

ABOUT US!

AGRI-BASED TECHNOLOGY BUSINESS INCUBATOR/ INNOVATION CENTER (BSU ATBI/IC)



THE ATBI SERVICES

// Services provided and facilities/equipment available for the incubatees

Services Offered:

- Pre-incubation/ Pre-acceleration Services
- Access to market support and matching
- Access to physical facilities
- Access to technical and entrepreneurial training
- Access to financial support and matching
- Access to outreach and affiliate services

Facilities/equipment available for incubatees :

- Incubation Farms/Modular Kitchens
- Market Training Space
- Training Hall/Meeting Rooms
- Talents Co-creation Internet Lab
- Bio-Organic Waste Production Facility



**EXTENSION ACTIVITY
ACCOMPLISHMENT REPORT**

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BASIC INFORMATION:

1. Title of Extension Activity: **Bee Education Services (BeES)
Basic and Advance Beekeeping
Training (Batch 6)**
2. Date and Venue: August 3-5, 2022

Cordillera Regional Apiculture Center -
Training Center, College of Forestry,
Benguet State University, La Trinidad,
Benguet
3. Target Participants: 44 individuals interested to become
beekeepers; 5 Lecturers/facilitators
4. Estimate Cost: Note: no food and snacks were served to
the participants.
5. Fund Source:
6. Proponents/Implementers: Cordillera Regional Apiculture Center
(CRAC)

Office of Extension Services (OES)

College of Forestry (CF)
7. Cooperating Agency/ies/Unit/s:

REPORT:

1. Rationale:

The role of bees in agriculture, maintaining biodiversity, sustainable livelihoods and food security has been widely demonstrated. Bee products provide healthy, high-nutrient food, safe medicines and raw material for industries (Agera, 2011).

It is one of the sectors that could provide jobs and increase income of farming communities. However, the potential of beekeeping is often not much exploited in agriculture and forestry activities, since the benefits of bees and beekeeping are obscure to stakeholders.

Beekeeping as it is a landless and underrated based farming, provides economic, nutritional and medicinal, and ecological benefits. Bees are responsible for pollinating more than 80% of all plants that have flowers including the vast majority of agricultural crops. Without bees, several foods consumed by humans would become extinct (<https://beekeepingcoach.com/what-is-the-importance-of-beekeeping>).

Beekeeping is dependent on the forest. It is a rich food source for bees, as it provides nectar and pollen from a variety of plant species. As a result, during the honey flow season, experienced beekeepers bring their bees to forests. Because of their role as pollinators, bees are beneficial to forests. When certain trees or plants are pollinated, fruit or seeds are produced, allowing the trees or plant species and the forest ecosystem to continue to grow.

Cordillera region has an environment that favors beekeeping due to sufficient sources of forages to bees. Complimentary to agriculture, agroforestry and forestry; beekeeping can improve crop yields through enhancing pollination process. Since most communities in the region are engaged in agriculture as their main source of livelihood, the incorporation of the beekeeping is essential.

Beekeeping, basically, is the process of maintaining bee colonies or hives so that honey or other products can be harvested from them. Maintaining beehives do not require a huge amount of labor. It does not even require a wide and fertile land. However, colonies or beehives



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require management and good stewardship, which require knowledge, skills and time. Consequently, a hands-on basic beekeeping training is necessary to equip wannabe beekeepers and other enthusiasts for successful apiary management.

The Queen honey bee plays a vital role in the hive because she is the only female with fully developed ovaries. The queen's two primary purposes are to produce chemical scents that help regulate the unity of the colony and to lay lots of eggs (<https://www.beehollowfarm.com/the-queens.php>). A colony in nature begins to rear its own queens when two conditions are met, namely that the population of the colony is large enough, and that resources are plentiful.

Beekeeping is not complete without raising queens. It is a highly specialized process that involves manipulating larvae to be nurtured as queen bees. There are two aspects that will be highlighted: rearing of queens as a method of multiplication and selection of the colonies that are appropriate for multiplication and breeding (Moškrič et al., 2020)

The production of queens is done for the sustainability of colonies amidst the challenges met in bee survival, health, and overall colony performance. For beekeepers, their job is to anticipate problems before they happen. An aging queen is something that they deal with by replacing her after checking her egg laying capacity before they have a problem.

Knowledge and skills on rearing queens would be of good advantage to beekeepers. Training on raising quality queens would help them have their own queen for the sustainable productivity of their colonies.

Currently, the Philippines does not have a breeding center for the mass production of queen bees, thus, supply of stock is, at times, a constraint since most often many beekeepers rely on imported quality queens. Locally produced stocks are not so much trusted due to incompetent colony performance. With this prevailing problem, knowledge and skills on queen rearing is a need.

The Cordillera Regional Apiculture Center (CRAC) was established with the mission to educate and train would-be beekeepers, apiculturists, and other stakeholders. Hence, the Center regularly conducts beekeeping trainings. The Center also provides trainings if requested by communities, and the public or private organizations. Also, this training aims to promote beekeeping in the region, which, hopefully, would contribute towards local economic sufficiency, food security and biodiversity conservation.

This activity will be more of hands-on and will cover everything from basic to advance beekeeping.

2. Objectives:

This training aimed to provide fundamental knowledge, and skills on beekeeping and to enhance the knowledge and skills of the participants on queen bee rearing. Specifically, at the end of the training the participants should be able to:

1. discuss the importance and benefits of beekeeping;
2. explain the biology and anatomy of honey bees;
3. identify tools and equipment used for beehive management;
4. discourse on the management of beehives, queen bee rearing techniques; and insect, pest and diseases of honey bees;
5. Identify plants as pollen and nectar sources for honey bees;
6. Explain strategies on how to conserve honey bees;
7. Explain queen bee development and production;
8. Acquire skills on queen bee rearing; and
9. Perform preparatory activities needed for queen bee rearing.

3. Type and Number of Clients:

There were 44 participants.

Agency Affiliation:	F	%
Students	2	5
Training Facilitators/Lecturers	5	
People's Organization/Community	42	95
Total	44	100



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4. Methodology:

Management:

Training Staffs	Role(s)
Kenneth A. Laruan	Activity consultant/Lecturer/Facilitator
Leo E. Kimbungan	Lecturer /Support Staff
Joseph C. Anas	Lecturer /Support Staff
Joshua Lloyd S. Navarro	Lecturer/Support Staff
Francois A. Bayas	Lecturer/Support Staff

- a. The training was conducted on-site, on limited face to face mode, since it required hands-on activities. Due to COVID 19 pandemic, health protocols were strictly followed such as social distancing, and wearing of facemask.
- b. House rules were discussed during the opening program to ensured that the training run smoothly.
- c. All learning materials were sent to the participants' email address.
- d. Lectures and demonstrations were conducted to instil the fundamental concepts of beekeeping and queen rearing; topics lectured and or demonstrated include:
 1. Honey Bee Biology and Anatomy
 2. Tools and Equipment in Beekeeping
 3. Hive Management
 4. Honey Bee Products and Other Products
 5. Nectar and Pollen Sources
 6. Honey Bee Best and Diseases
 7. Queen Rearing Techniques
 8. Conservation of Honey Bees
 9. Determining Authentic and Adulterated honey
 10. Queen Honey Bees
 11. Production of Queen Cells
 12. Mating of the Virgin Queen
 13. Care for the Queen
 14. Controlled Mating
 15. Practical Selective Breeding for Beekeepers
- f. Hands-on activities were also conducted to equip the participants the basic skills in beehive management and stewardship.
 1. Inspecting the beehives and describing the beehive frames
 2. Locating the Queen bee
 3. Identifying pests
 4. Preparing a smoker, sugar syrup, and the tools
 5. Soldering of wax foundation
 6. Queen cell cup making
 7. Larva grafting
 8. Preparing queen calendar
- g. During hands-on activities, participants were divided into small groups. Each group were supervised by a training staff.



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5. Brief Summary of Accomplishment:

*Age:	F	%
≤30	24	55
31 - 40	17	39
41 - 50	1	2
51 - 60	1	2
≥60	1	2
Total	44	100

*Gender:	F	%
Male	14	32
Female	30	68
LGBTQ	0	0
Total	44	100

*Address:	F	%
Baguio City	8	18
Mankayan, Benguet	3	7
Sablan, Benguet	1	2
Atok, Benguet	2	5
Buguias, Benguet	1	2
Kapangan, Benguet	1	2
Tublay, Benguet	1	2
Itogon, Benguet	3	7
Tuba, Benguet	1	2
La Trinidad, Benguet	23	52
Total	44	100

*Agency Affiliation:	F	%
Students	2	5
Training Facilitators/Lecturers	5	11
People's Organization/Community	42	95
Total	44	100

**Based on the Extension activity attendance*

To start off the training, Kenneth A. Laruan, CRAC Director, gave a short welcome remark after which gave an overview on what to expect during the entire duration of the Three (3) day training.

Before proceeding with the training, the participants were given a pre-assessment test to evaluate their current knowledge in beekeeping.



