



*Golden Jubilee 1968 - 2018*

**GOLDEN JUBILEE  
YEAR BOOK  
1968 – 2018**

**Indian Institute of Food Processing Technology  
(FSSAI Referral & NABL Accredited Laboratory)  
Ministry of Food Processing Industries, Government of India  
Pudukkottai Road, Thanjavur, Tamil Nadu**



*Golden Jubilee 1968-2018*

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Pudukkottai Road, Thanjavur, Tamil Nadu





## Foreword

***“God comes to the hungry in the form of food”***

**– Mahatma Gandhi**

Jubilee celebrations are occasions to reminisce the remarkable ways in which an institution has fulfilled its mandates. They also provide us an opportunity to divulge on achievements, as well as to introspect on the feasibilities to meet the challenges that lie ahead.

From a very humble beginning in 1967 as an R&D laboratory at Tiruvarur, IIFPT has grown exponentially and now stands tall and proud with impressive state of the art infrastructure facilities in food processing technologies.

As we ponder upon the fifty glorious years of IIFPT’s growth contribution to the country, our heart fills with love, admiration and pride for the services provided to the students, research scholars and other stake holders, who come into our prominence, to leave as responsible citizens of this great country.

The institution is striving towards greater heights with its teamwork and concerted efforts. It is the individual and collective contribution of each member in achieving this milestone with a great sense of satisfaction and fulfilment.

Looking ahead, I can visualize that our institute will grow in pursuit of higher standards of teaching, research, and give shape to the dreams of all the stake holders. It will continue to serve a significant role in higher education, research, skill development trainings and outreach activities.

In this book, I take pride to share the glimpses of our achievements, memoirs and milestones of our cherished journey and rich past.

I would like to remember and thank everyone who have worked tirelessly to make IIFPT what it is today. I feel privileged and humble that God has given me an opportunity to serve for this institution.

Together, we can make the difference; together let us work towards food security...

Warm regards

(C. Anandharamakrishnan)



# About IIFPT







# Contents

<b>Overview</b>	<b>9</b>
<b>Evolution and Transformation</b>	<b>21</b>
<b>Awards</b>	<b>29</b>
<b>Impressions</b>	<b>37</b>
<b>Research and Development</b>	<b>71</b>
<b>Incubation</b>	<b>85</b>





# Overview



## Preamble

*“There are people in the world so hungry, that God cannot appear to them except in the form of bread.”*

– Mahatma Gandhi.

India has achieved significant success in agriculture by increasing its food production by four folds during the last five decades and thus emerged as a self-sufficient country in food grain production with 252.23 million tonnes in 2016-17 crop year. But, there were times when India found it difficult to feed its own people. This success has not come all of a sudden. Ensuring food security for more than a billion people was possible only through a concerted effort put by all stakeholders from various fields including researchers, academicians, and from the government. However, with this great achievement, our future challenges for ensuring food security has not been solved forever. Wastage of food grains, fruits and vegetables and other primary agricultural products has emerged as serious issues for food and nutritional security. A total of 17.3 million tonne of food grains and 59.00 million tonne of fruits and vegetables are wasted in India, which is enough to feed one third of India's poor. As per recent statistics, 1.9 billion people in the world do not have enough food to eat and 194 million people in India are suffering from hunger. Among the numerous reasons for this wastage, lack of storage infrastructure, inadequate post-harvest processing technologies at the grass root level, lack of proper policy initiatives have been the major ones. Storage, processing and value addition of primary agricultural products are as equally important as increasing the production level. With immense supply strength in agriculture the food processing industry is expected to play a key role across the food value chain in the country. The food processing industry is estimated to be around \$ 180 billion and contributes about 1.5% to India's GDP. Food processing industry has been hailed as one of the sunrise sector and its challenge is to provide nutritional security to the billions of Indian population.

Considering the vital importance of food processing sector to harness positive socio-economic impact, Government of India has shifted its concentration on encouraging more research and technological innovation in the food processing sector and to encourage institutions across the country to work for the growth of this sector. IIFPT is one such unique institute in the country working on minimizing food

wastage, developing infrastructure for storage, transportation and processing of agricultural produce, developing on-farm gadgets and encourages need based research in food processing for products and process development. It also focus on various gaps that exist in the areas of crop processing and storage for food and nutritional security, quality and food safety by providing consultancy services.

## History of IIFPT



**PPRC staff with Prof. M. S. Swaminathan**

The Institute has its origin way back in 1967 when it was started as R & D laboratory in the Modern Rice Mill complex of Thanjavur Co-operative Marketing Federation (TCMF) at Thiruvavur, Tamil Nadu, India. The mandate of the Institute at its inception was to seek solutions for preserving high moisture paddy because the paddy harvest season in Southern India coincided with the tail end of the South West monsoon. The Institute was later upgraded as a national laboratory with the name Paddy Processing Research Centre (PPRC) in 1972 with a small group of ambitious scientists worked under the grath Leadership of Dr.V.Subramanyian. At the time of up-gradation the mandates of the Institute were also changed and the scientists in the Institute focused their research in identifying technologies for post-harvest processing and preservation of paddy. The Institute was moved to its current location at Thanjavur in 1984.

Considering the vital importance of strengthening R & D efforts in the post-harvest processing, preservation and value addition of raw agricultural produce, the Ministry of Food Processing Industries (MoFPI) strengthened and upgraded PPRC as a National Institute in February 2008 and named it as Indian Institute of Crop Processing Technology (IICPT). IIFPT has started a regional center Guwahati to cater to the needs of the stakeholders in the north-east region of the country. Recently to cater the needs



of the farmers in Punjab, IIFPT has started a Liaison office at Bathinda also.

***IIFPT starts by doing what is needed for the public, then what is possible and finally makes the impossible become possible***

IIFPT, being a world class educational and research institute under the Ministry of Food Processing Industries, Government of India is dedicated to contribute substantially towards achieving the growth of the food sector in preventing food grain wastage, creating qualified human resources and to create new avenues in food processing sector. The continued efforts made by the institute are being recognized by various stakeholders in food processing sector. Besides R&D, IIFPT is also engaged in HRD and extension services to benefit the public. IIFPT has signed MOU with several international and national universities and institutes for joint research programs for the exchange of knowledge between scientists and students.

## The IIFPT's Vision and Mission

### Vision

- To serve as a national institution for research, education and training in the area of post harvest processing of crops of wetlands and storm prone regions.
- To undertake basic, applied and adoptive research in post-production sector of cyclone/storm prone areas and wetlands, also including plantation, spices and other important crops.
- To act as a national organization for information on post-production systems of mandated crops.
- To undertake transfer of technology, consultancy and analytical services for raw and processed agricultural commodities.
- To establish linkages with related processing industries and other academic as well as R&D institutions for achieving its goals effectively.



**PPRC staff with Dr. V. Subrahmanyam**

### Mission

- Gaining an increased understanding of living organisms with a view to increasing its application in the grain industry.
- Developing a strong human resource capacity for the processing industry.
- Providing a sound scientific basis for decision making in food security, safe environment and addressing the concerns of the consumers.
- Generate and upgrade the scientific knowledge in the area of food grains for maximizing, conservation and utilization of food grains.
- Value addition to the food grains and development of food products with safety through the application of newer technologies by R&D work.
- Assist the existing industries for better performance in terms of efficient functioning, by-product utilization and effluent management.
- Promote growth of new food industry, entrepreneurship, upgrading the skill of industrial manpower and management by imparting training programme.
- Storage of grains, insect pest management and safeguarding the quality of food grains and products.
- Shelf-life improvement of food grains/products by packaging and improved technology.
- Environmental protection and work safety measures in food industries

## Importance of IIFPT in the Food Processing Sector

India is the third largest producer of foods in the world next to China and USA. We produce more than 600 million tons of foods in all. We are the largest producers of pulses, milk, tea, all spices, first or second largest producer of fruits and vegetables, largest in livestock population, third largest in grains and oil seeds, fifth largest in poultry and sev-

enth largest in fish productions. In spite of these superlative productions, the food supply in domestic market is inadequate and our export share in international markets is much less than 2%. The reasons behind it being huge post-harvest and storage losses, lack of adequate quality control, high inventory and packaging cost and so on. Due to changing prospective economic scenario, 200 million Indians are in a transition zone from lower economic status to upper middle class levels. Government of India has a target of achieving >3% of international food trade from current levels of 1.7% by 2017. IIFPT has created marked achievement by catering all income groups including creating employment opportunities for the new entrepreneurs to large scale industries to upgrade their facilities to widen their business. IIFPT has created its own laboratories for teaching and research and also works as consultants for creating research labs and food processing incubation centres for other organizations including NIFTEM, NMPPB, Aachi masala, etc., IIFPT offers training programmes, consultancy, incubation services and testing for microbiological and nutritional safety, pesticide residue analysis etc.

A milestone achievement made by IIFPT includes conducting and fixing Milling Out-Turn-Ratio for India. IIFPT has conducted 88 trials in rice mills in 11 States. IIFPT has developed technologies from PPRC traditional storage structures to bulk storage metal silo's in order to preserve grains and reduce the post harvest losses.

IIFPT has well-equipped world class research laboratories for conducting research in different areas of food processing technologies. IIFPT researchers have expertise in multidisciplinary science in the areas of food engineering, post-harvest technology, food science and technology, nutrition science, storage entomology, biotechnology, extension, economics, microbiology, biochemistry, chemistry, mathematics, statistics and computer science. They work as a team for the benefit of the farmers and food processing industries to solve their problems and carry out need based research projects.

*Onions make people cry ... not just the person who peels it but also the farmers who cultivates it... IIFPT has put an end to stop the tears of both through its mission onion.*

On the journey since 1967 this institute made a foot path in each decade which contributed for the

growth of the farmers in this region and food processing fertility as a whole. As a whole IIFPT have been doing 33 externally funded research projects worth of 18.05 crores. Recently, first time in the country, all the scientists of this institute are working on a single goal of 'Mission onion' project. Onion, being a perishable commodity, it is unfortunate to anticipate the price in India due to lack of storage facilities. This project aims to solve the problems faced by onion farmers in Perambalur district of Tamil Nadu and planned to provide complete technology for onion from farm to plate.

## Departments of IIFPT

IIFPT has multi-disciplinary team of faculty members functions as one unit but in different departments as listed below:

- Academics and human resources development
- Food engineering
- Food packaging & system development
- Food product development
- Food safety and quality testing
- Primary processing, storage & Handling
- Technology dissemination
- Computational modeling and nano scale processing
- Food biotechnology
- Planning and monitoring cell

## Facilities Available at IIFPT

### FSSAI Referral and NABL accredited Food Safety and Quality Testing Laboratory

This Laboratory is equipped with modern equipments to carry out physico-chemical analysis of food, water and organic samples. It has high-tech analytical instruments for analyzing moisture, fat, protein, fibre, free fatty acids, peroxide value, mineral contents, toxins, pesticide residues and other analyses related to food products. Recently the laboratory was renovated with latest high-tech equipments such as LCMS, ICP-OES, ICP-MS, GCMS, GCMS-MS, HPLC, Bench top NMR, FTIR, RT-PCR, Ion Chromatography, Solid Phase Extractor, Amino Acid Analyzer, and similar hi-tech instruments for water and food quality analysis. Ready reference standards such as BIS, CODEX, PFA, AOAC and AACC for food analysis are also available in the laboratory.



