

STATEMENT OF THE PURPOSE / INTENT

(GENERAL OBJECTIVES)

I. OVERVIEW OF BACKYARD GARDENING PROJECT

A healthy living in the Philippines is one of the programs that the government agencies is trying promote nor to maximize; and most people nowadays are living in the city and no longer recognizes the importance of growing own food in their backyards, probably the required space is not enough and most of the products in gardening are available in the markets without the needs of too much effort. Certainly, as the population has moved away from agriculture and into more urban settings, gardening is not as necessary and there isn't as much land to garden on, but it is certainly still possible.

Ever since, gardening was once a normal part of life for most people in Philippines, and in almost all parts of the world, we still have the ability to grow some of our own food, at least part of the year. Yet, statistically, many of us don't, especially in the Philippines. With rising food & gas prices, droughts and issues with the food supply, perhaps it is the time to bring back the backyard gardening most specially to people who lives in both urban and rural areas.

With the use of technology and transmitting information through radio broadcasting as a medium, maximizing the promotion on a healthy living is much possible to achieve. The BA-COMM fourth year students of PHINMA - Cagayan de Oro Colloge are conducting School on the Air program that focuses on Backyard Gardening. A program that encourages the residents of the target area to be more productive through their own gardens at home and to help them generate their income with

just 20 percent of their backyard's space. The goal of this program is to Promote Healthy Living through School on the Air program – With the span of 3 months and with the help of the coordinating agencies like the Department of Agriculture Region 10, Agriculture Training Institute R.10 and through lectures and discussions with a resource person. Applying and exercising the organic planting procedure, the listeners nor the target listeners will be able to make and grow food in their own backyards at home

II. The Subject (*What is Backyard Gardening?*) - Identification

“Backyard gardening can inspire you to take an interest in the origins of your food and make better choices about what you put on your plate,” says Dr. Helen Delichatsios, an internist at Harvard-affiliated Massachusetts General Hospital. “When you grow your own food, you savor it more because of the effort it took to get to the table.”

Growing your own food has many health benefits:

- It helps you eat more fresh fruits and vegetables.
- You decide what kinds of fertilizers and pesticides come in contact with your food.
- It lets you control when to harvest your food. Vegetables that ripen in the garden have more nutrients than some store-bought vegetables that must be picked early.

Growing your own food isn’t rocket science. “Growing food is very simple,” says Kathleen Frith, managing director of the Center for Health and the Global Environment (CHGE) at Harvard Medical School. “It takes a little time, but things like tomatoes, lettuce, peppers — basic kitchen crops — are very forgiving. Really, anyone can learn to grow food pretty easily.”

Frith proved that when she spearheaded the Harvard Community Garden, a large collaborative project in Harvard Square. Students tend the garden and grow a variety of fruits and vegetables. The garden’s bounty is donated to food shelters or featured on the menu at the Harvard Faculty Club. You can see photos of the garden [here](#).

If you’re interested in growing food in your backyard, Frith offers these tips:

- Start small and plant things you'd really like to eat.
- Pick a spot with at least 6 hours of good daytime light and access to water.
- Use contaminant-free soil.
- Consider using a raised garden bed, which allows you to control the soil and nutrient blend.
- Talk to farmers or other backyard gardeners in your area to get a sense of what grows well in your region and when.

III. Types of Backyard Gardening

There's no doubt that growing plants is a rewarding way to beautify one's home indoor and outdoor spaces, and gardening is increasing more in popularity with each year that passes. While you may associate gardening mostly with standard residential or commercial landscaping, there are actually many different types of gardening that encompass various styles, techniques, locations and types of plants. There are 5 common types of Backyard Gardening (Indoor and Outdoor).

1. Container Gardening (Pot Gardening)

Gardening in containers rather than the open ground opens up a whole new world of growing plants, allowing the gardener to bring plants inside during the cold season and use all sorts of vessels to contain them. With containers, even gardeners living in urban apartments can grow food, herbs, flowers and foliage in sunny windows or on balconies and rooftops. Container gardening eliminates the problems of weeds, most soil-borne diseases and gives the gardener ultimate control over moisture, sunlight and temperature.

Container gardening provides the perfect opportunity to recycle used household and industrial items that may otherwise have ended up in a landfill, from an old boot to a porcelain pitcher or even a bathtub. Containers of plants can be grown indoors, outdoors, in conservatories or greenhouses. They can stand alone or be arranged in groups to provide maximum aesthetic appeal, varying the height, color and texture of the plants as well as that of the containers to achieve visual balance.

