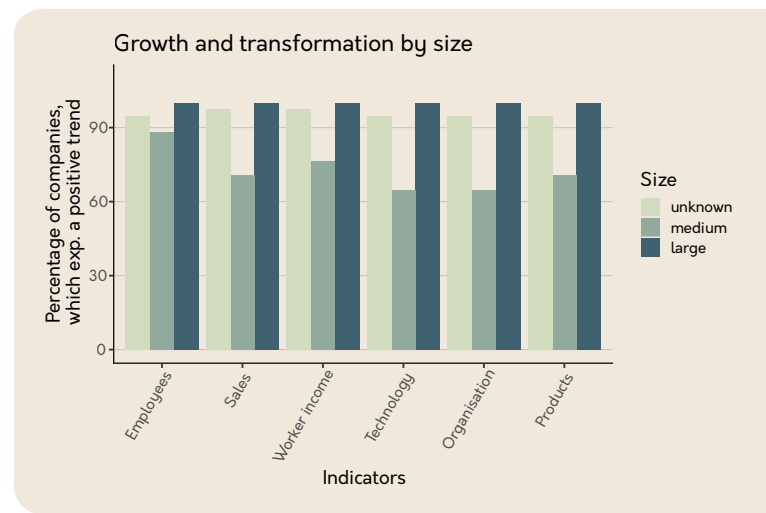


The companies experiencing growth were inclined to upgrade their manufacturing processes and produce more advanced and newer products in order to survive in the very competitive global market. To this end, they transformed their organizational management and adopted new technologies.

Data show that more than 85% of companies integrated advanced technology into their production processes, and produced newer, more advanced products. They also went through organizational changes. On the other hand, around 33% of medium-sized companies still struggled across indicators.

Fast adaptation in both large and unknown-sized companies

More than 85% of companies registered growth and some form of transformation over the last five years, resulting in the virtual disappearance of small companies in the sub-sector. Both the large- and unknown-sized companies have been very fast in adapting to change. While small companies are dynamic because they need to grow to survive in the competitive market, they seem to adopt a more conservative approach once they reach a medium size. The larger ones are ambitious and export-oriented.



Only 38% of companies provided data on the number of employees at each level. With a huge 62% of companies withholding employee data, it was difficult to accurately chart the range of company sizes. The result was that in 2017, there was practically no small company, according to the survey results. Five years earlier, in 2012, 17.4%, 65.2%, and 17.4% companies

were small (less than 50 employees), medium (50 to 249 employees) and large (more than 250 employees) respectively.

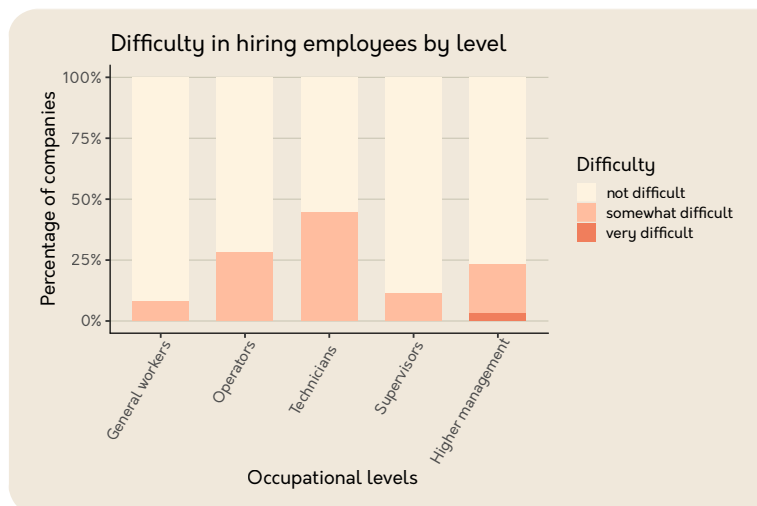
Data show that large- and unknown sized companies adjust to produce advanced and newer products, adopt advanced technology and also undertake change in operations and management more regularly than medium sized companies. As a consequence, in the large and unknown sized companies, recruitment rates, salary growth rates and sales are comparatively higher. On the other hand, medium-sized companies, sticking to a conservative growth strategy, still did well in the growth of sales (75%) over the five-year period of 2012-17. Their employee growth rates, however, were lower than for large and unknown sized companies.

Consequences for the supply of skilled workers

The pharmaceutical industry faces difficulties in finding technical employees such as machine operators and technicians. Most of the companies do not express a need for skills training for non-technical employees – either general workers or their supervisors. However, all companies face a skills shortage in technical personnel, and they assert that VSD programs do not meet the industry's needs.

