

RDES ANNUAL REPORT 2021





Office of the VIce President for Research, Development and Extension Services



Message from the VP

RDES Milestones FY 2021

Research Highlights of Events &

- Activities IRCIEST V: Innovations in Engineering, 4 Science and Technology for the New Normal and Beyond BatStateU KIST Park-Embassy of India **Cooperation: Jumpstarting** Knowledge Economy and Investments in the New Normal BatStateU, University of Wolverhampton hold synchronized virtual research workshop for SEACAP Project International Virtual Symposium on Environmental and Green Chemistry for Sustainable Development Online Research Colloquia 2021 **Research Bootcamps 2021** BatStateU Research Centers Center for Technopreneurship and Innovation **Electronic Systems** 2 Research Center **GIS Applications Development Center** Labspace for Innovation Knowledgehoning and Application (LIKHA FabLab) **Digital Transformation Center** Material Testing & Calibration Center (MTCC)
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BANGHAY: Building A Network of Gender and Human Rights Advocates in the DYnamic New Normal



Office of the VIce President for Research, Development and Extension Services



MESSAGE FROM

Almost two years have passed, and the country is still fighting the battle to fully mitigate the COVID-19 pandemic, carrying on with the hope to end it at the soonest possible time. During these uncertain times, the Batangas State University Spartans gracefully fought alongside their fellow Filipinos and continue to do so up to this day.

Being the premier national university in the lead of spurring innovation in the country, BatStateU, through its R&D initiatives, has brought light to its neighboring communities and yonder regions in the darkest times. Despite the challenges brought about by the COVID-19 pandemic, BatStateU never stopped responding to the emerging needs and challenges of the community, society, and the industry through its R&D programs, activities, and projects. Through determination and passion for giving service to its neighboring community, the university went over and beyond the COVID-19 restrictions to extend its service to depressed and underserved communities through timely extension programs, activities, and projects.

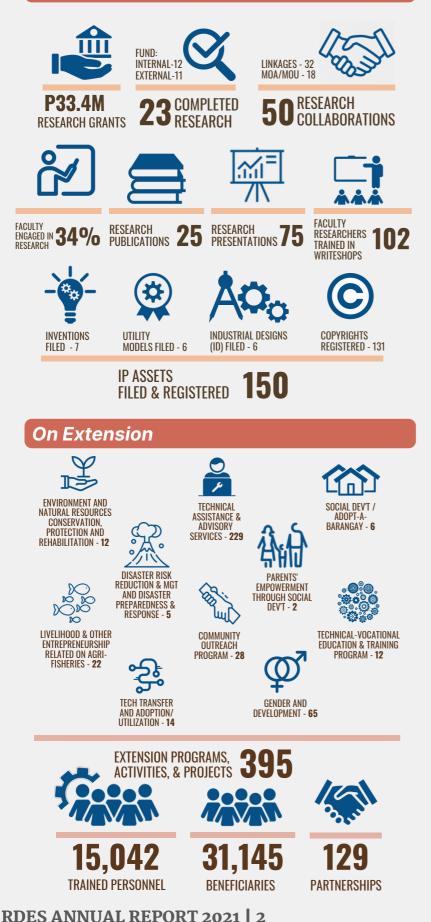
Still, all these efforts are rooted in our continuous pursuit to make the university a future-ready institution. We shall continue to go beyond the borders, to lead innovations and transform lives.



BatStateU through its R&D initiatives have brought light to its neighboring communities and yonder regions in the darkest times.

RDES MILESTONES FY 2021

On Research



RDES

Despite the COVID-19-related challenges that momentarily put a halt to the fundamental operations and processes of various sectors in the country, the university went above and beyond what was expected from a leading academic institution in the province. BatStateU's noteworthy outputs are somehow a response to its commitment to advancing sustainable development.

Particularly, in the area of research and development, a total of P33.4M worth of grants were bestowed to a number of competitive research. A sum of 23 institutionally- and externally-funded research projects were successfully completed. Meanwhile, a total of 50 collaborations have been secured through forged linkages and memoranda of understanding/ agreement.

In research management, 75 research studies have been presented on all levels while 25 were published in ISI-Scopus. Moreover, a total of 150 IP assets comprised of inventions, utility models, industrial designs, and copyrights were filed and registered.

In faculty engagement, a total of 102 faculty researchers were trained in writeshops while an average of 34% of the university's faculty members were engaged in research.

Meanwhile, aligned with the university's 12point Extension Agenda, a total of 395 programs, projects, and activities (PPAs) were conducted. In addition to the extension services initiatives, 15,042 personnel were trained while 31,145 recipients from various communities benefited from the PPAs conducted. The university also secured a total of 129 partners in the conduct of extension PPAs from various sectors.

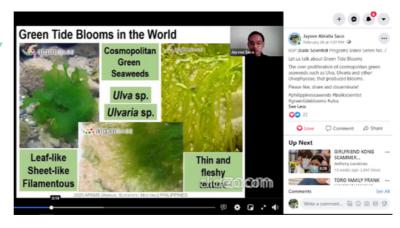
The aforementioned compendium of R&D outputs would not have been possible without the proactive involvement and contributions of the entire BatStateU community, from its zealous administrative and academic officials down to its ardent staff, faculty, and students.

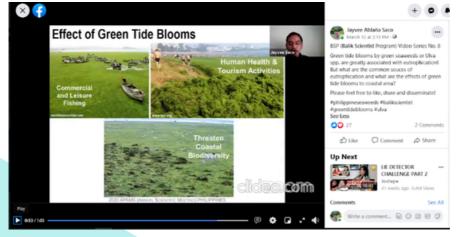
Through the continuous cultivation of R&D culture, the Office of the Research, Development, and Extension Services will always strive to achieve its goals of leading innovations to bring change to countless lives.

