



**VSU EXTENSION PROJECT
ANNUAL ACCOMPLISHMENT REPORT**

CY 2022

I. Basic Information

1. Program/Project Title: Enhancing Capacity in Socio-Economic Research through the Visayas Socio-Economic Research and Data Analytics Center (ViSERDAC)

Program/Project Leader: Name: Moises Neil V. Serino
Designation: Professor III / Project Leader
Institution: Department of Economics, Visayas State University
Address: Visca, Baybay City, Leyte
Contact Number (s): 0918 4438 048
Email Address: moisesneil.serino@vsu.edu.ph

2. Project Component (s):
Staff Involved: Wendy C. Enerlan and Reyvin N. Sabanal
Designation: Science Research Assistant
3. Implementing Unit: CME-ViSERDAC
4. Cooperating Agencies: DOST-PCAARRD and RAISE 8
January 1, 2020 – December 31, 2022
5. Program/Project Sites: Department of Economics, College of Management and Economics, Visayas State University, Visca, Baybay City, Leyte
6. Duration:
 - a. Date Started: January 1, 2020
 - b. Expected date of completion: December 31, 2022
7. Financial report for the year under review
 - a. Total approved budget: 80,000.00
 - b. Actual released budget: 75,000.00
 - c. External support or counterpart funds from cooperating agencies:
 - d. Actual expenditures: 75,000.00

II. Technical Report (not more than 25 pages including the tables and charts)

A. Executive Summary (1 to 2 pages only)

The Visayas Socio-Economic Research and Data Analytics Center (ViSERDAC) is one of the three newly established centers in the Philippines funded by the Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCAARRD) from September 2017 to December 2019. The center is geared towards the establishment of the center specializing in socio-economics and allied fields. Its mission is to strengthen the research capability of the institution, faculty and staff in the field of socio-economics. It aims (1) to establish a venue for excellence in socioeconomic R&D, (2) to provide training, seminars and coaching on socioeconomic analysis, (3) to provide



socioeconomic technical assistance to the other R&D sectors, and (4) to provide assistance to PCAARRD on capacity building-related initiatives.

In 2022, the project conducted a total of 17 trainings, workshops, seminars, and lectures. The participants served numbered 716, with 182 of them being faculty, students, and researchers trained, and 543 being participants from webinars and lectures. The majority of the trainings were rated as Outstanding by the participants. The team also provided consultation and data analysis services to 5 post-graduate studies and 3 research projects. Additionally, the center is currently conducting an impact assessment study on Integrated Coastal Resource Management in Southeastern Camotes Sea and Selected Municipalities of Leyte, which has supported a graduate student's thesis study.

The project has established several linkages and partnerships, including with the Economy and Environment Group of the Philippines, which hosted the Regional Forum on the Economy and Environment in collaboration with the university. The project has also partnered with Project Smarter Philippines through Data Analytics, Research and Development, Training, and Adoption (SPARTA) together with ViSERDAC and VSU, which endorsed the project as one of its institutional partners to recommend scholars to enroll in short courses on data science and analytics. The Department of Statistics and the center hosted 2 statistics student trainees who honed their skills in data analytics.

A database containing 22 datasets has been uploaded to the center's website (www.viserdac.edu.ph). In addition, the project has employed various promotional strategies, including the creation of a Facebook page (www.facebook.com/viserdac) and flyers.

The main problem encountered during the project implementation was related to virtual trainings, as some participants experienced internet connection issues, causing them to miss some discussions during the training. To address this, lecture presentations and video recordings were provided to participants to enable them to catch up on the training lectures.

B. Rationale

Socio-economic research is an integral part of the development process. It focuses on how the society is changing with respect to policies, social processes, environment and economic development among others. It is concerned with the people's welfare as the country develops. In general, socio-economic research complements output in natural sciences especially those that focuses on physical commodities. According to PCAARRD, socio-economic research is concerned with households or the people who are involve in the production process, who consume goods and services and how they are impacted by the policies affecting economic processes.

