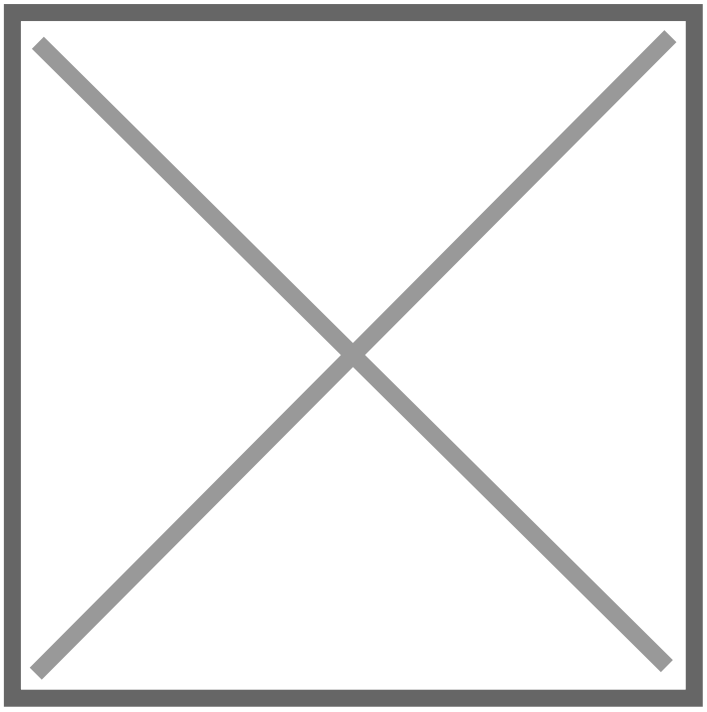
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A yacht with Technology hull

15 April 2003 | News



Avesthagen had a very humble beginning in 1998. Four employees, Dr. Villoo Morawala-Patell's brain, hard work and a bungalow in Sahakarnagar, Bangalore. Villoo and friends with some seed funding totaling nearly $300,000 (Rs 1.5 crore). Now in the fifth year, Avethagen is heralding the revolution in the staid Indian life sciences industry.



While traveling around the world Dr Villoo Morawal-Patell realized that what India needed was a powerhouse of technology in the life sciences to become a world leader. Blessed with a bountiful biodiversity and surplus skilled manpower, what we needed was a technology platform to utilize these resources. To make this a reality, Avesthagen was born to produce drought and pest resistant rice. Avesthagen has come a long way since then adding more pathways in informatics, proteomics, neutraceuticals and genomics.

Claimed to be the first genomic company in the country, Avesthagen has been rated amongst the top five life sciences companies for its business plan presented at the TiEcon, 2002 (the world's largest conference on entrepreneurship) held at Westin, Santa Clara, California in the heart of the Silicon Valley.

Avesthagen is a fully integrated bioinformatics company set up for promoting research and development in various fields of biotechnology. Avesthagen aims to improve the productivity in agriculture and develop agro-technologies that would lead to value addition in food and pharma products.

Etymologically the word Avesthagen is derived from the Persian religious system of 'Zoroastrianism', which was founded by Prophet Zarathustra. Agriculture is given a pride of place by Zoroastrians and "Avestha" stands for knowledge. Thus the name Avestha Gengraine Technologies is symbolic of the company's application of knowledge in the areas of agricultural biotechnology and medicinal plant based drug discovery

Founded in April 1998, Avesthagen became a full-fledged company in 2000 with the restless efforts of its CEO Dr Villoo Morawala-Patell, one of India's most prolific and academically accomplished biotechnologists. The commercial ramp-up happened in the last three years with the company filing about 40 patent applications in this field.

Through these new initiatives, the company plans to achieve $2.6 million (Rs 11 crore)of revenues in the first year and in five years, $5.2 million(Rs 26 crore) through the sale of skincare and diabetes products. Avesthagen is developing a variety of drought tolerant GM rice which is currently undergoing field tests. The product should be in the market in four years.

