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â€œDemand for biodiesel will see a steady riseâ€?

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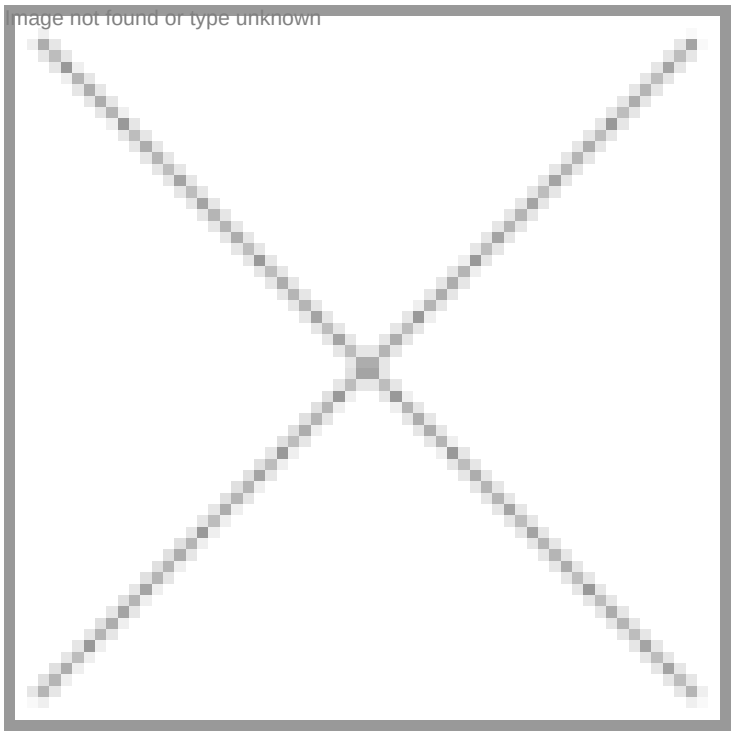

“Demand for biodiesel will see a steady rise”

—CS Jadhav, director – marketing, Nandan Biomatrix, Hyderabad

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Hyderabad-based Nandan Biomatrix is one of the pioneering jatropha agri-R&D companies in India with a 1,000- acre Research and Resource Center in Hyderabad. In an exclusive interview with BioSpectrum, CS Jadhav, director – marketing of Nandan Biomatrix gives a wide statistical information on the domestic and international biofuels market.

What are the initiatives needed to make biofuel as an alternative to nonrenewable fuel?

National mission on biodiesel has given the blending mandate of biodiesel with high speed diesel to be 20 percent by theend of 2012. To execute this mandate, the biodiesel production by the end of the year 2012 has to be 13.38 million metric tonnes. This demands 11.19 million hectares of land in the country to be converted into biofuel plantations. These numbers and statements provide scope to the players in the industry to explore the possibilities for commercializing the biofuel production. Given the facts that India spends more on the import of crude oil and has got huge potential for production of biofuels, the sector has got remarkable prospects as alternate fuel.

How will the biofuel policy help to steer the growth of the biofuels sector in India?

Biofuel policy gives a structured approach to all the stakeholders of the biofuel industry like farmers, government organizations and departments and corporates. This organized industrial approach leads to further growth. If the biofuel policy could address all the necessary issues like pricing and procurement of seeds, the industry shall flourish and sustain on

its own. Once the policy is in place, more players shall enter the segment, leading to a competitive situation, which in turn escorts towards an established industrial segment.

What are the key achievements of biofuels research in India?

Eminent organizations and institutions involved in the research and development of biofuels are ICRISAT, Hyderabad; CRIDA, Hyderabad; and ICAR, New Delhi. Other than these research-focused organizations such as, TNAU, Coimbatore; TERI, New Delhi and FRI, Dehradun; are also engaged in the extensive research of biofuel crops. The key areas of research so far are for the feedstock development and for the processing of the produce into biofuel. The raw material or the feedstock development includes the crop development through varietal improvement and hybridization, and locational trials for adaptation of the species. The research on processing technology focuses on evolving cost-effective technology for the betterment of all the stake holders.

The Department of Science and Technology (DST) is the committee member in producing high yield varieties for jatropha along with the coordination of the Ministry of New and Renewable Energy (MNRE) as well as the Ministry of Agriculture. Department of Biotechnology (DBT) is working on production of quality planting material of jatropha, and they have called for proposals for initiating the multi-locational trials of jatropha.

Nandan Biomatrix has been selected by DBT for the project of mass multiplication of jatropha curcas saplings through vegetative cuttings since they were convinced with the R&D work taken up by us on jatropha for the past several years. DBT selected us and gave 25 percent of the work order in India.

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W business prospects of biofuels from India's perspective?

India has a huge potential for biofuels production. The favorable subtropical climate, huge stretches of culturable marginal lands and the natural resource wealth of the country stand testimonials to the fact that the country has good scope for biofuel production. India has witnessed a steep rise in energy consumption in the recent years and is today the world's sixth largest energy consumer with the demand growing at an annual rate of 4.8 percent. The demand for diesel is estimated to grow at an annual rate of 5.8 percent till 2030. Current oil and gas reserves in India are not adequate to fulfill this growing demand. India produces about 30 percent of its annual crude oil requirement of approximately 105 million tonnes. For the balance 70 percent, the country relies on imports.

The transportation sector accounts for almost 50 percent of the total crude oil consumed. This has increased the risk exposure of the country to the high price of the crude oil in the international market. Considering this demand-supply mismatch, the Government of India has undertaken two strategic measures of accelerating the exploration and production activities in the oil and gas sector; and promoting the consumption of alternate fuels. Blending mandate of 20 percent by the end of the year 2017 and the support package extended by the government in terms of tax sops and incentives are some of the eminent drivers of the industry. Other than the aforesaid factors, the country having 70 percent of its population in the rural areas, ought to focus on the production of green fuels especially for rural electrification programs. The industry is still in its nascent stage in the country and expected to take off when an organized industry status is given to the sector by bringing biofuel policy in place.

Estimated Jatropha cultivation requirement [in million hectares (mn ha)] to meet biodiesel blending demand in India.

How is the business potential of biofuels in the global market?

Global demand for oil is rising at two percent every year. Since 1985, the energy use has increased by about 30 percent in Latin America, 40 percent in Africa and 50 percent in Asia. Over the next 20 years, the demand for energy is expected to rise by about 50-60 percent worldwide. Though Europe has started research on biodiesel in 1970s, industrial production began in the year 1992. Today the EU produces about 48.45 lakh tonnes of biodiesel of which Germany is the largest producer with 21.80 lakh tonnes per year. The US shifted its focus towards biodiesel in early 1980s, and it began its production in early 1990. The biofuels demand is expected to increase to 33 million tonnes by 2010.

Where does India stand in global biofuels market?

In India, the biodiesel industry is in the nascent stage. However, there has been greater awareness on biodiesel in India in the recent times due to shortage and escalating prices of petrol and diesel. With the government introducing the biofuel blending mandate, the demand for biodiesel will see a steady rise in the years to come.

Indian government is very keen and if the National Biofuel Policy is approved we can be one of the most potential countriesin the world. There is lot of awareness about biofuels in the country. Availability of land for biofuel crops cultivation and low cost of production have made India as one of the most potential countries for biofuel production. The scope for producing biodiesel from non-edible seeds like jatropha and pongamia is an advantage to India when compared to rest of the world. „

Pradeep Kumar