The importance of socio-economic research is highlighted in the university's research and development agenda. The Visayas State University' (VSU) research and development (R and D) responsibilities follow a multitier system. Its national R and D responsibilities are in rootcrops, abaca and coconut. Its regional responsibilities include rice, corn, sorghum, and other cereals, vegetables, livestock, forage and pasture, soil and water resources, applied community sociology and socio-economics. VSU is one of the leading agricultural universities in the Philippines that is mandated to conduct research aiming to shed light on socio-economic issues. With the implementation of the government's Agriculture and Fisheries Modernization Act (AFMA), VSU has been mandated to continue building up its research capability and further expand R and D pursuits to include environmental ecosystems, biotechnology, agro-industry and information technologies.

VSU strategically hosts in its campus several national agricultural research centers and institutes such as, the Philippine Root Crop Research and Training Center (PhilRootcrops), the National Abaca Research Center (NARC), and the National Coconut Research Center (NCRC). The PhilRootcrops is



the lead agency for national rootcrop research, development, and extension. The NARC's abaca germplasm collection, on the other hand, is the largest in the country the VSU-based NCRC is also active in coconut research and currently has a wide variety of macapuno products for commercial production. New centers established in VSU include the Regional Climate Change Research Center and the Renewable Energy Research Center. This shows that most of the facility development of the university is mostly concentrated on physical based commodities and no facility development has been devoted to the field of socio-economics. However, this current gap is not unique to VSU. Initial data from PCAARRD shows that in the past 5 years, there have been 23 facilities development projects all concentrated to commodity-based products. Hence, this current situation both in the local and national level presents an opportunity to strengthen socio-economic research by establishing a facility called socio-economic research center and analytical laboratory.

The establishment of socio-economic research center and analytical laboratory is very important because it will strengthen the research capability of the institution, faculty and staff in the field of socio-economics. Researchers in the region will have access to analytical tools that will enhance the conduct of socio-economic research. The Department of Economics of the Visayas State University will house the socio-economic research center and analytical laboratory in the Visayas. The Department of Economics is the lead unit in the university conducting socio-economic research. The department aims to conduct relevant research in the field of economics and allied fields in the Visayas region. In line with this goal, the establishment of the socio-economic research center will contribute to the mission of the department in attaining high quality manpower resources and scientific knowledge in economics needed for sustained growth and development of agriculture and allied fields.

In the past years, demand for socio-economic research is increasing. This is manifested by the increasing need of institutions within the region to assess the impact of technology and service interventions in the community. In addition, the socio-economic researches conducted in the university include socio-economic base-lining, marketing and value chain, technology adoption studies, impact assessment studies and policy analysis. In terms of enhancing research capabilities, the university also spearheaded trainings on economic research methods, socio-economic analysis, vulnerability assessment, basic spatial trainings and trainings on the use of relevant statistical software for economic research. In reality, most of the software used in the socio-economic analysis were not genuine given its huge investment cost and limited institutional funding. Hence, the establishment of the socio-economic research center equipped with licensed and updated software will address the issue of inadequate research tools and equipment experienced by researchers. The center will also cater to the needs of socio-economic research in the region. It will serve as hub for those who aim to conduct socio-economic research but is constrained with analytical tool.

Research and development are part of the primary mission of the university though generating knowledge and technologies aiming to contribute to the national goals of innovation, economic development, social development, and environmental sustainability. For years now, VSU has generated high quality research in the fields of crop and livestock production, crop protection, plant breeding, postharvest technologies, food processing and biotechnology. However, more has to be done in the field of socio-economics so that the changes in people's welfare involve in any economic processes will be highlighted. The establishment of the socio-economic research center will contribute and strengthen the university's thrust of conducting quality research in socio-economics.



