

**MAJOR PRACTICE IN UNIVERSITY EXTENSION OFFICE, RESEARCH,  
EXTENSION AND TRAINING, CENTRAL LUZON STATE UNIVERSITY,  
SCIENCE CITY OF MUÑOZ, NUEVA ECIIJA**

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An Undergraduate Major Practice Report Submitted to the Faculty of the Department  
of Agricultural Extension Education and Rural Development, College of  
Agriculture, Central Luzon State University, Science City of  
Muñoz, Nueva Ecija, Philippines in Partial Fulfillment  
of the Requirements for the Degree of

**BACHELOR OF SCIENCE IN AGRICULTURE  
(Agricultural Extension Education)**

**September 2019**

## ACCEPTANCE SHEET

This undergraduate major practice report entitled "MAJOR PRACTICE IN UNIVERSITY EXTENSION OFFICE, RESEARCH, EXTENSION AND TRAINING, CENTRAL LUZON STATE UNIVERSITY, SCIENCE CITY OF MUÑOZ, NUEVA ECIJA," prepared and submitted by ROHN JERICHO L. DAYAP in partial fulfillment of the requirements for the degree of BACHELOR OF SCIENCE IN AGRICULTURE (AGRICULTURAL EXTENSION EDUCATION), is hereby accepted.

  
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## **BIOGRAPHICAL SKETCH**

The author was born on June 10, 1999 at General Hospital, San Jose City, Nueva Ecija. He is the second child and only son among the three children of Mr. Gerry A. Dayap and Mrs. Zosima L. Dayap.

He completed his primary education at St. John's Academy in 2011 and his secondary education at Central Luzon State University (CLSU), Laboratory High School in Pinili in 2015.

To fulfil his dream to have a baccalaureate degree, he continued his study at CLSU, where he enrolled in and pursued the degree Bachelor of Science in Agriculture major in Agricultural Extension Education.

As a requirement for graduation, he conducted his major practice in University Extension Office, Research, Extension, and Training, Central Luzon State University, Science City of Muñoz, Nueva Ecija.

## ACKNOWLEDGEMENT

Foremost, the author would like to thank God, for giving his life, wisdom, endless blessings, guidance and undying love and for giving his strength in facing every challenge in his entire college life and providing all his needs, which made him survive all the trials, difficulties and challenges in life.

The simple work would not be on its state of completion without the effort, critiques, golden advices and valuable comments and suggestions of many people, so the author says, "Thank you so much to everyone who made this manuscript possible and worthwhile".

To his beloved parents, Mr. Gerry A. Dayap and Mrs. Zosima L. Dayap, to his two sisters for giving unconditional love, moral and financial support, for their sacrifices, care, prayers and understanding.

To his very supportive adviser, Mr. Johnah Jefferson S. Mercado, for his patience and wisdom starting from the preparation of manuscript.

To the Dean of College of Agriculture, Dr. Ernesto A. Martin and all the faculty members of the College of Agriculture, to Dr. Mari Joy M. Buenavista, Department Chair, DAEERD; Mr. Nemesio V. Torres, Department Major Practice Coordinator, Mr. Joseph R. Mendoza, College Major Practice Coordinator, for the guidance they provide.

To his loving friends, Indira Josephine Tira, Joanalyn L. Lata, Mc Leo M. Martinez, Galeli E. Lapira, and Mar T. Dolores, for all the fun through the ups and downs. To the whole Cell group family, for the prayers and encouragements and to his classmates, for the memorable experiences and strategies that he learned.

To his Agriculture Dorm Family, Sir James Espiritu, Dorm Manager, to all his

dorm mates, thanks for all the happiness, support, happy moments they shared.

Lastly, to all the person he failed to mention, this piece of work is humbly dedicated.

To all of them, he wants to say "thank you and may God bless you".

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## ABSTRACT

**DAYAP, ROHN JERICHO L.**, Department of Agricultural Extension Education and Rural Development, College of Agriculture, Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippine, September 2019. **MAJOR PRACTICE IN UNIVERSITY EXTENSION OFFICE, RESEARCH, EXTENSION AND TRAINING, CENTRAL LUZON STATE UNIVERSITY, SCIENCE CITY OF MUÑOZ, NUEVA ECIA**

Adviser: **JOHNAH JEFFERSON S. MERCADO, MAB**

The major practice aimed to practice and develop desirable work attitude and values in extension management, to develop knowledge and skills in agricultural extension methods, techniques, and strategies by engaging in extension office activities, and to increase in knowledge in various fields of agricultural extension, extension approaches and methods.

The major practice was carried out at University Extension Office, Research, Extension and Training (RET), Central Luzon State University, Science City of Muñoz, Nueva Ecija. The major practice started on June 14, 2019 to July 26, 2019 with a total of 240 hours.

The major practice student was assigned in Mango Techno-demo Learning Site. Aside from mango, different varieties of fruit trees and vegetable crops were planted such as pomelo, mango and eggplant. This crops were planted in order to maximize the usage of the area.

The major practice activities and outputs were presented based on the involvement on the agricultural extension modalities such as Capability Building, Techno-demo, Monitoring, and Evaluating. In capability building, *lakbay aral* was

conducted. The major practice student learned how to take care the natural resources and how to communicate with Indigenous People. In techno demonstration, there are establishment and maintenance of Mango techno-demo learning site, under this are clearing/cleaning/weeding on the Mango Techno-demo Site to avoid competition in terms of nutrients water and space. Cleaning includes the removal of dried mango branches and leaves in the field. Pest management have three practices were done namely spraying of pesticide, bagging of Mango Fruit, and installation of insect traps to protect the fruit, to maintain the quality of the fruit, and lessen the damage caused by fruit flies. Nutrient and water management are practiced to maintain the growth and development of the crops. The mango seedling production includes the preparation of soil media and potting, planting of seeds and seedlings, and nutrient management.

