Final Report

A Comparative Study on Clusters and non-Clusters Based SME Development in Bangladesh

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Chapter 1: Executive Summary

In Bangladesh, there are nearly 7.9 million SMEs including micro enterprises contributing to Gross Domestic Product (GDP) at an estimated 25% (Asian Development Bank (ADB) 2015)[1]. SMEs account for 11% of the country's industrial establishments, 30% of industrial employment and 40% of the manufacturing output (Economic Census 2013). While SMEs have been considered as one of the few sectors that will drive the economy to a higher growth trajectory without compromising the perverse distributional impact, these sectors are still not competitive domestically and globally in Bangladesh. The government of Bangladesh (GoB) has put forward several strategies for the development of SME sector and these include identification of areas of comparative advantage, creating an enabling environment for private investment, hassle-free indirect tax system, easier access to imported inputs, greater access to financing facilities, and cluster-based SME development. Along with the GoB, the United Nations Industrial Development Organization (UNIDO) is also working for cluster development in Bangladesh. UNIDO is the specialized agency of the United Nations that promotes industrial development for poverty reduction, inclusive globalization, and environmental sustainability. "The cluster/network development programme is one of the SME programmes managed within the Private Sector Development Branch of UNIDO". Following the spirit of the 7th FYP of the government and UNIDO's effort to develop an efficient and productive SME sector, the SME Foundation, the apex body for the development of the SME sector in Bangladesh, is going to conduct a study on the comparative performance of the cluster-based SMEs vis-a-vis non-clustered SMEs. This study is expected to provide important insight on how clustered SMEs are different from non-clustered ones and the rationale for differential treatments highlighted in 7th FYP.

The main objective of the study is to assess the comparative performance of the enterprises under the cluster and those of the enterprises outside clusters. The study also aims to identify the barriers and challenges along with the recommendations of cluster-based SME development. To fulfill the study objectives, the study adopts and employs a number of approaches and methodologies. They are an enterprise survey a number of key informant interviews (KIIs), a number of meetings or focus group discussions (FGDs) and three case studies. The study also uses secondary level information as well information obtained from consulting with the SMEF. The enterprise survey, KIIs, and meetings or FGDs include both includes cluster and non-cluster SMEs. The sample size for the enterprise survey is 500 (250 cluster SMEs and 250 non-cluster SMEs). The KIIs includes 75 clusters KIIs and 75 non-cluster SMEs. The meeting consists of15 cluster meetings and 15 non-cluster meetings. Several descriptive, statistical, and econometric methods have been used to process various sets of data and to examine the study objectives. The methods mainly include frequency distribution, a simple t-statistics and several ordinary least squares (OLS) regressions analyses. Based on various analyses, the findings of the study are summarized as follows.

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[1] https://www.adb.org/sites/default/files/project-document/171750/36200-023-ipsa.pdf

On the status (comparison) of the key economic variables (e.g., size, structure, profitability, productivity, availability of credit, technology adoption and extent of formalities of the SMEs) in (between) the cluster and non-cluster SMEs, this study finds a number of interesting results. They are as follows. Cluster SMEs are larger than the non-cluster SMEs in terms of capital stock, output, and sales but not in terms of labor employment. Clustered SMEs are more capital intensive than the non-clustered SMEs. However, there is no difference between labor productivity. While there is no difference in profit between clustered SMEs and non-clustered SMEs, cluster SMEs have higher total factor productivity (TFP). Non-cluster SMEs rely more on semi-formal sources than the cluster SMEs for loans. While the role of Mahajan is very insignificant, both cluster and non-cluster SMEs borrowed from friends and relatives, though the difference is not statistically significant. We found that cluster SMEs received the SME credit from banks with less hassle than the non-cluster SMEs. This is also true for a non-SME loan from the private banks. Cluster SMEs are more formal in terms of the legality of the firm but in terms of formal contract, there is no difference between cluster and non-cluster SMEs. Regression results show that TFP of the cluster is about 10-11 percent higher than that of non-cluster after controlling for capital-labor ratio, total labor hour and sectors.

On the sectoral status of SMEs, the study finds that an average firm in the Electronic and Electrical sector is smaller compared to the size of a typical full-sample firm in terms of capital stock, total employment, and total output. In comparison to a typical full-sample firm, an average firm in light engineering and metallurgical works sector has a higher amount of capital stock, employs lower number of labor and produce a higher amount of output. An overall comparison with all firms in the sample reveals that the agricultural-based business sector has a higher capital stock, employs less workers and produces higher output. The Size of the SMEs in the leather sector is smaller compared to the full sample SMEs. In comparison to an average full-sample firm, an average firm in the home textile sector has a lower amount of capital stock, employs lower number of labor and produces higher amount of output. Compared to the full-sample, the capital stock in plastics and other synthetic sector is four times higher, employment is lower and output almost double. The fabric clothing and consumer products sector uses one-third of capital stock compared to an average full-sample firm, while employment is almost double. Output in this sector is lower compared to a typical full-sample firm. An overall comparison with all firms in the sample reveals that the micro garments sector has lower capital stock, employs higher number of workers and produces higher output.

