



# **2019 ACCOMPLISHMENT REPORT**

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## RATIONALE

- The establishment of ISU-DOST 02 Food Innovation Center in ISU Cauayan Campus in 2017 and its full operation in February 2019 paved the way in the development of innovative products out of locally available fruits, crops and vegetables as resource for health, wellness and food security. Currently there are three existing food processing equipment in the center namely extruder, vacuum fryer and fruit drying cabinet and an additional equipment has just been approved for procurement, the retort, which all will be used as the focus of research in the Product Development studies of the campus to be able to accomplish and fulfill one of its quality policy which is to develop products for glocalization hence strengthening the promotion of Cauayan City being a Smarter City.

# R&D Center Background

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## **GOAL 1 : Increase research outputs on food product development**

### **OBJECTIVE 1**

- To plan, formulate and package credible research proposals for funding;
- To implement approved research proposals in accordance with approved methodologies and timeline;
- To present scientific papers in national or international for a/conferences;
- To ensure all research outputs are patented; and
- To produce publication in international journals indexed in Scopus, Thomson Reuters and other reputable publications.

# **Goals & Objectives**

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## GOAL 2 : Promote adoption and commercialization of research output

### OBJECTIVE 2

- To identify potential adopters of matured technologies;
- To establish strong linkages and collaborations with the industry, MSMEs and LGUs for the adoption of matured technologies;
- To produce IEC materials for the promotion of research outputs;
- To display products in trade fairs, exhibits, display/pasalubong centers and One-Store hub;
- To conduct technology transfer to identified adopters;
- To capacitate Women's group, MSMEs, PWDs and OSYs to increase adoption of matured technologies to establish viable demonstration projects with partner cooperative or organization towards developing rural enterprise.

# Goals & Objectives

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## **GOAL 3: Strengthen institutional development and resource management**

### **OBJECTIVE 3**

- To generate additional resources and facilities for food product development;
- To establish sensory evaluation facility and quality assurance laboratory to support R & D/E activities;
- To produce IMs on GEC to improve instruction
- To propose BS Food Technology program and other related academic programs.
- To generate additional income for the university.

# **Goals & Objectives**

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## Externally Funded R&D Project

- 2M peso check was awarded last October 2019 to ISU Cauayan as initial funds for the project “Development of Ready-to-Eat (RTE) Meals As Convenient Foods During Calamities Using Water Retort, Freeze Dryer and Spray Dryer



# Highlights of Accomplishments

## **Institutionally Funded R&D Projects**

- 9 out of 15 studies under the Program entitled “Developing Innovative Food Products As A Resource For Health, Wellness and Food Security Towards a Progressive Smarter City” have already been started and is currently on going. This project has a duration of 24 months and is currently doing the experimentation process to determine parameters in processing.

# **Highlights of accomplishment**

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- The following are some of the prototypes that have been produced so far under the program.

## **Highlights of accomplishment**

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Black Rice Curls with Mung Bean  
Enriched with Malunggay



Brown Rice Curls with Mung Bean  
Enriched with Malunggay

# Rice Curls



# Corn Curls



Dried Pineapples in SUP



Dried Pineapples in Vacuum Pack



Dried Pineapples in PP Bag



# Dried Pineapples



# Dried Jackfruit



# Dried Green Mangoes with Chili



# Dried Kamias



# Kamias Prunes



Mixed Sweet Potato



Ube Chips



Mixed Veggies Chips



Jackfruit Chips



Okra Crisps

# Vacuum Fried Products





# Labels

- There were total of eight (8) undergraduate studies which have been assisted by the Center in terms of Product Development, Sensory Evaluation and the use of the Center's facility and equipment.

# **Instruction**

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- The Center was also able to assist students from other schools, research studies from other ISU campuses and MSMEs:
  - a. High School Students from Doña Aurora National High School – Drying of Seafoods using the Cabinet Dryer
  - b. Research Faculty from ISU Ilagan – Vacuum packing of Binalay
  - c. Graduate Student from ISU Ilagan – Drying of Cassava using the Cabinet Dryer
  - d. MSME – Processor of powdered malunggay leaves – Drying of Malunggay leaves using the Cabinet Dryer

# Instruction

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- BAMBUFUD - Approved trademark for Bamboo Products for FIC

Registration No.: 4/2017/00502817

- UM for bamboo Shoot Wine for review of IPO  
Application No. 1/2018/00025



# Patent Utility Model

## Rental of Equipment and Purchase of Packaging Materials:

- Cabinet Dryer:  $3490 + 3629.60 + 1209.864 = \text{₱ } 8,329.464$
- Use of Stand Up Pouch (SUP) Packaging Material: ₱ 80.00
- Vacuum Packing Machine: ₱ 520.33
- Use of Vacuum Bag Packaging Material: ₱ 198.00
- Label Development: ₱ 2,341.00

Total income generated for 2019: **₱ 11,468.79**

# Resource Generation

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**Thank you!**

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