

# IP-TBMIN FOCUS

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Quarterly Publication of the PSAU Intellectual Property & Technology Business Management Office



“ —  
Biofloc fish farming is a game changer in aquaculture.  
— ”

## 2 Sibul TBI Incubatees secure funding from Young Farmers Challenge provincial level

*Queency Eurranne G. Castillo*

Sibul Technology Business Incubator, a hub for agripreneurs, has emerged as a fertile ground where agri-innovation thrives. Nestled within its nurturing environment, two young agripreneurs have sprouted as key players in the agricultural landscape.

Driven by desire to create a positive impact and development in agriculture, Sibul incubatees Ronnel Bryan Javier and Reymark Reyes keep pace along with other young farmers provincial awardees in the regional level.

Javier and Reyes are faculty-researcher and a student from the Department of Fisheries.

They were among the 48 agri-enterprises from

Central Luzon who joined the Young Farmers Challenge at the provincial level.

Both of them take pride in their agri-business technology titled, "Solar Powered Biofloc System of Tilapia and Catfish".

In August, they were hailed as a young farmer start-up awardee and were granted a total of Php80,000.00 by the Department of Agriculture Central Luzon.

With a hope to contribute development in fish farming, Javier said, "The award that we received from the DA - AMAD has paved the way for this idea of fish farming practice to be put into a real-time action."

**TECH IT TO THE NEXT LEVEL!**

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## IPTBM bags 5 awards in 36th AIHR

Sherry Lyn D. Supan

The IPTBM Office secured multiple awards during the 36th Agency In-House Review (AIHR) of the Completed and Ongoing Researches of the PSAU held last August 10-11, 2023, at the Conference Room of the University Food Center.

Three 2022-completed projects implemented and assisted by the Office were presented on the first day of the said activity. These include the 2021 initiatives titled “PSAU IP-TBM Phase II: Patent Mining on Selected ISP as an Approach in Advancing Industry-based S&T for Milkfish” funded by the DOST-PCAARRD and the “Technology Business Incubator (TBI) for the Agriculture and Fishery Commodities of PSAU” supported by the DA-BAR.

The Patent Mining project was presented by PSAU IP Manager Ms. Divine Reine S. Aquino, while the highlights of accomplishments of the TBI project were discussed by Ms. Maricel B. Ramos, Sibul TBI Project Development Officers. Meanwhile, the two-year activities of the 2020 DA-BAR-funded initiative titled “Bioeconomic and Risk Analysis of Invasive Aquatic Species (BRA-IAS) in the Aquaculture-

Areas of Pampanga” led by IP-TBM Director Prof. Walter L. Pacunana was also conveyed by Ms. Aquino during the event, highlighting the assistance that the IP-TBM office has provided to the project by securing the intellectual property protection of its developed IAS-based technology products.

Recognizing the achievements and notable impact of the services and initiatives taken by the Office through the mentioned projects, the panel of judges during the Review granted five (5) awards to the IP-TBM team on the last day of the activity. These include the Best Paper award for its TBI project, Best Poster and Best Presenter for the Patent Mining project, and Best Poster and Best Presenter awards for its assisted BRA-IAS project.

Aside from Dir. Pacunana and Ms. Aquino, Mr. Jacob Anderson C. Sanchez, Ms. Anne Gellie T. Dimabuyu, Ms. Chonnie Cholla R. David, and Ms. Gerondina C. Mendoza also served as implementation leads of the abovementioned undertakings.

# IPTBM projects qualify in 72nd PhilAAST Convention

Sherry Lyn D. Supan

The Manila Hotel, Metro Manila – Three of the externally-funded and 2022-completed projects of the IPTBM Office qualify for poster presentation in the 72nd Annual Philippine Association for the Advancement of Science and Technology (PhilAAST) Convention last September 22, 2023.

In line with the event's theme, "National Wealth Creation and Sustainable Development through Science, Technology and Innovation", IP Manager Ms. Divine Reine S. Aquino presented the DOST-PCAARRD supported project "IPTBM Phase II: Patent Mining on Selected ISP as an Approach in Advancing Industry-based S&T for Milkfish" while TBI Manager Ms. Chonnie Cholla R. David showcased the accomplishments of the DA-BAR assisted project "Technology Business Incubator for the Agri-Fishery Commodities of Pampanga State Agricultural University".

