

“What helps you persevere is your resilience and commitment.” Roy T. Bennett

NATIONAL**INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN FOOD PROCESSING TECHNOLOGY (ICRAFPT)**

International Conference on Recent Advances in Food Processing Technology (iCRAFPT) got underway today at Indian Institute of Food Processing Technology, Thanjavur in Tamilnadu.

Food processing sector in India:

The unorganized segment dominates in numbers (about 25, 00,000 in 2015-16) of small enterprises and workers, but the organized segment (about 40,000) dominates in terms of value of the output and investment.

The percentage share of the organized/registered food processors is hardly 1.5 percent of the total food processors.

India's export basket of food produces contains 75% of the fresh F&V and unprocessed item and only 25% of processed products.

The first tier technology should target the unorganized sector who can be encouraged to concentrate on primary processing and provide strong supply link to the high-end secondary and tertiary processing.

The second tier should deal with sophistication of secondary and tertiary processing of high value products and enable industry to compete and stand up shoulder to shoulder with world food processing industries.

Indian Institute of Food Processing Technology (IIFPT):

IIFPT is a premier national Institute working under the administrative control of Ministry of Food Processing Industries (MoFPI), Government of India functioning from its headquarters in Thanjavur, Tamil Nadu.

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.

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 procession and preservation of paddy.

The institute has been organizing an International Conference on Recent Advances in Food Processing Technology (iCRAFPT) during 17th to 19th August 2018 with the theme of doubling farmers' income through food processing.

MALNOURISHMENT IN INDIA**Data:**

25% of India's children less than 5 years old are still malnourished

NFHS-4 in 2015-16 (the latest available information), to the Global Nutrition Report 2016 and the Global Hunger Index (GHI) 2017, which ranks India at 100 out of 119 countries all confirm low nutrition among children in India

Among children less than 5 years, wasting (low weight for height), continues to be 21% in the 2017 index — it was 20% in 1992

190.7 million people in India sleep hungry every night, and over half of adolescent girls and women are anaemic

The recently announced flagship program of the Ministry of Women and Child Development will be anchored through the National Nutrition Mission (NNM), or Poshan Abhiyaan

NITI Aayog has worked on a National Nutrition Strategy (NNS), isolated the 100 most backward districts for stunting and prioritised those for interventions

The National Nutrition Strategy (NNS) has set very ambitious targets for 2022 and the Poshan Abhiyaan has also specified three-year targets to reduce stunting, under-nutrition and low birth weight by 2% each year, and to reduce anaemia by 3% each year

Steps required to curb malnutrition:

Altering the fundamentals of poor nutrition requires multiple and sustained interventions over a period of time — increased availability and accessibility of nutritious food, potable water, hygiene and sanitation, primary health care, etc

The challenge for India is to simultaneously address insufficient and poor diets, inadequate hygiene and sanitation and better management of disease and infections

Approach that can be followed:

Adequately re-engineer the Integrated Child Development Services (ICDS), mid-day meals (MDM) and Public Distribution System (PDS) for greater effectiveness

Involving the best nutritionists to work with local communities on calorie and nutrition dense supplementary foods, using easily available local ingredients that are within the ICDS and MDM budget guidelines

Products produced by self-help groups could easily be anchored by the relevant private sector and development agencies, working with State governments and considered as corporate social responsibility initiative

The key advantages of this disaggregated supply model are that it engages local communities, generates employment and ensures minimal leakage as it works with and inside the community

This will also ensure that space and other constraints of lack of hygiene at Anganwadi Centres do not become impediments in the supply of nutritious food

To mandate and scale staple food fortification comprising edible oil, wheat, rice and dairy products, in addition to salt

There is persuasive evidence from several countries of the efficacy and cost-effectiveness of large-scale staple food fortification to address “hidden hunger” or micro-nutrient deficiencies

The success of micro-nutrient fortified food is that it does not entail a change in behavior.

A case in point is the mandate of July and August 2017 to use fortified oil, salt and wheat flour in the ICDS and MDM by the Ministries of Women and Child Development and Human Resource Development, respectively

Multiple campaigns designed to inform, communicate and educate on nutrition-specific and nutrition-sensitive behaviors.

These behaviors include breastfeeding, diet diversity, hand-washing, de-worming, safe drinking water, hygiene and sanitation

Nutrition has to be “marketed” and made interesting, engaging, simple and personally relevant

Nutrition is complex, and therefore its delivery must be simplified through greater awareness and actions

Way Forward:

Unless economic growth improves social and human development, cannot be sustained

Equally, economic growth itself is impeded by low levels of productivity in an under-nourished and malnourished population

Exploring new models to address the structural and systemic issues on a priority basis, learning from what has worked or not, and single-minded focus on implementation will be critical to delivering better nutritional outcomes and meeting the Sustainable Development Goals, to which India is a signatory.

INDIA PROPOSES FAO TO DECLARE AN UPCOMING YEAR AS “INTERNATIONAL YEAR OF MILLETS”

The Union Minister of Agriculture and Farmers’ Welfare has written to the United Nations Food & Agriculture Organization (FAO) and proposed the declaration of an upcoming year as “International Year of Millets”.

India is celebrating 2018 as the National Year of Millets and is promoting cultivation by amending cropping pattern of areas which are especially susceptible to climate change.

The Ministry has requested the inclusion of this proposal in the agenda of the 26th session

of the Committee on Agriculture (COAG) meeting, scheduled in October 2018 in Rome.