After the one-month of major practice at the University Extension Office, the major practice student learned how to deal and communicate with his supervisor, Extension Office personnel, clients, and co-major practice students; learned to appreciate the importance of agricultural extension, to enable farmers adopt the technology that can improve their living conditions by lowering the cost of production and increase farm yield and income; learned to facilitate, monitor, and evaluate trainings such as *lakhuy-aral*. Documentation, monitoring and evaluation are needed to improve future training activities, and gained knowledge and skills in managing techno-demo projects specifically mango orchard production. During the major practice at Techno-demo Learning Site, major practice student met problems such as lack of personal protective equipment specifically in the application of insecticides like spray mask, gloves, goggles, jacket/long sleeve, pants, and boots, and long pouring of rain during the conduct of the

major practice. Based on the problems met, the major practice student made the following recommendations: Purchase of personal protective equipment is needed for the protection against the adverse effect of chemicals, and establishment of working shed is needed to be able to do task even during rainy season such as potting.

## LITERATURE CITED

- Al-Dulumi, J. M. S. (2011). The impact of the use of field crops newsletters of agricultural extension education development in Iraq as the contemporary global trends master's thesis, institute of research and study Arabic, Egypt.
- Agriculture and Fisheries Modernization Act of 1997, Department of Agriculture, Quezon City, Philippines.
- Belasubramanian, V. (2016). What is the meaning of Agricultural Extension? Retrieved on March 22, 2018 from <https://www.quora.com/What-is-the-meaning-of-agricultural-extension>.
- Battad, T. T., Coloma, P. S., & Paderes, A. S. (2003). Agricultural Extension. Makati City: Grandwater Publications.
- Belay K., & Ahebaw, D. (2004). Challenges Facing Agricultural Extension Agents: A Case Study from South-western Ethiopia. *In African Development Review*, 16(1):139- 168
- Blum, M. (2015). What Challenges does Agriculture Extension and Advisory Services face today? Paper presented in the EUFRAS International conference held on January 16, 2015 in Berlin, Germany.
- Cardenas, V. R. (2015). Emerging Context of Rural Advisory Services in Asia-Pacific. Paper presented during the National Consultation Workshop on the Development of National Extension Agenda and Programs 2017-2022 held at Rural Development Education Center, Agricultural Training Institute, Quezon City, Philippines.
- Chaunan, J. (2010). Agricultural Extension Education. R.B.S. College, Bichpuri
- Central Luzon State University (CLSU). 2013. Catalog. Central Luzon State University, Science City of Muñoz, Nueva Ecija, Philippines.
- Chowdhury, A. H., Odame, H. H., & Lecuwis, C. (2014). Transforming the Roles of a Public Extension Agency to Strengthen Innovation: Lessons from the National Agricultural Education and Extension, 20(1):7-25.
- Christoplos, L. (2010). Mobilizing the potential of rural and agricultural extension. FAO, Rome, Italy.
- College of Agricultural Sciences and Natural Resources. (2005). Agricultural and Extension Education, Retrieved on May 21, 2018 from Google Scholar. <https://ag.tennessee.edu/casnr/Pages/agexteduc.aspx>.

- Glidermacher, P. & Klerkx, L. (2012). The Role of Innovation Brokers in Agricultural Innovation Systems. *In* World Bank (ed.) *Agricultural Innovation Systems: An Investment Sourcebook*. The World Bank, Washington DC, 221-230.
- Jafry, T. & Sulaiman, R. V. (2013). Gender Inequality and Agricultural Extension. *The Journal of Agricultural Extension Education*, 19(5): 433-446.
- Kibikwa, P., Wals A. E. J., & Nassuna-Musoke, M.G. (2009). Competence Challenges of Demand-led Agricultural Research and Extension in Uganda. *The Journal of Agricultural Extension and Education*, 20(1): 7-25.
- Klerkx, L., Schut, M., Leeuwis, C., & Kilelu, C. (2012). Advances in knowledge Brokering in the Agricultural Sector: Towards Innovation System Facilitation. *IDS Bulletin*, 43(5), 53-60.
- Leeuwis, C. & Aarts, N. (2011). Rethinking Communication in Innovation Processes: Creating Space for Change in Complex Systems. *The Journal of Agricultural Education and Extension*, 17(1): 21-36.
- Mccapra, K., (2015). Importance, scope and objectives of extension education
- Oonk, L. & Bitzer, V. (2016). Quality of content in agricultural extension. Special series on Agricultural Advisory Services.
- Phyburn, R. & Woodhill, J. (2014). *Dynamics of Rural Innovation: A primer for Emerging professionals*. LM Publishers, Arnhem.
- Pye-Smith, C. (2012). *Agricultural Extension- A time for Change- Linking Knowledge to Policy and action foe food and livelihoods*. Technical Centre for Agricultural and Rural Cooperation. Wageningen, the Netherlands.
- Qamar, M. K. (2005). *Modernizing Agricultural Extension systems: a practical guide for policy-makers of developing countries*. FAO, Rome, Italy.
- Saplaco, R. L. (2000). *Manual in Agricultural Extension*. College of Education, Central Luzon State University, Munoz, Nueva Ecija, Philippines.
- W. K. Kellogg Foundation. (2004). Using logic models to bring together planning, evaluation and action: logic model development guide. Retrieved on February 3, 2018 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3266837/>.
- Yuan Zhou, M. F. (2012). Achievements and Challenges in Agricultural Extension in India. *Global Journal of Emerging Market Economies*, vol4, 3: pp. 319-346.