C. Logical Framework

Narrative Summary	Objectively Verifiable Indicator	Means of Verification	Important Assumptions
Goal/Impact <ul style="list-style-type: none"> Increased employment opportunities Sustainability of center's operations Ethical use of copyrighted software's 	Number of researchers implementing socio-economic research among those trained faculty Number of supported clients Use of software	Tracer study Approved service request Computer logs	Continued support for socio-economics RDE
Purpose/ Outcome <ul style="list-style-type: none"> Increased awareness, confidence, knowledge and skills on socio-economic analysis Strengthen the presence of the center to different consortia Consistent and standardized delivery of trainings and center operations Use of genuine software's 	Number of researches using appropriate and updated methods in socio-economics Number of focal persons Number of programmed trainings	Publication Meetings with focal person List of programmed trainings	Increasing need for socio-economic research
Output <ul style="list-style-type: none"> 17 trainings, workshops and lectures conducted 182 faculty, students and researchers trained 534 participants on lectures and webinars 408 researchers trained 	Number of trainings and participants	Attendance sheet, annual report	Increasing need for socio-economic research



<ul style="list-style-type: none"> 8 researchers who availed consultation services 1 on-going CRM impact assessment project conducted Linkage with 3 agencies: (1) EEG (2) SPARTA Ph (3) Department of Statistics Appointed 13 experts across the Visayas Region SUC's 1 database generated 22 datasets uploaded Updated website contents Development of center's promotional video 2 licenses still in the process of procurement 	<p>Pool of socio-economic experts</p> <p>Access to online database</p>	<p>Confirmation of experts</p> <p>Data can be accessed at viserdac.vsu.edu.ph</p>	
<p>Activities</p> <ul style="list-style-type: none"> Provision of trainings and workshops Provision of technical assistance and consultation services 	<p>Inputs</p> <ul style="list-style-type: none"> Resource Persons Pool of Experts Supplies and Materials Training Kits and Materials Training Budget from original project funds and augmentation from SERD PCAARRD SERDAC Personnel Pool of Experts 		<p>Preconditions</p> <p>Limited funds allocated for the socio-economics RDE</p> <p>The increase in socio-economics research is not at par with the rising research in other fields</p>



<ul style="list-style-type: none"> Appointment of pool of experts from different SUC's in the Visayas Region Coordination with Consortia and socio-economic experts Procurement of software for qualitative analysis 	<ul style="list-style-type: none"> SERDAC Personnel Datasets from different projects Training materials (ppt, pdf, xls files) of trainings conducted with corresponding datasets University Server University Internet Connectivity Supplies and Materials 		
---	--	--	--

D. Methodologies Employed

Programmed and Requested Trainings

The capacity building activities such as the provision of trainings and workshops, consultancy services and services on analysis of socio-economic data are designed to impart knowledge on economic tools for applied socio-economic research and orient participants in a number of statistical packages for econometric analysis. In determining the trainings to be conducted that are at par with what socio-economic researchers needed, a training needs assessment (TNA) was done. The survey was implemented by interviewing representatives from the different departments and research centers in Visayas State University (VSU). Each unit was given two (2) questionnaires, one is answered by the unit head and the other by one faculty or staff. A total of 51 respondents were interviewed.

Results reveal that the urgent need of the respondents is the training on Quantitative Methods for Impact Assessment (84.3%). Second, respondents need the training on Data analysis using Open-Source Software R/RStudio (80.4%). This is followed by training on Socio-economic research methods using Stata and Data Management using SPSS (72.5%). Programming of trainings to be provided for the year is benchmarked from these results. Training participants come from VSU, other SUCs and agencies in the Visayas Region.

Table 1. Specific trainings needed by respondents

		n	n %
Specific Trainings	Quantitative Methods for Impact Assessment	43	84.3%
	Socio-economic research methods in Stata	37	72.5%
	Data management using SPSS	37	72.5%
	Data analysis using open-source software R	41	80.4%
	Data Management/Analysis using Correlation and Regression	1	2.0%
	Data Management for Tracer Studies Using SPSS	1	2.0%
	Other statistical software	1	2.0%



Data Collection Methods and Instrument Preparation	1	2.0%
Total	51	100.0%

**multiple response*

Aside from programmed trainings, the project also accepts on-request trainings from different SUCs and agencies. The training requests are evaluated depending on the alignment of training topic to the center's expertise, schedule and availability of resource persons.

Data Collection

During the implementation of trainings, pre- and post- assessment questionnaires are given to respondents to determine the change in the level of awareness, confidence, knowledge and skills after the training. Participant's evaluation towards the over-all training-workshop is also assessed at the end of the training to let the team know different recommendations/ suggestions for further improvement of training implementation. Profile of each participant are obtained for data purposes. Data generated can be used for an impact evaluation studies in the future.