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Series of lectures:

a. Bee Biology and Anatomy

Mr. Laruan started his topic with a quote from Albert Einstein which is "If the bee disappeared off the surface of the globe, then man would only have four years left to live", this was to emphasize the importance of honey bees as pollinators. He continued with explaining the job of a beekeeper which is to maintain the health and security of bee colonies to assure their productivity. The three bee caste were also covered during the lecture which were the queen, worker, and drone bee, each of which has an important role to do to maintain the existence of the colony.

b. Honey Bee Products and Other Products

To be familiar with the different bee products, Mr. Francois A. Bayas, CRAC staff enumerated the various products derived from bees. One of these products is honey. He explained that honey is produced by collecting nectar from flowers then storing the nectar into an organ of the bee called a honey stomach the bee then returns to the hive and passes the nectar to other bees mixing bee enzymes to the nectar in the process, after which the nectar is stored into combs. The bees then fan it with their wing until the moisture of the honey is 18% and below, then they seal it. The other bee product that can be obtained from bees are bees wax, propolis, bee pollen, and bee pollen.

c. Tools and Equipment in Beekeeping

In beekeeping there is a wide assortment of tools and equipment used. Mr. Laaruan showed these different tools and their uses. He stated that bee tools are further divided into basic, honey extraction, and for queen rearing. Some basic tools are the smoker, hive tool, and the bee suit which a beekeeper normally uses when working with the hive. Honey extraction as the name implies are equipment utilized for collecting honey from the hive. Lastly the queen rearing tools are used in producing new queen bees.

d. Hive Management

One of the important aspects of beekeeping is being able to attend to the needs of the colony for them to be healthy and to survive in the long term. Mr. Leo E. Kimbungan, CRAC staff, shared about what to do during hive inspections. He mentioned that it is important to use a smoker as it will help in controlling the bees. When working on the hive, do it on the side and not the front as it will block the pathway of the bees. During the periods where in the honey bees are not able to gather pollen and nectar, supplemental feeding is done with the use of sugar syrup and pollen substitute to keep the colony alive and strong.

e. Honey Bee Pest and Disease

Just like with other living organisms, honey bees are not exempted from pest and disease. Mr. Joseph C. Anas presented some pest and disease that can possibly be encountered in beekeeping. Among the bee pests in the Philippines, varroa mites are frequently encountered and are the most destructive. If left unattended varroa mites can negatively affect a colony leading to weakening of the colony and eventually failure of the hive.



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f. Queen Honey Bees

In preparation for the following advance beekeeping topics, Mr. Laruan gave an introduction topic about Queen bee. This is to let the participants be familiarized with the behavior and characteristics of the queen bee and for them to understand the other topics in queen rearing. During his discussion, it was explained that the queen bee can lay about 1,500 eggs a day. The queen has no maternal instincts and leaves the caring of the brood to the worker bees. The queen can live up to 3-5 years.

g. Queen Rearing Techniques

Queen rearing is an integral part of beekeeping and having the skill to do so is invaluable. Mr. Anas explained that the reason why a beekeeper rears queen is for the purpose of requeening colonies, for income, and for expansion. One of the queen rearing techniques used is the Doolittle method also known as grafting method. A 1-day old larva is grafted into a queen cell cup then placed into a finisher hive. Being monitored until the queen emerges.

h. Production of Queen Cells

Mr. Anas further delved into the topic of queen rearing specifically on the conditions needed to produce queen cells, the tools needed, and the procedure of grafting a larva in a queen cell cup. He discussed that the characteristics of a suitable queen rearing environment are the following: good food supply, numerous nurse bees, overcrowded, good ventilation, presence of good larva.

i. Mating of the Virgin Queen

The process of how a virgin queen mates is quite unique in the animal kingdom. Mr. Kimbungan gave a rundown on the process that undergo during mating. To identify if a queen bee is virgin: she is more active than mated queens, often fly from combs, always runs away, and hides under masses of workers. Three to five days after emergence, the queen makes several orientation flights then takes nuptial flight on the 5th to 14th day after emergence.

j. Care for the Queen

After producing new queens from rearing, a beekeeper must be able to care for the queen and know how to handle them correctly. Mr. Joshua Lloyd S. Navarro, CRAC staff, discussed about the general practices in caring for the queen. It was explained that a queen should not be exposed to bright light in long durations of time since they are photophobic. Additionally, it is advised when handling frames, it should always be above the hive, in case the queen falls off the frames.

k. Controlled Mating

Surprising to some individuals, honey bee queens can also be mated through the use of artificial insemination (AI). Mr. Kimbungan guided the participants on the step-by-step process of AI. He discussed that in the Philippines, AI is still limitedly utilized. AI is done in a sterile environment to avoid contamination. The semen is collected from several selected drones, then deposited into the virgin queen using specialized equipment.

l. Practical Selective Breeding for Beekeepers

If a beekeeper wants to have quality honeybees, one must take into consideration what traits are desirable in a colony. Mr. Kimbungan explained what desirable traits to look for when trying to breed honey bees. One of those traits are; a colony must be resistant to diseases and have hygienic behavior to reduce the spread of disease and pest to other bees in the colony.



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m. Determining Authentic and Adulterated honey

One of the prime problems with honey which usually is a differentiating point is its quality. Adulteration of honey has become a common practice; it can be a challenge to find pure honey. Honey can be often mixed with glucose solution, high fructose corn syrup, and many other ingredients that consumers are not aware of. Mr. Kimbungan enumerated on some techniques to differentiate authentic and adulterated honey. Among these are presence of pollen, thumb test, paper test, fire test, water test, and laboratory test.

n. Nectar and Pollen Sources

Aside from the management aspect of beekeeping, knowing the plant species that are beneficial to honey bees is very important for the survival of the colony. Mr. Navarro discussed that those beneficial plants are collectively called melliferous plants. These are plants that honey bees forage to collect either nectar, pollen, or resin. Additionally, he explained that not all plants that produce nectar considered melliferous plants, since the structure of some flowers are not designed to be accessed by honey bees but by other animal species.

o. Conservation of Honey Bees

Honey bees are one of the main pollinators of important food crops. Despite their role as important pollinators, honey bees have been at risk due to man-made hazards and natural climactic factors. Mr. Laruan discussed about the importance on the conservation of honey bees and our role in protecting these beneficial pollinators. In protecting the honey bees, we should not limit it to the domestic species but also include the wild species such as *Apis dorsata*.

9. Actual Financial Report:

Note: no food and snacks were served to the participants.

10. Highlights of Evaluation:

Extension Activity Components	Average	Percentage				
		5	4	3	2	1
1. How satisfied are you with the pre-event organization of the activity? (Communication, coordination, etc.)	5	84.1	15.91			

2. Activity components	Average	5	4	3	2	1
Timeliness [for topics discussed]	5	75	25			
Relevance of topic[s] to participant's job	5	79.5	20.45			
Contribution of topic[s] to participant's knowledge/skills	5	81.8	18.18			
Knowledge sharing among participants	5	77.3	20.45	2		
Answers to questions	5	79.5	18.18	2		



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3. How satisfied are you with the extension activity in terms of	Average	5	4	3	2	1
Organization of the training	5	75	25			
Duration of training	5	77.3	22.73			
Appropriateness of audio-visual aids used	5	75	25			

4. Resource Person	Average	5	4	3	2	1
Punctuality	5	90.9	9.09			
Mastery of topic	5	86.4	13.64			
Clarity and orderliness of the delivery of lecture	5	81.8	18.18			
Modulation of voice	5	68.2	29.55			
Interaction with participants	5	72.7	27.27			
Time management	5	72.7	27.27			

5. Physical Facilities	Average	5	4	3	2	1
Conduciveness of the venue/proximity of restrooms	5	79.5	18.18	2		
Functionality of sound system	5	79.5	20.45			

6. Facilitator/Moderator	5	79.5	18.18	2		
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What is your overall assessment of this activity?	5	75*	25**			
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**Outstanding; **Very Good*

What changes or improvements should be made in future events?	CR should be constructed near this room More examples and elaborations/More actual demos Additional time of training, more days Venue of lectures (too crowded) More hands on activities (3)/More practical (2)/Actual practice/Hands on activity with beehives Limit participants to seating capacity of the venue (2)/More training and rooms for trainings Extend days whenever weather is not cooperating (2) More free trainings inclusive of food (2) Additional slot for 6 months training with certificate Free starting colony (2) More trainers (2) The fewer the number of participants, the better
Any future extension activities you wish to suggest?	More (honey) taste testing (2) How to domesticate wild bees



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	<p>Stingless bee/Trigona Topic/Seminar</p> <p>Processing of by products produced from honey (2)/ Honey harvesting</p> <p>The bee keeping training should continue.</p>
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****based on submitted accomplished Extension Activity Evaluation form**

8. Problems Met:

- a. The number of participants were more than what was anticipated by the center.

9. Recommendation:

- a. Limit the number of participants to the maximum capacity of the training center. If the number of registrations exceeded the desired capacity, the excess participants will be contacted via text message to attend the next training session instead.