2. Raised Bed Gardening (Organized Pattern)

Like container gardening, raised bed gardening allows the gardener to have total control over the soil being used to grow plants. Since raised beds are actually freestanding structures, typically made of wood, stone or concrete, the quality of the soil beneath them doesn't have an effect on the results. Raised beds allow gardeners to grow a variety of ornamental, edible and medicinal plants on top of even the most barren surfaces, from rock-hard clay to concrete slabs. They also provide better drainage, keep the soil warmer and require less maintenance than traditional gardens.

Raised beds are often made of planks of wood screwed or nailed together in sizes typically ranging from 3 x 8 to 5 x 20. Leaving the width of the bed relatively small enables the gardener to reach inside to care for plants, preventing the need to step on and compact the soil. Beds are usually 8 inches to 3 feet in height, depending on the needs of the plants being grown. Raised bed gardens are filled with good quality soil mixed with compost and rotted manure.

Raised beds are especially well suited for disabled or elderly gardeners, since they can be built high enough for one to remain seated comfortably while gardening, eliminating strain on the joints and spine.

3. Indoor Gardening (Pot and Beautification)

Indoor gardening brings the beauty of nature inside, all year long. Many people grow houseplants for the visual benefits, but they also act to purify the air, drawing in airborne pollutants as part of the photosynthetic process. Houseplants can significantly improve air

quality, especially in newer buildings that are completely airtight.

Common houseplants that help purify the air include English ivy, spider plant, golden pothos, peace lily, Chinese evergreen, bamboo or reed palm, snake plant, heartleaf philodendron, dracaena and weeping fig.

Caring for houseplants is easy even for the most inexperienced of gardeners. The plants rarely require much more than the recommended levels of sunlight and water.

4. **Water Gardening** (Fish pond and Garden) Outdoor Beautification

Water gardens can be made up of any vessel that contains water – from a pond or half-barrel to a an old bathtub or watertight planter. Water gardens are typically made to include aquatic plants, fish and other aquatic life. They can be as simple as a couple of plants in a bowl, or large, complex ponds fitted with waterfalls, filters and many different types of plants.

It's fairly simple to put a water garden together; the most basic items that you need are a watertight container, potted aquatic plants, pea gravel and clean, fresh water. It's recommended to use a combination of submerged plants, emergent plants and floaters. Common aquatic plants for water gardens include wild celery, dwarf papyrus, water hyacinth and water lettuce.

You can add snails, which will eat algae, fish waste and decaying organic matter. Fish often used in water gardens include goldfish, mollies, guppies and gambusi, which eat mosquitoes.

5. Community Gardening (Organizational)

Community gardens are public spaces where you can typically rent a plot of land to plant ornamental, edible and medicinal plants as you like. Not only do community gardens provide access to fresh produce, they beautify neighborhoods, give a sense of community and connection to the environment. Some community gardens are tended communally, allowing everyone who helps out in the garden to have a share of its bounty.

These gardens help bring food production back to the individual, regardless of personal access to land for growing plants. Community gardens aren't just for growing fruit and vegetables, though. Many community gardens are made up of native plants, herb and butterfly gardens and/or purely ornamental plants, often as a setting for sculptures and other art displays.

FINDINGS FOR THE APPLICABLE TOPIC FOR THE PROPOSED SOA BACKYARD GARDENING

Among the Five types of Gardening, **Raised Bed Gardening** (Organized Pattern) is more applicable to be used as a material-basis for the SOA backyard gardening. In which, the target area for SOA will be interested, more evaluation on the said topic are shown in the next pages of this report.

IV. ABOUT THE TOPIC (Raised Bed Gardening)

*The Benefits of **Raised Bed Gardening**. **Raised garden beds**, also called **garden boxes**, are great for growing small plots of veggies and flowers. They keep pathway weeds from your **garden soil**, prevent soil compaction, provide good drainage and serve as a barrier to pests such as slugs and snails. And can be a source of income once managed properly.*

By raising the soil level, raised garden beds also reduce back strain when bending over to tend the bed. This is especially helpful to older gardeners or people with bad backs. And if the beds are built well, the gardener can sit on the edge of the bed while weeding, and for some gardeners this is the biggest benefit of all. Raised beds are not the same as garden planters. Planters are elevated containers which have bottoms to prevent the soil from falling out. Planter bottoms usually are slatted, with some type of semi-permeable cloth barrier which permits drainage.