Services Provided

Researchers have varied needs and concerns related to socio-economics. To accommodate these varying concerns, technical assistance in the conduct of R&D projects of agencies as well as data analysis are also provided to socio-economic researchers in the Visayas.

A pool of experts was established to create a database of socio-economic experts within the region to handle various needs of the clients. The pool of experts is essential in linking respondents and finding the best fit experts for issues and concerns related to socio-economics

Linkages

To encourage collaboration, this project establishes the regional focal for socio-economics in Region 6, 7 and 8. The regional focal person were essential in coordination, communication and proper channeling of the concerns of the clients.

E. Results/Accomplishments

Training Services Provided

The center was able to provide a total of seventeen (17) trainings, workshops and seminars. Six (6) of which are requested; In-Service Training for Teachers on Writing Action Research Proposal with fifty five (55) participants (Figure 1) and Webinar on Classroom Based Action Research on April 22, 2022 with sixteen (16) participants both from DepED in Ormoc City; Basic Video Editing (Figure 2) with nine (9) participants from ACIAR-VSU Researchers; Training Workshop on Selective Quantitative Methods for Impact Evaluation (Figure 3) with twenty nine (29) participants from DA Region 8; Training Workshop on Evidence Based and Data-Driven Impact Assessment of Extension Project (Figure 4) with twenty six (26) faculty and research staff from the Iloilo State College of Fisheries (ISCOF), Iloilo City and Statistical Analysis Training (Figure 5) with sixteen (16) students from the Department of Tourism and Hospitality Management in VSU.

Four (4) lecture seminar (Figure 6) on General Aspects of Public Administration, Basics of Financial Methods, Basics of Cost-Benefit Analysis, and Public Goods and a Webinar on Waste Management and Circular Economy (Figure 7) were sponsored by the center with a visiting professor, Dr. Michal Struk from Masaryk University in Czech Republic as the lecturer. A webinar "Roadshow on Data

Science and Analytics” (Figure 8) was also conducted during the convocation program of the center’s anniversary. This was participated by Faculty, researchers, and students in the Visayas Region. The DOST-PCAARRD also sponsored a “Training-Workshop on Strengthening Policy Analysis in the Regions” (Figure 9) with twenty-seven (27) faculty researchers from VICARP member agencies as participants.

ViSERDAC in collaboration with VSU co-sponsored the Visayas Regional Forum on the Economy and Environment with the theme “Challenges and Opportunities in Transitioning to a Resilient and Sustainable Future” (Figure 10) on February 11, 2022. This was an organized conference by EEG. ViSERDAC’s project staffs served as host, facilitators and moderator during the forum.

Lastly, ViSERDAC conducted several trainings and seminar co-sponsored the Project RAISE. The “Production and Marketing Management Training” were attended by several Baybay City Farmers Association members (Figure 11) and “Training Workshop on Financial Analysis and Investment Appraisal of Technology” attended faculty and researchers from Eastern Visayas (Figure 12) and a “Seminar on Identifying Appropriate Value-Chain Approaches for Small Island Agriculture: Citrus Fruits in Homonhon Island” attended by VSU Students at RDE Hall (Figure 13).