Avesthagen has decided to go in for an initial public offering (IPO), after repeatedly facing the not-so-understanding faces of venture capitalists. The company has also entered into a strategic tie-up with International Crop Research Institute for Semi Arid Tropics (ICRISAT) to provide supportive services in genomics. To scale up global
operations, the company is looking at additional funding and has appointed Kotak Mahindra and KPMG as global advisors for

raising about $10 million (Rs 50 crore)

Collaborations with universities, research institutions and corporations around the world, it is actively expanding its portfolio further. The technology that was used initially was developed in NCBS-TIFR (National Center for Biological sciences- Tata Institute of fundamental Research) labs through funding from the Rockefeller foundation.

Exactly after one year, Avesthagen has signed an MOU with the University of Agricultural Sciences (UAS), Bangalore, and some projects were initiated there. Avesthagen raised $ 2 million (Rs 10 crore) as venture funding from ICICI ventures, Global Trust Bank and TATA Industries Ltd. Operating from the state-of-art-facilities in the International Technology Park, near Bangalore, Avesthagen has specific capability in laboratory information management systems, marker-aided selection, DNA micro-arrays, proteomics, GMO testing, high-throughput screening, gene mapping, gene discovery and plant transformation.

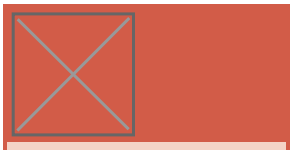
Avesthagen is also looking at setting up business development offices abroad to scan the commercial opportunities in the segments where it operates. Opportunities in seed development, contract manufacturing for pharma majors and biotech are huge, and the company is looking at an entry into the US, European and Australian markets. Avesthagen has offices in Kuala Lumpur which provide on-the-ground office support.

Avesthagen has also entered into a research-based alliance with AstraZeneca in the drug discovery program for tuberculosis. The biotech company also has a strategic tie-up with the Hyderabad-based ICRISAT (International Crop Research Institute of the Semi Arid Tropics) to provide supportive work in the genomics. The project with ICRISAT is aimed at developing improved crop varieties and will translate into definite intellectual property rights (IPRs) for both the parties Biotechnology based agriculture is another area where Avesthagen has found its own space. As India has its own set of agricultural problems, be it climate or pests or diseases, Value added crops, pest and disease resistant varieties with specific reference to India will definitely have a place on the shelf in India. Biotech needs an assessment of the relevant factors before it is taken up recently Avesthagen did a study on the economic importance of drought resistant rice for Karnataka in collaboration with GREQAM Ã¢â?¬â?• Groupe De Recherche en Economie Quantitative de Aix - Marseille under the University of Aix -Marseille. Expanding, changing premises, adopting new protocols, updating knowledge are all part of the joy and laughter tears and pain at Avesthagen. Avesthagen is constantly growing to keep up with the most current breakthroughs in the world. The interim phase was tough but they survived it and the international network has won the day.

Roby Ajith

"I am fortunate in my team with an intimate involvement"

In a recent write up, an Indian magazine asked: why Basmati rice has a unique aroma? It then answered grandly: Because Dr. Villoo Morawala- Patell did the RNA reading of that rice genome. The magazine may have exaggerated a bit. But that is the way a section of the society looks at her with awe. A prominent speaker at biotechnology meetings, people hear her with rapt attention as she narrates the struggles, the fears, and the successes that make life as an indomitable entrepreneur. Dr. Villoo Morawala- Patell shared her experiences and expectations with Roby Ajith of BioSpectrum.



Villo with her daughters

Background: Dr Villoo Morawala Patell, is a plant molecular biologist from the University of Louis Pasteur, France. She studied at different boarding schools such as St Annes school, St Francis School, Secundrabad and Sophia College, Mumbai. Then did her Ph.D. at Louis Pasteur, Strasbourg and
completed the post doctoral work at the University of Ghent.

With her research group, she holds several patent applications in gene discovery and functionality, gene transformation for rice and millet as well as tissue-culture techniques, bioinformatics, and gene-sequencing techniques. Clearly, the startup is allowing this highly qualified Indian scientist to venture into the world of business.