### ISO 9000, 14000 and 22000 Certified Food Processing Business Incubation cum Training Centre



The world class Food Processing Incubation Centre has the following product lines

- Canning of fruits, vegetables, meat and meat products
- Ready to Serve (RTS) / Ready to Drink (RTD) fruit based beverages, jams and jelly manufacturing with bottling facility
- Ready to Cook (RTC) food products manufacturing
- Instant mixes, masala and chutney powder production and sachet packaging
- Food extrusion lines with single & double screw extruders and hot & cold extruders
- Specialized packaging section with facilities for ordinary packaging and Modified Atmosphere Packaging (MAP)

### AICTE Approved Teaching Laboratories

The teaching laboratories are attentively designed and the most updated equipments are in place. These teaching laboratories include:

- Food Engineering
- Heat and mass transfer laboratory
- Crop and spices processing laboratory
- Electronics and instrumentation and physics laboratory

- Biochemistry and chemistry laboratory
- Food packaging laboratory
- Fabrication and production technology laboratory
- Food product development and sensory laboratory
- Hydraulics and strength of materials laboratory
- Storage engineering
- Fluid mechanics

### Knowledge Centre



The knowledge centre has exclusive collection of books and journals on food processing related areas. The knowledge centre having more than 35,000 books and regularly subscribe for more than 50 Indian and 15 International journals in food processing. We keep adding to our wealth of books and journals resources every year and soon expect the library to become reference point of national importance for food processing, preservation and value addition related subjects.

### Our Current Research Focus

The subjects of research problems that need to be addressed in food processing, preservation and value addition are vast and needs careful selection and approach. We, at IIFPT, focus our research in major theme areas including:

- Development of farm and industrial gadgets like fruit & vegetable grader, continuous washer, sugarcane scrapper, continuous waxing, de stoner units, tender coconut dewatering system, continuous UV treatment system and low cost ripening chamber
- Bulk storage studies on pulses and cereal grains
- On-farm onion packaging and storage studies
- Ultra-sonication of fruit juices
- Development of indigenous technology knowledge based foods and composite grains based foods
- Image processing, soft X-ray and resonance acoustics



- Energy saving in parboiling with microwave assisted treatments and improving milling techniques of cereal grains, pulses, oil seeds and millets
- Food processing effluent treatment
- Creating ready to use dry mix fermented batter for idly and other Indian foods
- New food product development based on grains, fruits and vegetables,
- Fortification of processed foods for making health foods at affordable prices,
- Development of new equipments for puffing, drying, parboiling, hand pound rice
- Reducing storage losses and processing losses
- Economic utilization of biomass, food industries by-product and waste utilization.
- Non-thermal food processing

- Computational modeling and nanoscale food processing
- Bulk storage of food grains and integrated pest management.

IIFPT also encourage collaborative research with other national laboratories, agricultural universities, public private partnership with industries for technologies innovation.

## Services Offered By IIFPT to Stakeholders

### Academic Programs

The institute began offering formal degree courses at bachelor's, master's and doctoral levels in food process engineering from 2009-10. In B.Tech. program, 60 students are admitted every year, 20 students are admitted in two M. Tech. programs (one in Food Process Engineering and the other in Food Science and Technology) and 5 in the Ph.D. program. IIFPT sends undergraduate students for short term exposure and graduate students for long term research training works in reputed international institutions and advanced laboratories around the world. These training and research exposures help the students & researcher to create leaders in food processing to bring the processing sector forward.



## Food Quality Testing



Food testing laboratory supports regulatory analysis of food and agro products. It assists the food industry for nutritional labelling, food safety evaluations, and trace analysis and shelf life studies. It also offer consultancy for setting up of quality testing laboratory in food processing and allied industries. Food processing entrepreneurs, rice millers, packed food manufacturing industries, distillery units, mineral water manufacturers, farmers, and academicians are some of the beneficiaries of the food analysis laboratory. This laboratory is FSSAI referral ISO/IEC- 17025:2005 certified one.

## Training Programmes



IIFPT has excellent trainers in food processing areas who are leading scientists in different sectors of food processing and preservation. The type of training programs offer by IIFPT includes food safety, handling analytical instruments, food product and process development, etc. Participants in the training programs derive boundless benefits in food processing areas to participate enhance the value to update their knowledge base in frontier areas of food processing. Also, farmers and self help group benefit by venturing in the sunrise sector for economic betterment and entrepreneurs already in the business of food processing to expand their business.

## Consultancy Services

IIFPT scientists offer consultancy services to stake holders in food processing. Consultancy services offered by IIFPT includes product development from “batching up” a home recipe for mass production, selecting appropriate packaging materials, sourcing commodities, applying the basic principles of imaging and positioning to an emerging product etc. Trainings are provided on technical and regulatory issues related to food processing, packaging, and labelling requirements. IIFPT also offers quality testing, consultancy on microbiological and nutritional safety, pesticide residue analysis, value addition of agro products, setting up of pilot scale industries etc.

## Outreach Activities

Bringing technologies of food processing to stake holders and popularizing the benefits of venturing in food processing businesses are important to motivate new ventures in food processing. To achieve these goals IIFPT takes up extensive extension activities. These activities include conducting national seminars, participating in food processing related expos, arranging stake holders and farmers meet and conducting awareness training programs. Numerous such outreach activities are taken up continuously. In the last 5 years IIFPT organized 26 national seminars and workshops, 4 international seminars/conferences and workshops, 33 food processing expos, 280 training programs and 300+ outreach activities across the country.

## Collaborations

### MoUs with International Universities/ Colleges

- University of Manitoba, Canada
- Kansas State University, USA
- University of Nebraska-Lincoln, USA
- Wageningen University, The Netherlands
- University of Saskatchewan, Canada
- Auburn University, USA
- McGill University, Canada
- Asian Institute of Technology, Thailand
- Colorado State University, USA
- Ambo University, Ethiopia
- Illinois Institute of Technology, USA
- ONIRIS, France



IIFPT - PAU MoU

- Saskatoon Pulse Growers, Canada
- Kuraray Co. Ltd., Japan
- Oklahoma State University, USA

### MoU's with National Universities/Colleges

- MS Swaminathan Research Foundation, Chennai
- Vellalar College for Women, Erode
- Jamal Mohamed College, Trichy
- Punjab Agricultural University, Ludhiana
- Tamil Nadu Agricultural University, Coimbatore
- Ayya Nadar Janaki Ammal College, Srivilliputhur
- University of Agricultural Sciences, Bengaluru
- J R Polytechnic College, Trichy
- Gandhigram Rural Institute-Deemed University, Dindigul
- Sengamala Thayaar Educational Trust Women's College, Mannargudi
- Karunya University, Coimbatore
- SASTRA University, Thanjavur
- Bharathidasan University, Tiruchirappalli
- National Institute of Technology, Trichy
- Thassim Beevi Abdul Kader College for Women, Madurai
- St. Joseph's College, Trichy
- Tamil Nadu Veterinary and Animal Sciences University, Chennai
- Kongu Engineering College, Erode
- Marathwada Agricultural University, Parbhani
- CSIR-Central Food Technological Research Institute, Mysuru
- PRIST University, Thanjavur
- Fatima College, Madurai
- Pandit Jawaharlal Nehru College of Agriculture & Research Institute, Karaikal
- ICAR-Central Tuber Crops Research Institute, Trivandram
- Annamalai University, Chidambaram
- VIT University, Vellore
- Mohamed Sathak College of Arts & Science, Chennai
- Kings College of Engineering, Pudukkottai
- Bharath College of Science & Technology, Thanjavur



- Entrepreneurship Development Institute, Guwahati
- Parisutham Institute of Technology & Science, Thanjavur
- CSIR-Central Electronics Engineering Research Institute, Chennai
- Sri Nehru Maha Vidyalaya College of Arts & Science, Coimbatore
- SLIET Longowal, Punjab

### MoU's with National Industries/Companies

- Aachi Masala Food Pvt. Ltd., Chennai
- Envisources Pvt. Ltd.
- SRG Organic Foods India Pvt. Ltd., Chennai
- Food Industry Capacity & Skill Initiative, New Delhi
- Jaya Sathya Agro Food Products Pvt. Ltd., Pudukkottai
- VM Foods, Andhra Pradesh
- Sri Jayashree Food Products, Salem
- Drishtee Naturals Pvt. Ltd., Bengaluru
- Cauvery Delta Agro Producer Company Ltd., Thanjavur

- Ammapaa Foods International, Chennai
- Food Corporation of India, New Delhi
- Sridhanaya Speciality Foods Pvt. Ltd., Bengaluru
- SRF Ltd., Chennai
- Amalgamated Spice Park, Assam
- Rajah Company, Thoothukudi
- Tamil Nadu Foodgrains Marketing Yard, Madurai
- Favourich Group, Bengaluru
- Assam Agrotech Pvt. Ltd., Assam
- Rajaraja Chozhan Farmers Producers Company Ltd., Thanjavur
- SKM Egg Products Export (India) Ltd., Erode
- K.S. Rice-Tech Milling Equipment Pvt. Ltd., Chennai
- Sun Agro Biotech Research Center, Chennai
- Office of the Assistant Executive Engineer (Agri.), Kollam
- Frigoscan Post Harvest Technologies Pvt. Ltd., Chennai
- Central Warehousing Corporation, New Delhi
- Oceanaa Biotek Industries Ltd., Villupuram
- Elixir Technologies, Bengaluru
- Nectar Fresh Pvt. Ltd., Karnataka

# Milestones

**1968**

R&D Lab, PPRC at Tiruvarur

**1972**

Upgraded as National Laboratory by Govt. of India

**1987**

Shifted from Tiruvarur to Thanjavur

Upgraded to National Institute as IICPT

**2008**

Started 1<sup>st</sup> Liaison Office at Guwahati

**2010**

Started 2<sup>nd</sup> Liaison Office at Bathinda

**2016**

**2017**

Renamed as IIFPT

# Directors



**Dr. V. Subrahmanyam**  
Founder Director  
28.03.1968 to 30.01.1979



**Shri. B.S. Vasan**  
Director i/c  
31.01.1979 to 01.03.1988  
01.04.1993 to 02.12.1993



**Dr. V. Subramanian**  
Director  
02.03.1988 to 31.03.1993



**Dr. A. Dakshinamurthy**  
Director  
03.12.1993 to 30.04.2007



**Dr. K. Alagusundaram**  
Director  
03.04.2007 to 20.10.2014



**Dr. K. Singaravadivel**  
Director  
21.10.2014 to 31.01.2016



**Dr. M. Loganathan**  
Director i/c  
01.02.2016 to 28.04.2016



**Dr. C. Anandaramakrishnan**  
Director  
29.04.2016 to ...



# **Evolution and Transformation**



*First R&D Lab of Paddy Processing Research Center – 1972 at Tiruvarur*



*Foundation works and infrastructure development at the new site of Paddy Processing Research Center – 1984*



*PPRC upgraded to National Institute named as IICPT - February 2008*



*Foundation stone laid for Phase I - Administrative Building, IICPT*



*Foundation work for the New Building for IICPT – Phase 1 2008*



*IICPT – New Building Work in Progress - Phase 1*



*IICPT – New Building Work in Progress - Phase 1*



*Completed Phase I - Dr. V. Subrahmanyam Block, IICPT*



*Construction of Phase II Building – Academic Block 2012*



*Completed Phase II Building – Academic Block 2012*



*Dr. A.P.J. Abdul Kalam Block - 2016*

## Infrastructure Facilities



NABL Accredited -  
Food Testing Laboratory



Food Processing Business  
Incubation Centre



Food Processing Engineering Laboratory



Unit Operations Laboratory



Knowledge Centre



Conference Hall



Examination Hall



Grain Silos



Modern Rice Mill



Integrated Onion Processing Unit



Parboiling Plant



Incubation Centre



Bakery Unit



Mobile Food Testing Laboratory



Mobile Processing Unit



# Awards





*ICAR Award for team research 2002 at New Delhi received by a Team of scientists of Paddy Processing Research Centre, Dr. S. Kumaravel, Dr. S. Sulochana, Dr. R. Jagan Mohan, Dr. Sheriff, Dr. B.S. Vasan, Dr. N. Vengatachalapathy, Dr. A. Dakshinamurthy [Director] and Dr. K. Singaravadivel on the photo with Central Agriculture Minister Shri. Ajit Singh*



