



V Gokuldas

Food processing only sector which can generate huge employment opportunity

HRS Process Systems Ltd., (HRS) part of UK based HRS Group, is one of the leading heat transfer specialist that operates at the forefront of thermal processing technology. Established in 2003, with headquarters in Pune, HRS has marketing offices spread across major metro cities of India along with the group companies in UK, Spain, USA, Malaysia, Australia and New Zealand.

HRS offers effective heat transfer solutions for an extensive range of processing applications across a spectrum of industry sectors like Food & Beverage, Nutraceuticals, Dairy, Pharmaceuticals, Chemical, Oil & Fats, Fertilizer, Cement, Steel, Power, Agro Chemical, OEM (Original Equipment Manufacturers), Paint, Paper & Pulp, Textile, Automotive, Sugar, Breweries and Distilleries among others.

HRS is ISO 9001:2008 certified along with ASME 'U' (The American Society of Mechanical Engineers), NBBI (The National Board of Boiler & Pressure Vessel Inspectors), HTRI (Heat Transfer Research, Inc.) and NSIC-CRISIL accreditations. In a candid chat with V. Gokuldas MD, HRS Process Systems Limited we came to know about some of the latest information about the company and his views about the food processing industry of the country and its potential.

Government of Indian has kept Food processing Sector in "Make in India" plan, your comments.

India is the world's second largest producer of food with a clear potential of being the biggest. The food processing industry is one of the largest industries in India contributing to 9-10% of GDP through the agricultural and manufacturing sectors. Sectors such as agriculture, horticulture, dairy, fruit pulp, vegetables and beverage processing,

bakery and confectionery, meat, additives and nutraceuticals are some the key contributors to food industry. The Indian food Industry stood around US \$ 39 billion in 2013 and is expected grow at rate of 10 % to touch US \$ 64 Billion by 2018. At the same time it must be noted that the level of food processing in the country stood at 6 per cent, as against 60 to 70 per cent in developed countries.

Food processing sector has great potential in India, since a very small percentage of the fruit and vegetable produce find

their way into processing sector. Right combination of technology and marketing will enable companies to grow in this sector. The sector can achieve faster growth with more investments and better technology and Make in India seems to offer the right platform to the food processing sector.

What Potential do you see for the growth of this sector as a whole which includes grains, fruits & veggies and modern food products?



The food sector has witnessed a marked change in consumption patterns, both in urban and rural areas as well as in terms of demographics. Changing lifestyles are driving growth and demand for newer food and beverage categories as well as more processed foods that offer convenience with a longer shelf life. Rising income levels and a growing middle class are the main factors for processed food demand. There is an awareness and concern for wellness and health foods. Consumption in India is slowly driving towards packaged and ready-to-eat foods.

There is a need of enhancing technology and machinery which not only retains the naturalness but also gives a longer shelf life to the processed products. Companies like HRS have been at the forefront of innovation in food processing technology enabling food and beverage companies to substantially increase both - quality output and productivity. We have introduced revolutionary products and solutions for a range of food products - fruit pulps, beverages, diced fruits, ready-to-eat foods, range of dairy products, nutraceuticals, infant food substitutes and probiotic supplements.

Food Processing is directly connected with the farm produce, do you think this can be a game changer for farming

communities if done systematically in rural areas?

India is an agrarian economy and enhancement of agriculture / farming output will not only benefit the food processing sector, but will also enhance economy and opportunities for rural employment. While large farmers can absorb losses relatively easily, it is the small farmers that have to bear the brunt of losses, at times emerging from "wastage" of agricultural produce. This is where the processed food industry can play a significant role. The farmer is not dependent on one product or produce but can look at various options suitable for farming during the year. Better storage and transportation facility will help reduce wastage. Enhancement in food processing will make the market more competitive thereby giving the farmer a better return on their product / produce. Thus, growth in food processing will be a game changer for farming communities especially in rural areas.

Government announcement of setting up of 17 new mega food parks is in the right direction. These parks are expected to attract investment of over Rs 6,000 crore. If media reports have been accurate then basic infrastructure in these food parks will be set within 30 months. In each

mega food park, 40-50 food processing units would come up and it would directly get benefited to 5 lakh farmers.

Food processing sector can without doubt be a game changer for India's rural economy but it needs to be supported with better infrastructure in terms of road connectivity, power for cold storage / warehousing and innovative Government financing / credit availability for small farmers as well as micro small and medium enterprises (MSMEs). The "Make In India" focus of the Government should facilitate this in a planned and systematic manner.