On the status of Marshallian externalities (sharing, matching and learning benefits of SME cluster), the study finds that there is a significant difference between cluster and non-cluster firms in transport sharing – about 15 percent of the cluster SMEs shared transport with neighboring SMEs and this figure is only 3.2 percent for non-cluster firms. The share of SMEs sharing raw materials is meager – 1.2 percent for cluster and 1.6 for non-cluster firms. Regression results show that cluster SMEs have shared significantly higher than the non-cluster SMEs, controlling for technology, size, and sectors. Cluster SMEs found non-labor inputs with greater ease than the non-cluster SMEs and the difference is statistically significant. In the case of labor, the difference between cluster and non-cluster SMEs is not statistically significant. Regression results show that matching of labor and non-labor inputs in the cluster is not significantly different from non-cluster SMEs. A significantly higher share of clustered SMEs learned business and skill related knowledge from other SMEs than the non-clustered ones. Regression results indicate that

higher incidence of knowledge sharing in the cluster compared to non-cluster SMEs. The learning or knowledge sharing is also negatively correlated with the size of the SMEs – smaller firms tend to share knowledge more than the larger ones.

On the status of subcontracting and values chain, this study finds that only few clustered SMEs are involved in subcontracting. About 7.2% clustered SMEs are involved in subcontracting where an SME prepares raw materials for other firms and only 3.6% of non-clustered SMEs are involved in subcontracting. On the sectoral activities of subcontracting, the study finds that subcontracting among clustered SMEs is the highest in the yarn and cotton sector (66.67%) followed by plastic and other synthetics (19.23%). The study also finds that about 20% clustered SMEs (works as parent enterprise) provide subcontract to another enterprise (who prepare raw materials for parent SMEs). The number of SMEs working as a parent enterprise is greater than the number of SMEs that work as subcontractors. These SMEs provide only a smaller percentage of the total value of the final products when they work as a subcontractor. Thus there is a plenty of scope for subcontracting. On value chain, we find that both clustered and non-clustered SMEs add the majority of the value along the production process of a product. The value addition for cluster SMEs varies from 70% (Micro garments industry sector) to 91% (Fabric clothing and consumer products sector).

On the barriers and challenges of cluster-based SME development, the study findings are as follows. According to the participants, lack of capital or lack of access to credit is the number one barrier for cluster-based SME development. Other important barriers are as follows: gas supply, load-shading, no official cluster-based SME development policy, lack of available land, problem in marketing, and highly competitive markets.

The study also investigates the working environment of the SME factories and a number of issues relating to the development of clustered-based SMEs. On the working environment, the study finds that the working environment of the factories somewhat good or good as evaluated by both the SMEs and the enumerators. The top three clustered SMEs in terms of good working environment are leather-processing and leather goods, yarn and cotton, and agricultural-based business. The results also show that about 28.8% clustered SMEs have fire service-system as against the 21.2% in the non-clustered SMEs. Plastics and other synthetics sector (about 30%) in the clustered SMEs ranked first in terms of having fire service system followed by micro garments sector (17.65%). On the evaluation of skills of the workers as evaluated by SMEs, the study finds that the skill level of the workers is in between "somewhat satisfactory" to "satisfactory". About 41.2% of the clustered SMEs work with a different research organizations, financial institutes, universities and business development services (BDS) as against 31.2% of the non-clustered SMEs. About 65.38% clustered SMEs work with NGOs for the purpose of training and about 37.18% clustered SMEs work with the financialinstitutions for the purpose of the loan. About 31.6% clustered SME entrepreneurs took training on business and about 8% non-clustered SMEs took training. The study finds that, in general, the quality of the training received by the SME entrepreneurs is good. The workers in both clustered and non-clustered SMEs get trained up mainly through the work of the factory and from previous trainings.

Finally, based on the KIIs, cluster meetings, and survey findings, the study recommends a number of suggestions that are required for the success of cluster-based SME development in Bangladesh. The KII and meeting participants mention that access to loan at lower interest rate, the arrangement of training for the workers, improvement in

electricity and gas supply, the creation of the new markets, and the availability of skilled labor are the most important factors required for the success of cluster-based SME development. The survey results show that credit at lower interest rates and easy terms (64.80%), arrangement of advanced training for the workers (32%), and availability of raw materials (16%) are the top three issues that policymakers need to ensure for the growth of the SME sector. Overall, access to loan on easy terms (e.g., lower interest rate, longer repayment period), arrangement of training for the improvement of skill of workers, improvement of infrastructure facilities and power system (e.g., uninterrupted electricity supply, new gas connection), regular communication with SME traders, the introduction of modern and advanced machines, the availability of land, lower VAT and tax, and allocation of space for the cluster are the most important issues that need to be addressed for the cluster based SME development.