Millets are highly nutritious and useful in various lifestyle diseases, enhancing resilience and risk management in face of climate change especially for small and marginal farmers.

The government recently increased the MSP of millets by more than 50 per cent of cost of production which is an important component of efforts to achieve the national commitment of doubling farmers' income by 2022.

Importance of Millets:

Millet is a common term to categorize small-seeded grasses that are often termed nutri-cereals or dryland-cereals, and includes sorghum, pearl millet, ragi, small millet, foxtail millet, proso millet, barnyard millet, kodo millet and other millets.

An important staple cereal crop for millions of small holder dryland farmers across sub-saharan Africa and Asia, millets offer nutrition, resilience, income and livelihood for farmers even in difficult times.

They have multiple untapped uses such as food, feed, fodder, biofuels and brewing.

Photo-insensitive & resilient to climate change, millets are hardy, resilient crops that have a low carbon and water footprint, can withstand high temperatures and grow on poor soils with little or no external inputs.

In times of climate change they are often the last crop standing and, thus, are a good risk management strategy for resource-poor marginal farmers.

SCIENTISTS TO TEST LAND FOR LIGO

The Environment Ministry has allowed scientists to test the suitability of land in Maharashtra's Hingoli district to host the India wing of the Laser Interferometer Gravitational Wave Observatory (LIGO) project.

The project is piloted by the Department of Atomic Energy (DAE) and Department of Science and Technology (DST) and is expected to be ready by 2025.

This is a key step to establishing the one-of-its-kind astronomical observatory.

The project involves constructing a network of L-shaped arms, each four kilometers long, which can detect even the faintest ripples from cosmic explosions millions of light years away.

The discovery of gravitational waves earned three U.S. scientists the Nobel for physics in 2017. The scientists were closely involved with LIGO.

However the construction of such a large, sensitive device — there are only three of its kind in the world — requires an extremely flat surface.

The LIGO-India consortium, made up of physicists from several institutes, had submitted a proposal to "prospect" 121 hectares of forest land in Dudhala village, Hingoli.

For the LIGO project, it is to check if the land can be made perfectly level at a reasonable cost. The project is in the process of acquiring necessary land some of it is private and some barren forest land.

The LIGO project operates three gravitational-wave (GW) detectors. Two are at Hanford in the State of Washington, north-western USA, and one is at Livingston in Louisiana, south-eastern USA.

The proposed LIGO-India project aims to move one Advanced LIGO detector from Hanford to India. The LIGO-India project is an international collaboration between the LIGO Laboratory and three lead institutions in the LIGO-India consortium.

The LIGO lab would provide the complete design and all the key detector components. Indian scientists would provide the infrastructure to install the detector and it would be operated jointly by LIGO-India and the LIGO-Lab.

Gravitational waves:

Gravitational waves are distortions or 'ripples' in the fabric of space-time caused by some of the most violent and energetic processes in the Universe.

These ripples would travel at the speed of light through the Universe, carrying with them information about their cataclysmic origins, as well as invaluable clues to the nature of gravity itself.

Any object with mass that accelerates (which in science means changes position at a variable rate, and includes spinning and orbiting objects) produces gravitational waves, including humans and cars and airplanes etc.

The LIGO is a large-scale experiment and observatory to detect cosmic gravitational waves and to develop gravitational-wave observations as an astronomical tool.

COLOURED STICKERS TO INDICATE NATURE OF FUEL

The Supreme Court accepted the Centre's proposal to use hologram-based coloured stickers on vehicles, plying in the Delhi-National Capital Region (NCR), to indicate the nature of the fuel used.

The Hologram-based sticker of light-blue colour will be used for petrol and CNG-run vehicles while similar sticker of orange colour will be used for diesel-driven vehicles.

The court asked the ministry to implement the use of the coloured stickers by September 30.

The top court also asked Additional Solicitor General to consider having green number plates for electric and hybrid vehicles.

ODISHA TO SHOWCASE ITS BIODIVERSITY

The Odisha government is setting up a world-class interpretation centre at Dangamal near Bhitarkanika National Park to showcase its efforts in protecting crocodiles and preserving its rich mangrove diversity.

The project, which has been approved under the Integrated Coastal Zone Management Project, will be taken up at an estimated cost of Rs. 3 crore.

It is planned to develop the centre both as a tourist attraction and a place for students to learn about the environment.

Bhitarkanika National Park:

Bhitarkanika National Park is a national park located in Kendrapara district of Odisha in eastern India. It spreads over 672 km² and is surrounded by the Bhitarkanika Wildlife Sanctuary.

It was designated as national park on 16 September 1998 and as a Ramsar site on 19 August 2002.

The national park is home to saltwater crocodile (*Crocodylus porosus*), Indian python, King cobra, black ibis, darters and many other species of flora and fauna.

It hosts a large number of mangrove species, and is the second largest mangrove ecosystem in India.

Integrated Coastal Zone Management (ICZM):

Integrated coastal zone management (ICZM) or integrated coastal management (ICM) is a process for the management of the coast using an integrated approach, regarding all aspects of the coastal zone, including geographical and political boundaries, in an attempt to achieve sustainability.

It is a World Bank assisted project.

The ICZM plan involves identification of infrastructure requirements and livelihood improvement means in coastal districts. Conservation of mangroves is among the components.

The national component of the project includes mapping of the country's coastline and demarcation of the hazard line.

It is being implemented by the Department of Forests and Environment with assistance from the Union Ministry of Environment, Forests and Climate Change (MoEFCC).