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PHOTO DOCUMENTATION



Lectures



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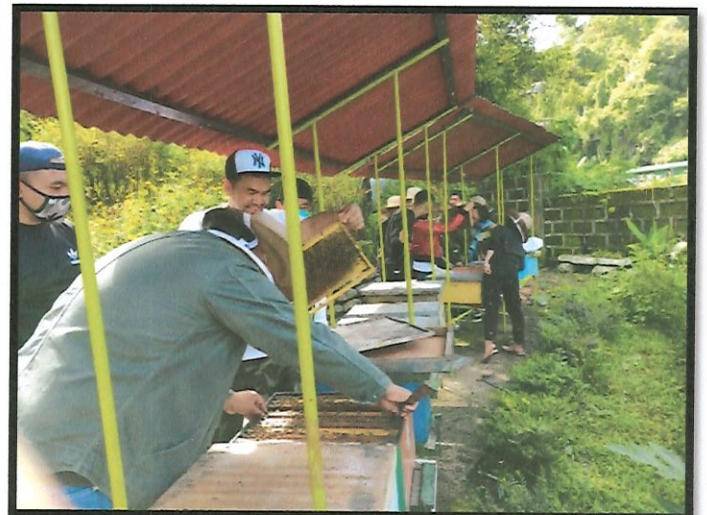


Preparing Smokers



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Inspection of Hives



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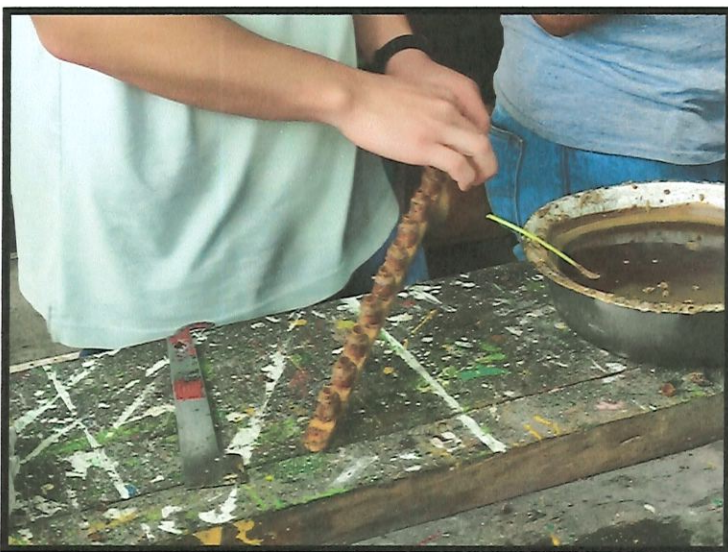
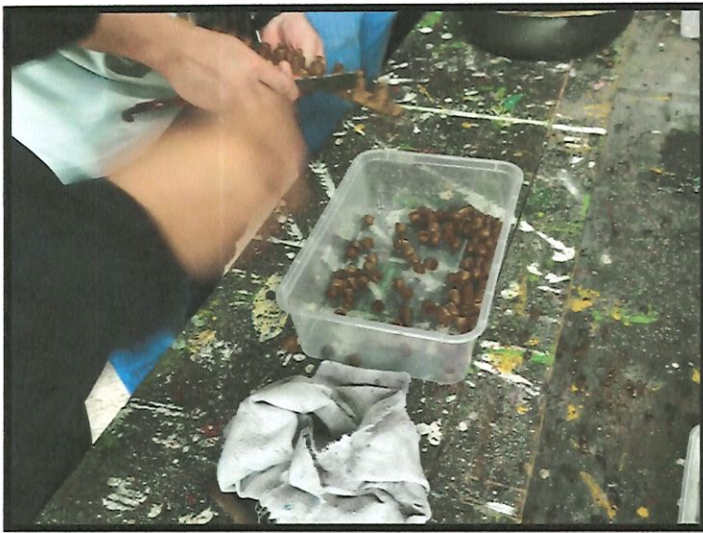
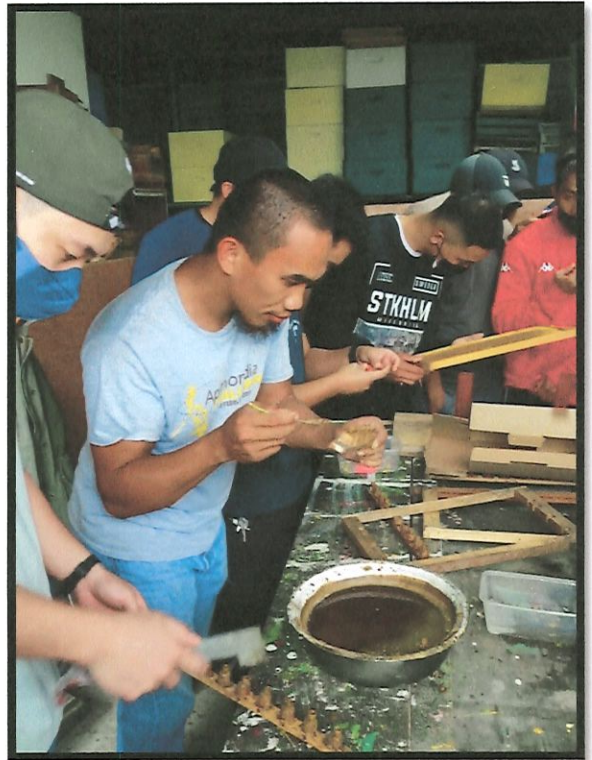


Mounting of wax foundation to frames



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Molding of queen cell cups



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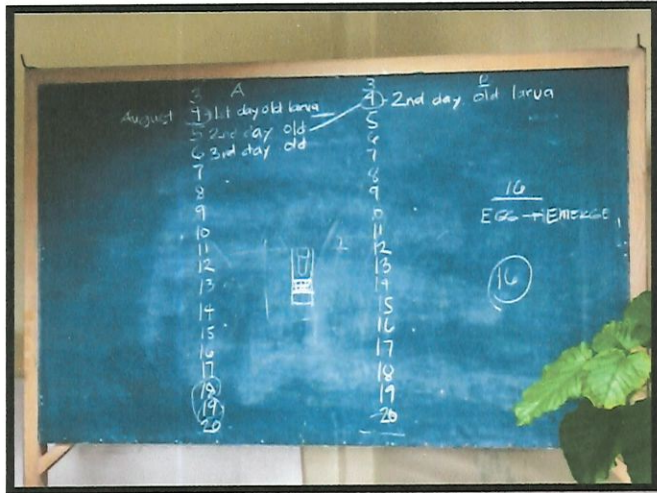


Grafting of 1-day old larva



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Queen rearing calendar planning



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Extension



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BASIC INFORMATION:

Title of Extension Activity:	Bee Education Services (BeES): Beekeeping Internship-Mentoring (Batch 3)
Date and Venue:	22 August 2022 to 16 December 2022 "Paquito P. Untalan Training Center" Cordillera Regional Apiculture Center, College of Forestry, Benguet State University, La Trinidad, Benguet The internship-mentoring was also conducted in various apiaries outside the University.
Target Participants [Type and Number]:	27 individuals who completed basic and advance beekeeping training
Estimate Cost:	The interns shouldered their food and snacks in the various internship activities.
Fund Source:	Cordillera Regional Apiculture Center (CRAC) Office of Extension Services (OES) Office of the Vice President for Research and Extension (OVPRE)
Proponents/Implementors:	Cordillera Regional Apiculture Center (CRAC) Office of Extension Services (OES) College of Forestry (CF)
Cooperating Agency/ies/Unit/s:	Beekeeping Internship Partners

REPORT:

I. Rationale:

In the world of beekeeping, for one to gain the necessary skills to become an adept beekeeper, hands on trainings should be a component of their capability development. However, to further their skills, internship and mentoring are equality important groundings, especially if they intend to work abroad as beekeeper or to establish their own apiary.

The most important feature of internships is that they combine classroom knowledge and theory with practical application and skills developed in professional, community, or work settings. Internships are a fantastic way to apply what were learned in class to real-world situations. It provides trainees with the necessary experience and soft skills for work and managerial positions. Internships teach trainees about workplace culture, employee relations, and leadership structure, which should make it easier for them to transition into their first professional job than if they haven't had any. It also allows you to get feedback from someone who works in your desired field on your work.



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Mentoring, on the other hand, is the act of pointing a mentee in the right direction so that he or she can solve issues or problems related to his or her career. Mentorship is all about encouraging and assisting the mentee in effectively managing his learning process in order to maximize his potential, improve his performance, and develop skills. Mentorship is important because: (1) mentors' success stories inspire and boost mentees' confidence; (2) mentors' instructions help mentees avoid avoidable mistakes; (3) a mentor serves as a role model and can have a positive impact on mentees' professionalism and social lives; and (4) mentorship also helps mentees foresee future opportunities and threats that would otherwise go unnoticed by a mere novice.

The beekeeping internship/mentoring program is specifically designed to provide individuals with the experience and knowledge necessary to become comfortable and confident around bees and to become successful beekeepers. Individuals will have plenty of opportunities to practice sustainable beekeeping techniques and learn about commercial honey production.

II. Objectives:

In general, the internship-mentoring aimed to provide an avenue for the participants to perform various beehive management activities. Specifically, at the of the internship/mentoring; participants should be able to acquire experiences related to the following:

1. Management of beehives;
 - a. Raising bees
 - b. Building and maintaining hives
 - c. Inspecting beehives
 - d. Treating insects, pests and diseases of honey bees
 - e. Maintaining tools and equipment used for beehive management
2. Rearing of queen bees;
3. Re-queening beehives;
4. Beekeeping carpentry;
5. Establishment of apiary; and
6. Workplace culture, employee relations, and leadership structure in beekeeping.

III. Type and Number of Clients:

As shown in the table below, there were 27 participants.

Agency Affiliation:	F	%
People's Organization/Community	27	100
Training Facilitators/Lecturers	7	
TOTAL	27	100



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III. Methodology:

Management:

Training Staffs	Role(s)
Kenneth A. Laruan	Activity consultant/Lecturer/Facilitator
Leo E. Kimbungan	Lecturer /Support Staff
Joshua Lloyd S. Navarro	Lecturer /Support Staff
Joseph C. Anas	Lecturer /Support Staff
Francois A. Bayas	Secretariat/Support Staff
Tristan B. Apiles	Lecturer /Support Staff

1. The activity was conducted on-site, through face-to-face mode. Due to COVID 19 pandemic, health protocols were strictly followed such as physical distancing, wearing face mask and appropriate working clothes for beekeeping.
2. The mechanics of the internship-mentoring and house rules and were discussed during the opening program to ensure that the activities ran smoothly.
3. The interns-mentees were divided into small groups, each group were given a specific task and working area. Each group were supervised by a training staff.
4. The interns-mentees, participated in whatever on-going activities of the Center. The internship-mentoring were also conducted in various apiaries outside the University.
 - a. Internship-mentoring lasted five (5) months. Interns-mentees worked for at least 320 hours for at least two (2) days per week, from 9-12 AM; 1-6 PM While working at the Center, interns-mentees were responsible for their own food and snacks.
 - b. Interns-mentees also participated in the Center's beekeeping activities, which took place outside of the University. In those cases, the interns-mentees were responsible for their own travel expenses.
 - c. Interns-mentees ensured that they were physically, emotionally, and mentally capable of participating in the various internship-mentoring activities.
 - d. Throughout the various activities, the Center monitored the interns'-mentees' performance and safety. Interns/mentees, on the other hand, were required to protect themselves from physical and moral harm to the greatest extent possible.
 - e. In the event that untoward incidents occurred outside of the Center's or University's control despite all efforts to ensure the interns'/mentees' safety and well-being, the Center or the University will not be held liable.
5. Interns-mentees were required to sign the log book at the Center on a regular basis and to fill up and submit a daily log of their significant activities in order to monitor their performance.



