



# THE HORTIPRENEUR



E-NEWS LETTER OF BUSINESS ENTREPRENEURSHIP & START-UP SUPPORT THROUGH TECHNOLOGIES IN HORTICULTURE (BESST-HORT), A NIDHI-TBI OF ICAR-IIHR, BENGALURU

**BESST-HORT**  
**(A TBI OF ICAR-IIHR)**  
**HESSARAGHATTA**  
**BENGALURU -560 089**  
**KARNATAKA. INDIA.**



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## BESST-HORT, the Incubator Casted

Business Entrepreneurship and Start-up Support through Technologies in Horticulture (BESST-HORT), is a NIDHI-Technology Business Incubator of ICAR-Indian Institute of Horticultural Research, Bengaluru, Catalyzed and Supported by National Science and Technology Entrepreneurship Development Board (NSTEDB) of Department of Science and Technology, Government of India. NSTEDB was established by Government of India in 1982 with a broad objective of promoting gainful self-employment amongst the Science & Technology manpower to setup knowledge based and innovation driven enterprises. BESST-HORT was sanctioned in later part of 2018 by the NSTEDB to promote knowledge and innovation driven start-up enterprises in the area of horticulture & allied fields. The major objectives of BESST-HORT are:

- \* Attract the youth to horticulture through capacity building and entrepreneurship development.
- \* Arrange for transfer of technology from ICAR-IIHR and other ICAR institutes in the domain of horticulture and allied fields.
- \* Provide On-site and Off-site Technology incubation facility to scale up productions.
- \* Provide mentorship (technical and business) and hand holding to the budding entrepreneurs.
- \* Help the enterprise building through acceleration, investment and market linkage.

After its initial administrative hiccups, incubator gained steam to move during first quarter of 2020 amidst the COVID-19 lockdown. The National Projects Construction Corporation (NPCC) under Ministry of Jal Shakti, GoI bagged the contract for construction / erection of the incubation facility, primarily for incubating food processing start-ups related to fruits and vegetables with technologies from ICAR-IIHR, Bengaluru. The incubation facility is expected to be ready by December 2020, where about 20 Start-ups can start their businesses at a time. The facility will have a common modern food processing infrastructure, 20 incubatees' offices (each of 100 sq.ft), a conference room with latest multimedia & Wi-fi features, an administrative office to run the TBI.



3-D View of Upcoming facility



Empowering the FPOs



## Kick Start

### Attracting Youth to Horti-Business

BESST-HORT conducted 16 capacity building training programmes during 2019-20 and trained 797 prospective entrepreneurs. The subject areas ranged from planting material production opportunities in mango and jackfruit, soilless cultivation, organic production of vegetables, production of plant health promoters, mushroom cultivation, to processing of fruits & vegetables into various products. These programmes helped in attracting 4 off-site incubatees, one on-site incubatee to BESST-HORT and 4 licensees to buy ICAR-IIHR technologies.



### Online EDP during COVID-19

BESST-HORT conducted its first Online Entrepreneurship Development Training Programme on 'Drying and Dehydration of Vegetables (Cabbage, Carrot & Beans)', on 19th June 2020. The day long programme involved practical demonstration of producing dehydrated vegetables, their quality control, packaging, marketing, financial schemes and preparation of model DPR. The programme was attended by 62 participants and sponsored by Karnataka Agribusiness Development Corporation, Govt of Karnataka.

### Partner in Bengaluru's Start-up Ecosystem

BESST-HORT entered into an MoU with Bangalore Bioinnovation Centre (BBC), which is a world class incubation facility located in the IT hub of Bengaluru. BBC is under the administrative control of Department of IT, BT & ST, Government of Karnataka, with liberal funding from DBT, GoI. BESST-HORT along with BBC agreed to Co-Incubate agriculture / horticulture-based Start-up enterprises and share immense facilities for the purpose of scientific innovation and entrepreneurship promotion. The MoU was exchanged in the presence of Dr. Trilochan Mohapatra, DG, ICAR & Secretary DARE, GoI on 5<sup>th</sup> February 2020.



"Together We Grow"

### Important Meetings

#### 3rd BOC Meeting

- \* The 3rd Board of Governors Meeting of BESST-HORT Society was held on 26th June 2020. NSTEDB was represented by Dr. Anita Goel and Dr.Praveen Roy. Dr.Mruthyunjaya, Shri.Naga Prakasham, Dr.Sudha Mysore and Dr.Prakash Patil attended through video conferencing, while Dr.M.R.Dinesh, Dr.T.S.Aghora, Dr.C.K.Narayana, Dr. G.Selva Kumar and others attended in person.
- \* Though there was delay in takeoff of the TBI due to certain administrative reasons, the progress made was appreciated by the board and wished that it would be fully operational by the end of this financial year.

