

MODERN BIOTECHNOLOGY AND INDIA'S GOVERNANCE IMPERATIVES

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Like all countries, India faces the reality that modern biotechnology is unlocking many advances in healthcare, food and energy security, and environmental conservation. At the same time, these same breakthroughs are ushering in a host of potential threats, including biological warfare and irreversible alterations to the human gene pool.

To navigate this complex policy landscape, India needs to craft a more streamlined regulatory system and take other concrete steps to support growth in its domestic biotech sector. Doing so would likely help New Delhi—a much-needed voice from the developing world—vie for a chance to play a leading role in discussions on global governance, as nations begin formulating responsible global standards in response to recent biotech innovations.

The Promise and Pitfalls of India's Biotech Sector

- India's indigenous biotech sector has risen rapidly in recent years, with the country's biopharmaceuticals industry leading the charge. Given increasing private investment in R&D, and the sector's relatively low starting point, there remains immense potential for future growth, especially in biopharmaceuticals, bioservices, and bioagriculture.
- Yet India's convoluted regulatory system is plagued with bureaucratic bottlenecks and redundancies that delay or prevent new products from securing government approval. This problem is compounded by highly politicized public opposition to biotechnology, which lacks a serious empirical or scientific basis and further impedes the sector's growth.
- New Delhi must take proactive steps to strengthen and streamline its biotech regulatory apparatus; support the commercialization of biotech advances; and foster an inclusive domestic dialogue to build greater public knowledge about biotechnology, appropriate norms, and baseline practices.

Prospects for the Global Governance of Biotechnology

- There are gaps in the current patchwork of international legal agreements that shape the global governance of biotechnology, particularly related to the protection of intellectual property rights, the nonproliferation of biological weapons, and equitable terms for the cross-border movement of biotech products. Even more stark is the absence of global norms that outline responsible practices for new advances in the biotech sector, especially in the cases of big data analytics and genetic engineering.
- Developing and developed countries should begin collaborating to try to craft guiding principles for responsible innovation in the biotech sphere. India should start positioning itself as a strong voice in the discussions that will help define and set these emerging global standards. For instance, India and the rest of the international community need to rethink and possibly overhaul the existing global regimes for biodiversity and patenting.

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