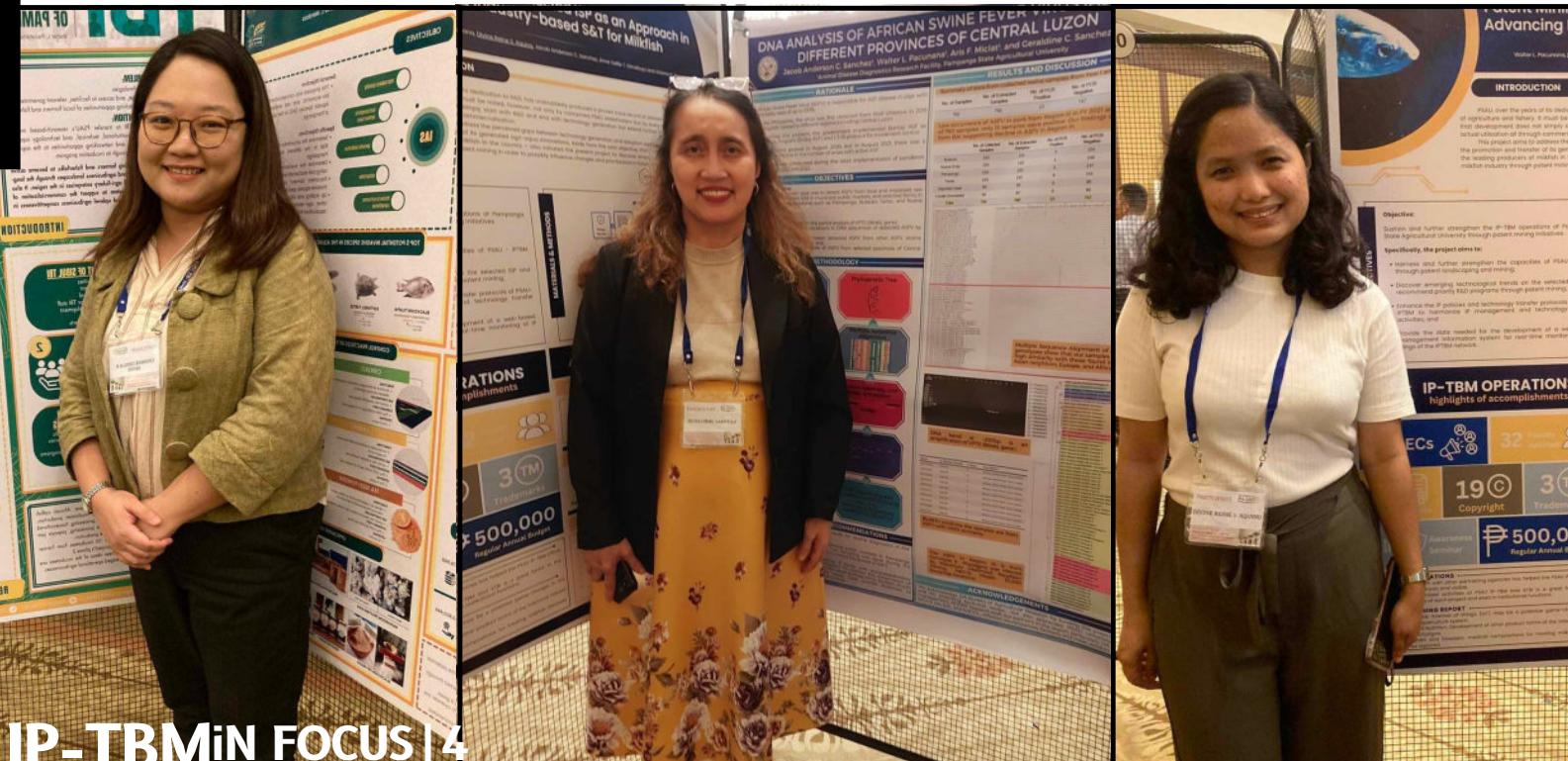
Aside from these, the DA-BAR funded project "Bio-economic and Risk Analysis of Invasive Aquatic Species in the Aquaculture Areas of Pampanga" which was housed and assisted by the IPTBM Office during its implementation was also presented by Ms. Aquino in the convention.



Meanwhile, the project titled "DNA Analysis of African Swine Fever Virus (ASFV) in Different Provinces of Central Luzon" funded by the DA-BAR and led by former TBI Manager Mr. Jacob Anderson C. Sanchez, won the 2nd Best Poster Presentation during the convention.

PSAU Vice President for Research, Extension, and Training, Dr. Geraldine C. Sanchez — also one of the study leaders of the said project — received the award on behalf of Mr. Sanchez who is currently pursuing his doctorate in Japan.

