Task Force 1
**Macroeconomics, Trade, and Livelihoods:
Policy Coherence and International
Coordination**

BOOSTING INDUSTRIAL DEVELOPMENT IN LOW- AND MIDDLE-INCOME COUNTRIES THROUGH MANAGEMENT TRAINING FOR MSMEs

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Abstract

ndustrial development is crucial for job creation and poverty reduction in the low- and middle-income countries (LMICs). It can also improve environmental sustainability. However, most LMICs struggle to develop their industries. The critical challenge for policymakers in LMICs is upgrading their micro, small, and medium enterprises (MSMEs) while considering their diversity. Potentially growing firms face different constraints than stagnant firms that are not necessarily willing to grow. Therefore, there is no one-size-fits-all MSME policy.

This brief recommends that the G20 support industrial development in LMICs by providing management training to their MSMEs in industrial clusters. Management training can help screen growing firms and boost their productivity. Further, it will help stagnant firms increase their income incrementally and adopt more stable and environment-friendly business practices. Industrial clusters are the best injection point of such training as the knowledge can spill over to other firms in the same cluster.

The Challenge

1

Industrial development is necessary to generate employment opportunities and reduce poverty. For instance, the economic success of many East Asian countries can be attributed to their strategic focus on developing their manufacturing sectors, followed by the services sectors. This growth was accompanied by relatively low levels of inequality and significant reductions in poverty levels. China and several Southeast Asian countries have followed the same pattern and experienced economic growth by strengthening their manufacturing sectors. However, typically, low- and middle-income countries (LMICs) face significant challenges in developing their manufacturing and service sectors.

Industrial development can also improve environmental sustainability. The primary sector in LMICs has a high employment share, and people with low incomes tend to engage in environmentally harmful activities, such as slash-and-burn agriculture or unsustainable extraction of natural resources. But if the industrial sector achieves green growth, its employment-creation capacity will facilitate labour allocation away from such environmentally damaging activities and towards more sustainable livelihoods.

To promote industrial development, it is necessary to upgrade micro, small, and medium enterprises (MSMEs). Since most firms have been MSMEs, particularly in the LMICs,[1] they play a critical role in industrial development. It is vital to address their low productivity due to outdated technology and poor management practices.[2] National governments and the global aid community should support these firms in adopting advanced technology and management know-how. Further, it is important to encourage MSMEs to adopt energy-saving technology to improve their productivity and for environmental reasons.

The challenge with developing policies for MSMEs lies in their diversity. These enterprises are typically divided into two categories. The first is comprised of potentially growing firms whose growth is constrained by factors such as poor infrastructure and institutions, limited access to credit and output markets, or a lack of access to advanced technology and knowledge. The second category includes stagnant firms that are managed out of necessity rather than choice. A typical example is microentrepreneurs who have no other income-generating opportunity, with the only option being the operation of

a small business in the informal sector. Stagnant firms are unlikely to invest in their business or adopt advanced technology, preferring to maintain the status quo and earn a profit above the subsistence level.

Recent studies have observed the coexistence of different types of MSMEs in adopting digital technologies.[3] Such coexistence makes it challenging to reach a consensus on what the most appropriate policies may be since there is no one-size-fits-all solution. Therefore, the existing variety should be considered by policymakers on their path to address this subject. While developed countries also face this challenge, this is especially true in LMICs, which have a high share of MSMEs and need to encourage their growth.

The G20's Role

2

There are several reasons for the G20 to consider the crucial issue of industrial development in LMICs. First, is a humanitarian reason. In 2021, at least 684 million people were considered extremely poor.[4] In addition, over 6 percent of the global labour force was unemployed in the same year.[5] Therefore, providing employment opportunities to the poor is the best option to alleviate poverty sustainably.

The second reason is the presence of various cross-border effects. Unemployment and poverty can create an environment of dissatisfaction and frustration, leading to social and political unrest, which can destabilise entire regions. Relatedly, the failure to create enough jobs in LMICs can push the unemployed labour force to other countries as migrants. This can pressurise the social and economic systems of the receiving countries and can have significant political and social implications. Environmental damage is another cross-border effect. Pollution and environmental degradation in one country can negatively affect neighbouring countries, and climate change will affect all countries worldwide.

