## News Details

Vaccine Eloquent Nov 08, 2002

**ELLA** is currently in the news for his attempts to develop a vaccine for the rotavirus - one of the most common causes of severe diarrhoea among children, a disease that results in the death of over 6,00,000 worldwide every year. What's interested is that the company is seeking to develop the vaccine at about a hundredth of the cost of the average MNC. What's more significant is that the \$6.7 million being invested in the research has come as a grant from the Bill and Melinda Gates Foundation, which is also partly funding Bharat's efforts to develop an antimalarial vaccine.

"My whole mission now is to prove wrong a recent McKinsey report to the WHO that only multinational companies have the expertise to produce vaccines needed for global requirements," says Ella, as he takes you around his spanking new production facilities. The plant was built at a total investment of around Rs.50 crore.

Though a small company by international standards, Bharat Biotech posted a turnover of Rs.26 crore last financial year, and boasts of the largest biologicals production facility in the Asia-Pacific region. "At 3.5 lakh square feet, this is the largest clean room in the region," says Ella, who has doctorate from University of Wisconsin, USA.

That more or less appears to characterize Ella's approach - aim big and plan for the future. And his recipe for success on his front has been quite simple - better technology management and process innovation to achieve the market differentiator. He's achieved this through a smart mix of collaborative research and funding from International and National bodies to minimize risks, coupled with huge volumes to roll out a bevy of products within a few years into the market.

While the Indian scientific institutions have provided the scientific manpower and other inputs for most of Bharat's R&D; work, it's Ella's collaboration with international bodies that has provided some of the expertise and wherewithal by way of grants to carry out the research activity on some of the forthcoming products. Not surprisingly, the progress on some of the new products in the pipeline has been fast and cost-effective. Thanks to this, Ella already has one patent under his belt (Lysostaphin). He's hopeful of being granted one more soon; even as three others patents have been filed.

Talking of his penchant for size, Ella surprised the markets when he launched the first product Revac-B - a hepatitis-B vaccine - and went on to build up a capacity of 100 million does a year, when the market was known to be small. But the logic behind having such capacities is clear now. As Ella points out:

"The vaccines business is one of volumes. In trying to build such large capacities, we learn the technology even as we achieve economies of scale."

Not surprisingly, given this large capacity, Ella is today flooded with requests for contract manufacturing from several multinationals. "But we're very cautious on this," he says. This, he explains is on account of the long line of products in the development pipeline that should be hitting the markets over the next few years and Ella clearly doesn't want to hinder things.

With two products currently in the market, Ella is pinning his hopes on four more major new products. The first

of these, expected to hit the market this winter, will be the much-awaited typhoid vaccine TYPBAR. It's gone through clinical trials and is awaiting regulatory clearances. The market for the typhoid vaccine in India is estimated at around Rs.60 crore and is currently met totally through imports. It took two whole years to develop the vaccine in collaboration with the National Institution of Health (NIH), USA, and is the first non-bovine-based typhoid vaccine in the world. Bharat Biotech has decided not to file for patents on it, preferring to keep it a proprietary product.

Some other products slated for early launch include streptokinase, which is used for dissolving blood clots, and an epidermal growth factor (EGF), to be made in various forms. While the market for streptokinase is estimated at around Rs.80 crore in the country, Bharat is also eyeing the insulin market, which is worth Rs.250 crore.

Though turnover is expected to grow only marginally during the current year (at Rs.28 crore), Ella projects a quantum jump next year. With new products slated to hit the market, he reckons the turnover should be any where between Rs.75-100 crore. And the company is pinning long-term hopes on it's rotavirus and malaria vaccines. Infact, Ella is confident that his company will be able to emerge as a global player by 2007, with a turnover in the region of Rs.800 crore.

However, the scientist-turned-entrepreneur is conscious of the fact that business development and marketing have been a weak link. While a current tie-up with Unichem might mitigate this shortcoming to some extent, he's nevertheless open to the idea of a large pharmaceutical company - with the right marketing clout, of course - picking up a stake in Bharat Biotech.