

Science for Environment Policy

Pressures for Indian manufacturers to green their supply chains identified

The pressures facing Indian manufacturers to 'green' their supply chain have been explored by a recent study. Both international and national pressures from government and consumers were found to play an important role in whether a company adopts green supply chain management principles, with pressures varying to some degree depending on the business's sector and size.

Manufacturing in emerging industrial nations, such as India, Indonesia, Malaysia, the Philippines, Thailand and Vietnam, has grown significantly in recent years. However, this has come at an environmental cost. Manufacturers in these nations are facing increasing pressures to [produce products](#) in an environmentally-sustainable manner, particularly those who compete in the global market and have to comply with foreign environmental standards and regulations. Consumers are also becoming more critical of manufacturers' environmental performance.

Green supply chain management (GSCM) can be an important part of a company's overall [business](#) strategy as it boosts their competitiveness, while improving environmental sustainability. This study explored some of the pressures on Indian manufacturers to adopt GSCM principles and considered whether the sector and size of the different businesses affected these pressures. The researchers surveyed 35 managers of businesses in southern India about the pressures to adopt GSCM in their organisation. Each business was in one of four industrial sectors: automobile, chemical, textiles, or electrical and electronics and the size of the businesses ranged from small-scale (less than 2000 units produced per year), through to large-scale (more than 10 000 units).

The responses confirmed that, although there were some similarities between the different sizes and sectors of business, there were also different pressures to incorporate GSCM. The automobile companies that were surveyed were driven to improve their green credentials in the face of stiff global competition and pressure from government regulations, while textile companies already operated under strict environmental regulations to protect their exports.

Chemical businesses faced strong regulatory pressure to manufacture in a more environmentally-friendly manner. Electrical and electronics companies surveyed typically produced most of their component parts themselves and were therefore under less pressure to green their supply chain. They also appeared to face less pressure from consumers, since they have a lower carbon footprint compared with the automobile and chemical industries.

Automobile and electrical and electronic industries typically employed specialist staff responsible for environmental issues and regulations, making it easier to adopt GSCM methods. In contrast, businesses in the chemical and textile sectors without specialist environmental management found it more difficult because they lacked the necessary expertise.

Organisation size had a significant impact on the pressures to adopt GSCM practices. Notably, large businesses were driven by government policies and regulations to reduce carbon emissions and use greener materials in manufacturing, compared with small-scale businesses, even when manufacturing similar products. Large organisations were also better able to access greener manufacturing technology, were aware of consumer demands for green goods and were more committed to developing sustainable manufacturing processes.

Shareholder demands for green practices were a driver in large companies, but rarely in medium-sized businesses. Medium-sized businesses were more willing to adopt GSCM methods as it would help their products compete in foreign markets, whereas small businesses were not.



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