EXTENSION ACTIVITY ACCOMPLISHMENT REPORT

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5. Brief Summary of Accomplishment:

*Age:	F	%
≤30	14	52
31 - 40	10	37
41 - 50	3	11
51 - 60	0	0
≥60	0	0
TOTAL	27	100

*Gender:	F	%
Male	26	96
Female	1	4
LGBTQ	0	0
TOTAL	27	100

*Address:	F	%
Baguio City	6	22
Itogon, Benguet	3	11
Kapangan, Benguet	3	11
Sablan, Benguet	2	7
Atok, Benguet	1	4
La Trinidad, Benguet	12	44
TOTAL	27	100

*Agency Affiliation:	F	%
People's Organization/Community	27	100
Training Facilitators/Lecturers	7	
TOTAL	27	100

**based on the Extension activity attendance*

During the first week of the internship, the interns were oriented about house rules and protocols to follow throughout the internship period. They were then divided into two (2) groups. During their early weeks of internship, they were tasked with inspecting the apiaries within the University, treatment of varroa mites, splitting of hives, and supplementary feeding were also done. For the duration of the internship, they were required to log in their activities for every internship session to monitor their progress.

Not only the apiaries at the university were regularly inspected but also the apiaries of the CRAC beekeeping internship partners in La Trinidad and Baguio City. The interns were given a schedule to follow as to what apiary to visit. By visiting other apiaries, the interns were able to broaden their skills and knowledge in beekeeping by learning from various experienced beekeepers in the locality. The activities done during the visits varied between apiaries but ranged from hive inspection, landscaping, queen rearing, supplemental feeding, hive migration and treatment of mites.



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EXTENSION ACTIVITY ACCOMPLISHMENT REPORT

Aside from the routine beehive management activities, the interns were also tasked to construct a standard size hive box. Additionally, to evaluate the amount of knowledge and beekeeping skills acquired, they were given a theoretical and practical exam at the close of their internship.

6. Actual Financial Report:

While working at the Center, interns-mentees were responsible for their own food and snacks. Similarly, activities that took place outside of the University, in those cases, the interns-mentees were responsible for their own travel and food expenses.

7. Highlights of Evaluation:

Extension Activity Components	Average	Percentage				
		5	4	3	2	1
1. How satisfied are you with the pre-event organization of the activity? (communication, coordination etc)	5	85.2	14.8			

2. Activity components	Average	5	4	3	2	1
Timeliness [for topics discussed]	5	88.9	11.1			
Relevance of topic[s] to participant's job	5	92.6	7.4			
Contribution of topic[s] to participant's knowledge/skills	5	92.6	7.4			
Knowledge sharing among participants	5	88.9	11.1			
Answers to questions	5	88.9	11.1			

3. How satisfied are you with the extension activity in terms of	Average	5	4	3	2	1
Organization of the training	5	88.9	11.1			
Duration of training	5	88.9	11.1			
Appropriateness of audio-visual aids used	5	88.9	11.1			

4. Resource Person	Average	5	4	3	2	1
Punctuality	5	85.2	14.8			
Mastery of topic	5	88.9	7.4	3.7		
Clarity and orderliness of the delivery of lecture	5	92.6	3.7	3.7		
Modulation of voice	5	88.9	7.4	3.7		
Interaction with participants	5	88.9	11.1			
Time management	5	92.6	7.4			



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EXTENSION ACTIVITY ACCOMPLISHMENT REPORT

5. Physical Facilities	Average	5	4	3	2	1
Conduciveness of the venue/proximity of restrooms	5	85.2	14.8			
Functionality of sound system	5	88.9	11.1			
6. Facilitator/Moderator	5	88.9	7.4	3.7		
What is your overall assessment of this activity?	5	85.2*	14.8**			

Outstanding **Very Good *Good*

What changes or improvements should be made in future events?	Field trip on other places More activities on other apiaries like Buguias, Mankayan and Kabayan Tasting of different kinds of honey Honey extraction (2)
Any future extension activities you wish to suggest?	

8. Problems Met:

Few interns were not able to participate in some activities.

9. Recommendation:

Schedule makeup activities for interns who missed some activities and implement stricter rules regarding attendance.



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EXTENSION ACTIVITY ACCOMPLISHMENT REPORT

Photo Documentation



Supplemental Feeding of Colonies



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EXTENSION ACTIVITY ACCOMPLISHMENT REPORT

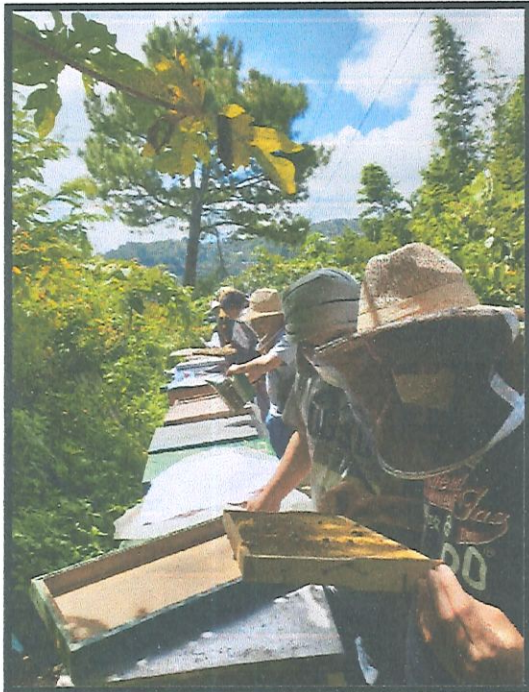


Queen Rearing



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**EXTENSION ACTIVITY
ACCOMPLISHMENT REPORT**



Inspection of Colonies at Carpio's Apiary at Shilan, La Trinidad



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EXTENSION ACTIVITY ACCOMPLISHMENT REPORT



Inspection of Colonies at the CBTS Apiary at Tawang and Pico, La Trinidad



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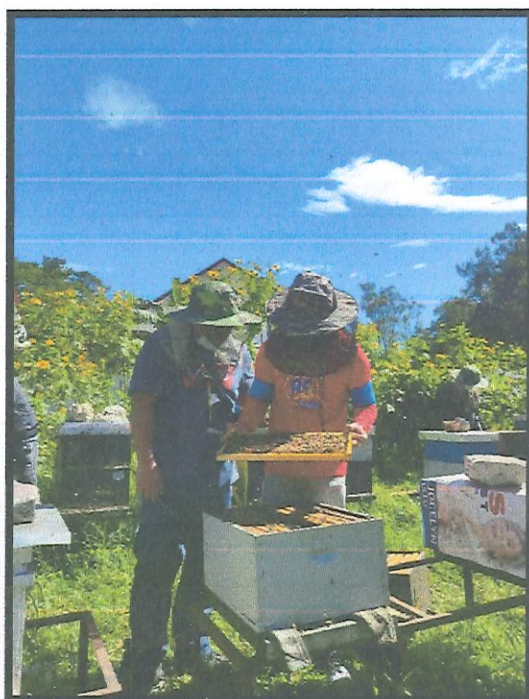


Internship at DA RFO CAR Apiary at the Baguio Animal Breeding Research Center (BABRC) compound, Dontogan, Baguio City



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EXTENSION ACTIVITY ACCOMPLISHMENT REPORT



Internship at the Badihoy Honey Beekeepers Association's Apiary at Leonard Wood Road, Baguio City