Lastly, market failure in industrial development can occur for various reasons, such as externalities, information asymmetries, and public goods provision. In such cases, public intervention is needed to correct the market failure. The G20, as an international forum of the world's largest advanced and emerging economies, can proactively support industrial development in LMICs by mitigating market failure and promoting the growth of MSMEs.

Recommendations to the G20

3

This brief recommends providing management training to MSMEs in industrial clusters to facilitate the growth of such organisations and of industrial development in the LMICs.

Management training will help potentially growing and stagnant firms in these countries, with some studies attesting that adopting advanced management practices can boost firms' productivity.[6] Providing management training can also help screen potentially growing firms. While identifying such firms is difficult based on observable characteristics, machine learning algorithms, or expert judgement,[7] training can be used to screen organisations. Once promising firms are identified, resources such as loans and research and development subsidies can be provided to them. Providing such limited resources to stagnant firms is inefficient since they are not necessarily interested in boosting their productivity and may end up using loans to finance their daily necessities. On the other hand, the training will also help stagnant firms increase their income incrementally and operate a more stable business. In addition, if properly designed, training can help stagnant firms adopt more environmental-friendly technology.

In developed countries, firms in a certain industry tend to cluster (for instance, technology organisations clustering in Silicon Valley). But this also happens in the LMICs.[8] There are three key advantages to such industrial clustering: (1) information spillovers, (2) specialisation and division of labour among firms, and (3) the development of skilled labour markets.[9] Based on the modern microeconomic theory, these advantages can be referred to as learning, sharing, and matching mechanisms.[10]

The authors conducted a series of randomised controlled trials to evaluate the impact of management training in industrial clusters in several LMICs, including Ghana,[11] Kenya,[12] Tanzania,[13] and Vietnam.[14] The results of these trials consistently demonstrated that the provision of management training improved the management and business performance of the trained firms. In some trials, the authors observed knowledge spillovers from the trained firms to non-trained control firms.[15] Such a phenomenon demonstrates the benefit of the

learning mechanism that is inherent in industrial clusters. Additionally, once the trained firms introduce new technology, it is expected to diffuse to other firms within the same cluster. Thus, industrial clusters represent the ideal location to provide management training, disseminate new knowledge, and adopt advanced technology.

Targeting industrial clusters will help maximise the impact of training and promote industrial development more effectively. However, such targeting is challenging, just as it is to identify promising firms. Therefore, the authors recommend providing training to existing clusters in general. This may help policymakers screen promising clusters by observing the participation rate, attitudes during training, and performance after the training.

The existence of knowledge and technology spillovers highlights the fact that the public benefit of management training outweighs the private benefit received by individual firms. This indicates that the level of investment in management training is lower than the socially optimal level. As a solution, the G20 countries should provide publicly-funded or subsidised management

training programmes to address this market failure in the LMICs.

More specifically, the G20 countries can collaborate with an existing organisation focused on productivity growth, industrial engineering, or private-sector development. Many LMICs have national productivity organisations or technical institutes for industrial engineering. Some countries even have more specialised lean and total quality management institutions, such as the Ethiopian Kaizen Institute and Tanzania Kaizen Unit. It is crucial to enhance their capacity, both in quantity and quality, so that they can provide managerial training support to the MSMEs.

Providing management training in industrial clusters has the additional advantage of improving the match quality between firms and workers. Despite efforts by aid organisations and governments to invest in human capital development, there are still job-market frictions, especially in LMICs.[16] Even when firms improve their management and try to hire good workers, they face challenges in finding the right match. This mismatch between workers and firms can negatively affect worker retention and result in skills mismatch,

ultimately negatively impacting the firm's productivity. However, industrial clusters solve this problem as many similar firms operate in small geographical areas, making it easier to match upgrading firms with appropriate workers. This will significantly impact both workers and firms as improved match quality will increase productivity and employment opportunities. Further, employed workers could benefit from improved job satisfaction, job tenure, and potentially better working conditions. Therefore, providing management training in industrial clusters can be an effective tool to enhance the match quality between firms and workers and improve the overall productivity of LMICs.

Relatedly, providing technical training for potential workers, including reskilling training, is also important. If the growth of industrial clusters is facilitated by managerial training, workers can be a scarce resource. Firms and the suppliers of human resources can cooperate in developing specific skills demanded in the cluster. This can be done through technical and vocational education and training institutions to train the youth. At the same time, a reskilling programme is important for this purpose to facilitate the transition from the primary sector to the industrial sector.

RECOMMENDATIONS TO THE G20

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