Improving the environmental performance of Pakistan’s textile sector

Pakistan’s textile industry, the country’s largest manufacturing industry and second largest employer, is also responsible for large discharges of wastewater. Three steps can help improve the environmental performance of the textile processing industry – use of effluent treatment technology matched with improved monitoring, a rating system to trigger competition among firms and environmental training and information services at the district-level.

Background

Pakistan has a dynamic, export oriented textile industry with a large economic footprint. Within this sector, 600-800 textile wet processing units turn gray fabric into finished fabric. These major industries contribute to almost 50% of total exports, 38% of the manufacturing labor force and about 9.5% of GDP. However, they also contribute to waste water discharge into drains and rivers. Pakistan’s textile industry is covered by six major environmental regulations and National Environmental Quality Standards. However, fines are too low to improve corporate behavior, few factories treat effluents and government monitoring can be ineffective. Thus, researchers from the Sustainable Development Policy Institute (Waseem Gulzar) and the Pakistan Institute of Development Economics (Ghulam Samad) sought to examine environmental compliance in this sector. To this effect, they analyzed data from a survey of 60 firms and 10 case studies in the industrial estates of Faisalabad and Khurrianwala in Punjab. The average surveyed firm was 20 years old, had 2,393 employees and generated 14,244 cu meters of wastewater per day.

The textile industry in Pakistan adopts nine different environmental management practices. While only 12% of the firms surveyed adopted all nine practices, 50% embraced more than five and some 87% adopted at least two practices. Over 70% of firms adopted broad-based production practices such as Total Quality Control. Chemical hazard evaluation and environmental audits were two other practices followed by a majority of firms. Waste treatment appears to be a lower priority.

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Large textile firms behave differently

Study findings suggest that textile firms are quite heterogeneous and face different challenges. Large firms are more likely to have an overall environmental policy — about 72% of large firms in the study had an environmental policy, while only 14% of medium-sized firms had one. Similarly, larger firms are more likely to have operating waste treatment plants. Large firms are also likely to feel more pressure from international buyers to improve their activities. Medium firms, in particular, identify costs as a major challenge to complying with environmental regulations. In general, firms see a larger role for the government as a coordinating and facilitating agency. Management and employees are not seen as major challenges to improving environmental performance.

External factors influence firm activities

International pressure is an important reason why firms take environmental actions. For example, the probability that a firm adopts environmental training increases by 41% if it is under international pressure to improve. Interestingly, pressure from local communities and the media have limited influence.

Fines and penalties act as a stimulus for certain environmental practices. They influence whether or not firms evaluate the environmental risks posed by their suppliers and whether they provide environmental training to their employees. For example, the imposition of penalties increases the likelihood that a company will undertake environmental risk evaluations of its chemical suppliers by 10%.

Recommendations

Three main strategies could improve the environmental compliance of Pakistan’s textile sector.

- Firms need to install and effectively use effluent treatment technology. Currently, many large firms install such technology to please customers, but do not use them. Thus, unless environmental agencies are better resourced to monitor the use effluent treatment technologies, waste management will not improve.
- The government should publish environmental impact reports or create a rating system to reward environmental performance. This strategy is likely to be effective as peer pressure influences on firm behavior.
- Better access to training and information, particularly at the district level, is likely to improve environmental management in small and medium industries. Government and industry associations can come together to offer training.