Raised beds, however, do not have bottoms; they are open to the ground, which offers the benefit of permitting plant roots to go further into the ground for available nutrients. Raised garden beds are available in a variety of different materials, or they can be made with relative ease.

In 1975, Raised Bed Gardening was developed to be more specific and productive by a retired engineer and it was a big success in USA. Mel Bartholomew produced massive volume of copies on his book called *All New -Square Foot Gardening* and 2 million copies sold all over the world. The new method on Raised Bed Gardening was introduced on a television series on agricultural program in USA. Since then, Square Foot Gardening become more popular than conventional Raised Bed Gardening.

V. AVAILABLE SOURCE

A. About the Resource Person

In the Philippines on the other hand, the adaptation was only recently and only a few individuals are practicing it even though the system is highly adaptable for urban dwellers.

One of the few who adapted the system is the 65 years old Cagayanon, a former Philippine Constabulary Colonel and an incumbent Councilor of Brgy. Pagatpat in Cagayan de Oro City in the person of Honorio Cervantes.

Honorio Cervantes is now active on propagating to the public the squarefoot urban gardening system which he adapted from Mel Bartolomew. And to attest to Filipinos ingenuity in innovating things, he put in some innovations to the system so it would suit to Philippine setting. According to Cervantes - because of what he saw as the potential of squarefoot gardening, he now make it as a personal advocacy by teaching the technology to organizations and students, for free.

For now Honorio Cervantes have given free trainings about the technology to students in region 10 and Luzon, organizations, foundations and schools here and abroad like the Land Care University of Australia. All this can be found in his logbook at his office in Brgy. Pagatpat, Cagayan de Oro City inside his garden. A garden wherein a hidden fishpond is underneath which can be seen through a bamboo opening on the floor.

For more than 39 years as an employee of the Philippine National Police, Honorio S. Cervantes retired from the service as Police Senior Superintendent in 2005 at the age of 56 .

Though retired from public service he is not tired of searching on what to do with his 300 square meter land area located in Pagatpat, Cagayan de Oro City.

His effort resulted to the adoption of square foot gardening technology in April 2014 where he follow the method of an American engineer from Utah, USA .

Square foot gardening is the basic box project requiring a little of one's time, space and money. It is the practice of dividing the growing area into small square sections where plants can be grown and materials are always available in the local market.

Nor continues to apprise himself on organic farming through attendance to trainings and fora conducted by the Department of Agriculture (DA) and the Agricultural Training Institute (ATI). With the technologies at hand, he saved a lot of money from buying expensive and harmful chemical fertilizer. This move eventually brought him to engage into organic farming while developing his own innovations.

At first, he grows pechay, kangkong, eggplant, tomatoes, alugbati, cabbage, cauliflower, lettuce, sweet corn, squash, pole sitao, cucumber, spinach, upo, ampalaya, saluyot, and camote, as Nor planted all these in square foot by block.

He has made improvements and refinements and continually put into practice what he learned from the trainings he attended to keep pace with modern times.

Now, minus the sweet corn and squash he still invested in the production of all the other crops plus some okra, carrots, and raddish.

Since 2014 to 2015, he harvest his produce every week and sell it for retail to walk-in buyers but mostly *akomprador* will buy directly from the garden. In a month, he will earn at least P 16,800 for kangkong, pinakbet and all other crops planted in the block except for those that grows with trellis but still it's an addition to his income.

His place is now an agri-tourism destination and a learning site frequented by farmers and students. With a glance one can say that you will have an enjoyable gardening experience inside. Nor also raise tilapia on his 5'x5' fishpond which he positioned under the 2nd floor of his office.

Still in line with his extension work and as part of his advocacy on FAITH (Food Always In The Home) program, he introduces the square foot gardening to the inmates of the city jail of El Salvador, Misamis Oriental. He taught them the technology on easy gardening methods through a season-long training on urban vegetable garden.

Age is surely not a hindrance as Nor, at 67 is still into square foot organic urban gardening .Today, one can visit his place and be fancied with the thought that one can have a healthy and productive life with only 300 square meters.

Because of his hard work and perseverance and continuous study, he and his wife, Mary Ann were able to achieve their goals to spread the word and help others start their own square foot gardening.

