

Listening to India's Shop Floor

Rethinking Skills and Industrial Policy

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The academic economist in me has spent more than a decade studying industrial policies and analysing the conditions under which they succeed or fail. Data crunching, consulting with key stakeholders, and translating the findings into evidence-based policy recommendations seemed to be the butter on my bread.

However, something in this equation never sat right with me.

There remained a persistent disconnect between what my five senses registered as I lived through everyday economic realities and what policy frameworks envisioned to achieve at the top. The gap between the anticipated impact of the policy and the outcome on-the-ground was too significant to ignore. Somewhere along the way, the transmission mechanism was breaking down - a recurring theme.

Therefore, at The Global South Convergence Forum (GSCF), we decided to reverse the usual direction of inquiry. Rather than starting with policy documents, we began with conversations. We travelled through industrial clusters, navigated the by-lanes of manufacturing hubs, and cold-called micro-enterprises across sectors and regions. We sought to examine industrial policy from the bottom up, grounded in the lived realities of market participants. In other words, we asked: *How does industrial policy function in the real world, where does its transmission fail, and how can these gaps be addressed?*

Over time, it became clear that industrial policy is often evaluated through investment figures, production targets, exports, and employment statistics. Although these indicators are important, they tell us little about a shop floor in India, where industrial policy is tested. If manufacturers consistently struggle to access the skills they require, then the challenge may not simply be one of labour supply. It may indicate that our understanding of industrial capability itself is incomplete.

One capability surfaced repeatedly: moulds and the making of moulds.

At first glance, moulds appear to be just another production tool. In reality, they occupy a fundamental position within manufacturing. Every manufactured product begins with a mould. Whether consumer goods, engineering components, jewellery, handicrafts, automotive parts, dental applications, or prosthetics, moulds transform raw materials into repeatable products. They enable replication, support economies of scale, reduce production costs, and make continuous product improvement possible through rapid prototyping and testing.

In other words, mould making is not simply a technical activity. It is *the* foundational manufacturing capability.

However, our conversations with small and micro business owners consistently revealed that the shortage of skilled personnel is acute. Entrepreneurs have repeatedly de-

scribed the same challenge. As one manufacturer remarked, “*India has a huge demand for skilled labour, but vocational education is at least two decades behind.*”

Initially, we assumed that this reflected a conventional skills shortage. However, our interactions with skill-training institutions revealed something much more surprising.

Many institutions were unfamiliar with moulds and subsequently mould-making as a manufacturing skill.

This was a revealing moment for us.

If institutions preparing tomorrow’s workforce are themselves unaware of foundational manufacturing capabilities, then the disconnect runs deeper than skilled labour shortages. It reflects a gap between industrial reality and the knowledge ecosystem responsible for preparing people to participate in it.

This insight has important implications for industrial policy: *India’s industrial policy needs an update, and it begins with awareness of the manufacturing processes, tools, and skills required.*

Industrial capability is built not only through incentives, infrastructure, and investments. It is equally shaped by whether educational institutions recognise the skills that industry actually requires. When this feedback loop between the shop-floor and the education/training system weakens, policy interventions lose effectiveness because they do not strengthen the capabilities upon which production depends.

Recognising both the need to make moulds as a skill and the absence of accessible training, Team **GSCF** developed a comprehensive **workshop on making moulds with silicone**. Silicone was deliberately chosen not because it represents the final destination for the participants but because it offers an accessible, low-cost medium through which the students can understand the logic of moulds, manufacturing constraints, design decisions, and production thinking through

hands-on experience.

Our objective extends far beyond teaching participants how to make silicone moulds. We aim to develop *mould-thinking*, which we define as the manufacturing literacy needed to understand how products are conceived, engineered, and produced. Through hands-on learning with silicone, participants learn to read shapes, understand negative space, make informed design decisions, anticipate failure, and develop a judgement in making moulds. Once learners grasp these principles, they are better equipped to adapt to different materials, industries, and manufacturing environments throughout their career.

An equally important outcome is employability. Participants not only acquire practical skills but also develop the confidence to pursue opportunities in wage employment, self-employment, or further specialised manufacturing training.



Paresh R. Batra conducting an online awareness programme on the foundations of moulds, for 40 centre heads from one of India’s leading NGOs.

One encouraging milestone came on December 12, 2025, when Team **GSCF** conducted an **online awareness programme for more than forty centre heads from one of India’s leading non-governmental organisations**. The programme was curated and delivered by one of the members of Team **GSCF**, a businessman with hands-on experience in running a silicone mould

factory. The session introduced the participants to the conceptual, functional and economic significance of moulds.

The positive response reinforced our original hypothesis: there is a demand for foundational manufacturing knowledge, even where awareness of such skills remains limited. The best results are those where industry-academic collaboration moves beyond words on paper.

This initiative is only the beginning.

As India aspires to become a global manufacturing powerhouse, strengthening industrial capability will require more than financial incentives and policy announcements. It will require systematically listening to

the shop-floor, identifying the capabilities manufacturers struggle to find, and ensuring that those capabilities become part of our education and training ecosystem.

The making of moulds is an example. There are undoubtedly many others waiting to be discovered. Team **GSCF** aims to foster meaningful collaborations through hands-on workshops that transform awareness into capability, and capability into sustainable livelihoods. Moving from insight to implementation, we look forward to an exciting phase of building manufacturing capacity from the ground-up.

Perhaps the future of industrial policy lies in listening to the realities emerging from the ground-up.

***Paresh R. Batra** is a manufacturing entrepreneur with over two decades of hands-on experience in the silicone mould industry. Over the years, he has engineered custom solutions for a wide-ranging clientele, spanning luxury brands, high-profile celebrities, and NGOs. He brings a rare blend of deep industrial insight, refined design aesthetics and extensive execution experience directly to the classroom. His unique background ensures participants gain insights into how design concepts adapt to scalable processes.*

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