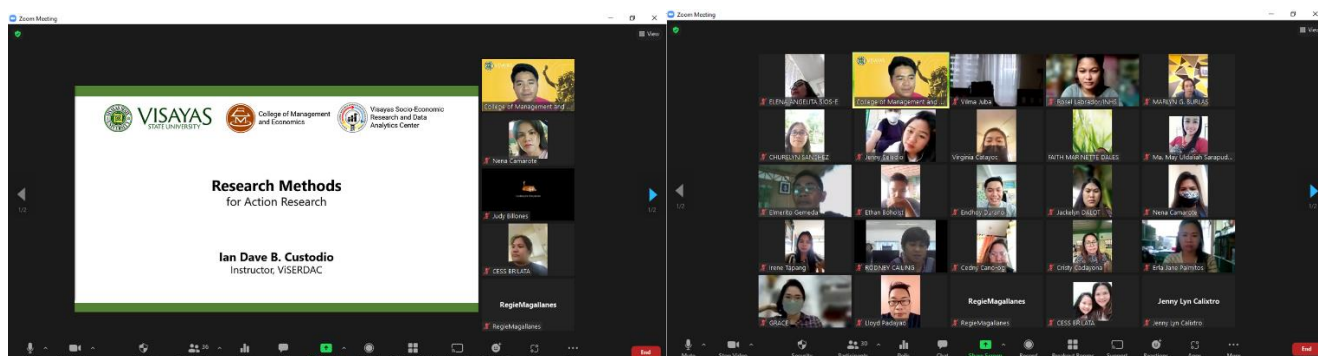


Figure 1. In-Service Training for Teachers on Writing Action Research Proposal on February 4, 2022



Figure 2. Basic Video Editing on March 8-9, 2022



Figure 3. Training Workshop on Selective Quantitative Methods for Impact Evaluation on June 7-8, 2022



Figure 4. Training Workshop on Evidence Based and Data-Driven Impact Assessment of Extension Project on September 5-6, 2022



Figure 5. Statistical Analysis Training on September 22-23, 2022



Figure 6. Lecture seminar on General Aspects of Public Administration, Basics of Financial Methods, Basics of Cost-Benefit Analysis, and Public Goods on March 29-31 and April 5, 2022