*Best research institute award for PPRC received by Dr. K.S. Singaravadivelu from the Hon'ble Governor of Tamil Nadu Shri Bismanarayana Singh*



*In recognition of contribution in promoting food security and research, IIFPT has been awarded by the Indian Technology Congress during the event held on 10.08.17. The award was conferred by Dr. Mylswamy Annadurai, Director, ISRO Satellite Center, Dr. V. Prakash, former Director, CFTRI and Dr. S. Ayyappan, former DG, ICAR. Dr. C. Anandharamakrishnan, Director IIFPT received the award and delivered a talk on "Recent Technological Advances in Food Processing" during the event.*





*IIFPT has been awarded with Excellent Institute for Food Processing Technology in India at the 11<sup>th</sup> National Education Summit & Awards held on 4th July, 2017 at Vigyan Bhawan, New Delhi. Director, Dr. C. Anandharamakrishnan received the award from Prof. Anil D. Sahasrabudhe, Hon'ble Chairman of the AICTE and Sh. Rajesh Kumar Chaturvedi, IAS, Hon'ble Chairman of the CBSE in the presence of Prof. B.B. Sharma, Hon'ble President of the Association of Indian Universities.*



*Indian Institute of Food Processing Technology, awarded with ASSOCHAM's Best Institute – Women Skill Development Award. The award was conferred by Shri Rajiv Pratap Rudy, Hon'ble Minister of State Skill Development and Entrepreneurship. Women Empowerment Skill Development Transforming Food Processing*





*In the 13<sup>th</sup> Federation of Indian Chambers of Commerce & Industry (FICCI) Higher Education Summit 2017 held at India Exposition Centre, Greater Noida on November 9, IIFPT has won the Award for 'Excellence in Institutional Social Responsibility' in recognition of the impact of its recent Mission Onion Programme.*



Rank **27** Outreach & Inclusivity

Rank **32** Teaching, Learning & Resources

Rank **87** Overall



***IIFPT has been honoured with the SKOCH AWARD 2017 - GOLD under the 'Safe Food Projects in India' category for the novel products 'Mahua Nutribar', 'Millet Idli and Dosa Mix Technology' & 'Non-Dairy Functional Millet Ice Cream'.***

***The award was presented by Mr. N. K. Singh, Chairman, 15<sup>th</sup> Finance Commission to Dr. C. Anandharamakrishnan, Director, IIFPT at 50<sup>th</sup> Skoch Group Summit on 21<sup>st</sup> Dec 2017 at the Constitution Club of India, New Delhi.***





*Integrated Chambers of Commerce and Industry recognizes IIFPT as Best Innovative Training Provider 2018. Award is given for remarkable services of IIFPT in social and education field during National Education Conclave on 11<sup>th</sup> August 2018*



**Impressions**





*Staff in front of the PPRC building at Thiruvavur modern rice mill campus. From Left Shri N.Vengatesan, Technical Asst., (FCI staff), Dr.S.Kumaravel, Scientist, Dr.Illiyas, Research Engineer,(ICAR Staff), Dr.P.Pillaiyar, Deputy Manager-Technical, (FCI staff), Shri.Gupta, Rice Miller, Dr.V.Subrahmanyam, Project Head, Mr.B.S.Vasan, Research Chemist, Lt.Col.Iengar, Consultant, Dr.G.Rajendran, Research Chemist, Dr.S.Anthoniraj, Microbiologist - 1979*



*Training cum Demonstration of modernization of rice mill on 29 – 30th April, 1984 at Thanjavur*



*Modernization of Rice Mills – Action plan Conference at Salem District conducted by PPRC Scientists Dr.K. Singaravadivel, Dr.Pillaiyar and Dr.S.Kumaravel*



*Shri.B.S.Vasan, Director of PPRC and Shri.Kumar Bhatia, Chief Engineer, Rice milling, MoFPI, Govt. of India in a National Seminar on Rice Milling*



*Demonstration of Modernization of rice mill conducted by PPRC for Pudukkottai Rice millers - 1985*



*Seminar cum demonstration at Annamalai University on Modernization of Paddy Processing*



*Dr.S.Pillaiyar Scientist PPRC in the demonstration of modern rice milling processes with Shri.Kumar Bhatia, Chief Engineer, MoFPI, Govt. of India*



*Mini bran stabilizer developed by PPRC at Thiruvarur campus*



*Workshop on Wetland water use planning and social forestry conducted by PPRC – 1989, address by Dr.M.S.Swaminathan in the presence of Dr.V.Subramanian – Director PPRC*



*Paddy Processing Research Centre, Main building entrance during a function to welcome the delegates during the visit of Governor of Tamil nadu Shri.Surjit Singh Barnala*



*National seminar on Improved techniques in Rice Processing conducted by PPRC, 23rd March 1990*



*Visit of Shri.Surjit Singh Branala, Governor of Tamilnadu to PPRC*



*Felicitation of Dr.M.S.Swaminathan for the Dr.V.Subrahmanyam memorial Lecture by the Director of PPRC Dr.V.Subramanian - 1992*



*Group photo of all the staff members of PPRC with Dr.M.S.Swaminathan on the occasion of Dr.V.Subrahmanyam, Founder Director-Memorial Lecture*



*Training programme conducted by PPRC for Palghat Rice Millers during 20th Feb 1992*



*Stall of PPRC in a Rice milling Seminar during 1994 at Thanjavur*



*Lt.Col.Iyengar [PPRC consultant] receiving a memento with his wife from Director of PPRC Dr.Subramanian, 1993*



*Seminar Cum training programme for Rice mill owners Conducted by PPRC at Palghat 14th Feb 1994*



*Dr.V.Subramanian [Director, PPRC], Shri.Kumar Bhatia, Dr.Desikachar and Vice Chancellor-Dr.Muthuveerappan of Annamalai University on the dais in a PPRC programme at Thanjavur-1994.*



*Inauguration of steam plant at PPRC by Shri.N.T.Shanmugham, Minister of State for Food Processing - 1995*



*Seminar Cum demonstration on Modernisation of Huller mills conducted by PPRC on 1st Feb 1995*



*Industrialist Dr.Pollachi Mahalingam visited PPRC facilities and interacted with the scientists*



*Paddy separator used in rice mills – Designed by PPRC*



*Rice Husk stove developed by PPRC in the new campus at Thanjavur*



*Demonstration of Multipurpose Yard drying equipment in a rice mill for rice millers*



*Paddy winnower developed by PPRC in the Thanjavur Campus.*



*Demonstration of Multipurpose Yard drying equipment developed by PPRC in a local rice mill, Thanjavur - 2001*



*Batch type rice degermer design and developed by PPRC scientists*



*Demonstration of Multipurpose yard drying equipment in the field trial in a rice mill*



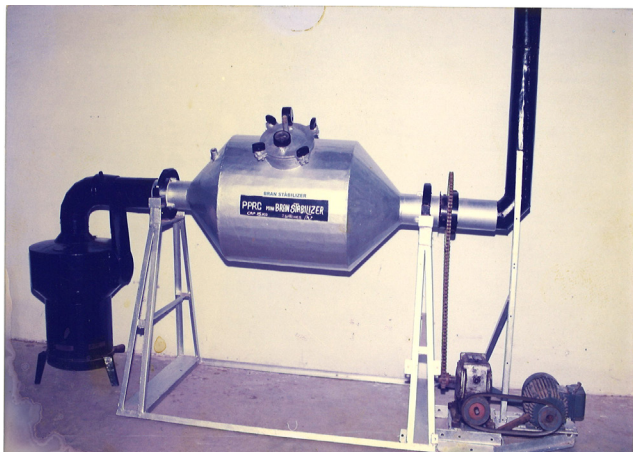
*Rice husk stove developed by PPRC scientists*



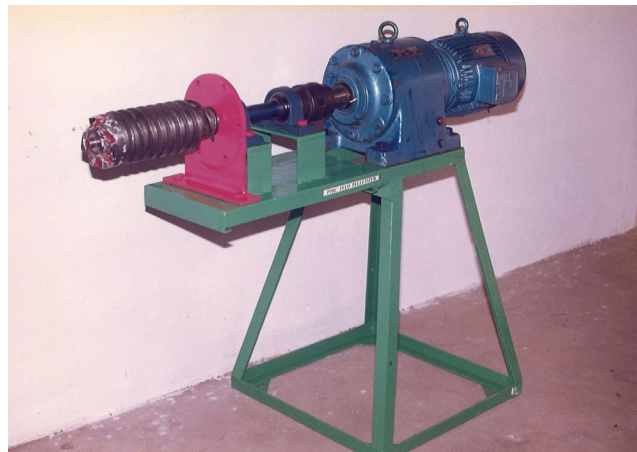
*Problem solving in rice mills by a team of PPRC scientists*



*Pedal operated Paddy winnower developed by PPRC in the Thanjavur campus*



*Bran stabilizer developed by PPRC scientists*



*Feed pelletizer developed by PPRC scientists*



*Group of PPRC Scientists (from left) Dr.N.Vengatachalapathy, Dr.Sheriff, Dr.K.Singaravadivel Dr.A.Dakshinamurthy [Director], Shri.B.S.Vasan Dr.S.Kumaravel and Dr.R.Jagan Mohan*



*PPRC Building*



*Indian Institute of Crop Processing Technology, Main building , 2008, Thanjavur-613005*



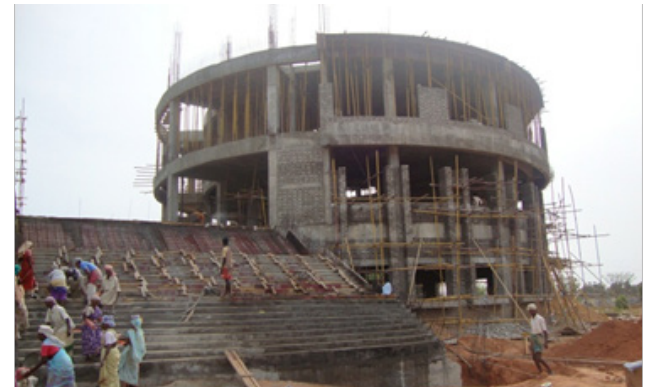
*Foundation stone laying Ceremony for the New Building by Hon'ble Minister of Food Processing Industries Shri. Subodh Kant Sahai 18th Feb 2008*



*Shri T.R.Balu and Shri Subodh Kant Sahai lighting the lamp in the inauguration of Phase I building for IICPT*



*Inauguration of Parboiling plant at IICPT in the presence of Shri. Ashok Sinha Secretary, MoFPI*



*New building structure evolution of IICPT in the year 2008*



*Shri. Ashok sinha, inaugurating the incubation center, Feb 2008*



*Welcoming Joint Secretary Shri Ajit Kumar by team of PPRC scientists.*



*Inauguration of Parboiling plant at IICPT by Shri. T.R. Balu, Minister of Shipping and Highways, Feb 2008*



*IICPT Food TESTING Lab got accreditation from NABL*



*Visit of Joint Secretary Shri Ajit kumar to Food Testing Lab IICPT*



*Dr. Rolando Flores, the Director of Food Processing Centre at the University of Nebraska, Lincoln, USA*



*Workshop on Safe and Hygienic slaughtering of Animals- Namakkal 22.12.09*



*Dr. Shane Ward, Dean, University College, Dublin, Ireland*



*International Workshop on Enhancing India's Global Competitiveness in Food Trade New Avenues in Food Processing and Safety Management, 24th to 26th May 2009 – Inauguration by Shri Ashok Sinha, Secretary MoFPI*



*Inauguration of academic programs and International Conference was inaugurated by our Hon'ble Secretary Shri. Ashok Sinha, IAS, MoFPI*