VERDE ISLAND PASSAGE CENTER FOR OCEANOGRAPHIC RESEARCH AND AQUATIC LIFE SCIENCES (VIP CORALS)

Balik Scientist Program: Dr. Jayvee A. Saco

VIP CORALS Center Head (BatStateU Lobo) Dr. Jayvee A. Saco spearheads a series of online video series on various topics concerning the studies on marine life and the ocean systems. This is part of his deliverables in the Balik Scientist Program by the Department of Science and Technology (DOST).





In his seventh video series, Dr. Saco presented an introduction about Green Tide Blooms on February 26.

Following this, he presented on March 12 another video discussing the relation of Green Tide Blooms with eutrophication and effect on the coastal ecosystem.

Backyard Tilapia Farming Project

The VIPCORALS continues to conduct the Backyard Tilapia Farming project, with the goal to respond to the immediate needs of the less fortunate communities in Batangas province as they face the challenges of food security and means of income brought about by the COVID-19 pandemic.



Delivery of fingerlings to selected beneficiaries. Subsequent monitoring was also done with the supervision of Dr. Azcuna and Dr. Corral of VIPCORALS.



Harvesting of the tilapia in BatStateU ARASOF-Nasugbu facility

Rising up from the Ashes:

Bangon Batangas Project continues to aid IDPs through S&T interventions a year after its launch

The BatStateU Extension Services Office continues to reach out to the communities affected by the Taal Volcano Eruption through its DOST-PCAARRD-funded project called "Bangon Batangas: S&Tbased intervention to Taal Volcano's Internally Displaced Population (IDP)."

In 2020, the Taal Volcano eruption caused more than a thousand families to be evacuated from their shelters. The evacuation also meant that the affected population, majority of which relied fisheries on aquaculture, agriculture and livestock livelihood, had to leave their source of income behind.



Ever since the Bangon Batangas project launched in 2020, during which time it began to assess the socioeconomic damages brought by the natural disaster and conduct a series of relief operations for the affected families, its goal in addressing the needs of more than 150,000 affected families across CALABARZON continues to this day through the implementation of S&T-based interventions and rehabilitation plans.

Training Workshop on Smoked Fish and Distribution of Smokehouses



To sustain the S&T-based livelihood interventions provided by the university to the IDPs of Taal through the project titled "Bangon Batangas," the proponents provided a training on Tinapang Bangus/Tilapia production.



In partnership with DOST-PCAARRD, the university distributed smokehouses and training kits for Taal IDPs located at Balete, Talisay, Laurel, Agoncillo and Ibaan, Batangas.

The project continues to explore other product development ideas that will possibly generate income to provide new knowledge on how to preserve and market the products and to ensure that the beneficiaries would engage in livelihood as adopters.

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Product Development and Capacity Building Trainings at Laurel, Batangas

As part of the intitiative for the BANGON BATANGAS project of the university, a group of BatStateU graduate students taking up Masteral in Business Administration partnered with Laurel Municipal Police Station and brgy. Buso-Buso to conduct an integrated program for a one-day training in dishwashing liquid making and a webinar for basic bookkeeping, marketing strategies, and costing at Brgy. Buso-Buso, Laurel, Batangas.

Both the training and webinar aimed to instill and encourage entrepreneurial concepts. Following the strict health protocols due to COVID 19 hazards,



the students facilitated the training and seminar through online modalities. During the hands-on training, the students gave the trainees the materials needed to produce the dishwashing liquid such as chemicals, PET bottles, and stickers. Participants will have the opportunity to produce household items, market them, and profit for their families and communities.

Meanwhile, in the webinar on basic bookkeeping, marketing strategies, and costing, the graduate students provided lecturers who will teach them how to market and manage the business. There were also training materials such as videos wherein the audience can play back, booklets, and a Q&A portion in the program with experts.

A Webinar-Training in Food Gardens: A Promising Approach to Improving Household Food Security and Conserving the Environment

A webinar training dubbed as "Food Gardens: A Promising Approach to Improving Household Food Security and Conserving the Environment" was conducted by faculty extensionists from BatStateU Rosario on October 19 via Google Meet and FB Live.

CIT Faculty Mr. Mark Anthony C. Lat served as the speaker for the said training, wherein he discussed food production, how to make Food Gardens, and its benefits to homemakers and the community. An open forum followed after the presentation wherein the participants engaged in a Q&A with the speaker.



Organic Fertilizer Production and Utilization Training for People's Organization in Lobo, Batangas



In celebration of the National Science and Technology Week, the two-day training on Organic Fertilizer Production and Utilization for Selected People Organization in Lobo, Batangas was conducted by faculty extensionists from the College of Agriculture and Forestry on November 26-27. Participants of the training were the members of JAVELIPA (Jaybanga Vegetables and Livestock Producers Association), a people's organization from Brgy. Jaybanga.

The training highlighted on the utilization and conversion of crop by-products into organic concoctions as fertilizers for the crops and aimed to promote proper waste management via organic fertilizer production and demonstrate the feasibility of growing vegetables using organic fertilizers as the main source of nutrients for the plants. The activity is an extension project delivery of useful agri-for-technologies for committed agriculture and forestry farmers.



This section highlights the significant R&D events and activities conducted by the university in the year 2021 through the Research, Development, and Extension Services Office and its subordinate offices with the aim to sustain the culture of R&D among the BatStateU community.



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