“Start small and expand as you gain experience and success. Let us provide food without chemicals for families through the ORGANIC SQUARE FOOT GARDENING way. OSFG is saving effort, space, water and saving earth!” Nor remarked.

This suggest that, the said person could be a good source of information related to the Square Foot Gardening. And he is available for training and lectures for the School-On-the-Air program.

B. Coordinating Agency

With the agreement signed by the **TBG Network** and the **Department of Agriculture R.O-10**, agreed to support the implementation of *School on the Air on Square foot Gardening*; a modified raised bed farming. The agency agreed to produce available materials and products needed for the target Area. The signing was spearheaded By *Mr. Welson B. Caliat* Managing Head – SOA program, *Teodoro Auxtero* – Technical Head, *Amorsolo Kabalan* – Evaluation Head Committee. *Lealyn A. Ramos* – DA R.O 10, RD, *Lester A. Jaduana* – Chief Administrative Officer , Administrative Finance Officer, *Cora A. Domayaca* – Project Evaluation Officer – Planning, Monitoring and Evaluation division. and signing of contract was made thereafter – July, 11, 2016 at TBG Network Office.

As a strategy to harmonize the *extension* initiatives of the different institutions offering Agriculture and Fisheries Extension (AFE) services, the Institute forges linkages with these institutions for collaborative undertakings. The aim is to expand the reach of extension services as well as to cater to a more and diverse clientele. With the support of the *Department of Agriculture*, the project is now forwarded to the training program and planning of *Agricultural Training Institute (ATI) R.O 10*. And shall the project for SOA on Organic Square Foot Gardening will be supported and facilitated by the ATI programs. The agreement was made July 22, 2016 at ATI convention hall with *Mr. Welson B. Caliat* Managing Head – SOA program, *Teodoro Auxtero* – Technical Head, *Amorsolo Kabalan* – Evaluation Head Committee. *Lealyn A. Ramos* – DA R.O 10, RD, *Lester A. Jaduana* – Chief Administrative Officer , Administrative Finance Officer, *Cora A. Domayaca* – Project Evaluation Officer – Planning, Monitoring and Evaluation division. *Leonardo A. Luja* – ATI Regional Director, *Carl B. Kubot*- Chief Administrative Officer and *Abriel D. Kalas* - Project Evaluation Officer.

Note : The statement above is not Authentic and was never made – It is only to assume what this project should comply; and is only part of the training to students and completion of the said project. No Harm or Against the Institution and School; the Professor of this Subject is not held reliable.

VI. AVAILABLE MATERIALS

REVIEWER

Department of Agriculture R.O-10

1. Instructional Infographic material
- Brochure, Leaflets, Flyers and Book Let

Agricultural Training Institute R.O-10

2. Instructional Infographic material
- Brochure, Leaflets, Flyers and Book Let
3. All New Square Foot Gardening Handbook
Authored and Popularized by : Mel Bartholomy
- Discussions Reference

RESOURCE PERSON

1. **Lara M. Ambioles, PNS – DOH R.O 10**
- Reference on Health Benefits or Issues
2. **Emanuel E. Lazaro, PNS – DOH R.O 10**
- Reference on Health Benefits or Issues
3. **Emanuel E. Lazaro, PNS – DOH R.O 10**
- Reference on Health Benefits or Issues
4. **Juanita B. Salvani**
- Officer In-charge (Northern Minanao Agri. Crops & Livestock research complex)
Reference on Agriculture and Crops Program / support lecturer
5. **Ched V. Ansale**
- Chief Agriculturist (Agribusiness and Marketing Assistance Division)
Income Matrix Reference On Agriculture and Crops Program / support lecturer

INSTRUCTOR / LECTURER

6. **Mr. Honorio Cervantes**
- Square Foot Gardening (Instructor on SOA on SFG) – Airing Discussion

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VII. CONCLUSION

With all the research and inquiries, the subject and specific topic is now identified. The program will be entitled as *School-On-the-Air on Square Foot Gardening*.

All the definitions, statements and material-resources are also specified and Identified by the Evaluation Committee.

This chapter is now forwarded to the Managing Head to be evaluated, corrected and for approval of the broadcast.

INVESTIGATIVE REPORT

After the identifications, research and evaluations, And as part of the preparation for the School-On-the-Air on Square Foot Gardening, this chapter contains all the necessary background-information on the target area as specified and deliberated by the management.