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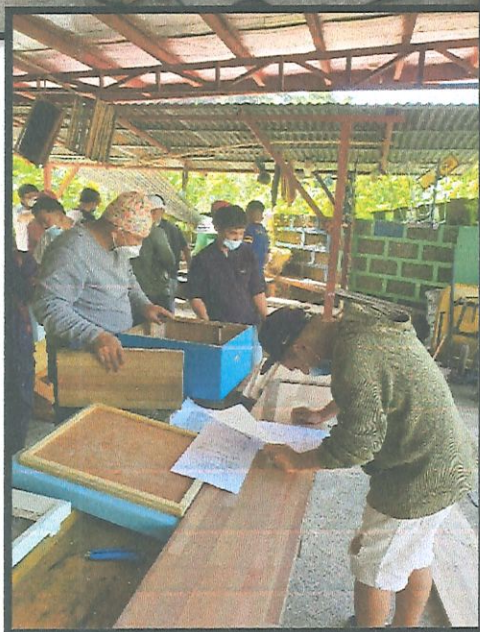
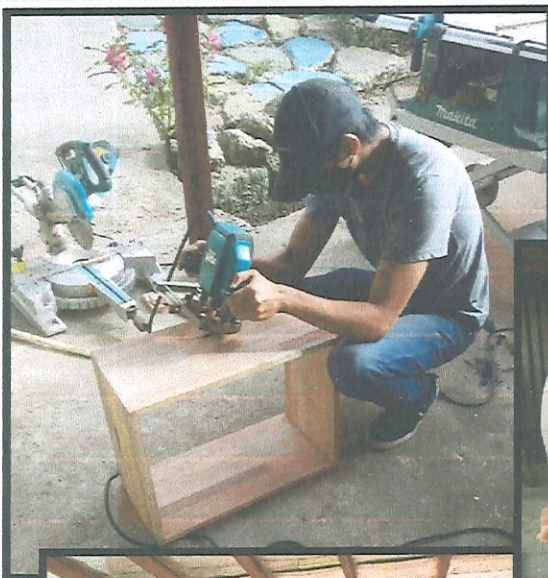
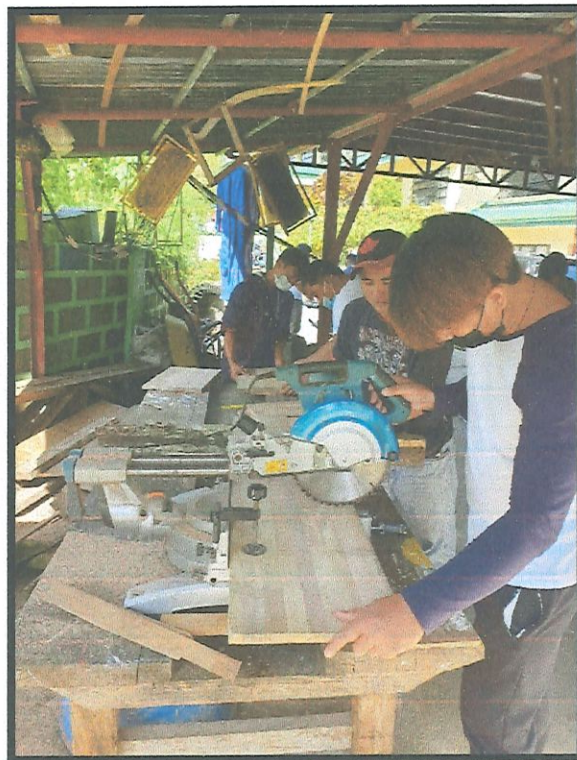


Hive Migration



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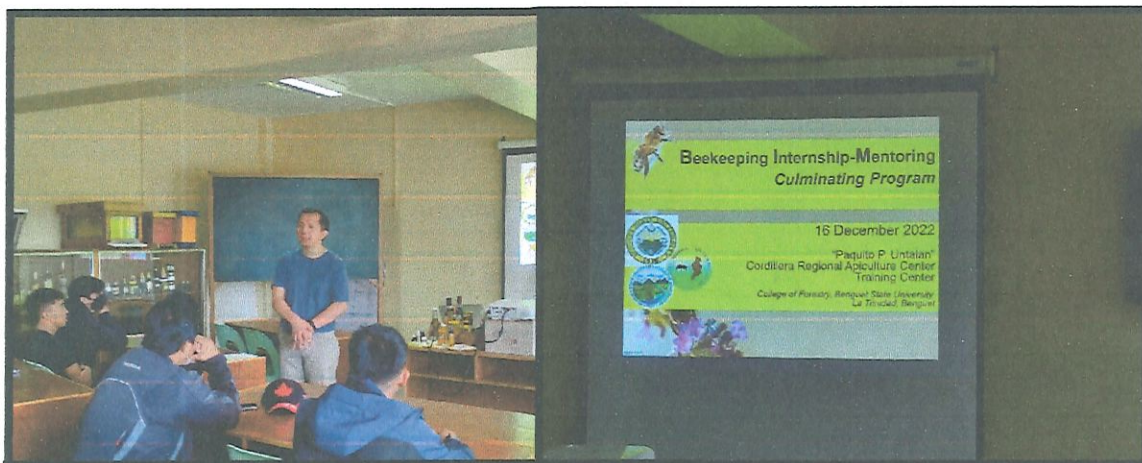


Carpentry (Construction of Beehive)



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Culminating Program





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EXTENSION ACTIVITY ACCOMPLISHMENT REPORT

Prepared by:


JOSHUA LLOYD S. NAVARRO
Staff, CRAC

Endorsed by:


KENNETH A. LARUAN
Director, CRAC


MARISSA R. PARAO
Dean, CF

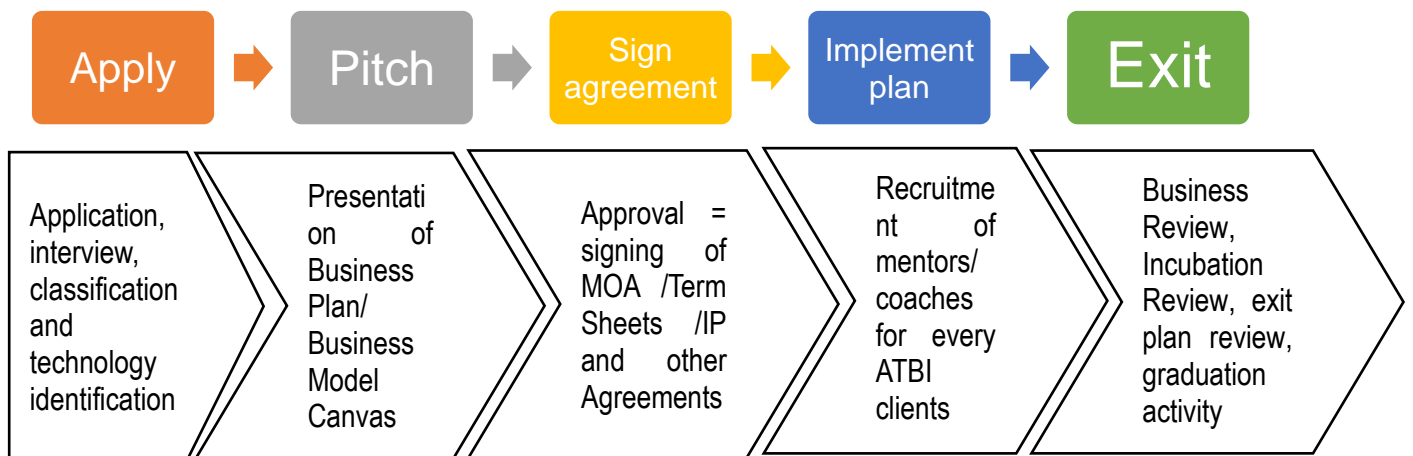
Recommending Approval:


ANNA CRIS L. LANGAOAN
Director, Office of Extension Services

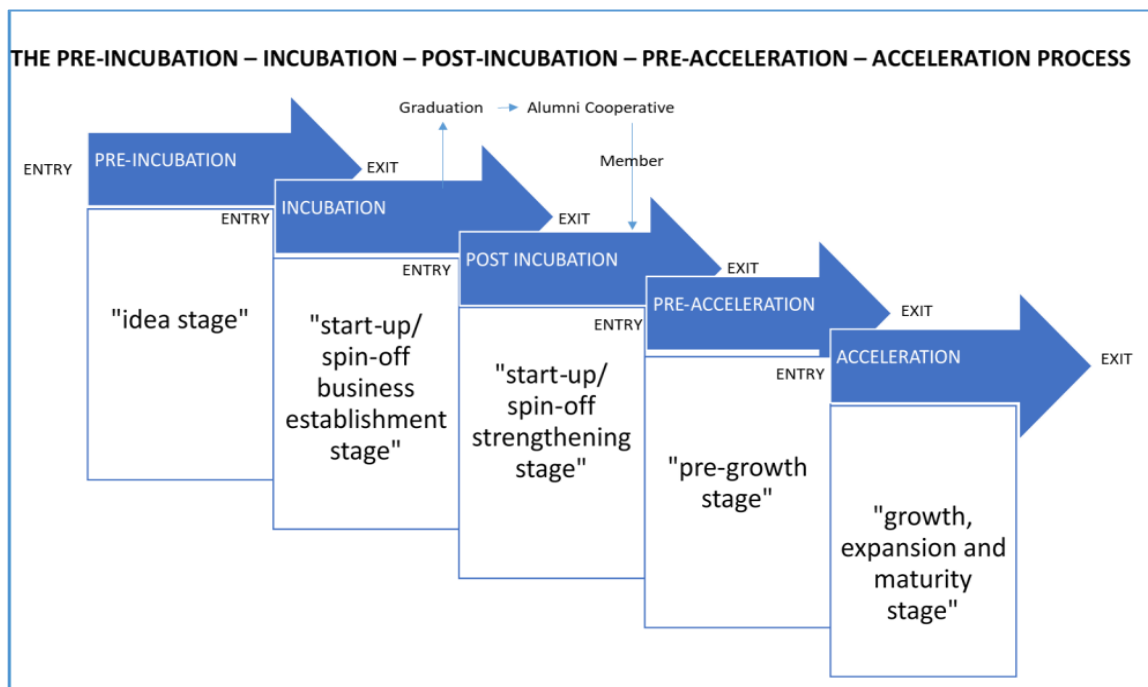
Approved


JOHNNY GUZMAN DATI
Vice President for Research and
Extension

HOW TO BE AN INCUBATEE



THE ATBI INCUBATION PROCESS



THE ATBI CLIENTS AS OF 2022

Pre-Incubatee

- 1.NA-OY, Marlou A.
- 2.ALLAN, Robert Jan T.
- 3.LANGPAOEN, Winter M.
- 4.CALIG-A, Alpha B.
- 5.BASTE, Pedro Jr. K.
- 6.LOQUE, Nick
- 7.BAYANG, Roland
- 8.MAGUINSAY, Rember
- 9.OLAYAN, Jennette
- 10.AGUILON, Jennifer

