

BARChronicle

The official newsletter of the Department of Agriculture-Bureau of Agricultural Research

MOA signing seals edible landscaping project in Brgy. Batasan Hills, QC

In line with the Department of Agriculture's (DA) Plant, Plant, Plant program, a virtual ceremonial signing of Memorandum of Agreement (MOA) on edible landscaping (EL) project in Brgy. Batasan Hills, Quezon City was held on 13 July 2021 via Facebook live.

The MOA signing formalizes the agreement between the University of the Philippines Los Baños (UPLB) EL Team through UPLB Foundation, Inc., and its partners and stakeholders from the Quezon City Local Government and its Food Security Task Force, Brgy. Batasan Hills, Star Homeowners Association, DA-BAR, and DA-Agricultural Training Institute (ATI).

"For the last 10 years, the UPLB EL team has been working with our partner agencies and organizations for the public and private sector in the promotion of EL technology as a viable method of addressing food security," said Dr. Sanchez.

"The onslaught of the pandemic has called for the ramping up of our efforts as a response to the needs of the present situation. The team has been working on additional projects which are in line with DA's Plant,



SCREEN GRABBED FROM UPLB EL FACEBOOK PAGE

Plant, Plant program," he added.

Funded by DA-Bureau of Agricultural Research (BAR), the project aimed to establish EL gardens among low- and middle-income households in urban and peri-urban communities toward food self-sufficiency.

"*Sa proyektong ito, kayo po ay matutong mag-edible landscaping. Titiyakin po namin na kayo ay aming tutulungan at bibigyan ng assistance sa project na ito,*" said DA-BAR director Mamaril as he extended his gratitude towards Star Homeowners Association in their participation in the project.

Signing the MOA were Hon. Maria Josefina "Joy" G. Belmonte, Quezon City mayor; Dr. Vivencio R. Mamaril, DA-BAR director; Dr. Rosana P. Mula, DA-ATI deputy director; Dr. Enrico P. Supangco, UPLB Foundation, Inc. executive director; Dr. Fernando C. Sanchez, Jr., UPLB EL project leader; Hon. John M. Abad, Brgy. Batasan Hills captain; and Teodoro B. Ochavillo, Star Homeowners Association president.

Meanwhile, Abad and Ochavillo expressed their heartfelt gratitude and commitment to the project. ###
(Rena S. Hermoso)

Mamaril underscores wider outscaling of farming system

In his visit to a project site in Candelaria, Quezon, Department of Agriculture-Bureau of Agricultural Research (DA-BAR) director Dr. Vivencio R. Mamaril underscored the wider outscaling of farming system by encouraging farmer beneficiaries to continue the roll-over scheme even beyond the set protocol; hence, benefitting more farmers.

As part of the regular activities of the bureau to ensure that the set objectives of the projects are met, director Mamaril and technical staff Juan Nikolas Paller monitored the project titled, "Outscaling of Coconut-based Farming System (Coconut + Soybean + Vegetables + Native Chicken)" on 19 July 2021.

The project implemented by ► 4

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SUCs showcase role in technology development for agriculture food systems

Advancing Innovations and Science-based Farm Production Systems:
The Role of State Universities and Colleges in Modernizing, Industrializing, and Professionalizing Philippine Agriculture Food Systems

6 July 2021 (Tuesday)
 2:00 PM to 4:00 PM

Online Symposium

Register through this link:
https://bit.ly/2021UNFSS_Registration

Dr. William D. Dar
 Secretary, Department of Agriculture (DA)

Dr. Tirso A. Ronquillo
 President, Philippine Association of State Universities and Colleges
 Speaker

Dr. Edgardo E. Tulin
 President, State Universities and Colleges – Association of Colleges of Agriculture in the Philippines
 Speaker

Live via Facebook: @DABAROfficial

The online symposium on advancing innovations and science-based farm production systems, in partnership with the country's SUCs, is part of the United Nation Food Systems series of activities organized by the Department of Agriculture (DA), together with the international and national offices, for June-July 2021. SCREENSHOT: JALAXAMANA

The Department of Agriculture (DA), through its Agriculture Dialogue and Information Network Groups Program Office and the Bureau of Agricultural Research (BAR), spearheaded an online symposium about the role of state universities and colleges (SUCs) in developing technologies for a

sustainable, equitable, and resilient food systems on 6 July 2021 via video conferencing.