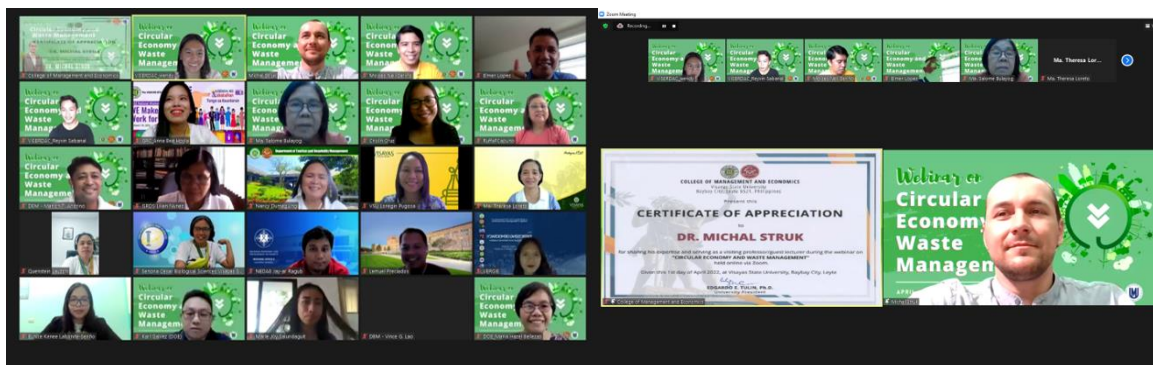


Figure 7. Webinar on Waste Management and Circular on April 1, 2022

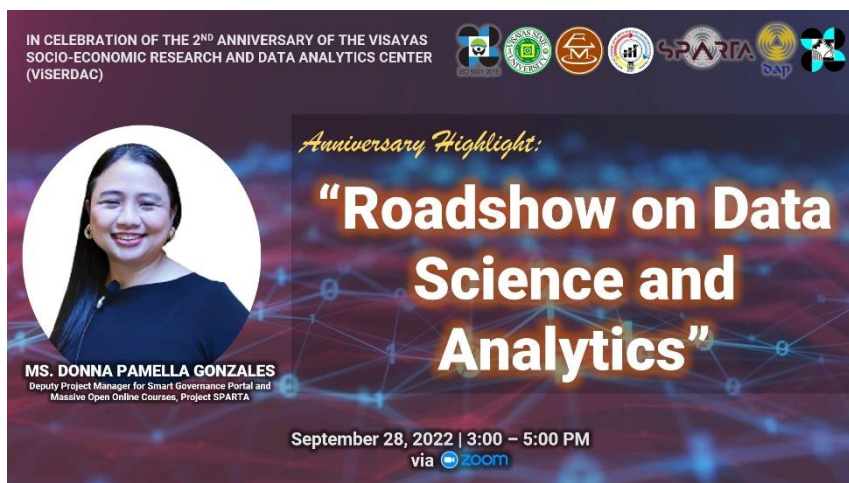


Figure 8. Roadshow on Data Science and Analytics on September 28, 2022

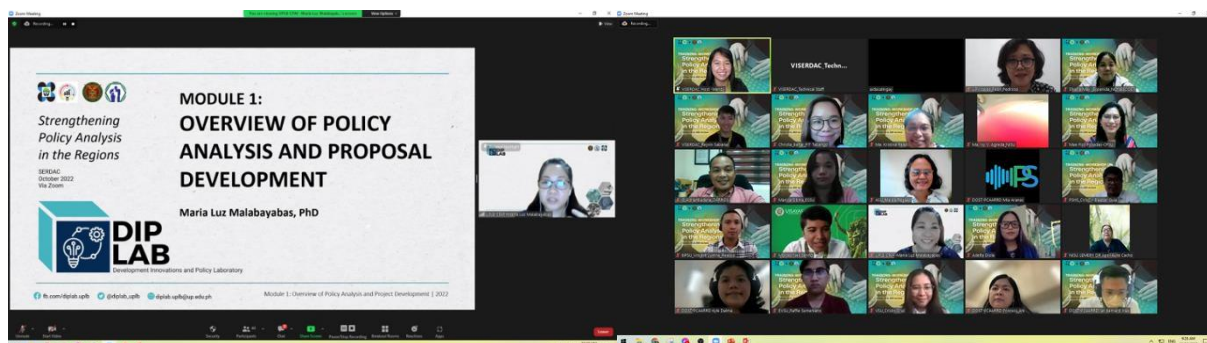


Figure 9. Training-Workshop on Strengthening Policy Analysis in the Regions on October 10-14, 2022

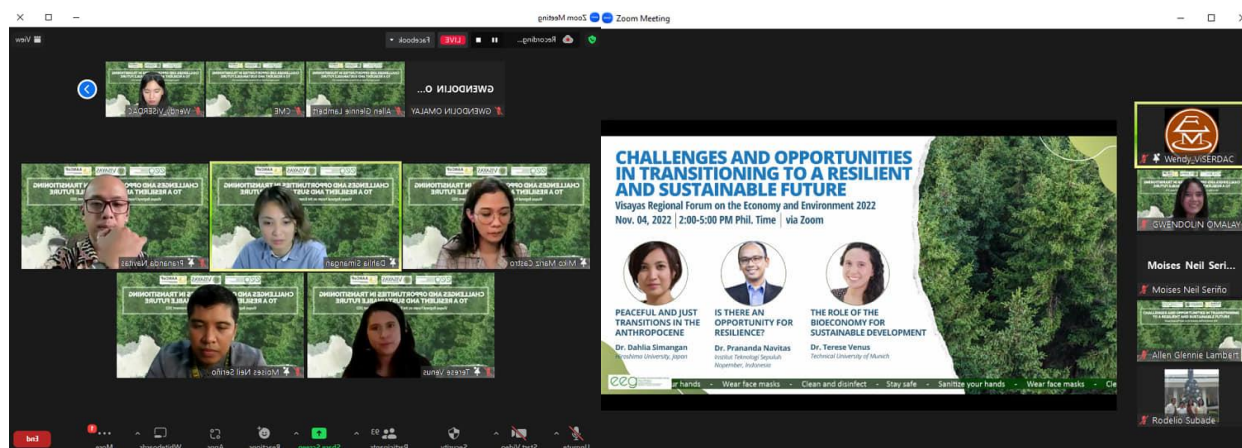


Figure 10. Visayas Regional Forum on the Economy and Environment on February 12, 2022



Figure 11. Production and Marketing Management Training on December 16, 2022



Figure 12. Training Workshop on Financial Analysis and Investment Appraisal of Technology on December 27-29, 2022



Figure 13. Seminar on Identifying Appropriate Value-Chain Approaches for Small Island Agriculture: Citrus Fruits in Homonhon Island

Linkages

In 2022, the linkages created include the Economy and Environment Group of the Philippines, Project Smarter Philippines through Data Analytics, Research and Development, Training, and Adoption (SPARTA) and Department of Statistics in VSU.