Incubatee

- 1.AKIANGAN, Caycee Comaid
- 2.BOTARDO, Gina Toyda-an
- 3.COLESTONG, Edgar Benito
- 4.GAYASO, Joash Langpaoen
- 5.PUYAO, Jerry Banwa
- 6.PUYAO, Wilfred Jr. Diblo
- 7.SALIPIO, Janice Calalanoy
- 8.SANTOS, Christian Ango
- 9.SABADO, Saturnino Jr. Tirso
- 10.DOMALSIN, Carol R.
- 11.SAMORANOS, Maria Monica Jarata
- 12.PALSA-AN, Zoraya Binay-an
- 13.WALANG, Ariel Jun Pata-ag
14. ALUMNI AGRICULTURE COOPERATIVE

Members:

- a. COSTAN, Hydran, Cariño
- b. CUABAN, Jessie, Amos
- c. SUKABIT, Jubeskie, Kiswa
- d. LANGBIS, Franjon, Tigo
- e. LOPEZ, Dixon Keniado
- f. PAGOLI, Divina Tininggal
- g. PALUKPOK, Luther Sagayo
- h. ATINYAO, Margaret Alejandro
- i. DAWANG, Evelina Pelingan
- j. PALOCPOC, Victor Jr. Sagayo
- k. WATAWAT, Miller Gamotlong
- l. DE LEON, John Dave Vencio
- m. PULTINO, Jenalyn Ligligen
- n. FIANZA, Fernan Alfonso
- o. SALES, Rowena Tacio
- p. SISON, Sinson Cayamso
- q. TUBBAN, Harissa Watawat
- r. BERNARDO, Jan Michael Guitelen
- s. BANIAGA, Jocelyn Alapang
- t. ALIMA, Teddy Waking
- u. BERNARDO, Thaddeus Jr. Guitelen
- v. FANGKI, Sunny Mata-ag
- w. AYAWAN, Freddie, Macario
- x. CALAYON, Belmor Costan
- y. TUDAYAN, Baltazar Kial, Jr.

Post-Incubatee

1. PULTINO, Jenalyn Ligligen
2. BANIAGA, Jocelyn Alapang

Pre-Acceleratee

1. AYAWAN, Fredie, Macario
2. CALAYON, Belmor Costan
3. TUDAYAN, Baltazar Jr. Kial

THE ATBI CLIENTS' BASIC CURRICULUM FOR THE FARMING INCUBATEES

Pre-Incubation Curriculum

Module 1- Entrepreneurial/ Mind-setting and Social Value Formation

Module 2-Understanding the Market

Module 3- The Business Plan and Business Model Canvas

Module 4- Entrepreneurial Accounting and Financial Management

Module 5-Science, Technology and Innovation

Module 6- Business Review, Planning and presentation for Potential Incubation

Incubation Curriculum

1st Year

Module 1-Entrepreneuership

Module 2-Marketing Innovation

Module 3- Financial Management 1

Module 4-Science, Technology and Innovation towards enhanced productivity 1

Module 5- Business Planning, Review and presentation of revised Business Plans 1

2nd Year

Module 1-Market Growth

Module 2-Supply and Value Chain

Module 3- Financial Management 2

Module 4- Operations Management

Module 5-Science, Technology and Innovation application 2

Module 6- Business Planning, Review and presentation of revised Business Plans 2

3rd Year

Module 1-Entrepreneuership for Growth and Expansion

Module 2-Market Growth and Expansion

Module 3- Human Resource and Organization Management

Module 4- Financial Management 3

Module 5-Science, Technology and Innovation applications

Module 6- Business Review, Incubation Review, and exit plan review

GRADUATION/ CULMINATING ACTIVITY


MEMBERSHIP TO THE ALUMNI AGRICULTURE COOPERATIVE MEMBERS OF BSU
ATBI


THE INCUBATEES PROFILE

AGRI-BASED TECHNOLOGY BUSINESS INCUBATOR/ INNOVATION CENTER (BSU ATBI/IC)

1. BALTAZAR K. TUDAYAN JR.

INCUBATEE PROFILE
Agri-based Technology Business Incubator/Innovation Center





BALTAZAR K. TUDAYAN JR.


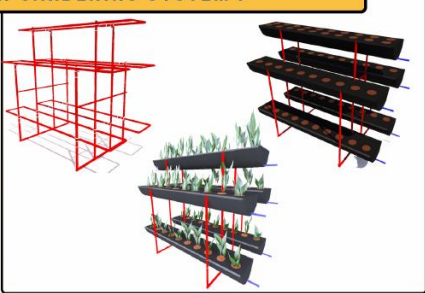
Business Name:
Yore Fruits and Vegetables Farm
Brand Name:
Yore Sky Garden
Incubation Status:
Pre- Acceleratee (inwall)

Mr. Tudayan a graduate of Benguet State University - Bachelor of Science in Agriculture major in entomology. A pilot incubatees of BSU ATBI/IC. He is currently developing a D-I-Y HUGS (Highlands Urban Garden System) that could help increase food production and expand agricultural operations in urban areas.

business logo

YSG

HUGS (HIGHLANDS URBAN GARDENING SYSTEM)

Business Coach: BSU-Agri-based Technology Business Incubator Staff
Technology Mentor: 1) Darwin A. Basquial, BSU Associate Professor under the College of Agriculture (Specialized in Crop Physiology, Crop Production and Management, Vegetable Crops)
 2) Zion Jemilinium S. Tam-awen, BSU College of Engineering, Instructor


Seminars/Trainings Attended
Pre-Incubation Stage
ATBI Orientation
Seminar-Workshop on Finalization of prices per product and pricing farm fresh products
Seminar-Workshop on Costing and Pricing of Fresh Farm Products
Seminar on growing elevated strawberry and setting up drip irrigation
Seminar-Workshop on Smallholder Farming Business Plan Preparation
Incubation Stage (Y1)
Seminar-Workshop on Soil Analysis
Seminar-Workshop to Review the Smallholder Farming Business Plans
Seminar-Workshop on Branding and Labeling
Workshop for Review, Capacity Development Assessment & Stakeholder Mapping
Workshop Results-based Monitoring and Evaluation
Installation of Irrigation System
Mid-Year Productivity Workshop
Orientation on ATBI, Strawberry & Vegetable Production & Farm Practices
Marketing Seminar Workshop
Operations Planning Seminar Workshop
Financial Planning Seminar Workshop
Strawberry cum Vegetable Farming Technology Matching Seminar
Food Safety Seminar Series I: Introduction to Food Safety, Global GAP, Food Safety Hazards, GMP, Food Labeling
Seminar Workshop on Farm Bookkeeping
Oral Presentation Skills Training for Farmer-Incubatees
Seminar and demo on Strawberry Production
Incubatees' 1st Quarter Business Review (Presentation of Farming' Financial Status)
Financial Statement Hands-on Preparation

Incubation Stage (Y2)
Training On Biological Control Of Phytophagous Twospotted Spider Mites Infesting Strawberry In The Highlands
Hands-on Training On Creating Labels Using Ms Publisher & Photoshop
Monitoring Of Midyear Performance: Productivity And Innovation
Strawberry Cultivation Current Trends In Spain
Seminar On Marketing Vegetables
Finalization of Business Plan Presentations Workshop
RDE Seminar Series: Seminar on Insights on the Monitoring of Pesticide Residue in Vegetables Using the RBPR analysis in CAR and in Taiwan
Presentation of Business Plans by Senior Farmer Leaders
Interview of Applicants & Meeting Senior Leaders
Seminar on Crop Programming
Training on Soil Probiotics, Soil Health, Soil Pollution, and Soil Analysis
Training on the Use of Stingless Bees as Pollinators in Strawberry
Training on Biological Control of Phytophagous Two Spotted Spider Mites (TSSM) Infesting Strawberry in the Highlands
Incubation Stage (Y3)
Stingless Bee Hive Installation and Maintenance & Monitoring Workshop
Orientation for Midyear Business Performance Review
Training on Soil Fertility and Alternative Pest Management
Training on Biological Control: Knowing Pest Management Strategies in Crop production
Seminar-Workshop on Domestication of Stingless Bee and Crop Pollinating as a Business
Symposium on Business Improvement in the Tourism Oriented Industry in La Trinidad
Incubation Stage (Y4)
Technical Session on Soil Probiotics and Launching of Organic Waste Conversion Facility
End-Year Business Performance Review
Presentation of Outputs on the Orientation-Workshop on Business Planning (BMC)
1st Agribusiness Incubation Training
1st National Conference on Agri-Aqua Technology Business Incubation
Seminars on 1) Business Registration, 2) Contribution of Filipino Values to Smallholder Farming Business Success, 3) Seminar on Gaining Access to Microfinance, and 4) Seminar on Preparing a Feasibility Study for a Smallholder Farming Business
Seminars on 1) Farming as a Business, 2) Farming and the Environment, 3) Farm Waste Management, 4) Orientation Seminar for Pre-Incubatees
Monitoring and Seminar on Health of the BSU ATBI/IC Incubatees and Personnel (as precautionary response to COVID-19 pandemic)
Learning Visits to Agri-tourism Farms in La Trinidad Benguet: 1) Living Gifts Nursery at Alno, 2) Lily of the Valley Organic Farms at Ampasit, Puguis, and 3) Strawberry under the Pines at Timoy, Puguis
Recognition / Culminating Activity
Post- Incubation Stage -Pre-Acceleration Stage
Intellectual Property Seminar and Workshop
Basic Orientation and Hands-on Training Equipment Operations cum Annual Equipment Assessment and Upscaling
BSU-ATBI/IC Crop Program and Harvest Schedule Workshop
Monitoring and Site visit of Operation/Production Area of ATBI/IC Outwall Clients
BSU-ATBI/IC Mental Health Awareness and Wellbeing Seminar
Quarter Business Performance Review of Incubatees and Acceleratees
Farm Inspection
Business Model Canvas Pitching
Social Media Marketing: A Guide for ATBI/IC Incubatees and Acceleratees
Gain Access to Microfinance Institutions and other Services
Business Pitch Development Training Part 1: Principles of a Pitch Deck and Script
1 st and 2 nd National Incubatee Summit, 2 nd ATBI Conference
Networking and Learning Visit at Chiang Mai, Phayao, and Chiang Rai, Thailand
<ol style="list-style-type: none"> 1. Visit a Growing Strawberry System in a Plant Factory at the Faculty of Engineering and Agro-Industry 2. Visit a Smart Aquaculture at the Faculty of Fisheries Technology and Aquatic Resources 3. Visit and Organic Fertilizer Production, Industrial scale (FOAM accredited) and Thai breed medical cannabis farm at the MAEJO, Natural Farming R&D Center 4. Visit a Strawberry Farm at Rim Farm 5. Visit the Sufficiency Economy Learning enter and knowledge exchange on agricultural technology development in Northern Thailand 6. Visit UPITI Service Laboratory and Animal Research Center 7. Visit UPITI Strawberry Processing 8. Visit UP Innoshop and Overview of Innovation and Technology Transfer Institutes on Entrepreneurship Development and Technology Business Incubation 9. Study Visit to the UNESCO GNLC: Phayao Learning City project and meet Incubatee of UPTBI