IPTBM Director Prof. Walter L. Pacunana and Ms. Aquino also took their oaths as new PhilAAST members during the event, with the aim of further contributing to promoting and broadening the base of scientific advancement in the country.



# PSAU joins 36th DA-BAR anniversary celebration

Robby D. Lalu

PSAU team led by Dr. Anita G. David joined the National Agriculture and Fisheries Technology Exhibition (NAFTE) during the Department of Agriculture - Bureau of Agricultural Research (DA-BAR)'s 36th anniversary on August 15, 2023 at the Central Luzon State University (CLSU)



The PSAU brought and showcased its tamarind-based and other non-food technology products through its booth, which preparation was spearheaded by the Tamarind RDE Center led by Dir. Warlina M. Guzman, and the ICT-RD and IP-TBM office headed by Dir. Walter L. Pacunana.

This year's event highlights the bureau's key role in mobilizing partner R4D institutions in developing breakthrough technologies and products that benefit our most important stakeholders, our farmers and fishers. Similarly, during this commemoration, the bureau reaffirmed its commitment to supporting agricultural and fisheries research for development purposes.

*"Ngayong araw, ipinagdiriwang natin hindi lamang ang mga kalalakihan at kababaihan na bumubuo ng ating institusyon. Ngunit, pati na rin ang ating mga kaagapay sa larangan ng pananaliksik at pagpapaunlad sa sektor-*

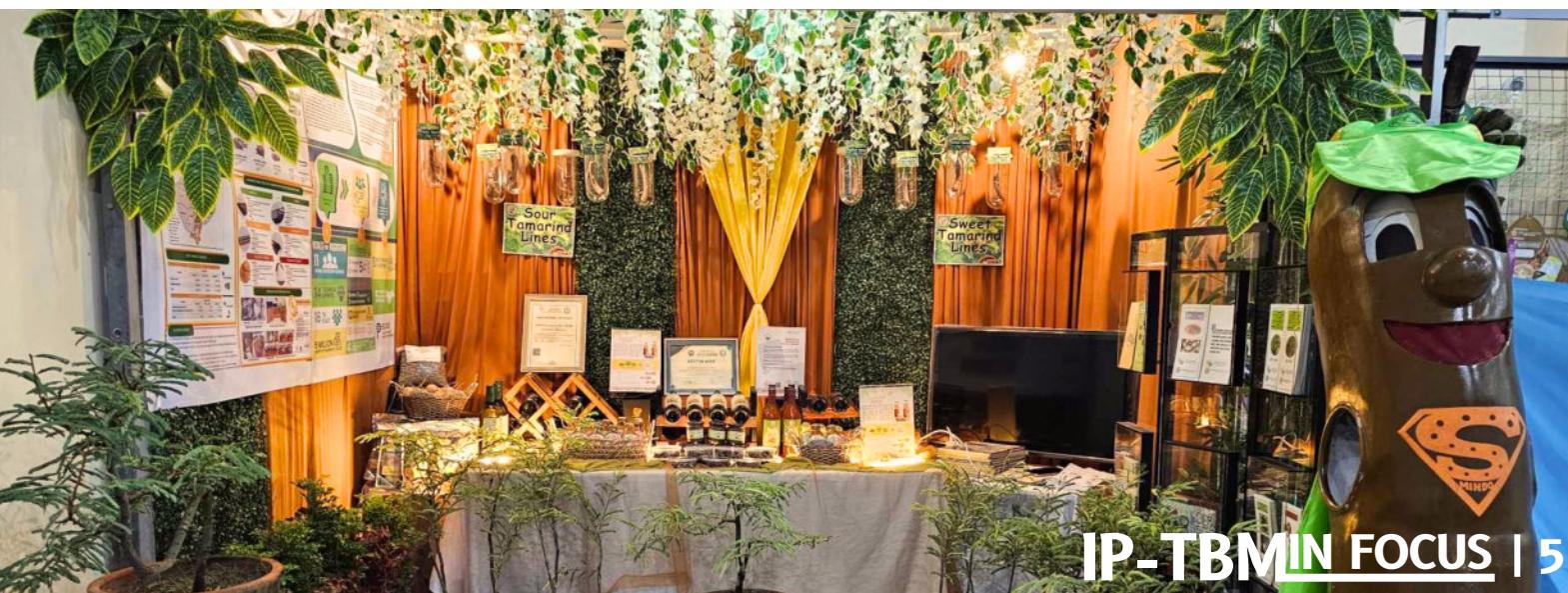
*ng agrikultura at pangisdaan, na patuloy na nag-aabot ng kamilang suporta. Higit sa lahat, ating ipinagdiriwang ang puno't dahilan ng ating mga pagsisikap – ang mga magsasaka at mangingisda,"* said DA-BAR director Junel B. Soriano during the opening of the event.