The nature of involvement with the Economy and Environment Group of the Philippines is through the partnership in hosting the Visayas Regional Forum on the Economy and Environment with the theme “Challenges and Opportunities in Transitioning to a Resilient and Sustainable Future” on February 11, 2022 (Figure 10). With the project SPARTA, ViSERDAC in collaboration with VSU become one of the institutional partners that endorsed scholars the opportunity to enroll to their main or micro-specialization pathways for data science and analytics. The partnership and linkage continue to bring capacity development opportunity across various communities and advocating the utilization of DSA in respective organizations envisioning a Smarter Philippines.

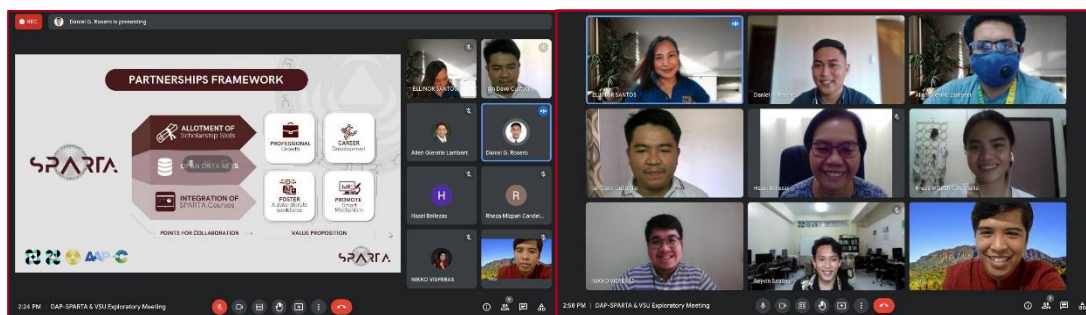


Figure 11. Online meeting with the Project SPARTA PH

Through the collaboration with the Department of Statistics and ViSERDAC, an on-the-job training (OJT) program was organized for statistics students (Figure 11). As a result of this program, the students gained hands-on experience in data analysis and conducting surveys.



Figure 11. BS Statistics students during their final day of internship

Awards and Recognitions

Figure 12 shows that the university, in collaboration with the center, received recognition from SPARTA PH. This recognition was for being the 4th institutional partner with the greatest number of graduates in the 3rd Recognition Ceremony of Project Smarter Philippines through Data Analytics, Research and Development, Training, and Adoption (SPARTA) held on November 29, 2022, via Zoom. The event was themed "Celebrating Future Data Experts."



Figure 12. Certificate of recognition as one of the institutional partners with the greatest number of graduates

Outcome/Impact of Services to the Clients/Community

Social Impact

As mentioned in the previous sections, the team conducts its pre- and post-assessment tests before and after the conduct of the training to determine the change in the level of awareness, confidence, knowledge and skills. The data is further analyzed to determine is statistically significant. Taking a sample of all the trainings conducted, these two (2) graphs show the mean levels of awareness, confidence, knowledge and skills before and after the Impact Assessment Trainings in VSU. Results reveal that after the training, participants have generally higher awareness, confidence, knowledge and skills in performing impact evaluation than before the training commenced (Figure 13).