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Ocular Visitation and Consultations

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- Land Area
- Residents Profile
- Number of Household
- Average Family Size
- No. of Houses per block
- Available Garden / Househol

B. Inquiries on Backyard Gardening Area (SFG)

- Common Garden Sizes (Average)
- Common Products with Nutritional Facts support

- Benefit of Backyard Gardening

C. Interview with the Resource Person

- Who is Mr. Honorio Cervantez
- About Mel Bertholomew

D. Weighing and Scaling Purpose

E. Income matrix

F. How Interested the residents in the target Area

- What they want to learn on Backyard Gardening

G. Other Income Generator of the residents in Sitio Lomboy

H. How Long the residents of Sitio Lomboy listens to Radio Broadcast

I. Conclusion

- Why Sitio Lomboy

(Is used to facilitate if the Backyard Gardening is Suited in the area, if yes – Soil sampling and testing shall be conducted)

J. Soil Sampling and Testing

- **Type of Soil in Sitio Lomboy**

- Result and Recommendation from the Laboratory

K. Approval for Soil Sampling and Testing

- Once approved, General meeting (all committees and Managing department)
-

- **Evaluation from the Evaluation Committees**

- Formulation on Pretest questionnaire (after the review of the gathered data and information)
- Schedule of Administrating the Pretest
- Pretest Analysis
 - Item analysis
 - Recommendation
 - Conclusion

Report Overview

Brgy. Indahag CDOC	About the Residents of Sitio LomBoy,	
Composed of 18 Sitios	3 rd Largest part of Brgy. Indahag	100-150 sqm per residential property.
16, 252 total population	1, 455 Total Population (Residents)	Source of Income - Farming
Comprises of 14000 hectare	4-8 Household member (Average)	Limited Available Garden's product.
Loam Soil is more Dominant in the area	Most of the residents are Farmer	Comprises of 250 hectares
48.2 land used for Agriculture	With Gardens – Low awareness	Loam Soil was Identified

A. RESIDENTS PROFILE

Barangay Indahag is composed of 18 sitios. With a total population of 16, 252- based on the 2016 Barangay Survey, comprises of 14 million sqf. Sitio Lomboy is the third largest sitio in Barangay Indahag. It has the approximate 250 hectares. According to the survey, Lomboy has a total population of 1,455 in which 693 are female and 762 are male with 84 active Senior Citizens. Sitio Lomboy is bounded on the North by Sitio Talisay, on the west Habitat Phase 1 and Phase 2, on the South is Poblacion Indahag, and on the east is Sitio Kamakawan.

Sitio Lomboy is divided into 10 Blocks. Two members of the Evaluation Committee Johnny Fuentes and Phil Bryan Pajo were assigned to inspect the block 1- 3 with its estimated 35 houses in block 1 and 30 houses in block 2 and Block 3 has 27 houses, with 4-8 members per household. 3 gardens are found productively growing in the said areas

Mary Grace Barbosa and Kyramie Ga-a were assigned to inspect the area from block 4-7. They found out that only few of the residents in this block have a growing garden. block 4 has 20 houses and block 5 has 28 houses and Block 6 has 30 houses and Block 7 has 19 houses with an average of 4 to 8 members per household. Among the three, there were 6 gardens inspected and reviewed by the evaluation committee and one of these gardens is the largest with 270 sqm in wide and 230 sqm in length. Fortunately the group were able to interview the owner, Mr. Emilio Ajan planted 6 different products in his garden, Ampalaya, eggplant (talong) and Okra are just the three out of six yet have a higher amount in terms of production. His common purpose of this huge garden is for profit.

As Pearl Betacura and Maureen Baja assigned in block 8, 9 and 10 they found out that most of the residents are working in their farms and suggest that gardening is not their priority; and only few have a backyard garden. Block 8 has 30 houses, Block 9 has 20 houses, Block 10 has 15 houses with an average of 4-8 members per household. In total from block 8-10, there were 4 gardens including pot gardening (was also sited) yet not properly cared and sustained, Out of these four gardens there were only one (1) garden that is properly cared, and produced good product the said garden and it's filled with *long melon (Opo)* and the rest are are concisely managed.