In 2017, the average workforce composition was 64% general workers, 16% machine operators, 6.5% supervisors, 5% technicians and 8.5% higher managers. Data also show that 64% of all employees have not received any VSD training and 92% of companies reported that they did not face difficulties in finding general workers. Clearly, the companies do not face a shortage of general workers (who do not receive any skills training) for non-technical tasks. At the same time, 11% of companies reported that they faced difficulties in finding supervisors, perceiving a minor skills shortage for this position.

It can be reasonably argued that the relatively high proportion of employees without VSD training (mainly general workers and supervisors) and the requirement to compensate for this low skill level of workers by investing in equipment might have a major negative impact on the productivity of the companies.



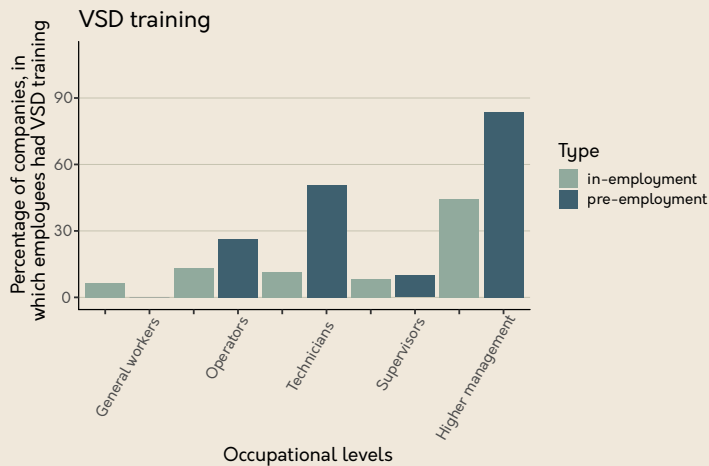
Further, companies reported that they faced difficulties in finding technicians (44%), machine operators (29%) and higher management staff (25%). These data indicate that the pharmaceutical industry has a skills shortage in technical jobs at different levels.

Data show as well that there is a gap in the provision of pre-employment training; in other words, general or lower level technical workers have no training before joining the company. Higher managers (84%) and technicians (52%) received VSD degrees mainly from university before joining. Only in 25% of companies did operators (10% for supervisors) have prior VSD training. For formal in-employment training, on an average, 9.8% of the companies reported that they arranged or provided on-the-job training for their low-level and mid-level employees. On the other hand, 44% companies reported that upper level/management level employees received further training – this includes trainings, which are not conducted by the company.

In recruitment of workers at all levels, from general workers to technicians, most of the companies look at work experience rather than certified qualifications. As a result, VSD programs are not popular or even widely known to the job seekers. At the same time, companies in the sub-sector have faced a shortage of skilled technicians.

The overall conclusion regarding VSD is that pre-employment training is not very popular amongst job seekers, and the companies do not demand or see much value in existing VSD programs. Industry also shows a preference for coping without substantial

in-employment training for workers. This situation has resulted in relatively low productivity growth rates in the industry, even though there has been an increase in the volume of production, product variety, employment numbers, technology adoption and salaries.



Policy Implications/Recommendations:

- Overall, companies in the pharmaceutical sub-sector are growing and transforming; however, medium size companies have not seen as much transformation. In this situation, a policy objective would be to identify the knowledge and success stories of the better-performing companies and exchange them among stakeholders for improving productivity, growth and transformation.
- Participation rates of employees (ranging from general workers to supervisors) in pre-employment VSD programs are very limited in this sector, and in-employment VSD training programs are not available to most of the employees. It is important to identify reform measures in the VSD programs according to the demands of the

industry so that VSD can make a stronger contribution to the development of companies and the industry.

- The industry as a whole and individual companies need to pay greater attention to the skills and productivity levels of the large proportions of general workers and supervisors to raise overall productivity and to stay competitive in the global market. They need to work with VSD providers and consider what they can do themselves in terms of systematic work-based skills development for their workers, including offering apprenticeships and internships for future employees.

Sources

- Own survey of 61 companies
- EBL Securities Ltd. (2018). Pharmaceuticals Industry of Bangladesh. Dhaka: EBL Securities Ltd.
- Islam, S., Rahman, A., & Al-Mahmood, A. k. (2018). Bangladesh Pharmaceutical Industry: Perspective and the prospects. Bangladesh Journal of Medical Science, Vol 17 (4), page-519-525. <https://doi.org/10.3329/bjms.v17i4.38306>

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