

College of Food Technology
Vasantrao Naik Marathwada Krishi Vidyapeeth,
Parbhani

Common Incubation Center
Under PMFME, MOFPI, New Delhi

(Jaggery, Liquid Jaggery processing, Sugarcane Juice based
beverage and Spices Processing Lines)

Name of the Host Institute: College of Food Technology, Vasantrao Naik Marathwada Krishi
Vidyapeeth, Parbhani

The processing facilities of the Incubation Center would be made available to existing and aspiring micro entrepreneurs, FPOs, SHGs, Co-operative, ELP students and Groups etc. to manufacture food products by the O&M operator. In addition, this Incubation Center will be utilized for imparting trainings, demonstration and skill up gradation of the beneficiaries under the scheme.

Objectives

- To support establishment of Incubation Center for ODOP (Jaggery for Parbhani district) and other products
- To utilize the Incubation Center on commercial basis
- To provide training to beneficiaries (micro entrepreneurs/ SHGs/ FPOs/ Cooperatives and groups) through Incubation centers at the training rates prescribed under PMFME Scheme based on National skill Framework.
- CIC facility aids in overcoming the financial burdens on capital investments of start-ups and also its supports the existing entrepreneurs to venture into product extension lines.

Chief Operating Officer

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Name of State Nodal Agency (SNA) : Agriculture Development Trust's Krishi Vigyan
Kendra (Farmers Science Centre), Baramati Dist.
Pune

Name of the Mentor Institute : Dr. Uday S. Annapure
Director , Institute of Chemical Technology, (ICT),
Marathwada Campus Jalna-431 203
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Approved Cost by PMFME for following three processing line (ODOP) Total : Rs. 329.50 Lakhs

- Jaggery processing line (Gud/Cubes / powder and liquid Jaggery & Jaggery based valued added food products : Rs. 98 Lakhs
- RTS Sugarcane Juice based beverage line : Rs. 47 Lakhs
- Spices Processing line : Rs.55 Lakhs
- Construction of New Building : Rs. 100 Lakhs
- Food Testing laboratory : Rs.25 Lakhs
- Mentoring Charges : Rs.4.50 Lakhs

Establishment of Common Incubation Center based on One District One Product (ODOP) is one of the important components of PMFME Scheme. Under the scheme Common Incubation Centers have been set up to facilitate the following class of activities:

- (i) Entrepreneur to manufacture and assess commercial viability of new food products by using the processing, packaging, testing facilities
- (ii) Hands on Training to entrepreneurs in new technology for processing, packaging, food standards/ safety, hygiene etc.
- (iii) Demonstration of machines, process, products and hands on training to workers in food safety, hygiene
- (iv) Usage of processing, packaging and testing facilities by Individual entrepreneurs/ FPOs/ SHGs/ Co- operatives.

Earmarking of utilization of the facilities would be done for the following type of usage of processing lines or part of there of:

- (i) Usage by Incubates i.e. micro entrepreneurs willing to use the facility for product development, brand development, trial of product line for commercial viability
- (ii) Training to the beneficiaries of capacity building program of PMFME Scheme or any other skill development program of state/central government.
- (iii) At least two consecutive days in a week, Viz. Monday and Tuesday shall be earmarked for usage referred to at (i) & (ii) above. The O&M Operator shall be under obligation to permit use of manufacturing & allied facilities by the Host institute for these purposes.
- (iv) Exposure Visits and Demonstration of Experiential Learning Program could be organized by the Host Institute on any of the days of the week.

Machineries in Common Incubation Center :

The incubation has other infrastructures utilities like furnace, generator (15 kW), RO water plant etc. which is the part of incubation centre.

Sugarcane jaggery processing and liquid jaggery processing line

Sr. No.	Name of equipment
1	Sugarcane crushing unit with motor and accessories
2	Juice filtration unit
3	Pipes and valves
4	Pump s
5	Juice and jaggery gutter SS 304
6	Pipe bridge
7	Furnace
8	Furnace tank (Clarifier, Evaporator and concentrator pan)
9	Cooling pan
10	Angles fire bat and pit cover
11	Railing and staircase
12	Scum drainage system
13	Chimney
14	Turbo charger
15	Temperature sensor
16	Temperature indicator
17	Scum removing system
18	Juice storage tank with pump
19	Furnace tank
20	Hand tools
21	Butterfly valve and SS hardware
22	Cooling pan, lumps breaker screening machine
23	Trolleys
24	SS tray
25	Molding machine
26	Shrink wrapping machine
27	Powder packing machine
28	Storage tank
29	Bagasse carrier
30	Cable tray
31	Electrical cable and panel