Based on the gardening standards of the Department of Agriculture suggest that a garden should have a regular cleaning, concise and proper garden lay-out, soil analysis and fertilization must be observed and evaluated. Upon the review and inspection of the evaluation committee 13 gardens (in total from block 1 to 10) were carefully inspected and reviewed, the findings were– *most of these gardens are not properly cared by the owners, grass and shrubs are also growing along their products in their gardens. There were no proper planting and measurement - as this suggest that the main purpose of the said gardens in Sitio Lomboy are for consumption only, thus proper and regular cleaning, concise and proper garden lay-out, soil analysis and fertilization are not thoroughly complied by the residents.* Sitio Lomboy has an approximate-area of 250 hectares. Around 1/2 of the whole area were used for agricultural production and the rest were occupied by the residents and/or titled lot by private sectors. Some part of these sitios are used for facilities and infrastructures. The residential property has 100-150 square meters For a regular house; it has 60-100 sqm (estimated- and is not official).

B. Inquiries on Backyard Gardening Area (SFG)

AVERAGE GARDEN SIZES AND THEIR COMMON PRODUCTS Sitio Lomboy, Brgy. Indahag

Sitio Lomboy is located in Indahag, southeast part of Cagayan de Oro City. The residents of Sitio Lomboy were engaged in backyard gardening. There were approximately 68% or 207 gardens (big and small) in the said area; and the group had observed 13 gardens with an average of 8x12 square meters and the smallest garden measurement is 2x4 square meters. The plants that were commonly planted in their gardens were malunggay, upo, okra, kangkong, alugbate, talong, sitaw, and ampalaya. The common reasons of the owners were it's easy to plant and easy to sell; most people have known these products for a long time and which are suitable for tropical countries like Philippines. Some gardeners are dependent on organic fertilizers and others applied inorganic ones, and most of them have no idea on what is Square foot gardening. In the documentation that the group had, it shows their how they plot their gardens, obviously there is no pattern used in their gardens. There is no regular maintenance for their gardens as well.

Moreover, the list of common products in their gardens were listed below with fact nutrients are included to verify how healthy their intake food; nor from a conventional garden like Sitio Lomboy Brgy. Indahag Have.

Malunggay (*Moringa Oleifera*) has been used as herbal medicine in many cultures for hundreds of years; Malunggay is known as a very nutritious plant where it is used to combat malnutrition in third world countries especially for infants and nursing mothers. The effect of **bottle**

gourd (Calabash) in our body are it can able to cool the body temperature if it's hot, helping patients heal very high fever, coping with flu, treating thrush, typhus cure, treat asthma, and for smokers, the water flask was also able to clean the lungs due to the effects of nicotine. **Okra** is rich in fiber, important for the maintenance of normal blood cholesterol levels, good digestion and stabilization of the blood sugar levels. A study conducted in Department of Biochemistry and Nutrition, India reported that by administering powdered **Kangkong** supplements to pregnant rats, both the mother and the fetus exhibited an increased resistance in diabetes induced oxidative stress versus a control group. The results suggest that kangkong supplementation during pregnancy may provide beneficial effects against diabetes induced oxidative stress both for the mother and the fetus. **Alugbati** is also rich in a number of antioxidants, namely lutein and talinum, according to a 2008 study published by the University of the Philippines at Los Banos. Antioxidants protect your body's cells from potential damage that can be caused by free radicals and exposure to environmental toxins. Research on **eggplant** has focused on an anthocyanin phytonutrient found in eggplant skin called *nasunin*. Nasunin is a potent antioxidant and free radical scavenger that has been shown to protect cell membranes from damage. While not documented in the health research to date, it is said that the omega-3 fatty acid of content of **green beans (string beans)** can also make an important contribution to the cardiovascular benefits. The Department of health approved and endorsed **Ampalaya** as an alternative medicine for diabetes mellitus 2. The study has been certified by the Philippine Institute of Traditional and Alternative Health Care (PITAHC).

THE BENEFITS OF GARDENING

Relaxation, fitness, family fun, delicious food—sounds like a dream vacation at an all-inclusive resort. But believe it or not, this can all be found in a simple backyard garden. Gardening supplies a total-body workout, allows us to reap what we've sowed, and provides an opportunity to reconnect with nature and our loved ones. A great way to spend time in nature, increase physical exercise, and promote mental health is as close as our gardens.

“Backyard gardening can inspire you to take an interest in the origins of your food and make better choices about what you put on your plate,” says Dr. Helen Delichatsios, an internist at Harvard-affiliated Massachusetts General Hospital. “When you grow your own food, you savor it more because of the effort it took to get to the table.”

Growing your own food has many health benefits:

- It helps you eat more fresh fruits and vegetables.
- You decide what kinds of fertilizers and pesticides come in contact with your food.
- It lets you control when to harvest your food. Vegetables that ripen in the garden have more nutrients than some store-bought vegetables that must be picked early.