DA-BAR recognized the importance of partnerships and collaboration among national and local government agencies, state universities and colleges (SUC), and farmers and fisherfolk cooperatives and associations in order to achieve agricultural development and a successful economy. The collaboration and unity of these institutions paved the way for continuing improvement and progress in the agriculture and fisheries R4D sectors.



The event was joined by the different SUCs and research offices across the Philippines, and each participant was given a booth space to showcase and promote their products and banner commodities.

PSAU R&D Director Dr. Rogelio P. Carandang, Jr. and staff, Planning Office Director Dr. Rafael R. Rafael, and CASTech Dean Dr. Joanarch C. Briones were also in attendance to support the celebration.



# PSAU represents Region 3 in the 2023 SUC Fair

*Queency Eurranne G. Castillo*



Pampanga State Agricultural University proudly represents the whole region in the 2023 SUC Fair, on July 10, 2023, at SM City Iloilo.

Sibul TBI project development officer, Christian M. Mañalac, Jr. held forth in presenting the pitch deck of the PSAU's very own tamarind juice during the FIRES Technology Pitching.

Mañalac remarked, "I am honored to represent the PSAU and Region 3, and kudos to our fellow higher institutions for participating and joining us on a -

national stage, building a culture of innovation that sparks more ideas and encourage economic growth."

The fair was spearheaded by the Commission on Higher Education (CHED) in celebration of their 3rd National Higher Education Day and 29th Anniversary.

With the theme, "Navigating the Global Landscape Through Innovations, Cultural and Arts Preservation, and Higher Quality Education", CHED steered 82 SUCs across the country, and Mañalac was one of the 1,130 participants who forgathered and joined the fair.

This year's event of CHED was successfully hosted by the West Visayas State University, and made possible through the support of different SUCs across the country which partake and show enthusiasm in pursuit of shaping a global innovation.

## ICT-RD welcomes Pacunana as new director

*Robby D. Lalu*



On July 25, 2023, Dir. Walter L. Pacunana was designated as the new head of the Information, Communication, Technology, Research, and Development (ICT-RD).

The ICT-RD is the Research, Extension, and Training Office's (RET) information arm. The office provides an accurate agricultural information dissemination in news, production, and broadcasting. Likewise, it serves as a link between the technologies and communities by translating and enhancing information dissemination.

Pacunana has been in charge of two major RET offices: IP-TBM, and KMC. Now, the ICT-RD has been added to the offices he oversees, "It is a true -

privilege to be trusted with this position. The office has been carrying out its functions under the guidance of Mr. Clark Sanchez. I believe that the ICT-RD, like the other offices I manage, is guided by the same mission and goals," Pacunana said.

The ICT-RD is anticipated to collaborate closely with the Knowledge Management Center, as both offices share the same goal of improving knowledge exchange and cultivating promotional strategies.

The KMC and ICT-RD will perform a variety of benchmarking efforts in order to identify their objectives and plan activities that will aid in strengthening their information distribution.

The ICT-RD is currently working to disseminate farming facts in order to assist farmers in the region. Similarly, they make site visits among partnered farmers to assist them in marketing their products and commodities.

Pacunana and the offices he supervises are collaborating to boost the university's research arm as they strive for an innovative future and to uplift the community.

# IP unit receives 17 certificates of registration for IPs applied in 2022, 2023

Sherry Lyn D. Supan

The intellectual property (IP) unit of the IP-TBM Office received a total of 17 certificates of registration this year for the IPs they facilitated in the last quarter of 2022 and early months of 2023.

These intangible assets include three (3) utility models developed by inventors from the College of Hospitality, Entrepreneurship, and Food Sciences (CHEFS); College of Agriculture Systems and Technology (CASTech); College of Veterinary Medicine (CVM); and College of Engineering and Computer Studies (CoECS).



The logos of the CVM and the Sibul Technology Business Incubator (TBI) were also able to secure their respective trademark registrations through the assistance of the unit. Aside from these, 12 certificates of copyright registration for the annual newsletter of the IP-TBM, the modules developed by the Sibul TBI, and the institutional learning materials authored by selected university educators were also received within the quarter.