*Vice Chancellor Tamil Nadu Veterinary University Dr. P. Thangaraju, Vice Chancellor of Periyar Maniammai University Dr. Ramachandran, Dr. Tim Bowser, President of the American Society of Agricultural Engineers, and Ms. Rupali Banerjee Singh, Deputy Secretary, Ministry of Food Processing Industries 28th Aug 2009*



*Memorandum of Understanding between the Indian Institute of Crop Processing Technology (IICPT), Ministry of Food Processing Industries and the University of Nebraska-Lincoln (UNL) was signed in the presence of Shri Ashok Sinha Secretary, and Shri. Ajit Kumar, Joint Secretary Ministry of Food Processing Industries in Panchsheel Bhavan, New Delhi on 11.2.2009*



*Dr.K. Alagusundaram, the Director of IICPT and Dr. Dr. Harvey Perlman, Chancellor of UNL, is intended to facilitate a collaborative program of research, training, curriculum, institutional development, information dissemination, and exchange of faculty, students and staff*



*MoU signing – IICPT and Saskatoon Pulse growers association Canada in the presence of Hon'ble Union Minister Shri.Sharad Pawar, MoFPI in Krishi Bhawan, 16th March 2011*



*Snapshots of Inauguration of 2nd INCOFTEC by Hon'ble Minister Shri.Subodh Kant Sahai, MoFPI and Shri Ashok Sinha, Secretary, MoFPI 30TH and 31ST of OCT 2010*



**Organized National Seminar on Molecular Innovations in Food Processing and Food Safety Management at Bangalore, presided by Shri. Hartal Halappa, Minister of Food, Civil supplies and Consumer affairs, Government of Karnataka.**



**Inauguration of Phase I building – under foundation scheme of IICPT to a world class institution**



**Awareness and Training Programme on Hygiene slaughtering and Handling of Meat organized by IICPT of National poultry and meat processing Board, MoFPI**



**Dr. A. Dakshinamoorthy, Former Director (PPRC) delivered the valedictory address**



**Two days National Conference was organized on 6th and 7th of March 2010 - Industry-Academia Synergy to Enhance Food Security Through Processing and Value Addition - inaugurated by Shri. Ajitkumar, Joint Secretary, Ministry of Food Processing Industries**



**Guest Lecture by Dr. Swamy Anantheswaran, Professor from Pennsylvania State University, USA**



**Inauguration of Phase I building – under foundation scheme of IICPT to a world class institution**



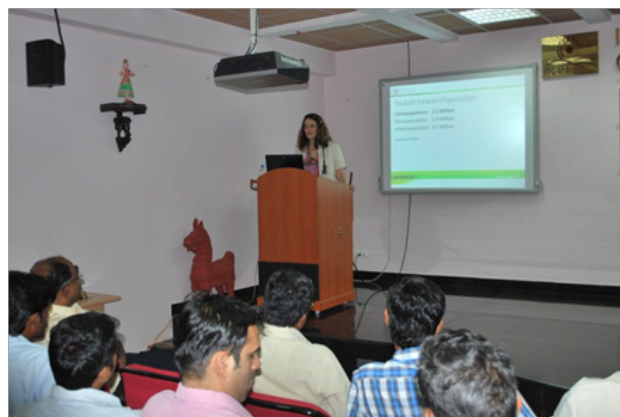
**Dr.Mary Buhr visiting the Incubation center facility**



**Training programme on Cottage level Food processing Entrepreneurship development for Farmers/Farm Women 11th APRIL 2011 jointly organized by IICPT and Sher-e-kashmir University of Agricultural Sciences and Technology of Kashmir.**



**MoU signed between IICPT and University of Saskatchewan, Germany in the presence of Hon'ble Minister Shri. Subodh Kant Sahai, MoFPI and Secretary Shri.Ajit Kumar, MoFPI**



**Guest Lecutre by Dr.Mary Buhr, Professor and Dean, College of Agriculture and Biosciences, University of Saskatchewan, Canada at IICPT**



**Visit of Shri.Padmasingh Isaac, Chairman and Managing Director, Aachi Group of Companies, for signing MoU with IICPT**



*Workshop on Hygienic Production of Meat and Slaughter House Management to Butchers, jointly conducted by IICPT and National meat and poultry processing board with Veterinary college, KVAFSU, Bengaluru 24th Jan 2011*



*Inauguration of Phase I building – under foundation scheme of IICPT to a world class institution*



*Indo Africa Forum Summit II, Ministry of External Affairs, Government of India and IICPT organized two 15 days training programs Business Opportunities and Entrepreneurship Development in Food Processing Sector*



*Students club inauguration@2012*



*Visit of Shri Rakesh Kacker Secretary of MoFPI to IICPT @Incubation center*



*NCOFTECH Edition II*

*National conference on Appropriate Technologies for Indian Food processing Industries*



*Short Term Skill Development Program on Cold Chain Management in Food Processing Sector*



Science Club activities 2013



Participation in Agri Expo conducted by Puthiya thalaimurai TV



Vigilance Awareness program



Visit of Dr.Charan Das Mahant, Minister of State for Agriculture and Food Processing

Indo-Africa Short term training programmes on Business Opportunities and Entrepreneurship Development in Food Processing Sector



3rd INCOFTECH – An international conference on Food Processing Technologies: Challenges and solutions for sustainable food security



**MoU Signed with University of Nebraska Lincoln**



**Rice mill visit of African Delegates**



**Seminar on Value addition to agro and agro based industries in thanjavur district – Dr.E.M.Sudharsana Nachiappan addressing the participants**



**Inauguration of Rajaraj Cholan Farmer producer organization**



**Shri.Sadvi Niranjan Jyoti, Minister of State for Food processing, Govt of India, inaugurating the engineering laboratories at IICPT**



**MoU between IICPT and Rajarajan Farmers Producers Company in the presence of Hon'ble Minister of State, MoFPI**



**Girls hostel inauguration 31.3.2013**



**MoU between IICPT and PAU in the presence of Hon'ble Minister, MoFPI**



*Dr. Sahu, Associate Professor, IICPT have received prestigious AFST(I) young Scientist Award for his contribution to Food Science and Technology.*



*IICPT and Office of the Assistant Executive Engineer (Agri), Kollam, Kerala signed an MoU today (29.12.14) to facilitate a consultancy project for establishing a Modern Rice Mill at Kollam District of Kerala.*



*IICPT signed an MoU with M/s. FAVORICH Group, Bangalore to facilitate collaborative program of research, training, new product development, solving technical problems, students in-plant training.*



*PARTICIPATION in the Expo @ Erode: Present The Director, Dr.Singaravadi IICPT 2015*



*Students of IICPT along with Hon'ble Minister MoFPI at SIAL, Paris, France*



*Director addressing the participants at National Workshop on Food Processing Industries organized by Odisha Industries federation*



**IICPT STALL at Agri expo @ Erode**



**One day workshop on Value Addition of Agricultural Commodities in Cauvery delta Region was organized on 07.12.2015 in association with the Rajaraja Chozhan Farmer Producer Company, Thanjavur**



**MoU Signed between IICPT and Oceanaa Biotech Industries Ltd., Chennai**



**IICPT staff and students made voluntary monetary contributions to provide relief to flood affected people. Food products were prepared and with the help of student and training volunteers, packets were transported to the District Disaster Management Cell of Thanjavur to be sent to flood affected Chennai and Cuddalore**



**IICPT hosted a stall at International Krishi Mela 2015 held at UAS, Bangalore from 19th to 22nd November 2015**



**Dr. Noel Ellis, Director, CGIAR-Research program on Grain Legumes, Dr. Prashant Bagade, Deputy Manager-Nutriplus Knowledge program, Dr. Pooran M Gaur, Assistant Director-Research program on Legumes and Dr. Bhubesh Kumar, Assistant Manager-Agri Business Incubator program from ICRISAT/CGIAR-Hyderabad visited IICPT today (26.02.2015)**



*Swachh Bharat Abhiyan – Feb, 2015*



*Students industries visit to Aavin Madurai*



*Students industries visit to ICAR-CIPHET*



*Inauguration of WHOLE GRAIN 2015 – National Seminar on Whole grain for Healthy Life*



*First International Yoga Day 2015 celebrated @ IICPT*



*Dr.K.Sinagaravel Director IICPT addressing the delegates in workshop cum exhibition on Food Processing Technologies, supported by Odisha Industries Federation*



*In the memory of Dr.A.P.J.Abdul Kalam demise – Silent rally*



*Dr.A.P.J.Abdul Kalam memorial Day*



*Constitution Day Celebration 2016*



*Ignite 2016 Club opening Day*



*MoU signed between IICPT and TNAU*



*Inauguration function of Clean India Project @IICPT*



*Open Day Inauguration 2016*



*Dr. C. Anandharamakrishnan, Director, IICPT, Prof. Gurmail Singh, VC, Akal University, Dr. R.K.Kohli, VC, Central University of Punjab in One Day National Seminar on "Recent Trends in Food Processing"*



*World Food Day function at IICPT in association with Association of Food Scientist and Technologists of India, Thanjavur Chapter*



*Part of students and visitors @ Open day of IICPT*



*Participation in Education Expo conducted by the Dinamalar at Thanjavur*



*Short Course of Food Business Management 30th sep 2016*



*Short Course of Food Business Management 30th sep 2016 – Group of participants visiting the IICPT Facilities*



*Vice chancellor of Central University of Tamilnadu, Tiruvarur @ Short course on food business management*



**Address by Shri. Rajiv Mishra, Economic Adviser, MoFPI, New Delhi at Perambalur District corn and small onion producers company Limited in the augural function**



**Brainstroming session on Growth of agroprocessing sector in NE REGION at Guwahati**



**Inauguration of One day national seminar on Challenges and opportunities in Food Packaging**



**One Day Workshop cum Awareness Programme on Food Quality and Safety Management for Export of Processed Foods 28th March 2016**



**IICPT family congratulates Dr. C. Anandharamakrishnan, Director, Indian Institute of Crop Processing Technology (IICPT), Thanjavur for being elected as the Fellow of The Royal Society of Chemistry (FRSC), United Kingdom.**



*Visit of CSIR-CECRI Director@ IICPT*



*CSIR – CFTRI and IICPT jointly organized the Agriculture and Food Industries Stake Holders Meet at IICPT*



*Director IICPT with Prof.M.S.Swaminathan at MSSRF Chennai May 2016 for research collaboration*



*Clean India Project – awareness rally by the students and staff members of IICPT*



*Dr.RAKESH Kumar sharma Director DRRL and Dr Subramanyam Bhadriraju, Kansas State University USA visited the Mobile Food Testing Lab at IICPT*



*Inauguration of Prof.M.S.Swaminathan Research Complex at IICPT*

### Snapshots of IICPT to IIFPT





*MoU Signing with Punjab Agricultural University*



*MoU Signed with University of Science and Technology, Meghalaya for research collaborations*



*MoU signed between IICPT and M.S.Swaminathan Research Foundation for setting up Pulse Biopark*



*Ph.D Degree awardees with delegations in the Graduation Conferring ceremony*



*3rd Yoga Day Celebrations at IIFPT*



*Master Degree awardees with the delegation in the Graduation Conferring ceremony*



**B.Tech Degree awardees with the delegation in the Graduation Confering Ceremony**



**Hon'ble Union Minister, FPI, Smt. Harsimrat Kaur Badal inaugurated IIFPT sponsored Common Food Processing Incubation Centre at Chettikulam, Perambalur District established under the Mission Onion Programme on 31st August, 2017.**



**Prof. A.K. Srivastava, Chairman, ICAR-ASRB was the Chief Guest and delivered the Graduation Day Address. Dr. Lakshmanan, Corporate Chief Scientist, Research & Technology Innovation and Head of R&D, ITC Ltd. delivered the Special Address**