## Conclaves –Breaking the boundaries

BESST-HORT participated in two Business Conclaves, one International Fair and one National Horticultural Fair during 2019-20.

- Nutri-Cereal Conclave –2019 was organized by Nutri-Hub, the NIDHI-TBI of ICAR-Indian Institute of Millets Research, Hyderabad. BESST-HORT participated in the Nutri-Cereals Conclave –2019 and highlighted the opportunities of fusion products like fruit & vegetable blended breakfast nutri-cereals, phytochemical enriched baked powders, fruit & vegetable drinks with malted millets.
- Rural India Business Conclave-2020 was organized by ICAR-CPCRI, Kasargod, Kerala from 27th Feb' to 3rd March 2020. BESST-HORT participated in exhibition and conclave and showcased the ICAR-IIHR technologies & the possibilities of the incubation of start-ups.

## New Technologies on Offer from ICAR-IIHR

- ◆ Ready-to-Drink Jackfruit beverage without added sugar or preservative having 6 months shelf life at ambient temperature. The technology is priced at Rs.50,000/- + 18% GST. The technology is ready for commercialization from ICAR-IIHR, Bengaluru.



- ◆ Jackfruit seed powder fortified cookies/biscuits is a new product with almost 40% refined wheat flour (maida) replaced with jackfruit pulp & seed powder and mushroom powder. Lesser calories & more fibre than commercial biscuits. The technology is priced at Rs.30,000/- + 18% GST. The technology has been licensed to two firms in Karnataka.

- ◆ Jackfruit seed powder based chocolate wrap (Arka Jackolate) is a new product with JF pulp & Seed powder, mushroom powder, cocoa powder & chocolate. The product is low in calories, high in nutrition (fibre, potassium, iron and zinc) and has a shelf life of 6 months under ambient conditions. The Technology is priced at Rs.50,000/- + 18% GST.



- ◆ Probiotic mango and pomegranate juices are new fruit based health beverages without preservatives and a shelf life of 3 months under refrigerated conditions. These beverages are likely to impart health benefits in improving digestibility and fighting infections because of the presence of probiotics. The technology is priced at Rs.1,00,000/- + 18% GST.

## Up Coming EDPs

- ◆ Online EDP on Production of fruit & vegetable pickles - 7th August 2020 (Tentative)
- ◆ Online EDP on Production of Arka Fermented Coco-peat - 21st August 2020 (Tentative)
- ◆ Production of Tissue Culture Banana- 11th Sept'2020 (Tentative)
- ◆ Shitake & King Oyster Mushroom Cultivation - 24th Sept' 2020 (Tentative)
- ◆ Tomato Processing and Value Added Products - 9th October 2020 (Tentative)

## Industry News

### • The Top 8 Startup Sectors that will grow Post COVID-19

EDU-TECH, Health & Wellness, Financial Services & NBFCs, Saas & Remote working tools, E-Commerce & Delivery Based Services, OTT Platforms & Online Gaming, Pharma, Life Sciences & Labs/Pathology and Managed Office Spaces are the top 8 Startup sectors likely to grow post COVID-19, says Vinayak Agarwal, the Co-Founder of myHQ, a startup with a mission to revolutionize the way millennials work.

### • Surge in Demand for Canned Products

Panic buying has positively affected the demand for canned beans, fruit and vegetables. All canneries around the world have large orders for smaller retail can sizes than the bigger cans (5-15 kg). Producers of fresh products had many order cancellations, forcing them to redirect products to processing in Europe & US.

### • Demand for Animal Meat drops & Plant Meat Rises

COVID-19's association with animal sources is expected to result in a large population shifting from meat-based proteins to plant-based proteins due to various health and environmental concerns. The WHO is also advising the consumption of unsaturated fats such as soy. Due to these factors, soy is projected to dominate the market during the years to come (Business Wire, 14<sup>th</sup> May 2020).

### • Sugar Reducing Technology for fruit juices

Better Juice Ltd., a FoodTech startup based in Israel developed a sugar reduction technology to reduce sugar by 80% in freshly squeezed fruit juices. Better Juice's solution uses natural enzymes in non-GMO microorganisms to convert sugars in juice to non-digestible compounds, such as dietary fibers. The product removes all sugars – namely sucrose, fructose and glucose – from all types of fruit juice, regardless of its sugar composition.

### • Immunity Boosting Food on Demand

In India, the demand for immunity boosters like milk with turmeric, herbal bread, and energy drinks are seen increasing. According to reports, the fear of the deadly contagion has resulted in a staggering 500 per cent spike in the search of the word, 'immunity' on Google alone.

### • Demand for fruits increases in India

Kiwifruit, citrus and apples have become the most demanded products in India says FreshPlaza.com a gatekeeper of fresh trade.



Published by & for President, BESST-HORT, ICAR-IIHR Campus, Hessaraghatta Lake Post, Bengaluru—560 089.