As of writing, the unit still awaits the release of the certificates of registration of its 16 utility models with already registered status on the World Intellectual Property Organization (WIPO) Publish.

## OMSC visits IP-TBM Office

Divine Reine S. Aquino

The Occidental Mindoro State College (OMSC) officials visited the Pampanga State Agricultural University on August 16, 2023 led by the DWEE and ICT-RD. The SUC officials also made a visitation in the IP-TBM office.

Sibul TBI Project Development Officer Ms. Maricel B. Ramos and IPR specialist Ms. Sherry Lyn D. Supan disclosed the functions of the office at the university, which focuses in fostering the importance of IP in the PSAU.

The activity was conducted to enhance efficiency and effectiveness in their respective offices and to demonstrate the value of collaboration and -

knowledge sharing as they looked for new growth opportunities specifically with their radio broadcasting and information technology.

The benchmarking marks the enthusiasm of OMSC in strengthening the information arm of their university, likewise, the function of their IP unit.



# Upskill incubatee-cassava growers and FCAs through cassava production training

*Maricel B. Ramos*



The Sibul Technology Business Incubator held an exploratory meeting with San Miguel Food, Inc (SMFI) Agribusiness Development Group on October 5, 2023 at 4RES Vegetable and Herbs Farm in Manibaug, Porac, Pampanga for possible partnership with the cassava growers under the incubation project for guaranteed market.

The officers and some members of Calzadung Bayu Farmers Agriculture Cooperative, Porac Farmers Agrarian Reform Beneficiaries Cooperative and Ilug Kamalig Agriculture Cooperative of Porac attended the meeting.

The cassava growers, particularly TBI's incubatee, Mr. Emmanuel Dela Cruz expressed that a guaranteed market for their produce, to be specific, will significantly benefit the mentioned cooperatives.

"Should this proposed partnership push through, it shall further promote the use of locally grown cassava as an industry raw material which in effect, will engender private investments in commercial medium-to-large-scale production, processing, and utilization" Mr. Dela Cruz said.

Sibul TBI Project Development Officers III, Ms. Maricel B. Ramos and Ms. Jess Nasarro introduced the incubation program and also the purpose of the meeting. After the briefing the other members of the cooperative, Mr. Art Misagal and Ms. Jop Fernandez of SMFI discussed the flagship program of SMFI for cassava.



On their next meeting, a training on cassava production, post-harvest, and logistic operations will be facilitated by SMFI. The set time frame for the next meeting will be on the second week of November.

## Sibul TBI conducts product development training on burong isda

*Nicole S. Cruz*

Sibul Technology Business Incubator carried out a successful product development training in one of TBI's partner-incubatees in Candaba, Pampanga on July 13, 2023

The training aims to provide knowledge on the proper bottling method as a means of preserving the burong isda or fermented fish for a longer period of time.



It was conducted in response to the previously conducted initial assessment on the burong isda production of our incubatee. This training was led by Sibul TBI project development officer, Maricel B. Ramos, along with the fisheries experts in the university. Led by the Department of Fisheries Science Faculty-researcher Mr. Ronnel Bryan R. Javier and Sibul TBI staff Nicole Marie S. Cruz.

# Sibul TBI, CHEFS conduct food products sensory evaluation

Robby D. Lalu

The Sibul Technology Business Incubator hosted a Food Products Sensory Evaluation on the products of the incubatees in the university's CHEFS building on September 01, 2023.



The TBI, alongside the College of Hospitality entrepreneurship and Food Sciences (CHEFS) conducted the sensory evaluation of the agri-food products of the four incubatees from their agricultural commodities. The evaluation aims to provide insights regarding the overall acceptability and consumer preference on their products and feedback on the areas for improvement.

Among the evaluated products are the mushroom chips, burung isda, onion powder, and banana chips.

The results of the evaluation were based on the intrinsic attributes of each product such as appearance, color, aroma, and taste and on the 9-point hedonic test which enabled assessors to tell the overall acceptability of the products

The sensory evaluation was conducted mainly to determine the products' general acceptability in terms of appearance, color, scent, texture, flavor, and taste. In addition, following the meal tests, each incubatee was requested to sit in front of the panelists for a Q&A session.



## Sibul TBI, DOST-PSTO hold a seminar on Good Manufacturing Practices (GMP)

Jesusa Flor Nasarro

Sibul TBI, in collaboration with DOST-PSTO, held a seminar on Good Manufacturing Practice (GMP) at the AVR of CHEFS building on September 26, 2023.

