BioSpectrum the business of Bio & Health Sciences

Lack of regulatory infrastructure & talent remain big hurdles

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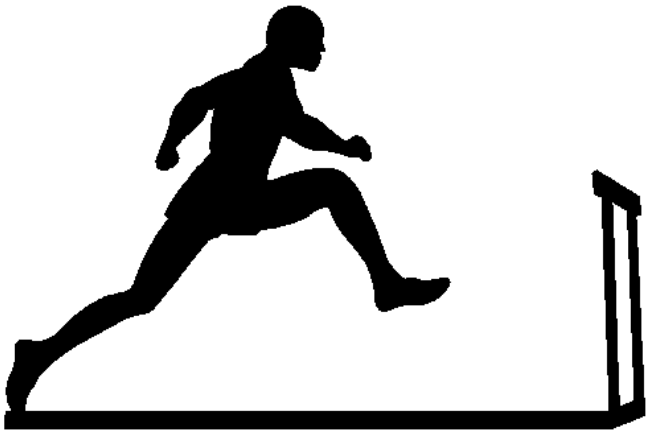

Comparisons with the IT industry might look highly promising to outsiders but many believe that these are being overstated. Among the reasons is the availability of the kind of financial support that the former enjoys. While the focus of this industry has been largely on biopharma, the sub sectors such as industrial enzymes don't require any huge funding. Probiotics and nutraceuticals too require fewer amounts. The best way out to attract funds is to shift the focus onto the lesser known areas.

Mr Jagannath Samavedam of Venture East explained, "We have invested in all sorts of companies including diagnostics, drugs, enzymes and recombinant products. This is great opportunity sector and we are all set to fund lifesciences with $3-8 million (20-50 crore) in each company but it depends."

"We speak to a lot of outsiders, they are happy with Indians. Innovators have not been able to attract typical funding. How far can Rs40-50 crore take a biotech company? Products take 5-6 years to research market. That is the reality private VCs have to live with," says Mr Jagannath.

When asked if quality issues are denting Indian image and impacting investments, a financial analyst responded, "There certainly are concerns around quality issues. Indian companies get miffed when asked about these issues and say it is just one or two incidents. the government is not the best deplorer of funds but has access to it. If the private sector can chip in, it can help in that."

However, Mr Jagannath doesn't share that view. "The Indian government doesn't have that kind of money. Not expecting a different policy on funds but on land, water, air and affluent regulation," he said.

Mr Ramesh Radhakrishnan, Artiman Venture feels that VCs are different from each other. "For example, we set the expectation with investors at 9-10 years but we have to be sure that there is Rs two billion exit."

Since a large number of early stage companies fail, there is always a risk about the money. Questions might be raised about public money for private good. Said a financial expert, "The government has risk money for helping the industry mature. The private sector can take over. Government and private risk appetite varies. It can enable the ecosystem but don't expect it to take over."

Mr Vishal Gandhi, managing partner and CEO, BioRx Venture Advisors feels, "We need a predictable regulatory policy so that the companies are able to plan their investments and product development stages. Also as a potential area, the focus can be on antibody conjugates and monoclonal antibodies."

While VCs agree that there is need for investments in biosimilar manufacturing but the question that confuses them is whether there is infrastructure available to push early stage manufacturing to a bigger scale?

Human resources constraint

It is said that every year, 10,000 quality students are produced but not even 4,000 of them are absorbed. Training and retaining is a big headache for Indian companies. Most of them do their basic HR work all by themselves. Despite the availability of talent, it is difficult to retain people. "Lot of patience is required to stay on, said Dr Mandakini Sharma of Biocon while adding further, "In US, we have high school students doing autoclaving and running gels while in India, the MSc level people do the same. There lies the difference"

Dr Gagandeep Kang, Christian Medical College, Vellore decried the lack of onus on research and development. She said, "There is hardly any orientation in the curriculum towards research or manufacturing"

The Karnataka government is way ahead in this matter. Dr Jagadish Mittur, head-biotech facilitation center at KBITS talks about a committee wherein there are eight domains including the fermentation bioprocesses and nutrition biomanufacturing. "Karnataka Biotech Aptitude Test has selected 126 students this time but for next year we have 145 students,"said Dr Mittur as he goes on to add, "Companies in the west allow you to do multiple staffing. They allow you the freedom to do things."

Agrees Dr Shams Yazdani, scientist and head-biofuel division, ICGEB, who asks a straight question. "Can we retain our talent here? The workforce generated at the moment is not enough I feel. Handholding of student entrepreneurs is required. Government cannot directly or indirectly interfere with the HR policies. Let the HR manager decide it."

There is another issue to tackle. Those joining the industry are treated as second class academicians. Dr Shahid Jameel, CEO, DBT-Welcome Trust Alliance points out to the fact that academicians are judged by the publications and not the processes. "Post docs are paid less than Rs 28,000. It is nice to say that they should come back but what about the mindset that looks at the foreign experience of a student as a superior ingredient in his resume," asked Dr Jameel.

Way forward:

The due attention to bio-manufacturing can help in expanding the products basket, thereby extending the benefits of biotechnology to untapped potential areas. Building basic research capabilities followed by scaling up of manufacturing processes and finally streamlining of regulations and education can surely do wonders. But the road to a strong and stable bio-manufacturing industry passes through a lot of challenges. The effective mix of plans and decisions involving right partnerships, would decide the gateway to the future

Note: The article is based on personal interactions and deliberations at 2nd Biotechnology Industry Research Assistance Council (BIRAC) Foundation day event held at New Delhi.