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"Biotechnology is a key sector of New Zealand economy"

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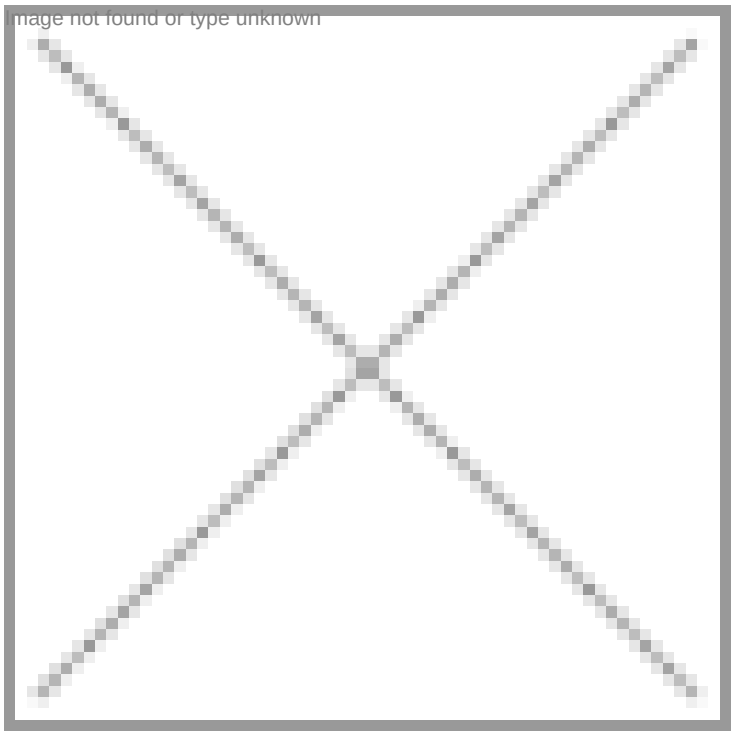
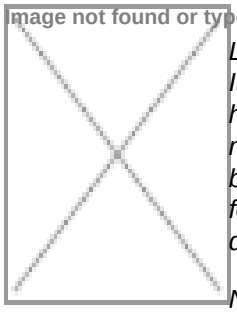


"Biotechnology is a key sector of New Zealand economy"

- Brian Ward, CEO, New Zealand's Biotech Industry Organization (NZBio)



Like in India, New Zealand's biotechnology sector is built on a century of world-class biological research. It has a long tradition of applying research to pastoral and arable farming, horticulture, forestry and human healthcare. New Zealand is now reaping the benefits of improvements in primary production, and from new high-value products. There are also a growing number of companies whose core business is biotechnology. These are high technology companies developing a range of novel products and services for global markets. The biotechnology sector will increasingly be seen as exciting, innovative and a distinctive New Zealand strength.

New Zealand's Biotech Industry Organisation (NZBio) as the industry organization, has become an important force for developing industry policy and fostering regional, national and international networks and connections. In an e-mail interview with BioSpectrum, Brian Ward, CEO, NZBio, shared his views on the biotech industry scenario in New Zealand. Excerpts of the interview:

What is the current biotechnology market scenario in New Zealand?

The New Zealand biotechnology industry is developing quickly across a number of dimensions. New Zealand has always had

a very strong research base and during the last five years we have seen an increase in momentum as a result of a much stronger focus on commercialization and greater critical mass. In 2005, $640 million was invested into biotech with more of this coming from private than public sources. During this time, 13 venture capital deals were completed and 11 companies raised money from initial or secondary offerings attracting $60 million of investment. Local venture capital funding has grown significantly in the last three years as has the interest from US-based venture funds. International collaborations and alliances are also on an upward trajectory.

What are the focus areas in biotechnology?

New Zealand has a traditional strength in agricultural biotechnology particularly in the areas of pastoral farming, horticulture, and forestry. Genetic and reproductive technologies are now being extensively used for improvement and selection. For example, in the dairy industry, Livestock Improvement Corporation is applying a range of genetic tests to improve milk yield and composition and in the sheep industry catapult is providing gene tests to improve muscling and fertility.

While New Zealand will continue to place high importance on increasing farm productivity and reducing costs, there is a growing interest in using biotechnology to create new high value foods, ingredients and materials from primary products. Functional food ingredients derived from dairy and fruit are examples.

The combination of an absence of many diseases and high trace ability standards means New Zealand is probably the world's most attractive place to produce high value therapeutics and biologicals from livestock. New Zealand is already a leader in the production of serum derived products and transgenic livestock for producing human therapeutics.

In addition, in the human health area there are pockets of research excellence that have resulted in a number of world leading technologies and innovations. Particular strengths exist in carbohydrate based therapeutics (IRL), neuroscience (Neuren), asthma (Malaghan Institute), diabetes (Protemix) cancer (ProActa, Pacific Edge Biotechnology) and cell therapy (Living Cell Technologies).

What are the incentives the government is offering to biotechnology companies and foreign investors?

Biotechnology has been identified as a key sector of the New Zealand economy and the government is an active supporter of the industry. On top of being a stable cost competitive environment, improvements in the tax environment are underway including the implementation of a simple limited liability partnership model for investment. For companies, research and market development grants are available to assist in developing technologies that target high growth international markets. Government assistance is also available to assist in identifying partnering opportunities with New Zealand companies. Add to this an open culture that responds well to challenges and values high performance and you have a very good environment for biotechnology innovation.

What advantages does New Zealand offer to biotechnology companies?

New Zealand has a strong biological research tradition and we have been quick to apply molecular biology, gene discovery, functional genomics and proteomics to agriculture and human health research. Generally, New Zealand scientists are very resourceful and this continues to stimulate divergent thinking, which in many cases results in breakthrough solutions.

The small size of the local industry has lead to a very well connected national network, which spans a wide range of disciplines and activities, and this has encouraged cross-pollination of ideas and provided very fertile ground for innovation.

Within industry segments, New Zealand strengths in pastoral farming, horticulture and forestry are internationally acknowledged. There are emerging strengths developing in nutraceuticals/functional foods and biomaterials and pockets of excellence in human health. These strengths have led to a solid pipeline of novel technologies.

What are the areas in which companies in New Zealand have an edge over the Indian biotechnology companies?

I believe that there are opportunities to leverage New Zealand's discovery depth across the board and our agricultural strengths by establishing commercial partnerships with companies in Asia. These arrangements could take a range of forms and include development, manufacture and marketing. New Zealand companies are becoming increasingly global in their search for partners and Asia is firmly on their radar. There are definitely opportunities to create win-win situations for both sides.

Are there any Indian biotechnology companies having presence in New Zealand or vice versa?

To date the majority of New Zealand's biotechnology companies have looked towards North America for growth opportunities

because these markets are the world's largest and most sophisticated. But this is changing as people realize that Asia is quickly emerging as a force in the industry and it is right in our neighborhood. At this stage there are a small number of companies with partnerships in Asia and I can see this accelerating and becoming increasingly common in the near future. For example, Pacific Edge Biotechnology has a development partnership with Medigen in Taiwan.

What are the issues hampering the growth of biotechnology industry in New Zealand?

A key issue for early stage companies is access to capital. While venture capital is developing in New Zealand, the industry is still very young. Similarly, New Zealand's public markets are risk averse and do not suit companies that are pre revenue. So this is a challenge, but also an opportunity for international investors into the New Zealand industry.

It is also clear that in many cases New Zealand companies lack immediate channels to market for their products. To be successful they must pursue aggressive partnering strategies with major companies that have global reach to capitalize on the value of their technologies. International partnering is therefore an imperative.

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