Provincial Director Mary Michelle Quiambao & Ms. Krizelle Ann Loria served as key resource speakers in the said seminar. They discussed the food safety measures and GMP guidelines that the participants can use to guard against any risks that can be catastrophic for food products such as food contamination.



Among the thirteen (13) incubatees under the incubation program, five of them are into food processing. Considering that the goal of technology business incubation is to launch profitable and sustainable business enterprises, part of the incubation pipeline are activities and requirements that shall comply to the mandated food safety regulatory standards and certifications including a training on Good Manufacturing Practices (GMP).



# BPI awards 700 banana seedlings to Sibul incubatee

Maricel B. Ramos

In September 2023, 700 pieces of banana seedlings, along with 50 tissue-cultured ornamental plant seedlings were distributed to incubatees from Rizal, Nueva Ecija, and Magalang, Pampanga.



cooperative in Nueva Ecija with devout residents living contentedly in a harmonious community under a capable leader.

Following Sibul TBI's request to the Bureau of Plant Industry (BPI) in August 2023, the Farmers Cooperative Associations (FCAs) received another batch of tissue-cultured banana planting materials, this time of the saba kind. The 700 pieces of seedlings, along with 50 tissue-cultured ornamental plant seedlings (*Philodendron Mayoi*) was awarded to TBI incubatee, Mr. Reynaldo R. Lapat.

Lapat is the owner of the Nueva Ecija Multi-Purpose Cooperative (NERCOVELIR), which was founded

In November 2022, Lapat was one of the incubatees from Rizal, Nueva Ecija, and Magalang Pampanga, who was awarded 450 tissue-culture lacatan banana seedlings by the BPI.

The request for saba banana (*Musa acuminata x balbisiana*) seedlings is meant to further develop their farms into a high-value banana orchard. This initiative of the TBI helps the incubatees in providing supply of their commodities in order to produce their products.

## Sibul TBI provides mushroom production training

Queency Eurranne G. Castillo

Castillejos, Zambales - The Sibul TBI headed to Del Facio Farm on August 15, 2023, to conduct an ocular site visit and to provide mushroom production training to Mrs. Marites Lambino, one of the Sibul incubatees.

The team were accompanied with the mushroom experts and project development assistants Mr. Jovin O. Soriano and Ms. Rosalie Tolidano from the Department of Agriculture CLIARC Research Station for Upland Development.

Soriano discussed the basic knowledge and techniques required in cultivating oyster mushrooms such as culture media and tissue culture preparation, how to plant, grow mushrooms in a bag, make grain spawn, fruiting bags, and the best practices to harvest mushrooms.

###



# Sibul TBI hails as the best presenter in the EE103 Program for the Academe

Walter L. Pacunana

Sibul TBI delegates headed by the Asst. TBI manager Ms. Marijoree A. Sapigao won as the best presenter in the Energy Entrepreneurship (EE) 103 Program for the Academe on August 16-18, 2023 at the E-library of Bulacan State University.

During the pitching activity, the Sibul Technology Business Incubators (TBI) delegates pulled off a compelling pitch which rendered an outstanding performance.

The program was spearheaded by the Department of Science and Technology (DOST) - Bulacan State University (BulSU) SULONG Central Luzon Project Team in partnership with the New Energy Nexus Philippines with the theme “TechnoRenew.”

The three-day innovative technopreneurship program started with a two-day bootcamp where each participant was required to complete the following modules: Problem Analysis, Generating Energy Startup Solutions, Customer Validation,



Market Segmentation, Lean Canvas, Impact Assessment, Startup Pitch, and Open Pitching Activity. The bootcamp was then followed by a pitch activity.

The event was also joined by other TBIs in Region 3, namely BulSU BARAS TBI, Encephalon TBI, BPSU's SIKAT TBI, BPSU SINAG TBI, TSU Aslagan TBI, NEUST I-Metal TBI, and DA RFO 3 GRAINS TBI.

###

## Sibul conducts skills training on onion powder processing

Maricel B. Ramos



The Sibul Technology Business Incubator, in partnership with the College of Hospitality, Entrepreneurship, and Food Sciences (CHEFS) of PSAU, organized a training on onion powder processing for the onion growers under the incubation program of Sibul TBI at the Food Processing Center of the University on July 25, 2023.

The chairman representative of San Roque Farmers' Association, Mr Rustico D. Bondoc with another-

member of the FCA, participated in the training to maximize the use of harvested onions of the farmers.