**Team IIFPT on ONION MISSION programme**



**IIFPT remembers Dr. A.P.J. Abdul Kalam and his outstanding scientific and societal contributions. Commemorating his memorial, Dr. Prabodh Halde, Head - Global Regulatory, Marico Ltd., delivered a talk on 'Food Processing Industry: New Way of Make in India'.**



**IIFPT's Mission Coconut Programme Launched on the eve of World Coconut Day on 2nd September 2017.**



*World Coconut Day celebration was held on 8th September 2017 at Udumalaipettai. Inauguration of Coconut Mission Programme & MOFPI's SAMPADA to farmers, entrepreneurs and farmers producer company.*



*Part of the students visited during open day*



*Inauguration of OPEN DAY 2017. Chief Guest, Shri. Shunchonngam Jatak Chiru, IAS, Commissioner of Agri Marketing and Agri Bussiness, Govt. of Tamil Nadu.*



*Commemorating Gandhi Jayanthi, IIFPT staff and students took part in the 'Swachhata Campaign'.*



*The food expo was inaugurated by Sh.S. Nagoor Ali Jinnah, Chief General Manager, NABARD*



*Dr. Nicholas Allot and Dr. Alexandru Mereacre from NquiringMinds Ltd., UK visited IIFPT, Ministry of Food Processing Industries, Government of India regarding the Department of Biotechnology, India-INNOVATE UK indo-UK funded research*



*Hon'ble Shri. Harsimrat Kaur Badal, Minister of MoFPI visited the IIFPT stall at World Food Expo 2017*



*Hon'ble Shri. Giriraj Singh, Minister of State, Ministry of Micro, Small and Medium Enterprises (MSME), Government of India visited IIFPT pavilion @ World Food India 2017.*



*Dr. S. Natarajan, Hon'ble Vice Chancellor, Gandhigram Rural Institute (Deemed to be University) visited IIFPT and entered into a Memorandum of Understanding For collaboration in research and academic activities.*



*An interactive session with coconut producers has been conducted by IIFPT faculties.*



*Inauguration of GYM @ IIFPT by Dr. A.K. Srivastava, Chairman, ICAR-ASRB*



*Ministry of Food Processing Industries, Government of India-IIFPT's Guwahati Liaison Office has entered into a MoU with University of Science & Technology, Meghalaya (USTM) for collaborations in Education & Research in the field of Food Processing*



*Prof. Ganapati. D. Yadav, Vice Chancellor, ICT (Formerly UDCT),Mumbai Dr. V. Subrahmanyam Endowment Lecture Award at IIFPT, Ministry of Food Processing Industries, Government of India on 31.01.2018.*



*IIFPT, Ministry of Food Processing Industries, Government of India in association with Tamil Nadu State Agri-Marketing & Agri-Business Dept. organized a State Level Seminar on 'Supply Chain Management of Onion and Coconut Neera Processing'. Sh. Gagandeep Singh Bedi, IAS, Agri. Production Commissioner, Govt. of Tamil Nadu and Sh. S.J. Chiru IAS graced the occasion.*



*A novel technology based moisture measurement instrument developed by Society for Applied Microwave Electronics Engineering & Research - SAMEER under joint collaborative project with IIFPT handed over to IIFPT Liaison Office,Guwahati by Shri. Ravi Shankar Prasad, Hon'ble Union Minister, Ministry of Law & Justice & Ministry of Electronics and Information Technology (India) in the presence of Sh. Sarbananda Sonowal, Hon'ble Chief Minister(CMO Assam) of Assam during the Advantage Assam Global Summit at Guwahati on 4<sup>th</sup> February 2018*

## Finish the food, and the plate

Researchers come up with edible plates made of jackfruit

L. BENGANATHAN  
TRANAVITA

People who love to eat but hate doing the dishes have a delicious new option: plates and cutlery made of jackfruit.

Researchers at the Thanjavur-based Indian Institute of Food Processing Technology (IIFPT) have developed a palatable plate made of jack fruit's horny pines and sticky core, which are normally thrown away once the sweet fruit is consumed.

"Actually, we had read a millet-based ice cream, which was well received by food technologists and administrators at the Krishi Unnati Mela held last March in New Delhi. But we wanted to develop a healthy-yet-tasty cone to eat the ice cream.



No flat idea: The zero waste offering. \*SPECIAL ARRANGEMENT

We searched for a suitable base and found that the jackfruit's bracts, axis, seed and the fleshy, sticky, fibrous nut holders offered a healthy and economic alternative to the regular cones made of atta and corn flour," IIFPT Director C. Anandharamakrishnan said.

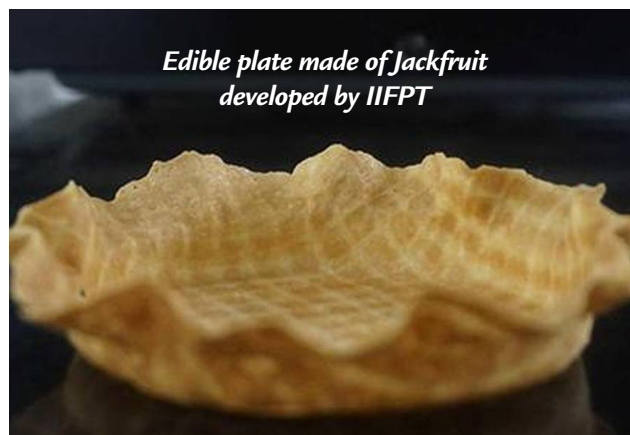
### More protein, fibre

"We then hit upon the idea of an edible plate that could be used to serve salads and a range of delicacies. While the normal cones made of

atta and corn flour contain less protein and little fibre, the cones and plates that we have developed are rich in protein (6.9%) and fibre (12.9%). For each kg of jackfruit, only 300 gram accounts for useful intake. The rest is unutilised. But now we have converted that waste into taste," he said.

India's jackfruit production is about 1.7 million tonnes a year. "We believe that this endeavour aids Prime Minister Narendra Modi's aim of doubling farmers' income by 2022. It is also in line with Union Minister for Food Processing Harsimrat Kaur Bada's objective of tackling malnutrition among children through child-friendly, cost-effective innovations," Mr. Anandharamakrishnan said.

Edible plate made of Jackfruit developed by IIFPT





**Director IIFPT Dr.C.Aanandaramakraichnan presenting prizes to the winners during National Science Day Celebrations at IIFPT**



**IIFPT's liaison office Bathinda was recently opened by Hon'ble Union Minister, FPI, Smt.Harsimrat Kaur Badal. First batch of trainees (16 members) who have completed training on Milk processing.**



**Sh. Y.S. Prasad, CEO - Andhra Pradesh Food Processing Society visited IIFPT, Ministry of Food Processing Industries, Government of India for discussions regarding possible collaborative research and consultancy projects with the Govt. of Andhra Pradesh.**



**Dr. S. Felix, Vice Chancellor, Tamil Nadu Fisheries University visited IIFPT, and discussed with Director-IIFPT regarding possible research collaborations. IIFPT's research facilities and novel products were demonstrated during his visit.**



**IIFPT takes pride in introducing our 74th successful entrepreneur, Mr. Murugesan. Trained under #PMKVY Baking Technician Programme at IIFPT**



**4th International Yoga Day celebrated at IIFPT**



*IIFPT in association with #MANAGE, Hyderabad organised the Feed The Future India Triangular Training (FTF ITT) on 'Entrepreneurship Development in Food Processing'. Delegates from Kenya, Liberia, Malawi, Mozambique, Myanmar & Uganda participated in the training.*



*Director, IIFPT explained about IIFPT's novel non-dairy Millet Ice Cream to Hon'ble Prime Minister Shri. Narendra Modi during Krishi Unnati Mela 2018, organised at Indian Council of Agricultural Research, Pusa.*



*Dr. Bijaya Kumar Behara, Economic Advisor, Ministry of Food Processing Industries, Government of India inaugurated Hybrid Energy Solar Dryer at IIFPT in the presence of Mr. G. D. Sharma, Deputy Secretary, Ministry of Food Processing Industries, Government of India*



*110 farmers from Namakkal district were given training on 'Techniques for Natural Preservation of Pulses' under CSIR, India Project at IIFPT.*



*Shri. Jagdish Prasad Meena, Secretary-Ministry of Food Processing Industries, Government of India visited and inaugurated The Solar Power Generation Unit, Heat Power Lab, and Knowledge Center's RFID System at IIFPT, Thanjavur.*



*IIFPT celebrated 4th International Yoga Day with a mass yoga demonstration in the morning session followed by a motivational speech delivered by Kalaimamani Marabin Mainthan Muthaiah, Editor of Namathu Nambikkai Magazine.*



*Commercial sale of #Neera was launched at #Pudukottai District by The District Collector. Ministry of Food Processing Industries, Government of India – IIFPT signed an MoU with Aranco Pudukottai Coconut Farmers Producer Company Limited during the event*



*Dr. Michael Friis Jensen, Senior Consultant World Bank visited IIFPT, LO-Guwahati. Detailed discussions on skill development activities of IIFPT in North East India and the role of the upcoming organic food testing laboratory in strengthening the export of processed foods*



*Visit of Dr.S.N.Jha ADG – ICAR*



# Research and Development



## Technologies Developed

<b>Technology</b>	<b>MULTIPURPOSE YARD DRYING IMPLEMENTS (MYDI)</b>
<b>Application</b>	MYDI was developed by PPRC for multiple purpose in the yard drying of parboiled paddy in the rice milling industry.
<b>Features</b>	The unit is useful for turning the paddy during drying, bund formation and to collect the paddy after drying in the yard.
<b>Other Details</b>	One semi skilled person is required for operation. The technology was transferred to the manufacturing industry and 300 units were already introduced in the mills. The technology is available in Uttaranchal, Orissa, Kerala, Madhya Pradesh, Karnataka and Tamil Nadu.
<b>Technology</b>	<b>MOBILE GRAIN CONVEYOR</b>
<b>Application</b>	For transporting grains from drying yard to mill house after and before drying Conveys products such as rice, paddy, sago and pulses
<b>Features</b>	Pneumatic grain pump; Conveys 2.5 tonnes of paddy and 3.8 tonnes of lintels vertically up to 30 feet lift per hour; Horizontal conveying is up to 150 feet lift Power consumption of the grain pump was 4 kilowatts per hour
<b>Other Details</b>	One semi skilled person is required for operation Operating cost including labour cost is Rs. 550/day (8 hrs)
<b>Technology</b>	<b>ROTARY VEGETABLE WASHER</b>
<b>Application</b>	Removes soil/dirt adhering to the surface of vegetables/tubers, Can be used at on-farm level
<b>Features</b>	Batch type, Perforated rotary drum type, Capacity 20 to 30 kg per batch, Washing efficiency of the unit is 90-95%
<b>Other details</b>	Drum is gently manual-rotated for a minute to wash thoroughly. Dirt is collected by sedimentation & removed through the water outlet at the tank bottom
<b>Technology</b>	<b>CARBONATED PALM NEERA</b>
<b>Features</b>	Bottled carbonated neera Shelf life more than one month under refrigerated conditions
<b>Other details</b>	Major processing steps - collection of unfermented sweet sap, centrifugation, filtration, pasteurization, cooling, bottling, carbonation (0.73 g CO <sub>2</sub> per 100 ml), corking and storage under refrigerated conditions
<b>Nutritive Value</b>	100 ml palmyra palm neera contains proteins 19.70 g, sugars 13.20 g, calcium 1.12 mg, magnesium 5.61 mg, iron 1.50 mg, ascorbic acid 4.95 mg, thiamin 0.06 mg, Vit A 74 IU

<b>Technology</b>	<b>QUICK RIPENING CHAMBER FOR BANANA</b>
<b>Application</b>	Quick ripening of banana fruit bunches
<b>Features</b>	Consists of ripening chambers, chemical container, ethylene analyser and distribution pipes. The unripe banana bunches were taken inside the ripening chamber and the lids were closed tightly. Acidic ethrel (0.5 ml/5 L water) with pH raised to 5+ by adding 2 g alkali (NaOH) was taken in the chemical container
<b>Other details</b>	Conventionally, mature banana takes 14 days for ripening. Method is cheap, safe and easy to use