Do you also think that food processing is the answer to the unemployment among the rural youth?

Yes ! Only 2 per cent of total fruits, vegetables and grains produced in the country are processed. This number can be substantially improved. Food processing sector is the only sector which can generate huge employment opportunity in the rural belt with low technology and low investment. Increasing agricultural output would need increased manpower apart from other resources. This will not only help generate employment in rural areas but also provide better remuneration for the day's work. The food processing industry is also

one of the largest employment creators, with growth in direct employment in the organised food processing sector expected to grow four fold in the next decade. The food processing plants need to be near source of raw material and hence there is a huge potential for employment for rural youth.

How important are the new methods of food processing, expertise and cutting edge technologies for the success of today's food processing companies?

Food processing has undergone drastic change in the last two decades. This has been due to urbanization, changing life style, higher income and preference for quality products. The increase in volume/demand for processed food products has necessitated development of technology that can deliver quality hygiene products at competitive price. Unlike other processes, processing of food products has to be very delicate, else the natural flavour or taste is lost rendering product useless. Deployment of latest technologies plays a pivotal role in food processing industry. These technologies contribute to increasing production by minimise downtime, increased capacity and efficiency, lower costs and better product quality and shelf-life.

The technology also needs to look at the packaging of the products based on requirement, convenience and visibility. Thus, the food processing sector has grown not only in thermal treatment or process technology but also in packaging of products.

HRS innovative heat transfer technology incorporating the Ecoflux* corrugate tube heat exchanger, Unicus® scraped surface heat exchanger and HRS Piston pump for various processing applications gives our customers the technology advantage.

How has been your journey with fruits segment especially with mangoes in India?

India is the largest cultivator of a variety of mangoes. Some of them are primarily used in pulp manufacturing and constitutes as key ingredient for many beverages. The country also dominates

the world market for mango pulp and possesses close to 67% share of world exports.

The manifold growth in the packaged mango drinks segment has propelled fast paced growth in the proverbial mango-processing basin of India – the common borders of three states, Andhra Pradesh, Tamil Nadu and Karnataka – primarily the Krishnagiri -Chittoor belt. Other areas in Maharashtra and Gujarat also process special mango variety. Fruit beverage companies like Parle, Pepsi, Coca Cola and the likes rely on pulp processed from this mango belt of India.

There are numerous mango processing units in this belt which work during the season only. The mango season is between 45 to 60 days and in that time all the produce has to be processed and packed for consumption throughout the year ! Thus reliability of plant operation has to be very high.

HRS energy efficient heat exchangers incorporated into preheaters, pasteurisers, sterilizers and evaporation systems enable Customers to have non-stop production during the mango season.

Our advanced evaporation systems ensure that the mango pulp is reduced in volume by reducing the water content, our aseptic Monoblock sterilizer with filler process and pack this pulp in a complete hygienic environment. This in turn means that the fruit processing companies are able to cut down significantly on packaging, transportation & storage costs as more quantity of pulp can be filled in same size of containers. Our customers have appreciated our systems and also service support.

HRS has installed Evaporation plants for Mango pulp processing at renowned processors like Rasaa Foods, Roshan Fruits, Sreedev Agro, Sree Sannidhi foods, Monoblock Sterilisers at Jadli Foods, Amudha Aseptic, Sree Sannidhi, Foods & Inns, Leon Foods, Sri Varsha Foods, amongst others. Many of these companies in turn either export their produce or supply to large food and

beverage companies. We are seeing a substantial increase in demand for our pulp processing solutions from the mango sector.

Our HRS Paradise* dice pasteuriser, UHT system, Nutraceuticals processing lines are some of the key solutions to the market giving our customers the particular advantage for meeting the demand for superior quality foods.

Please brief us about HRS-Paradice-technology and your plans to promote the same in India?

HRS ParaDice* is a unique offering from HRS Process Systems, which is capable of processing fruit dices / vegetable dices / ready-to-eat food without shearing them. The product is pumped using our unique HRS Hygienic Piston Pump which pumps products without breakage and are heated and cooled in the highly efficient ECOFLUX* Tubular Heat Exchangers for rapid, homogeneous and efficient heat transfer. HRS ParaDice* ensures quality product without loss of color, flavour or aroma. Product integrity and shape is maintained. These particulate foods are pasteurized for hot fill or aseptically processed for filling in aseptic containers. This innovative processing technology opens up a huge potential of applications for diced fruits and vegetables, ready-to-eat foods where the natural taste, texture and shape is of huge priority.

