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India's strategy to bridge the public-private divide

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Public-private partnership is the cornerstone of India's new draft National Biotechnology Development Strategy that aims at creating one million jobs and an annual turnover of $5 billion in the biotech industry by 2010.

A draft of the policy for the National Biotechnology Development Strategy released on April 2 by science minister Kapil Sibal is due to be implemented later this year. The policy, which is geared towards encouraging public-private partnership, has already triggered a debate within the biotech industry because it would allow 100% foreign direct investment, an option that could threaten the local industry, according to opponents.

Indranil Mukherjee/Agence France Presse

The Indian biotech industry has grown significantly over the past few years as it has successfully developed biotech drugs and vaccines.

The new strategy is designed to catapult India into the "global biotech league" says Maharaj Kishan Bhan, secretary to the New Dehli-based Department of Biotechnology (DBT) that drafted the policy. Bhan says the new strategy is built on the conviction that research for the "public good" and research "for profit" should become mutually reinforcing to help foster the development of innovation in biotech.

The draft policy envisages that by 2010, biopharmaceuticals—mostly vaccines and bio-generics—will be contributing to $2 billion of the annual turnover of the sector in India. Clinical development services is forecasted to reach $1.5 billion and outsourced research services are estimated to reach $1 billion. The balance of $500 million is attributed to agricultural and industrial biotechnology. This is an ambitious target but given the growth of the industry in the previous year, the government has strong growth data to support its optimism. The Indian biotech industry grew by 39% between 2003 and 2004 to reach a value of $705 million. Total investment in the sector also increased by 26% during the same period to reach $137 million.

Under the new policy, public funds can be spent on industrial projects while scientists who are employees of a public research institution can be seconded to private firms without losing any benefits. Furthermore, the policy states that "at least 30% of government-funded programs must have a commercial partner who will be responsible for directing research and development (R&D) towards commercialization." "This kind of partnership is very welcome," says Varaprasada Reddy, managing director of Shantha Biotechnics in Hyderabad, a company that pioneered recombinant vaccines in India in the 1990s.

But one component of the strategy that allows "100% foreign direct investment" is causing resentment in the industry. "The policy should have also insisted on partnership between local and foreign companies in the ratio of at least 25:75 [rather] than allowing foreigners total ownership," points out Reddy.

> "Allowing 100% foreign direct investment 'is a prescription for killing the local industry,' says managing director of Shantha Biotechnics in Hyderabad."
>
> Varaprasada Reddy

Indeed, the new policy dispenses with the need for government approval for equity investment in the biotech sector unlike in other sectors like telecommunications or energy. "What this means is multinational

companies can come with suitcases full of money, buy up plots, build plants, hire our scientists at low salaries and create wealth for themselves," says Reddy, adding, "That is a prescription for killing the local industry. We all will be dead."

Others like Bhimsen Bajaj, president of the southern chapter of the All India Biotechnology Association in Hyderabad, disagree. In his experience, foreign companies are not so interested in forming joint ventures, but he recognizes that with this new policy, they will bring new technology and generate jobs, thus enabling the country to develop. "There is nothing wrong in this," he says, adding, "we have to be open minded in these days of globalization."

The DBT says it will not finalize its strategy until it receives all opinions on the draft biotech strategy that is open for comments until May 15. After that, the strategy will be submitted to the cabinet for approval before implementation.

Despite the opposition to this aspect of the policy, India's priority in supporting public-private partnership could well benefit the industry. As proposed, public-private partnership can take several forms. In one form government institutes will partner with small and medium-sized companies such as biotech that have bright ideas but lack qualified staff. Once the project passes the proof-of-concept stage the company would become eligible for soft loans for product development and commercialization. The R&D expenditure of public sector institutes, while working on the projects of their private sector partners, will be met by grants from DBT.

In another form, the strategy aims at creating several "Technology Transfer Cells" that will promote the transfer of knowledge generated within publicly funded research institutions to the private sector. Biotech parks promoted by private industry will also get 30% equity funding from government. And the DBT will promote and support at least ten biotech parks by 2010. "This will really give a boost to the biotech infrastructure in the country," says Krishna Ella, managing director of vaccine and biologics company Bharat Biotech International in Hyderabad.

Web links

Websites referenced:

- Indian Department of Biotechnology