Titled as “Advancing Innovations and Science-based Farm Production Systems: The Role of State Universities and Colleges in Modernizing, Industrializing, and Professionalizing Philippine Agriculture Food Systems,” the webinar provided an avenue for possible collaborations between SUCs, DA, and private sector for the betterment of the agriculture and fisheries sector.

“The SUCs in the country have been partners of the government and the private sector in developing available tools in various segments and in the value-chain such as crop varieties, animal breeds, farm inputs, and other technologies—including value-adding food products,” DA Policy Research Service director Noel Padre said.

As one of the major partners of DA in its pursuit through its strategies under the Food Security Framework, Dr. Tirso Ronquillo of the Philippine Association of State

Universities and Colleges and Dr. Edgardo Tulin of the SUC-Association of Colleges of Agriculture in the Philippines were tasked to present a list of salient contributions that were aligned to the agri-fishery sector’s modernization, industrialization, and professionalization.

It was emphasized that food system technologies and innovations will be instrumental to achieving the sustainable development goals.

“To realize our goals, we must apply a whole of nation approach wherein a diversity of stakeholders will be involved— including voices that are seldom heard, and provide an important opportunity for participants to debate, collaborate, and take action towards a better future,” Agriculture Secretary William Dar emphasized.

During his ways forward and closing message, director Mamaril shared that he was happy with the participation of the attendees and that the online symposium is one of the fora that the bureau had really enjoyed. ### (**Jireh Alodia R. Laxamana**)

BAR CHRONICLE highlights the bureau’s activities as the country’s national coordinating agency for agriculture and fishery R4D, and provides updates on NaRDSAF-member institutions.

For comments and suggestions, contact us through tel. nos.: (+632) 8461 2900 or (+632) 8461 2800 local nos. 3121, 2143, and 2105 or email us at kmsid@bar.gov.ph. To subscribe, please send a formal request to our email.

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Rice-duck farming offers promising result in open-source pump irrigated areas

A 2013 study conducted by the Department of Agriculture (DA)-Northern Cagayan Experiment Station showed that the integration of duck in rice farming can increase yield to 36 percent and reduce golden apple snail (GAS) up to 95 percent, thus, helping the control of weeds in irrigated rice.

Today, the DA-Cagayan Valley Research Center (DA-CVRC) promotes the same technology to Open-Source Pump Irrigated Areas in Ilagan and Tumauni, Isabela through a two-year project funded by the DA-Bureau of Agricultural Research (BAR) on outscaling of rice-based farming system (rice+duck).

Through a webinar organized by DA-BAR on 30 July 2021, Gemma G. Bagunu, senior science research specialist and project leader from DA-CVRC, discussed the rice-duck farming system they introduced to 150 farmer cooperators that resulted to 121.9 percent of return on investment compared to 67.24 percent in rice production alone (2020-2021 dry season).

According to Bagunu, ducks are good “weed manager” and eat GAS which means less labor in weed management and less pesticide and insecticide application.

Rice production practices

Farmer-cooperators planted NSIC Rc480 at the rate of 40 kilogram per hectare with a spacing of 20 x 20 centimeter to allow enough space for the ducks to walk. Other practices include two to three healthy seedling per hill, plowing (once) and three times harrowing of field at one week interval.

Rice crop manager is used as basis in nutrient management and five centimeter depth of irrigation water is maintained to control weeds. These practices are under the nine key checks recommendation in PalayCheck System. The rice paddy is enclosed in a poultry net to prevent the ducks from escaping while grazing.

Release of ducks and its care and maintenance

In a 1,000 square meter, 20 heads (200 heads per hectare) at two to three months old muscovy ducklings were released in the field after 30 days from transplanting until the heading stage of the rice. Ducklings were grazed in rice paddies in the morning and evening.