<b>Technology</b>	<b>SMOKING KILN FOR FISH AND MEAT</b>
<b>Application</b>	Suitable for smoking of salmon, trout and other fishes
<b>Features</b>	The smoking kiln has cylindrical drum (to place fish pieces), top lid, SS trays, smoke distributing duct, smoke outlet, fire box, ash collecting tray and air inlet. Smoking time is 45 min, Capacity is 7-10 kg/batch, Fuel (sawdust and wood chips) requirement per batch is 1.5 kg
<b>Other details</b>	In the bottom of the drum, fuel (woodchips and saw dust) is burnt for heating. Destructive distillation of the fuel releases vapours in the temperature range 100-150°C

<b>Technology</b>	<b>PEDAL OPERATED AMLA DESEEDER</b>
<b>Application</b>	Deseeding of Amla fruit
<b>Features</b>	Continuous type, Concentric tube type deseeding mechanism, Capacity 45 kg/hr. Deseeding efficiency of the unit is 45%
<b>Other details</b>	Feeding system consist of improved hopper system, The transmission mechanism is designed as an open belt drive and chain drive

<b>Technology</b>	<b>CONTINUOUS AMLA DESEEDING MACHINE</b>
<b>Application</b>	Removes inner seed from amla fruit
<b>Features</b>	Overall efficiency of the machine is 86.6%, Capacity of the machine is 20 kg/h
<b>Other details</b>	Percentage pulp wastage is around 6.6%. Can be hand or motor operated

<b>Technology</b>	<b>IIFPT BIN CUM TRAP</b>
<b>Application</b>	Automatic insect removal and storage of grains.
<b>Features</b>	Perforated inner bin, Capacity 10 kg, Insect removal efficiency of the unit is 100%
<b>Other details</b>	Grains can be stored. Monitoring of insects is very easy. UV LED light is fitted. It increases the efficiency. It is very cheap. Eco friendly and organic in nature.

<b>Technology</b>	<b>MORINGA LEAVES SEPARATOR</b>
<b>Application</b>	To reduce the time of separation of moringa leaves from stalk
<b>Features</b>	Major components of moringa leaves separator are feed hopper, rotating handle, nails frames (2rows), motor, drive pulley, stand, discharge outlet, collecting pan  Two row alignment of nails with 70 rpm gives separation efficiency of machine was 58.4%
<b>Technology</b>	<b>OZONE FUMIGATION UNIT</b>
<b>Application</b>	Pilot scale ozone fumigation system for spices
<b>Features</b>	System includes oxygen concentrator, ozone generator, inlet and outlet pipes, storage bin (SS 304), vent valve, ozone analyser and ozone destructor
<b>Other details</b>	In turmeric, 100% mortality of adult insect ( <i>Lasioderma serricornne</i> ) was achieved at 610 min at 250 ppm, Similarly for pupa and larva, 100% mortality was achieved at 582 min and 545 min, respectively at 250 ppm
<b>Technology</b>	<b>BLISTER PACKAGING OF IDLI</b>
<b>Application</b>	Extended safe storage of fresh and dried idli (fermented traditional south-Indian food)
<b>Features</b>	Fresh idlis are cooled and placed in PVC blister trays  Blister packed idli was stored in refrigerated storage condition and the storage life was found to be 15 days
<b>Technology</b>	<b>BULK MODIFIED ATMOSPHERE STORAGE OF BELL PEPPER</b>
<b>Application</b>	Technology for bulk storage of bell pepper under modified atmosphere conditions for extended shelf-life
<b>Other details</b>	Storage at low temperature in corrugated fiber board boxes Best quality of bell peppers were obtained by packing in breathable packages and stored at 8°C temperature and 95% RH
<b>Technology</b>	<b>HAND-OPERATED CONTINUOUS TYPE ON-FARM FRUIT AND VEGETABLE WASHER</b>
<b>Application</b>	Washing of fruits and vegetables at farm-level/ cottage-level
<b>Features</b>	Washer consists of feed hopper, water trough, perforated drum (with handle), helical screw flights, rotor, perforated collecting bin
<b>Other details</b>	Washing efficiency of the unit is 95 % (with no power; operated by an unskilled labour)
<b>Technology</b>	<b>FISH DESCALING AND MUCILAGE REMOVAL MACHINE</b>
<b>Application</b>	This equipment is mainly used for commonly available fishes in India like Rohu, Catla, Red Snapper etc.
<b>Features</b>	A cylindrical abrasive surface is rotated using a 0.5 HP motor, Machine descaling consumes half the time taken by manual descaling, Machine descaling ensures hygienic processing of fish

<b>Technology</b>	<b>ENZYME PRODUCTION AND VALUE ADDITION OF CASHEW APPLE</b>
<b>Application</b>	Technology package for development of various value added products from Cashew Apple
<b>Other details</b>	Bioactive compounds were extracted from cashew apple and value added products were developed for commercial use DPPH radical scavenging activity was found to be highest for the methanol extract (97.38%) followed by aqueous and acetone extracts Tannase was produced from cashew apple pomace using <i>A. oryzae</i> . The tannic acid supplementation with 2.5% substrate shows increased enzyme activity of 2.95 U/g. The maximum ethanol yield of 8.53 % was obtained at pH 6 after 36 h of fermentation from cashew apple juice using <i>Saccharomyces cerevisiae</i> . Different value added products like cashew apple jam, squash, juice, jujubes, fruit leather and candy were standardized. Overall sensory acceptability was high for jujubes followed by fruit juice

<b>Technology</b>	<b>CONTINUOUS MICROWAVE PASTEURIZATION SYSTEM FOR FRUIT JUICES</b>
<b>Application</b>	Technology for the fruit juice pasteurization using microwave energy
<b>Components</b>	The continuous flow microwave pasteurization system consist of microwave oven, spiral type glass coil, feed pump, heat exchanger, inlet and outlet cold water line, thermometer and juice storage tank
<b>Other details</b>	Capacity of microwave pasteurization system is 10 L/hr, Microwave heated juice is cooled (up to 30°C) using the counter current heat exchanger

<b>Technology</b>	<b>SORTING SYSTEM BASED ON DIGITAL IMAGE PROCESSING</b>
<b>Application</b>	Continuous type external image based sorting system for fruits and vegetables
<b>Features</b>	The sorting system consists of conveyor system, camera to capture the external image of the products, processing unit to obtain the size, shape or color of the object, classification system to sort the test sample into different categories.
<b>Other details</b>	Once the fruit was tested, it was sent to the conveying system for further classification. The system gave acceptable results for sorting of guava, pomegranate and sapota.

<b>Technology</b>	<b>MILLET IDLI/DOSA DRY MIX</b>
<b>Application</b>	A ready to cook idli/ dosa mix with nutritional added values
<b>Features</b>	High protein, fibre and mineral content in the millet idli/dosa mix The millet ildi is nutritional superior over rice idli Ready to cook and eliminates cumbersome wet grinding

<b>Technology</b>	<b>HAND OPERATED AMLA DESEEDER</b>
<b>Application</b>	Deseeding of amla fruit
<b>Features</b>	Continuous type, Concentric tube type deseeding mechanism, Capacity 20 kg/hr Deseeding efficiency of the unit is 30%
<b>Other details</b>	Feeding system consist of hopper; The transmission mechanism is designed as an open belt drive

<b>Technology</b>	<b>SORTING SYSTEM BASED ON ACOUSTIC RESONANCE TECHNIQUE</b>
<b>Application</b>	Continuous type acoustic resonance based sorting system for fruits and vegetables based on internal quality evaluation
<b>Features</b>	The sorting system consists of sample holder to restrict free vibrations, impacting device to create acoustic responses, sound acquisition system to capture the acoustic response, signal processing unit to obtain the frequency spectrum from the acquired signal, classification system to sort the test sample into different categories and personal computer for process control and database interpretations
<b>Other details</b>	Once the fruit was tested, it was sent to the conveying system for further classification. The system gave acceptable results for sorting of sapota, muskmelon, mango and brinjal, Sorting efficiency is 91%, Capacity is 120 fruits/h

<b>Technology</b>	<b>PACKAGE OF TECHNOLOGIES FOR ON-FARM PROCESSING, VALUE ADDITION AND SAFE STORAGE OF ONIONS</b>
<b>Features</b>	Compared to all traditional methods available, IIFPT model (on-farm modular ventilated curing structure) found to be best for curing without quality deterioration, Unit is cheap and can be easily fabricated, IIFPT model can use even for short term storage at farm level under adverse climatic conditions, Curing of onions with stem yield better quality and storability bulbs compared to without stem, On-farm Modular Ventilated Structure stores the onions for 9 weeks at ambient conditions without quality deterioration
<b>Other details</b>	Pre-treatment method using ozone was developed for preventing microbial infection during storage. This is a greener technology and leaves no residues compared to conventional pre-harvest chemical sprays

<b>Technology</b>	<b>CONTINUOUS UV-C TREATMENT SYSTEM FOR GREEN LEAFY VEGETABLES</b>
<b>Application</b>	To improve shelf-life of fresh green leafy vegetables (such as amaranth) using UV-C radiation
<b>Features</b>	The major components of the system are conveying system, reflecting chamber holding frame and control system
<b>Other details</b>	Treatment combination of 90 W with 20 minutes exposure time gave with maximum microbial load reduction and minimum quality deterioration, Shelf life of the treated sample under refrigerated condition was 9-12 days without any changes in quality

<b>Technology</b>	<b>PALM JAGGERY BREAKING MACHINE</b>
<b>Application</b>	Breaking of palm jaggery into its powder without stickiness
<b>Features</b>	Continuous type, breaking into power without stickiness, Impact force is created from the number of blades by striking the palm jaggery. scrapers are used to reduce the sticking of palm jaggery
<b>Other details</b>	consists of hopper; feeding section, breaking chamber and discharge section

<b>Technology</b>	<b>READY TO USE IDLI MIX</b>
<b>Application</b>	An instant idli mix which can be cooked immediately.
<b>Features</b>	Easy to prepare Eliminates cumbersome wet grinding  Idli qualities are equal to normal

<b>Technology</b>	<b>RICE HUSK AS CARRIER MATERIAL FOR BIOFERTILIZER</b>
<b>Application</b>	A commercial value for black husk ash Black ash as a carrier materials for biofertilizer organized
<b>Features</b>	Easily powdered and sterilized High water holding capacity Raw material loss is reduced

<b>Technology</b>	<b>PRESERVATION OF HIGH MOISTURE PADDY DURING INCREMENT RAINY DAYS</b>
<b>Application</b>	The high moisture paddy can be preserved by simple chemical method.
<b>Features</b>	Free from mould infection Less milling breakage More milled rice out-turn Free from discolored rice

<b>Technology</b>	<b>PRESERVATION OF PADDY STRAW</b>
<b>Application</b>	The colour and nutritional value of paddy straw can be preserved.
<b>Features</b>	Preserved the wet straw up to 2 months period Maintains the color and flavor like the fresh straw Nutritional enrichment is taken place

<b>Technology</b>	<b>MOBILE PROCESSING UNIT</b>
<b>Application</b>	Multiple possibilites for processing of fruits and vegetables at different locations ; inculding on-farm application. MPU moves from site to site to collect harvested produce and process (to puree) in farm itself during glut seasons(mainly tomato)
<b>Features</b>	MPU is like an pilot scale food industry fully equipped with processing equipments. Later tomato puree can process into tomato sauce/ketchup for more income as per market requirement. The production line for the tomato puree in Mobile Processing Unit includes the following ten steps: (1) Sorting (2) washing (3) Heating/Blanching (4) pulping; (5) straining; (6) Concentrating; (7) bottling (8) pasteurization/Sterilization (9) cooling. Shelf life of tomato paste at room temperature is 6 months
<b>Other details</b>	Capacity of MPU is 50 kg/hr; Size of the MPU is 20x7x7 feet; Net profit ratio is about 60%