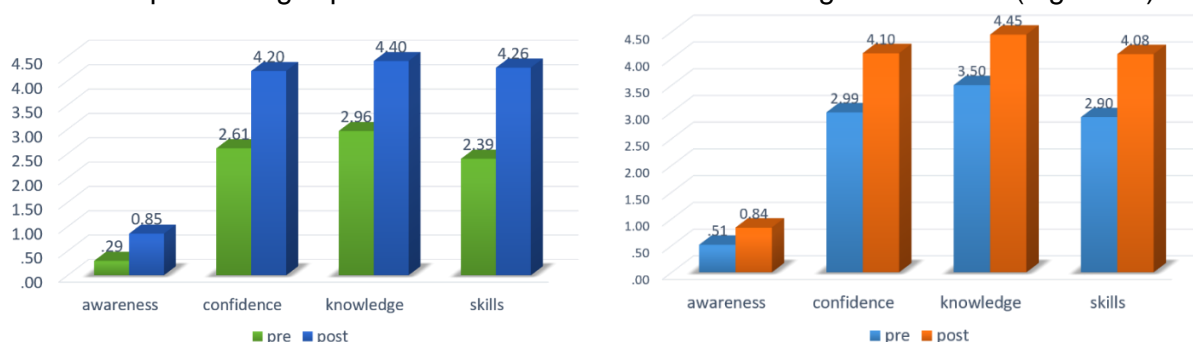


Figure 13. Pre- and Post-training assessment test results



Economic Impact

A person trained with the project reported that they were able to publish their works and they qualified for incentives to be given for published works. The trainings conducted were able to fine tune the analysis used and facilitated the publication of their research works in socio-economics.

The project was also able to assist PHD students in their dissertation work. One was able to finish her PHD. This is contributed greatly to their employment tenure.

Furthermore, it has also increased income of our pool of experts. Since ViSERDAC is regularly conducting trainings, experts are given honorarium for sharing their expertise as resource persons.

Environmental Impact

The project advocates the use of smartphone / tablets for paperless surveys. This would help reduce the use of raw materials for paper-based surveys (trees). It also increases environmental valuation through the conduct of environmental economics related trainings.

With the pandemic, all trainings are conducted online which reduces the use of voluminous papers for pre and post-tests, evaluation and other printing needs.

6P's	Expected outputs	Percent of Accomplishment
People and services:	<ul style="list-style-type: none"> ✓ 180 SE researchers capacitated ✓ ViSERDAC focal persons capacitated 	<ul style="list-style-type: none"> ✓ (398%) 716 faculties, researchers and students trained ✓ 3 focal persons designated ✓ 8 data analyses and consultations rendered. ✓ Part of 8 research projects and 2 were published
Patents:	<ul style="list-style-type: none"> ✓ Copyright for training modules and e-learning module 	<ul style="list-style-type: none"> ✓ Training modules available
People and services:	<ul style="list-style-type: none"> ✓ 180 non-SE researchers capacitated ✓ ViSERDAC focal persons capacitated 	<ul style="list-style-type: none"> ✓ (398%) 716 faculties, researchers and students trained ✓ 3 focal persons designated ✓ 8 data analyses and consultations rendered. ✓ Part of 8 research projects and 2 were published
Places and Partnerships:	<ul style="list-style-type: none"> ✓ 3 consortia capacitated on SERDAC services ✓ 1 consultant networks (1 per center) 	<ul style="list-style-type: none"> ✓ (100%) Conduct of training and workshops participated by the 3 consortia in the Visayas Region (Region 6, 7 and 8) ✓ (100%) 1 pool of experts in the Visayas Region; 13 experts ✓ Other collaborative activities/ partnerships with the following institutions: ✓ DOST-PCIEERD ✓ Don Mariano Marcos Memorial State University ✓ DAP-SPARTA Project



		<ul style="list-style-type: none"> ✓ Universitas Negeri Malang, Indonesia ✓ EEPSEA ✓ Caraga State University ✓ DA-RFO8 SAAD
Policy	<ul style="list-style-type: none"> ✓ Three (3) regional platforms on policy analysis and advocacy 	<ul style="list-style-type: none"> ✓ Coordination with consortia and socio-economic experts. ✓ Assisted PCAARRD in the conduct of Training Workshop on Strengthening Policy Analysis in the Regions on October 10-14, 2022
Publications		<ul style="list-style-type: none"> ✓ 2 Research studies published (1 international and 1 local journal) ✓ 1 official journal publication of the center (ReSERDS) ✓ 32 technical papers published by previous VISERDAC training participants after attending the capacity-building activities conducted by VISERDAC

F. Problems Met and Recommendations

Conduct of training, workshops, and seminars:

- Some of the participants and training coordinators faced slow internet connections and power outages.
- Since most training workshops are conducted online, most participants are preoccupied with other duties while the workshop is in progress, causing them to be less attentive and participatory during the event.

G. Plans and Target for the next year (if continuing program/projects)