Sugarcane Juice and Beverage processing Line

Sr. No.	Name of equipment
1	Sugarcane cleaner cum peeler
2	Soaking tank
3	Sugarcane set cutter
4	Steaming unit
5	Juice extractor machine
6	Juice filtration unit (Sparkler filter) filter press
7	Formulation tank/ Homogenizer
8	Raw juice collection tank
9	Raw juice screw transfer pump for automatic delivery
10	Batch pasteurizer-tank
11	Automatic juice filling and capping machine
12	Crown corking machine
13	Labeling machine
14	SS table for packing
15	Trolley
16	Bottle washing machine
17	Deep freezer
18	SS vessel with handle
19	Demineralizer

Spice processing line

Sr. No.	Name of equipment
1	Turmeric/Ginger/Garlic washer cum peeler
2	Slicer (Ginger & Turmeric)
3	Roaster
4	Micro pulveriser
5	Impact pulveriser / pin mill
6	Spice mill
7	Steel container
8	Scoops
9	Trolley
10	Stainless steel trays

11	Vibro sifter
12	Mixer cum ribbon blender
13	Continuous form, fill and seal machine
14	Continuous Dehydration Unit
15	Storage rack
16	Ginger and garlic paste making machine
17	Working table
18	Mini oil fryer
19	Weighing balance
20	Induction Sealing machine
21	Miscellaneous and need based accessories

Testing Lab equipments

Sr. No.	Name of equipment
1	Fiber analyzer
2	Vacuum Oven
3	Sensitive Balance-Sartorius
4	Aw meter with moisture meter
5	Rotary evaporator
6	Digital Hand-held pH meter
7	Pocket Brix-Acidity Meter Multi Fruits PAL-BX ACID F5 Master Kit
8	Salt Meter PAL-SALT Mohr
9	Frying Oil Monitor DOM-24
10	Portable Refracto-Polarimeter (Model RePo-1)
11	Deep Freezer – Horizontal (Chest Type)
12	Dehumidifier
13	Environment Controlled Chamber
14	Digital Thermo-Hygrometers
15	Digital Micrometer

End products to be prepared through proposed jaggery processing line

- Jaggery blocks, cubes, powder, granules
- Jaggery based Nutrachikki/ Nutribar
- Jaggery based confectionary products : Toffee/ caramel/ Hard boiled candy/ Chocolate
- Jaggery based bakery products : Cookies, cake, Biscuits
- Jaggery fruit based beverages: Squashes RTS, Crush, preserve murabba etc.
- Sugarcane Juice based RTS Beverage blended with other juices like Ginger, lemon juice, Aonla and Guava
- Jaggery based instant legume based millet, oil seed food mixes

End products to be prepared through proposed spices processing line

- Turmeric powder from fresh rhizome, chili powder, turmeric powder and spice mix powder, ginger garlic paste

Role of Host institute

Food Science and Technology lies in the fact that it has the capability and creditability to provide more food through apt scientific conservation, eliminating avoidable losses and making available more nutritious food, and high value products from low grade raw materials by processing, packaging, transport, marketing and also by-products and waste utilization using an integral approach. It enables the creation of agro-based industries to produce value added products assuring the greater financial returns and generating employment opportunities, and in turn will provide a greater potential to revival in rural economy. However, it should be born in mind that the technology varies with the commodity and also is location specific. Thus, modernization of post-harvest operations and agro-processing industries through appropriate technology has a vital role to play in national economy in general and rural economy in particular.

The VNMKV, Parbhani will provide the land and other basic amenities like water, electricity, etc. The established incubation center will operate on custom hiring basis and commercial production will perform throughout year. The infrastructural facilities created under incubation center will used for organizing and conducting short courses skill development training programmes for farmers, rural youth, farm women's and established entrepreneurs for their technical advice, NGOs, Self Help Groups. This Incubation Center will help to fulfill the dream of '**Atmanirbhar Bharat**' an envisaged by Hon'ble Prime Minister by adapting and following holistic approach for sustainable development.

Front View of CIC



Sugarcane Beverage Processing Machineries



Sugarcane jaggery Processing Machineries



Spice Processing Machineryes



Testing Laboratory Equipment