## List of Completed Grant-in-Aid Projects

Rs. in lakhs

S.No.	Project title	Total amount	Name of the PI
1	Ensuring food security harnessing science to protect our grain from insect threats	18.00	Dr. M. Loganathan
2	Ultrasound processing of liquid food: feasibility and efficacy	8.68	Dr. Ashish Rawson
3	Development of technologies for novel food products based on indigenous technologies	32.71	Dr. C.V. Kavitha Abirami
4	Phosphine and carbon dioxide (CO <sub>2</sub> ) combinations a alternative to methyl bromide to manage stored pests of rice under bulk storage	33.29	Dr. R. Meenatchi
5	Package of technologies for on-farm processing value addition and safe storage of onions	43.91	Dr. V.R. Sinija
6	Effective fumigation and control of laemophloeus	5.11	Dr. J. Alice R.P. Sujeetha
7	Oxidative stability studies and quality assessment of olive oil blends for the benefit of indian consumers	2.17	Dr. Akash Pare
8	Trial milling of paddy for fixation of out-turn ratio (OTR)	61.59	Dr. K. Singaravadivel
9	Evaluation and certification of srf's pvc coated polyester fabrics for grain storage	8.41	Dr. J. Alice R.P. Sujeetha
10	Standardization of process for idli, mild parboiled rice and vermicelli Standardization of process for murukku and vermicelli and study on cooking and textural quality	6.56	Dr. S. Sulochana
11	Application of bioavailable curcuminoids on selected food products	2.53	Dr. M. Durgadevi
12	Standardization of selected ethnic fermented foods and beverages by rationalization of Indigenous knowledge - NAIP-IV	230.77	Dr. K. Singaravadivel
13	Development of novel food chain using by-products of milling industry for enhancing nutritional security - NAIP-II	279.44	Dr. R. Jaganmohan
14	Process standardisation for low glycemic rice - Marico, Mumbai	8.93	Dr. R. Jaganmohan
15	Extension of shelf life traditional sweet, Thiruvaiyaru	1.50	Dr. R. Jaganmohan
16	Standardization of process for dosa mix, puttu mix and rice extruded products - CIKS, Sirkazhi	1.24	Dr. S. Sulochana
17	ICAR-Up gradation of Food Testing Lab	475.00	Shri. S. Kumaravel

## List of On-going Grant in Aid Projects

Rs. in lakhs

S.No.	Project title	Total amount	Name of the PI
1	Identification of sustainable technologies for value chain development of jackfruit	28.34	Dr. R. Jaganmohan
2	Solar energy assisted on-farm thresher cum winnower processing gadgets for millet farmers	39.31	Dr. S. Shanmugasundaram
3	Development of management protocols for on-farm bulk storage of paddy and development of a computer simulation model as design and management tools for bulk storage of grains in india	24.73	Dr. C.V. Kavitha Abirami
4	Design and development of atmospheric pressure non-thermal plasma system for food processing application	10.34	Dr. R. Mahendran
5	Microwave assisted extraction of soymilk for improving its functionality	2.79	Dr. Akash Pare
6	Quality evaluation of litchi fruit by using e-vision and e-nose system health	27.19	Dr. B.K. Yadav
7	Effective grain storage for better livelihoods of indian farmers for food and nutritional security in the new millennium	10.00	Dr. J. Alice R.P. Sujeetha
8	Smart warehouses with application of frontier EM & electronics based technology (S.A.F.E <sup>2</sup> .T.Y)	8.00	Dr. C.V. Kavitha Abirami
9	Development of an in-bin fumigation system an management protocols for scientific storage for selected indian spices	14.84	Dr. Jeyan Arthur Moses

## List of Completed INDUSTRY Sponsored Research Projects

Rs. in lakhs

S.No.	Project title	Total amount	Name of the PI
1	Dry mix for millet idli and dosa	1.03	Smt. R. Vidhyalakshmi
2	Study and quality of pasteurized liquid whole eggs as a replacement for whole eggs with shell in various fancy cakes	0.85	Dr. V. Hema

## List of On-going INDUSTRY Sponsored Research Project

Rs. in lakhs

S.No.	Project title	Total amount	Name of the PI
1	Evaluate EVAL hermetic package of food grains during storage	5.28	Dr. S. Anandakumar

## List of IIFPT's Patent

S.No.	Patent title	Status
1	A Process for microbial fermentation of idli mix	187818
2	An improved process for parboiling of paddy	187774
3	Technology for rice mill effluent treatment	3083/CHE/2008
4	Instant idli dry mix	4644/CHE/2011
5	Parboiled ragi-rice production	32/CHE/2009
6	Prevention of husk opening in parboiling of paddy to prevent fungal infection	676/CHE/2009
7	A formulation for preventing spoilage of high moisture paddy	1766/CHE/2011
8	PBP anti spoiler to prevent spoilage in high moisture parboiled paddy	Filed
9	Fluidized thermal disinfestation unit	Filed
10	solar energy for disinfestation of grains	Filed
11	New Processing Technology for tur milling	Filed
12	Non-kattai Biscuit	Filed
13	Protein isolated drink	Filed
14	Soup sticks	Filed
15	An integrated equipment useful for de-stalking and de-husking of small onion	R1912252111IN

## List of Technologies Commercialized by IIFPT

S.No.	Technology	Client
1	Idli dry mix - biological method	Aachi Group of Companies, Chennai
2	Process on millet puffing machine	
3	Process on extruded products RTC & RTC	M/s JVS Foods (P) Ltd., Jaipur, Rajasthan
4	Process on health mixes for school going children and adolescents	
5	RTE breakfast items and meal	
6	Pulse – rice analogue	M/s Flora-O-Foods, Jaipur, Rajasthan
7	Pneumatic grain pump	
8	Millet based uppuma & pongal mix	
9	Millet based idli mix	
10	Ready to use crispy mix	M/s. Nutriyes Healthcare Pvt. Ltd., Chennai
11	Ragi cookies	
12	Sugar free rusk	
13	Multigrain rusk	
14	Idly dry mix (chemical method)	Mr. Hariraj, SSR Products. Kumbakonam Mr. Wilson, Thanjavur Ms. N. Manjula, 16 Thirupparankundram, Madurai Sayed Ali, Keeranur
15	NAIP kure	M/s Saga Food Products Pvt. Ltd., Chennai M/s Shanmugam Traders, Tuticorin
16	Braffins	M/s Saga Food Products Pvt. Ltd., Chennai
17	Technology to treat rice mill effluents	Sikal Rice Mill ASK Rice Mill, Nellore
18	Asoka sweet	M/s. Thiruvayaru Sweets & Savouries
19	Low glycemic rice – brand name “Saffola Arise”	Marico Ltd.

### Technologies commercialized with IPR coverage

S. No.	Technology	Transferred to	Year	Cost in lakhs
1.	Completely Automated Small Onion (Shallot) Processing Unit (Funded by Department of Agril Marketing, TN)	Perambalur district maize and Small Onion Farmer Producer Company Ltd., Perambalur	2017	30.00
2.	Idli dry mix- Biological method	Aachi Group of Companies, Chennai	2013	3.00
3.	Idli dry mix - Chemical method	Mr. Hariraj, SSR Products Kumbakonam, Mr. Wilson Thanjavur, Ms. N. Manjula, Madurai, Sh. Sayed Ali, Keeranur	2012	0.50
4.	Technology for rice mill effluent treatment	M/s. Sikal Rice Mill, Nagapattinam, M/s. ASK Rice Mill, Nellore	2009	0.10

### Technologies commercialized without IPR coverage

S. No.	Technology	Transferred to	Year	Cost in lakhs
1.	Mobile Food Processing Unit	Tamilnadu Agri Marketing Department as issued supply order for fabricating 5 units	2018	200.00
2.	Grains Puffing Unit (Rice and millet)	Regional Rice Research station (KAU) Pattambi, Agricultural University, Raipur, Agricultural Research Station, TNAU, Kudimiyanmalai	2017, 2016 & 2015	1.50
3.	Millet Idly Mix	M/s. Sridhanya Speciality Food Pvt. Ltd., Bangalore	2016	1.00
4.	Choco Rice Flakes	M/s. Pavizham Rice – Kaladi	2016	0.75
5.	Traditional Rice Vermicelli	M/s. SRG Organics, Chennai	2016	0.30
6.	Mobile granule conveyor	M/s. KS Rice Tech	2015	1.14
7.	Pneumatic Grain Pump	M/s. Flora-O-Foods, Jaipur	2013	0.25 + Annual royalty Rs.5,000/-
8.	i) Process on extruded products (RTE & RTC)	JVS Foods Private Limited, Jaipur	2013	1.50
	ii) Malted Health mix for adolescents and school going children			
	iii) Puffed foxtail millet and raw foxtail millet			
9.	Idli batter technology	M/s. PLA Group, Thanjavur	2011	0.25
10.	Braffins Production	M/s. Saga Food Products Pvt Ltd., Chennai	2011	0.20
11.	Asoka Sweet Production Technology	M/s. Thiruvaiyaru Sweets & Savouries	2011	2.50
12.	NAIP Kure	M/s. Saga Food Products Pvt Ltd., Chennai, M/s. Shanmugam Traders, Tuticorin	2011	0.20



# Incubation



## Vision

The Food Business Incubation Centre is

*The focal point where farmers and food processing companies meet for the expertise and services*

*To develop new food products and explore new market opportunities in product development, interim processing and technology*

## Goal

The Food Business Incubation Centre will continue to be leaders in developing the Indian food processing industry.

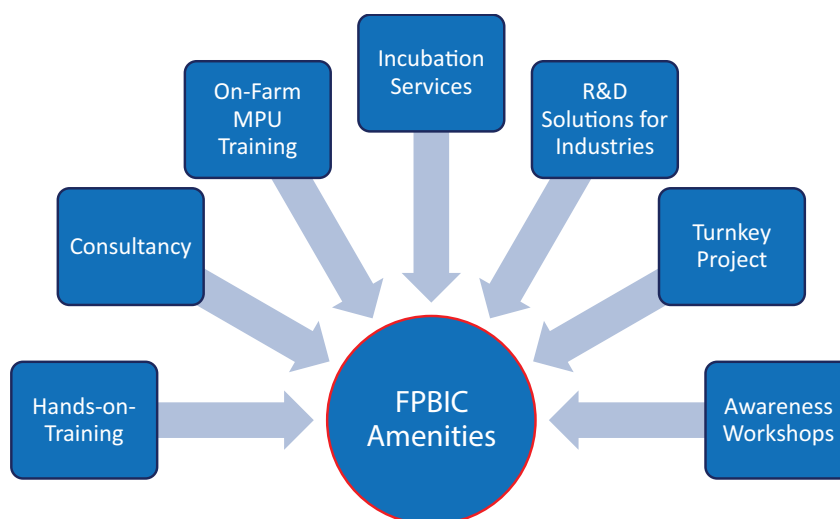
*Value addition to the farmers . . .  
Innovation to the industry*

## IIFPT Food Business Incubation Centre

A new Food Processing Training session was initiated as per the recommendation received by 45<sup>th</sup> Board Meeting in MoFPI based on the visit of Secretary in IIFPT on November, 2008. As a part of this initiation, Unit Laboratory Space was renovated and converted as Incubation Centre on 2008 with an area around 2500 sq.ft with the aim of providing hands-on-training and to offer incubation services.

The Food Business Incubation Center worked with minimum number of machineries and operations expanded to 7500 sq.ft with the facilities for processing and value addition of agro and horticultural crops includes fruits & vegetables, grain and gram, spice processing, cold and hot extrusion line, bakery line with different packaging facilities on May, 2013 due to the overwhelming interests observed from the farmers and food industries.