10. Learning visit at Chiang Rai Homemade Ice Cream Co., Ltd – tour the facility and learn about her experiences with the technology supporting service provided by Mae Fah Luang University
11. Learning Visit at the Center of Excellence in Agricultural Innovation (Agrinno)

2. FREDIE M. AYAWAN

INCUBATEE PROFILE
Agri-based Technology Business Incubator/Innovation Center





FREDDIE M. AYAWAN


Business Name:
Fredders' Buds and Blossoms Fruits and Vegetables Farm

Brand Name:
Barefoot Farm


Incubation Status:
Pre-acceleratee (Inwall)

Mr. Ayawan belongs to the pilot incubatees of BSU ATBI/IC. Aside from producing high-quality strawberries, vegetables, and herbs, he is perfecting his kitchen hydroponics system wherein he incorporated his own hydroponics solution "Hydropomin".


business logo




branding



KITCHEN HYDROPONIC SYSTEM





Business Coach: BSU-Agri-based Technology Business Incubator Staff
Technology Mentor: Darwin A. Basquial, BSU Associate Professor under the College of Agriculture (Specialized in Crop Physiology, Crop Production and Management, Vegetable Crops)

Seminars/Trainings Attended
Pre-Incubation Stage
ATBI Orientation
Seminar-Workshop on Finalization of prices per product and pricing farm fresh products
Seminar-Workshop on Costing and Pricing of Fresh Farm Products
Seminar on growing elevated strawberry and setting up drip irrigation
Seminar-Workshop on Smallholder Farming Business Plan Preparation
Seminar-Workshop to Review the Smallholder Business Plans
Incubation Stage (Y1)
Seminar-Workshop on Soil Analysis
Seminar-Workshop to Review the Smallholder Farming Business Plans
Seminar-Workshop on Branding and Labeling
Workshop for Review, Capacity Development Assessment & Stakeholder Mapping
Workshop Results-based Monitoring and Evaluation
Installation of Irrigation System
Mid-Year Performance Conference
Mid-Year Productivity Workshop
Orientation on ATBI, Strawberry & Vegetable Production & Farm Practices
Marketing Seminar Workshop
Operations Planning Seminar Workshop
Financial Planning Seminar Workshop
Strawberry cum Vegetable Farming Technology Matching Seminar
Food Safety Seminar Series I: Introduction to Food Safety, Global GAP, Food Safety Hazards, GMP, Food Labeling
Seminar Workshop on Farm Bookkeeping
Oral Presentation Skills Training for Farmer-Incubatees
Seminar and demo on Strawberry Production
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Financial Statement Hands-on Preparation
Incubation Stage (Y2)

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Hands-on Training On Creating Labels Using Ms Publisher & Photoshop
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Strawberry Cultivation Current Trends In Spain
Seminar On Marketing Vegetables
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Incubation Stage (Y3)
Stingless Bee Hive Installation and Maintenance & Monitoring Workshop
Orientation for Midyear Business Performance Review
Training on Soil Fertility and Alternative Pest Management
Training on Biological Control: Knowing Pest Management Strategies in Crop production
Seminar-Workshop on Domestication of Stingless Bee and Crop Pollinating as a Business
Symposium on Business Improvement in the Tourism Oriented Industry in La Trinidad
End Year Business Performance Review
Incubation Stage (Y4)
Technical Session on Soil Probiotics and Launching of Organic Waste Conversion Facility
End-Year Business Performance Review
Presentation of Outputs on the Orientation-Workshop on Business Planning (BMC)
1st Agribusiness Incubation Training
1st National Conference on Agri-Aqua Technology Business Incubation
Seminars on 1) Business Registration, 2) Contribution of Filipino Values to Smallholder Farming Business Success, 3) Seminar on Gaining Access to Microfinance, and 4) Seminar on Preparing a Feasibility Study for a Smallholder Farming Business
Seminars on 1) Farming as a Business, 2) Farming and the Environment, 3) Farm Waste Management, 4) Orientation Seminar for Pre-Incubatees
Learning Interactions of BSU Incubatees and Laguna State Polytechnic University – ATBI Project Team
Monitoring and Seminar on Health of the BSU ATBI/IC Incubatees and Personnel (as precautionary response to COVID-19 pandemic)
Learning Visits to Agri-tourism Farms in La Trinidad Benguet: 1) Living Gifts Nursery at Alno, 2) Lily of the Valley Organic Farms at Ampasit, Puguis, and 3) Strawberry under the Pines at Timoy, Puguis
Recognition / Culminating Activity
Post- Incubation Stage -Pre-Acceleration Stage
Intellectual Property Seminar and Workshop
Basic Orientation and Hands-on Training Equipment Operations cum Annual Equipment Assessment and Upscaling
BSU-ATBI/IC Crop Program and Harvest Schedule Workshop
Monitoring and Site visit of Operation/Production Area of ATBI/IC Outwall Clients
BSU-ATBI/IC Mental Health Awareness and Wellbeing Seminar
Quarter Business Performance Review of Incubatees and Acceleratees
Business Model Canvas Pitching
Social Media Marketing: A Guide for ATBI/IC Incubatees and Acceleratees
Gain Access to Microfinance Institutions and other Services
Mid-Year Business Performance Review
Business Pitch Development Training Part 1: Principles of a Pitch Deck and Script
1 st and 2 nd National Incubatee Summit, 2 nd ATBI Conference
Networking and Learning Visit at Chiang Mai, Phayao, and Chiang Rai, Thailand
<ol style="list-style-type: none"> 1. Visit a Growing Strawberry System in a Plant Factory at the Faculty of Engineering and Agro-Industry 2. Visit a Smart Aquaculture at the Faculty of Fisheries Technology and Aquatic Resources 3. Visit and Organic Fertilizer Production, Industrial scale (FOAM accredited) and Thai breed medical cannabis farm at the MAEJO, Natural Farming R&D Center 4. Visit a Strawberry Farm at Rim Farm 5. Visit the Sufficiency Economy Learning enter and knowledge exchange on agricultural technology development in Northern Thailand 6. Visit UPITI Service Laboratory and Animal Research Center 7. Visit UPITI Strawberry Processing 8. Visit UP Innoshop and Overview of Innovation and Technology Transfer Institutes on Entrepreneurship Development and

- Technology Business Incubation
- 9. Study Visit to the UNESCO GNLC: Phayao Learning City project and meet Incubatee of UPTBI
- 10. Learning visit at Chiang Rai Homemade Ice Cream Co., Ltd – tour the facility and learn about her experiences with the technology supporting service provided by Mae Fah Luang University
- 11. Learning Visit at the Center of Excellence in Agricultural Innovation (Agrinno)

3. MARIA MONICA J. SAMORANOS

INCUBATEE PROFILE
Agri-based Technology Business Incubator/Innovation Center





MARIA MONICA J. SAMORANOS

Business Name:
JONICAZ FOOD PRODUCTS

Brand Name:
ZANE Nutri Delights

Incubation Status:
Incubatee (Outwall)

UM REGISTRATION NO. : 2/2022/050147

ZANE Nutri-Delight Homemade Ice cream is a young company that offers uniquely delicious flavors of homemade ice cream.