Biggest exposure: We have the Research Process outsourcing (RPO) model and many products in the pipeline on the convergence of food and pharma. The main research in Avesthagen revolves around the seed for food and food for medicine, medicinal plants, and quality food and quality traits at the IP level. We generate our IP and license our products. We've

developed cytoplasmic male sterily in rice. This would be useful for rice breeders.

How She handled the pressure: Pressures are always there. But over time, I have developed the ability to switch off from one problem and attending to another, maintaining the essential linkages and connectivity.

Perseverance pays off: Yes, I have paid off my early debts on a milestone basis. The existence of a company depends upon its current business plan. If you have a discovery-services company such as ours where a large amount of the money is going into research then you would require 2-3 years to break even. And we are not so concerned at short-term measures as our play is really for the big ticket at the end of 4-5 years.

Sacrifice and battles: Lots of sacrifice and battles I have gone through in my life. I have traveled a long way to reach what am I now. It would be hard to describe it all. Family time is one that pinches most. My daughters Sarah and Sanaya are suddenly very big.

Lessons learned from the experience: Finally one stands alone although everybody (employees, investors, suppliersÃ¢â?¬Â¦) contributes, ***Survivors' perspective:*** I am fortunate in my team with an intimate involvement. It is an emotional involvement.

Desires: To see Avesthagen stand up to the world as an India based global company. Grow it through strategic alliances and co-development.

Looking back: Proud, we did it absolutely honestly. Can do it, bigger pride.

Strengths: A lot's been said about the potential in biotech. There is enormous potential but the hype that anyone can stand up and start a serious biotech company is wrong. You need enormous knowledge of both the industry and the science and have a serious vision to be successful. You also need enormous grit, determination broad shoulders and a strong heart to survive the first three years. There are no short cuts in this business and no early lucre.

Hobbies: Swimming, reading, update of the political world

Staff motivation: Opportunities to travel, attend conferences, I share everything with my employees. Avesthagen has a staff of 40, many of them sourced from the bioinformatics faculty of the Madurai Kamraj University, the only one of its kind in India. In keeping with its credo of convergence, the company is appropriately headquartered with the IT elite in the sparkling first-world environs of Bangalore's tech park in Whitefield. "We are not only doing pure research, but also carrying out contract research

Force behind your success: I believe in the elements and forces of nature, energy, fire. My mother in law was the first Indian woman Ph.D. in physical chemistry from Imperial College, London. She was very encouraging. Participating husband. Children, they always looked up to me. Parents gave me the grit to persevere.

Which place does she belong to: Born in Navsari at Gujarat. But likes to represent India, Karnataka, Andhra Pradesh and Gujarat.

History of Avesthagen in your perception: I started as a garage entrepreneur, very small, four students and big ambitions and today we are what we are. But what I believe we should aim for is new discovery, something not found before that could contribute on a global scale and put us on the map as inventors.

Future of biotechnology: In the next three years or so with the new generation of entrepreneurs, biotechnology will be a serious affair with more than 100 biotech companies in the pure biotech sense, (not ancilliary to pharma/crop) will mushroom. Indian biotech will develop very rapidly and there would be the entry of international companies.

Funding for Avesthagen: We are raising a second round of VC funding from international investors and expect that this will materialize in approximately 3-6 months.

Funding requirements of biotech industry: Yes, funding is a problem. And some of the reasons are new faces, no history to attract banks into lending, Knowledge-based entrepreneurs with no collateral power for banks to fund. Government loans take a long time to process and also require collaterals. VCs need to study the international scenario better, do a thorough homework and should not rely on the entrepreneur to do the convincing. This will save time and energy.

Role of Indian biotechnology in the global market: India will, in phase 1, outsource work from the West. In phase 2, start manufacturing. Everybody recognizes the potential but it will need a greater effort from all concerned to really make it big. Tomorrow is another day.

Family: Parents are very simple people, believe in simple living and high thinking. Husband was always participating and children involved. Mother's family was land owners/farmers. Father is an academic from Surat. Lived in the district of Hydrabad on the invitation of the Nizam. Brother is a writer and has written three books on cricket, sister accountant at ADNOC. My husband Zareer Patell is an icon on physical fitness. And jazz pianist.