IIFPT today prides itself as the first Indian institute to secure ISO 22000:2005, ISO 14001:2004 certifications for Food Business Incubation Centre.



### Services for the Farmers and Food Industry

- |                                  |                        |
|----------------------------------|------------------------|
| Product development              | Path finding           |
| Interim processing               | Skills development     |
| Federal facility                 | Food industry training |
| Technology assessment & transfer | Label review           |
| Process development              | Packaging              |
| Product testing                  | Ingredient sourcing    |

## Hands-On Skill Development Programmes



**Processing of Confectionaries**



**Processing of Pasta**



**Processing of RTE Extruded Product**



**Visit to Fruit Beverage Industry**



**Processing of Bread and Rolls**



**Processing of Grape RTS**

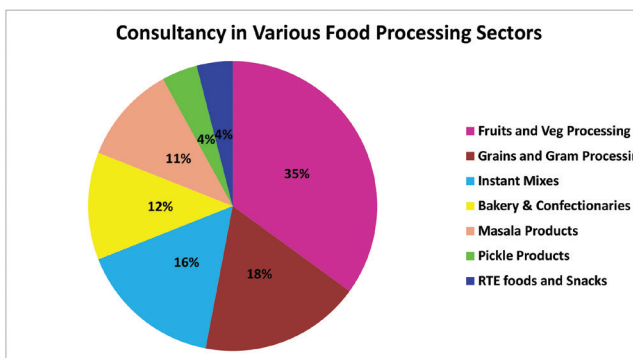


**Processing of Tomota Puree**



## Consultancy Service

Food processing consultancy services provided to industrialist, growers and new entrepreneurs for execution of food business. For the last 5 years around 762 clients were guided and motivated for the implementation of the food industries for that around 254 consultancy service programmes were organized. Eighteen percent of clients were using our consultancy services mainly for grain and gram processing; 16 percent for instant mixes; 12 percent clients were using consultancy service concurrently for bakery and confectionery and 11 percent clients using masala products and 4 percent in extruded & snacks and 4 percent in pickle products concurrently. The fruit and vegetable sector continues to show the most need for our services with 35% of the consultations and its activities.



Consultancy services usually equate to a revenue stream for the Food Business Incubation Centre; however every year, thousands of inquiries and visitors are fielded by staff and are provided at no cost. These inquiries and activities range from 5 minutes phone call to hours in meetings. In 2014, Food Business Centre fielded an estimated 4,632 inquiries and visitors from industries and farmers.

## Standalone Mobile Processing Unit

The Mobile Processing Unit (MPU) of IIFPT is the unique and the first of its kind in India for processing of different horticultural food crops at farmer's field itself. MPU was taken to different field around the country for on-farm training on value addition from 2012 to 2016.

MPU hands-on trainings were conducted at IIFPT for the field staffs of Department of Agricultural Marketing and Agricultural Business of Tamil Nadu. Totally 14 batches consist of 613 field staffs and



directors were attended from 31 districts of Tamil Nadu and 2 batches of Agri-business Advisory Department staff from 32 different districts Maharashtra in this program.

The MPU travelled across the country on May 2014, as part of the 'Krishi Parivartan Yatra' conducted by the ICAR, travelled to the ICAR institutes in our country and displayed and demonstrated our innovations in on-farm processing to the public. MPU on-farm workshops provide opportunity for the participants to interact with the scientists from IIFPT, to train them on post-harvest processing and to inculcate entrepreneurship skills. Graph showing the number of MPU beneficiaries in each year are increasing as aspiring entrepreneurs found the unit to be simple and user friendly. MPU on-farm demonstrations cum workshops were conducted in the following district of Tamil Nadu with the association of Tamil Nadu state departments under National Food Processing Mission Scheme.

## Food Industries Established Through IIFPT FPBIC Programmes

Totally 38 food industries were established by the IIFPT trainings and technical guidance programmes. They are manufacturing various processed packed foods.

<b>Extruded products</b>	: Millet pasta, RTE millet seva, corn snack
<b>Fruits and vegetable products</b>	: Herbal pickle, jackfruit chips, osmo-dried fruits and vegetables, osmodried papaya, Moringa powder,
<b>Snacks and millet products</b>	: Traditional snacks, poppedcorn, millet laddoo, corn laddoo, millet rice
<b>Beverages</b>	: Horse gram tea, organic green coffee, carbonated drinks, nannari sherbet, noni fruit juice, amla RTS, mango RTS, Guava RTS
<b>Convenient foods</b>	: RTC chappathi and parotta, instant health mixes, RTC Idli batter, instant kesari mix, instant corn rava and dosa mix, RTC Seva, Packed fresh tender coconut
<b>Masala products</b>	: Masala paste, asafoetida
<b>Bakery and confectionery products</b>	: Multigrain cookie, chocolate and candy, Millet cookie, cotton candy, chikki, horse gram cookie

### Industries Details of Successful Entrepreneurs

S.No.	Proprietor	Company	Products
1	Mr. A. Mohan	<b>AG Food Products</b> No 15/3c, Thirugnurpati, Thanjavur	Carbonated drinks
2	Mrs. S. Porkodi	<b>Amaze Multi Foods</b> 36-A, Mariammankoil Street, Muthiyalpalayam, Pondy - 9	Horse gram cookies
3	Mr. K. Muthuselvan	<b>Amigo Impex Pvt. Ltd.</b> #27, Sundar nagar, 2nd Street, KK nagar post, Trichy 620021	Herbal pickle
4	Mr. N. Ramesh Kumar	<b>Ammirdham Traditional Foods</b> No. 16H, SMIG, Thiruvalluvar Nagar, Tondiarpet, Chennai 600081	Millet pasta
5	Mrs. Surekha	<b>Anandham Millet Foods</b> Haritha Colony, Iyer Thottam, Trichy	Multigrain baked products
6	Mr. S. Thayagarajan	<b>Araikkal Former Producer Company</b> 2/135-1 Chettiyar thottam, Servampatti, Chinnamanali, Thiruchengodu (TK), Namakkal 637 410	Millet products
7	Mrs. R. Sivagami	<b>Aravind Chettinand Snacks</b> 33 Nehru Nagar, 4th Street, Madurai	Traditional snacks
8	Mr. Amirtha Pandian	<b>Cauvery Delta Agro Producer Company</b> 333 Mullai Nagar, New Housing Unit, Thanjavur	Millet pasta
9	Mr. V. Chollin Selvan	<b>Cornions Industries</b> Plot No: 35 Sidco Industrial Estate, Elambalur, Perambalur - 621 212	Corn products

S.No.	Proprietor	Company	Products
10	Mr. H. Mansur	<b>Delux Food Products</b> 11, Norths Vaniya Street, Orathanad, 614625	Nannari sherbet
11	Mr. V. Solaiyappan	<b>Ecofoods Pachamalai Hills</b> B25/A, Second Main Road, LIC Colony, Trichy	Osmo dried fruits and vegetables
12	Mrs. J. Bhuvana	<b>Greenmark</b> 7, Peria Ongaliamman Kovil St., Namakkal Dist., Tiruchengodu 637211	RTE millet sevai
13	Mr. K.R. Govindarajan	<b>Heaven Noni Juice</b> KRG Bio Farms, Thennangudi North, Peravurani Post 614 804, Thanjavur Dist	Noni drink
14	Mr.M.G.Chandrasekaran	<b>JK Nutri Diet</b> 26/33A Nethaji Nagar, Melapalayam Road, Pandrutti 607 106, Cuddalore district	Jackfruit dehydrated
15	Mr. E. Ramesh	<b>Kalyani Mills</b> 3/274-A, Somanatha Nagar, Podhuvakudi Road, Paramakudi-623 707	Millet rice
16	Mrs. Cellin	<b>Matha Healthy Foods</b> Marungur, Nagercoil, Kanyakumari Dist	Health mix
17	Mr. J. Vincent	<b>Mercynos Food Industries</b> 27, 5th Cross, Balaji Nagar, Trichy - 620 019	Amla juice and millet based product
18	Mrs. Sangeetha & Balaji Priya	<b>Mint Catering</b> 16, Raj Nagar, Ranimgammal Salai, Allithurai, Trichy - 620 102	RTC chappathi/Parotta
19	Mrs. Sudhashini C.	<b>Monsoon Leaf Organic</b> Chennai, sankar.yali@gmail.com	Millet ladoo, jackfruit chips, halwa
20	A. Nainar Mohamed	<b>Nizam Foods Private Limited</b> 111, Pazhankottai, Sankarankovil (Tk) Tirunelveli Dist, Tamil Nadu - 628 552	Masala paste
21	Mrs. Vidhya Sivakumar	<b>Purple The Royal Foods</b> 17/14 Srinivasa Nagar, 6th Main Road, Trichy 17	Sugar and coco confectioneries
22	Mr. M. Sathaiah	<b>Sasi Papaya Juice</b> 4, Konnaikadu, Aranthangi	Papaya RTS
23	Mr. Karthikeyan	<b>Sathya Food Products</b> 23, RMTTC periyarnagar, New Ayakudi, Palani-13	Guava juice
24	Ms. R.Usha Rani	<b>Shree Sai Food Products</b> 65, Single Street, Thiruvanai Kovil, Trichy 620 005	Idli batter
25	Mrs. R. Ambikapati	<b>SN Kootu Perungayam</b> # 16, Venkateswara Nagar, Pattukottai by-pass, Keelavasthavadi, Thanjavur 614904	Asafoetida
26	Mrs. G. Banumathi	<b>Sravani Beverages</b> Plot No.8 & 9, Shop No.G1&2, Raghaendra Society, Muthangi Medak Dist., Telangana	Mango fresh

S.No.	Proprietor	Company	Products
27	Mr. A. Ambalatharasi	<b>Sri Deepu Products</b> 12E, Rangesh Complex, Shop No.6, Rajaji Nagar, MC Road, Thanjavur	RTC Sevai
28	Mrs. N. Sangeetha	<b>Sri Lakshaya Biscuit Industry</b> No. 203 Nallur Main Road, Perumathur PO, Kunnam TK, Perambalur 621717	Cookies
29	Mr. Karthik K.	<b>Srikrishna Variety Stalls</b> S/o P. Krishnan 48/1202, Balapa Lane, West Main Street, Thanjavur 613 009	Cotton candy and pop corns
30	Mr. N. Murugesan	<b>Srineevee Natural Home Foods</b> City Union Bank, II Floor, Desiga Vinayagar Kovil Street, Vallam, Thanjavur 613 403	Millet pasta
31	Mr. P. Srinivasan	<b>Srinivasa Export</b> Palakarai, Register Office Opp., Thiruvaiyaru 613 204.	Chikki
32	Mrs. Rajeswari	<b>Suga Diet Natural Foods</b> #115, North Street Thiruvayarur 613 204	Health mix
33	Mr. S. Senthilkumar	<b>Super Naturals</b> D/No 11, Mullainagar, 2nd Street, Karumarupalayam, Uthukulzi Road, Tirupur-641 607	Organic green coffee
34	Mr. R. Sekaran	<b>Tanjore Agro Foods</b> West Main Street, Thanjavur	Tender coconut
35	Mrs. Pravitha	<b>Thaai Agro</b> 521, Big Street, Mullangudi PO Thiruvaidaimarudur TK, Thanjavur	Tutty fruity
36	Mr. V. Vinayagam	<b>Thanjai Kai Manam</b> East Gate, Thanjavur-613 001	Millet products
37	Mr. S. Krishnamoorthy	<b>Velan Natural</b> Tiruchnegode, Namakkal	Moringa powder
38	Mr. Jaganathan	<b>Yogam Herbs</b> 1/255, Karattupalayam, Gobi (TK), Erode 638 457.	Noni fruit juice