At flowering stage, ducks were removed and provided with house and pond. Ducks were fed with

fermented feed formulation using azolla, golden apple snail mixed with rice bran and other leguminous crops/forages to supplement their feeding requirements.

Arcadio Garcilian, one of the farmer-cooperators from Lapogan, Tumauni, experienced the benefit of integrating duck in his rice farming. Arcadio revealed that the integration of duck has significantly reduced GAS and weeds in his farm. From five heads of duck as starter in the project, he has now grown the flock into 150 heads. In terms of yield, he recorded a higher yield of 5.4 tons per hectare the NSICRc480 for 2020-2021 dry season with duck integration.

With the growing number of ducks in the community, the researchers also introduced value adding activities such as ready to eat duck viands, selling of ducklings and meat, and its eggs.

(Jonabelle Infante and Gemma Bagunu/DA-Cagayan Valley)

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Rice-duck farming set-up PHOTO COURTESY OF GBAGUNU/DA-CVRC

Genetic improvement, biosecurity measures among top research priorities for livestock, poultry

Genetic improvement of animals, and enhancement of biosecurity measures against economically important diseases were among the top research priorities identified during the National Consultation Workshop for Livestock and Poultry on 28-29 June 2021.

Profiling and evaluation of feeds and feedstuff; standardization of organic and non-organic livestock production, post-production, and facilities; and market study and value chain analysis of animal products and by-products were also in the list.

The Department of Agriculture (DA)-Bureau of Agricultural Research spearheaded the event to update and harmonize the bureau's livestock and poultry research for development (R4D) agenda and programs of the department.

Key DA offices participated in the said activity including the Office of the Undersecretary for Livestock, National Livestock Program (NLP), Bureau of Animal Industry, Philippine Carabao Center, National Dairy Authority, and National Meat Inspection Service.

The consultation workshop paved the way to identify and validate research gaps that need to be immediately addressed by the participating agencies.

The activity was also used as an avenue to present the roster of adaptive technologies, tools, and practices generated under the livestock and poultry R4D programs of the different participating DA agencies.

The outputs of the consultation workshop will be used as baseline for prioritization for 2022-2023 for endorsement to the DA-NLP and DA-Philippine Council for Agriculture and Fisheries. ### (Jhon Marvin R. Surio)

◀1...Mamaril underscores wider

DA-CALABARZON aimed to help coconut farmers of Barangays San Isidro, Kinatihan I, Pahinga Sur and Sta. Catalina Norte in Candelaria, Quezon to ensure sustainable production and availability of food commodities through utilization of mature and sustainable technologies for coconut-based and high value crops with integration of native chicken.

With 46 farmer-cooperators to date, each farmer-cooperator has at least 5,000 square meters coconut area as demo or experimental area wherein around 1,600 hot pepper seedlings and 1,700 okra plants were grown. Also, around 2,500 square meters were devoted to soybean production.

Each farmer-cooperator was given a module of native chicken consisting of 10 pullets and two roosters. From the produced, same number will be returned by the cooperator which will then be transferred to farmer adopters. The project is now in the process of transferring the native chicken modules to adopters.

Farmer cooperators of the said project as well as with the "Outscaling of Rice-based Farming System (Rice-watermelon-vegetables)" project in Sariaya, Quezon visited the Lowland Vegetables Technology demonstration area at the DA-Quezon Agricultural Research and Experiment Station (QARES).

Dubbed as "Lowland Vegetable Derby," director Mamaril also had



DA-BAR director Dr. Vivencio R. Mamaril (center) talks with a farmer-cooperator and a recipient of a module of native chicken.

the chance to see the new and common varieties of *pinakbet* vegetables showcased by partner seed companies during the said event.

Director Mamaril also visited the DA-Quezon Agricultural Research and Experiment Station wherein various food and non-food products from cacao, coconut, coffee, *sapinit*, and other indigenous fruits are promoted in the Technology

Commercialization Center. These are among the funded projects of the bureau through its National Technology Commercialization Program.

During the said visits and monitoring activities, director Mamaril emphasized farm-level application for the generated technologies and the need to ensure sustainability of the project. ### (Ma. Eloisa H. Aquino)

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