



World class referral food testing laboratory is being set up at NIFTEM

Though the Indian agriculture sector has made significant strides in the last few years, its full potential as a major player in the global agriculture market is still untapped, one of the reasons being inadequate development of food processing sector. Lack of proper development of food processing sector is also responsible for huge food wastage at harvest and transportation level, estimated to be Rs 92,000 crore. Only 3% to 4% fruits and vegetables are processed in the country. Presently, the Indian food processing industry accounts for 32% of the country's total food market.

To overcome the problem, world class institutions for technology, management & entrepreneurship education and research are critically required. National Institute of Food Technology Entrepreneurship and Management (NIFTEM) set up by the Ministry of Food Processing Industry (MoFPI) is one such effort by the Indian government. Set up with an initial investment of Rs 500 crore NIFTEM intends to act as a centre of excellence and an apex world class centre of global standards in the area of food technology and management, catering to the needs of various stakeholders such as entrepreneurs, industries, exporters, policy makers, government and existing institutions. It is a 'One

Stop Solution Provider' for various problems of the sector.

"NIFTEM aims to become a world class education hub in Food Technology and Management," says Dr Ajit Kumar, Vice-Chancellor (NIFTEM). Its mandate is to work as sector promotion organisation/business promotion organisation of the food processing sector. Its major objectives are:

- One stop solution provider
- Skill development and entrepreneurship development
- Facilitating business incubation services
- Conducting frontier area research
- Fostering innovation for development of the sector
- Developing world class managerial talent
- Functioning as a knowledge repository
- Upgradation of SME food processing clusters
- Providing intellectual backing for regulations
- Promoting cooperation and networking

Spread over 100 acres at Kundli in Haryana's Sonapat district, NIFTEM has state of the art infrastructure put in place in consultation with eminent food experts from India as well as abroad, comprising of centrally air conditioned administrative, academ-

ic, laboratory blocks and library and cafeteria. It has 14 world class state of art spacious and well equipped teaching and research labs, a central instrumentation lab having most advanced and sophisticated analytical equipment, lecture halls fitted with modern facilities.

In addition to the 14 labs, a world class referral food testing laboratory is also being set up. Five pilot scale food processing plants and incubation centres with strong industry linkages provide facility for experimental learning. Its NIFTEM Knowledge Centre set up in a boat shaped building is the best class library having collection of over 7,000 books, 15,000 volumes, 110 print journals & magazines, 16,500 e-journals and 700 e-books in addition to several DVDs, newspaper clippings etc.

NIFTEM was established in 2012 when it was granted deemed to be university status by HRD ministry. It started four-year B Tech and two-year M Tech courses that year, followed by PhD and research the following year. Nearly 900 students are present on the campus pursuing one of the courses. It admits 180 students each year for B Tech course in food technology and management and 18 each for five courses in M Tech in food supply management, food safety and

quality management, food process engineering and management, food plant operations management and food technology and management. Additionally, 30 to 40 students are admitted for PhD and post-doctoral research programme.

Beside the regular courses, NIFTEM also conducts the outreach programme, fiscal development, training programme, short term training programme for industry people since then. All the meritorious students from both the academic programmes are sent to universities abroad with whom NIFTEM has MoUs.

All the NIFTEM activities are run by approximately 70 staff members, including 45 academic faculty. In addition to the research in food content, developing new food products and enhancing shelf life of food items, research in many other food related areas including equipment is also done here. For instance research is being done on design and development of ginger peeler and prototype for making stuff parathas, or development of machine for continuous extraction of coconut water aseptically from mature nuts.

In view of the importance of innovative technologies in food processing industries for preserving crops, reducing wastage, creating value and enhancing farmer income NIFTEM has created innovation fund for its students. Two projects - Study of utilisation of waste potato for the production of biofuel and NIFTEM waste management – have been undertaken under this programme. Besides research and innovation, projects are also undertaken based upon literature search since not enough authentic information is available on various issues of the sector, making it a limiting factor. Under this programme NIFTEM has taken an initiative of developing status papers on different issues so that such a source of au-

thentic information can become useful for various stakeholders. M Tech students in their first year are asked to write a status paper.

In addition to the internal research, NIFTEM also undertakes externally funded projects. Indian Council of Medical Research (ICMR) has funded a project on antibiotic resistance in lactobacilli of food and faecal origin and detection of genes influence of stress and horizontal transfer. Few other externally funded research projects are also on which include development of food products fortified with cereal grasses and evaluation of their therapeutic characteristics. In order to ensure inputs on research oriented education NIFTEM has constituted research development council consisting of 65 members combining academia and industry. It has a mandate of future the future research agenda of NIFTEM.

NIFTEM has innovative concepts in education like unique programmes blended with technology & management, globally benchmarked curriculum and teaching through e contents in an interactive mode and facilitating learning through mind maps, role playing & scenario analysis. Its academic programmes are run through five academic departments – food science & technology, engineering, basic & applied sciences, agriculture

and environmental sciences and food business management. It has four divisions – skill development, consultancy, corporate resource, entrepreneurship, research – and three centers – International grain processing research and training, international bakery and training and international centre of excellence for food safety and quality. NIFTEM has collaborations and MoUs with many national and international universities and institutes.

As a result of its strong academic base, NIFTEM has set a benchmark by full placement of all students of its first and second batches of M Tech. It has one more feather in its cap as it has been conferred the prestigious Agricultural Entrepreneurs Award in September 2015 for contribution in building a sustainable India through innovative village adoption programme.

As a part of the Prime Minister's 'Make in India' programme NIFTEM has proposed to establish the 'National centre for Indian traditional foods' to conduct studies on Indian traditional foods to help for their global promotion. Twelve special dishes of different states have been selected for the same. "NIFTEM is functioning in consonance with its mandate and will attain further good heights in future," concluded Dr Ajit Kumar. [NS](#)