Mr. Bondoc is in great hopes that other FCAs will follow suit on pursuing onion products processing so as to see how versatile onions can be with an array of products that can be produced out of the commodity.

“Hindi lang pala ang fresh na sibuyas ang may gamit sa kusina, kundi marami palang produkto ang magagawa dito gaya ng onion powder na siyang pansamantala naming uunahin sa pagva-value adding,” Mr. Bondoc said.

The training is a value-adding activity for farmers' agricultural commodity, particularly, the reject ones and at the same time, a countermeasure to oversupply and food waste.

# IP SPOTLIGHT



Anne Gellie Dimabuyu, being the Assistant Manager of the Intellectual Property (IP) Unit of PSAU, stands as a pioneering force in the realm of innovation and IP, leaving an indelible mark on industries and communities alike. Her journey has been defined by her unwavering commitment to fostering creativity, protecting ideas, and championing the transformative power of IP and innovation extended beyond boardrooms. She actively engages with academic institutions, industry forums, and government bodies to advocate for policies that stimulate creativity and rights security. Her involvement in mentorship programs inspired emerging talents to embrace innovation as a driving force for societal progress. Her works serve as a beacon, guiding future generations to embrace creativity, advocate IP rights awareness, and contribute to a world where ideas continuously flourish and thrive.

## Ms. Anne Gellie T. Dimabuyu

*Asst. IP Manager, and College of Arts and Sciences IP Focal*

“

In today's dynamic landscape, where ideas can spark innovations and reshape industries, safeguarding intellectual property (IP) becomes paramount. Whether it's a groundbreaking invention, a unique design, or a creative work, IP rights provide the framework to protect, encourage, and reward the ingenuity that propels societies forward. By securing the rights over these intellectual masterpieces, we create an environment where bold ideas can flourish without fear of unauthorized use.

”

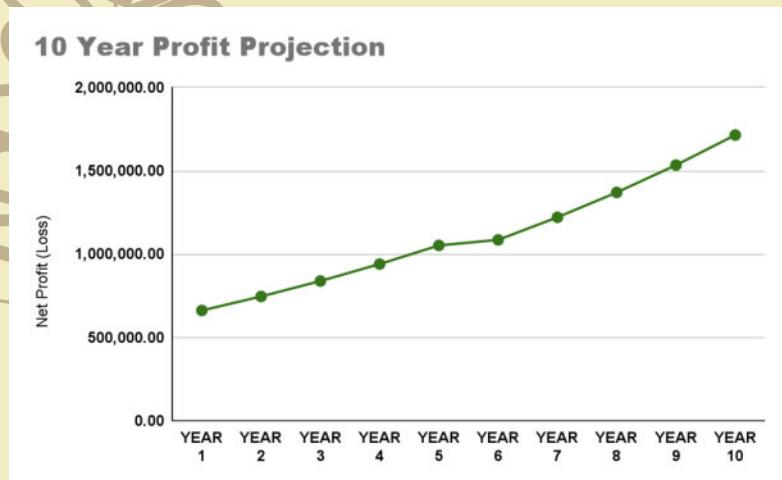


# Tamarind Ice Cream



The tamarind ice cream is made up of the primary commodity of the PSAU - the Aglibut Sweet. Its main ingredient is known to be good for the heart and digestive system. That's why this is a dream come true for ice cream lovers and health conscious people!

This ice cream is a guilt-free dessert that redefines indulgence with a healthy twist. The consumers can satisfy their dessert cravings up to their heart's content because it is much milkier and healthier compared to any ice cream offered in the market.



Breakeven Point  
**30,774.24₱**

Payback Period  
**0.28 yrs.**

Return on Investment  
**782.18%**

## Technology Corner



Ms. Divine Reine S. Aquino  
IP-Manager



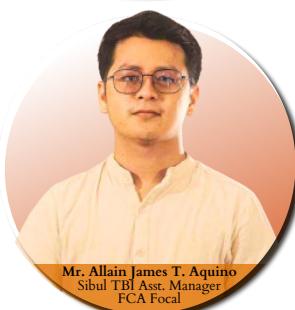
Walter L. Pacunana  
Director



Ms. ChonnieCholla R. David  
Sibul TBI Manager



Ms. Anne Gellie T. Dimabuyu  
Asst. IP Manager  
College of Arts and Sciences,  
Focal Person



Mr. Allain James T. Aquino  
Sibul TBI Asst. Manager  
FCA Focal



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Mr. James Allain T. Aquino  
Bamboo RDE, Focal Person