ZANE Nutri-Delight Homemade Icecream produces an array of choices of nutritious homemade ice cream and aspires to bring happiness in every scoop because happiness is home and happiness is homemade.

business logo



A COMPOSITION OF TARO-STRAWBERRY ICE CREAM



Business Coach: BSU-Agri-based Technology Business Incubator Staff
Technology Mentor: Esther Botangen, BSU Researcher at Northern Philippines Root Crops Research and Training Center (NPRCRTC)

Activities/ Seminars/Trainings Attended
Incubation Stage
Nutrifacts analysis
2 nd trial for Microbial test
2 nd National Conference and 1 st Incubatee Summit Exhibit
106 th BSU Foundation Day exhibit
Intellectual Property Seminar and Workshop
Business Performance Review
1 st and 2 nd National Incubatee Summit, 2 nd ATBI Conference
Networking and Learning Visit at Chiang Mai, Phayao, and Chiang Rai, Thailand
<ol style="list-style-type: none"> 1. Visit a Growing Strawberry System in a Plant Factory at the Faculty of Engineering and Agro-Industry 2. Visit a Smart Aquaculture at the Faculty of Fisheries Technology and Aquatic Resources 3. Visit and Organic Fertilizer Production, Industrial scale (FOAM accredited) and Thai breed medical cannabis farm at the MAEJO, Natural Farming R&D Center 4. Visit a Strawberry Farm at Rim Farm 5. Visit the Sufficiency Economy Learning enter and knowledge exchange on agricultural technology development in Northern Thailand 6. Visit UPITI Service Laboratory and Animal Research Center 7. Visit UPITI Strawberry Processing 8. Visit UP Innoshop and Overview of Innovation and Technology Transfer Institutes on Entrepreneurship Development and Technology Business Incubation 9. Study Visit to the UNESCO GNLC: Phayao Learning City project and meet Incubatee of UPTBI 10. Learning visit at Chiang Rai Homemade Ice Cream Co., Ltd – tour the facility and learn about her experiences with the technology supporting service provided by Mae Fah Luang University 11. Learning Visit at the Center of Excellence in Agricultural Innovation (Agrinno)

4. JOCELYN A. BANIAGA

INCUBATEE PROFILE

Agri-based Technology Business Incubator/Innovation Center






JOCELYN A. BANIAGA


Business Name:
Jocelyn Farm

Incubation Status: Post Incubatee




Technologies (POT):
Elevated strawberry production with walk-in polytunnel; Raised beds with low polytunnel

Ms. Baniaga produces and sells strawberries and high value vegetables through retail and wholesale . She also offers agrotourism where in costumers pick strawberries and other vegetables inside the farm. Aside from this she also produces lettuce and cabbage seedlings in a nursery.

business logo



STRAWBERRY AND VEGETABLES PRODUCTION

Business Coach: BSU-Agri-based Technology Business Incubator Staff
 Technology Mentor: Darwin A. Basquial, BSU Associate Professor, PhD in Horticulture
 Specialization: Crop Physiology, Crop Production and Management, Vegetable Crops

Seminars/Trainings Attended
Pre-Incubation Stage
ATBI Orientation
Forum on Enhancing Farm Management through Research Results Dissemination and Application
Symposium on Business Improvement in the Tourism Oriented Industry in La Trinidad
Incubation Stage (Y1)
Technical Session on Soil Probiotics and Launching of Organic Waste Conversion Facility
Business Performance Review
Meeting with Harvest Corporation and Preparation for the End-year Business Performance Review
Writeshop for the End-Year Business Performance Review Farm Production Year 2018-2019 (September)
Incubation Stage (Y2)
Market Growth and Market Growth Strategies Orientation Seminar
Farm Business Review Workshops
Seminar on Good Agricultural Practice (GAP) Compliance and Organic Production of Vegetables and Strawberry
Seminar on Health
Incubation Stage (Y3)
Orientation Seminar about Agri-based Technology Business Incubation
Presentation of Business Plan
Webinar on Gender Mainstreaming and Good Agricultural Practices Training
Incubation Stage (Y4)-Post Incubation
Nurturing the ATBI/IC Staff and Incubatees' Well Being through Greening Program
BSU-ATBI/IC Mental Health Awareness and Wellbeing Seminar
Understand Philippine National Standard: Code of Practice (COP) for the Prevention and Reduction of Aflaxton Contamination in Peanuts
Guide to Organic and Good Agricultural Practice (GAP) Certification and Standard and Procedures
Technical Training: Access to Finance
Learning Visit to Organic Farm and Agricultural Practices (GAP) Certified Farms
Business Name Registration
Gain Access to Microfinance Institutions and other Services
Incubatees' Performance Monitoring and Business Plan Review
Recognition / Culminating Activity

5. JENALYN L. PULTINO

INCUBATEE PROFILE
Agri-based Technology Business Incubator/Innovation Center






JENALYN L. PULTINO

Business Name:
TLZ's Hardin na Makulay
Incubation Status: Post incubatee
Technologies:
Elevated Strawberry production with walk-in polytunnel plant nursery.

Ms. Pultino offers agrotourism inside the ATBI/IC farm where in costumers pick strawberries in elevated strawberry beds. she also focuses in the production of strawberry runners and nursery for high value vegetables.

business logo



STRAWBERRY AND VEGETABLES PRODUCTION



Business Coach: BSU-Agri-based Technology Business Incubator Staff
 Technology Mentor: Darwin A. Basquial, BSU Associate Professor, PhD in Horticulture
 Specialization: Crop Physiology, Crop Production and Management, Vegetable Crops

Trainings/Seminars Attended
Pre-Incubation
Training workshop using MS Word & MS Excel
Marketing Seminar Workshop 2015
Operations Planning Seminar Workshop 2015
Financial Planning Seminar Workshop 2015
ATBI Orientation Workshop
Incubation Stage (Y1)
Strawberry cum Vegetable Farming Technology Matching Seminar
Food Safety Seminar Series I: Introduction to Food Safety, Global GAP, Food Safety Hazards, cGMP, Food Labeling
Seminar Workshop on Farm Bookkeeping
Incubatees' 1st Quarter Business Performance Review
Oral Presentation Skills Training for Farmer-Incubatees
Seminar and demo on Strawberry Production
Quarter Business Review(Presentation of Farming' Financial Status)
Orientation and Seminar on Product Labeling
Enhancement of Farm Records
BSU-ATBI/IC ORIENTATION-WORKSHOP
Culminating Activity
Financial Statement Hands-on Preparation
Incubation Stage (Y2)
Training On Biological Control Of Phytophagous Twospotted Spider Mites Infesting Strawberry In The Highlands
First Farming Business Review
Training On Creating Labels Using Ms Publisher & Photoshop
Monitoring Of Midyear Performance: Productivity And Innovation
Seminar On Marketing Vegetables
Finalization of Business Plan Presentations Workshop with Incubatees (who are applying for next production year)
Incubation Stage (Y3)
Why Women come to ATBI (FGD)
Cluster A Meeting, re: Farm names, Fences, Pav. Duties, Nursery, Product label
Training on Soil Probiotics, Soil Health, Soil Pollution, and Soil Analysis

Training on the Use of Stingless Bees as Pollinators in Strawberry
Training on Biological Control of Phytophagous Two Spotted Spider Mites (TSSM) Infesting Strawberry in the Highlands
Meeting on Barcoding & Other Matters
Stingless Bee Hive Installation and Maintenance & Monitoring Workshop
Midyear Business Performance Review
Training on Soil Fertility and Alternative Pest Management
Training on Biological Control: Knowing Pest Management Strategies in Crop production
Quality Service Training
End Year Business Performance Review
Symposium on Business Improvement in the Tourism Oriented Industry in La Trinidad
Monthly Business Performance Review
Technical Session on Soil Probiotics and Launching of Organic Waste Conversion Facility
Writeshop for the End-Year Business Performance Review Farm Production
End-Year Business Performance Review Farm Production Presentation
Incubation Stage (Y4)
Hands-on Training on Preparation of Financial Statement for Smallholder Farming Business
Seminars on 1) Entrepreneurial Process, 2) Business Ethics, 3) Wealth Management, 4) Productivity, and 5) Orientation for Year 1 Incubatees
Seminars on 1) Business Registration, 2) Contribution of Filipino Values to Smallholder Farming Business Success, 3) Seminar on Gaining Access to Microfinance, and 4) Seminar on Preparing a Feasibility Study for a Smallholder Farming Business
Seminar on 1) Market Growth, 2) Market Growth Strategies, and 3) Orientation Seminar for Year 2 Incubation
Seminars on 1) Farming as a Business, 2) Farming and the Environment, 3) Farm Waste Management, 4) Orientation Seminar for Pre-Incubatees
Monitoring and Seminar on Health of the BSU ATBI/IC Incubatees and Personnel (as precautionary response to COVID-19 pandemic)
Learning Visits to Agri-tourism Farms in La Trinidad Benguet: 1) Living Gifts Nursery at Alno, 2) Lily of the Valley Organic Farms at Ampasit, Puguis, and 3) Strawberry under the Pines at Timoy, Puguis
BSU-ATBI/IC Crop Program and Harvest Schedule Workshop
BSU-ATBI/IC Mental Health Awareness and Wellbeing Seminar
Recognition / Culminating Activity
Post-Incubation Stage
Learning Visit to Organic Farm and Agricultural Practices (GAP) Certified Farms
Intellectual Property Seminar and Workshop Among Incubatees and Acceleratees of BSU ATBI/IC
Basic Orientation and Hands-on Training Equipments Operations cum Annual Equipment Assessment and Upscaling
BSU-ATBI/IC Crop Program and Harvest Schedule Workshop
Understand Philippine National Standard: Code of Practice (COP) for the Prevention and Reduction of Aflaxton Contamination in Peanuts
Guide to Organic and Good Agricultural Practice (GAP) Certification and Standard and Procedures
Technical Training: Access to Finance
Social Media Marketing: A Guide for ATBI/IC Incubatees and Accelaratees
Business Name Registration
Gain Access to Micro-finance Institutions and other Services
Mid-Year Business Performance Review

INCUBATEES FINANCIAL STATUS

<i>INCUBATEE Level</i>	<i>ANNUAL GROSS INCOME BEFORE ENTERING ATBI</i>	<i>ANNUAL NET INCOME BEFORE ENTERING ATBI</i>	<i>ANNUAL GROSS INCOME IN ATBI</i>	<i>ANNUAL NET INCOME IN ATBI</i>
Pre-Acceleratee (farming)	400,000.00	200,000.00	1,388,633.50	863,136.99
Pre-Acceleratee (farming)	370,300.00	170,000.00	1,111,125.00	744,950.86
Incubatee (new start-ups food processing)	17,000.00	10,200.00	68,000.00	47,600.00
Post-incubatee (farming)	350,000.00	120,000.00	683,237.00	262,784.41
Post-incubatee (farming)	250,000.00	91,000.00	533,677.59	183,530.29