Ms. Warlina M. Guzman  
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**KMC**



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**Ms. Baby Annalyn  
Manalili**



**Ms. Rea Liza C.  
Peregrino**



**Ms. Obi Han  
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**Ms. Jesusa Flor  
P. Nasarro**



**Ms. Quency  
Eurreanne G.  
Castillo**



**Ms. Cris Angelie  
L. Layug**

## **ADMINISTRATIVE AND FINANCE**

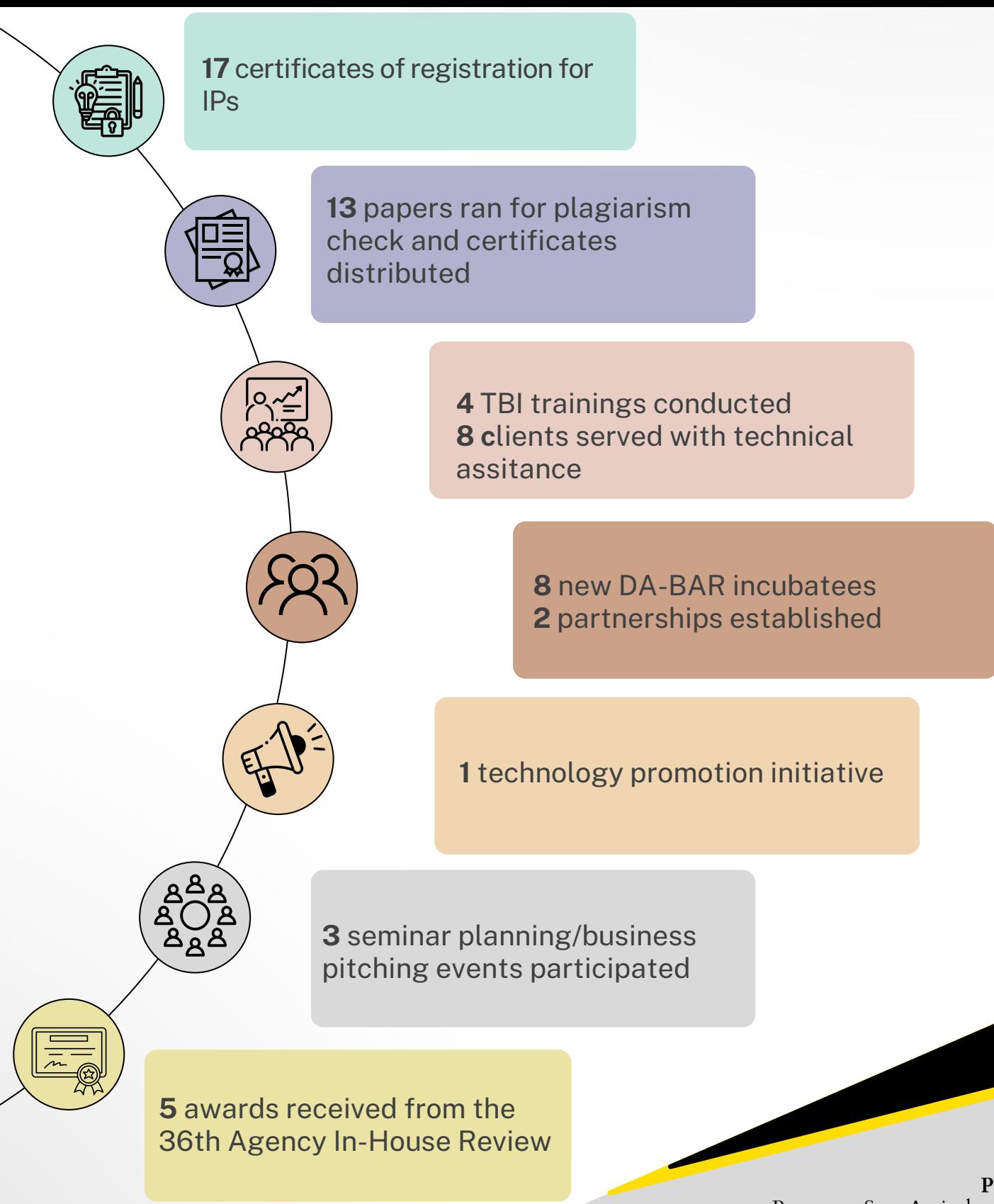


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# IP - TBM Quarter Three Accomplishments



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