Mr. Honorio Cervantes specializes the Square Foot Gardening, stated that Gardening is a great way to sustain family needs but it matters to what kind of gardening one does. Part of of a good gardening is anyone can ensure a healthy food intake by the family, specially to young ones or infants that need delicate to chemicals used in the production of most products nowadays.

He added, In the Philippines for example, gardening can greatly solve the issue on food shortage in the country, but one should have proper knowledge to what is best and not for the type of soil he/she be gardening. Furthermore, Square foot gardening is not as wasteful than the conventional one, any excess can be a source of income from any of the neighbors, it can also beautify your home and so much fun can be acquired once a good garden is properly applied. On the other side on Square Foot Gardening, it does not need big space, if one has a available spot like empty bottle or cans it could be used to grow food and pot gardening could also be place any part of the house, and for those who have 4x4 square foot available in their backyards great products can also be produced.

According to gardening expert Maria Iannotti USA-Backyard Farming on Square Foot gardening instructor. Even a small garden plot can produce significant food. For example, anyone could grow the five tomato plants in only about 30 square feet if one trellis them. Even if one has no yard, many vegetables are easy to grow in containers on your porch or balcony.

Eating fruits and vegetables is a proven way to stay healthier. Many studies have found that people who eat more fruits and vegetables suffer less from cancer and chronic diseases such as heart disease, gastrointestinal disease and impaired vision. It's a lot easier to get more vegetables into your diet when they are growing affordably right in your backyard! Your own vegetables will taste better, too, because you can eat them when they're freshly picked and still contain the maximum amount of flavor and nutrients.

Good-tasting food isn't the only health benefit gardening offers. It's also an easy and enjoyable way to spend time in the fresh air and sunshine getting healthy, moderate exercise. Most people agree that gardening is pleasant and relaxing, and it has actually been clinically proven to can help alleviate stress.

C. INTERVIEW OF THE RESOURCE PERSON

INTERVIEW WITH Mr. Honorio Cervantes

The evaluation Committee conducted an interview to Mr. Honorio Cervantes, last August 13, 2016. The interview was about the Backyard Gardening and how he started this program. What the products he planted in his garden and what his inspiration to do such project with his specialized garden methods and technique.

Mr. Cervantes of Pagatpat known to his specialized 4x4 square foot gardening – The Cervantes Farm. His garden were approximately 400 sqm. He has pechay, brocoli, lemon, kang-kong and so much more. He started his in 2014. And was featured in Agri Tayo Dito an ABS-CBN agriculture-feature program, he was also recognized and awarded as Agri Bida 2016.

He was also featured in Bright Leaf Agriculture Journalism Award, **“Square foot urban gardening: Saving space, saving water, saving effort, saving earth”** By Ronde Alicaya DXCC RMN, Cagayan de Oro

The methodology he is using is a pattern of Mel Bartholomew a retired Engineer in USA that specializes on Square foot gardening. According to him “As a Filipino we are trying to innovate with what the technology has to offer and the advantages and disadvantages on backyard gardening. He added, the American way has only three medium in mixing soil, which are not suitable in the tropical countries like the Philippines” furthermore, in gardening, there are things to consider heat of the sun, the soil and the plant that only applicable to the types of soil in the area.

In everyday endeavor people need food - Food is our body's fuel in order to accomplish tasks regardless of how small or big that task or project may be. But food is limited, and the situation may even aggravate for some issues, like the diminishing number of farmers, insufficiency of space for

planting—especially in urban areas, lack of water supply and climate change.

Nowadays, most of the people who are living in urban areas are dependent on farm produce from upland agriculture, while other supplies are imported from other countries. As a result, the consumers become hostage to price fluctuation.

The good news is, there is farming system which can be done any time anywhere because it needs not wait for a planting season. Maybe people are now aware about urban agriculture and urban gardening. However, have they ever heard of "Square Foot Urban Gardening"? - *Ronde Alicaya DXCC RMN*.

Honorio Cervantes: "The Kangkong takes only 18 days to plant, and you can harvest it. In squarefoot gardening, in a single squarefoot, 36 'tudling' can be produced and one can harvest more than 500mgs of it, in 18 days. You see? It's easy "

The square foot gardening is a farming system which was introduced not by an agriculturist but by an American civil engineer named Engr. Mel Bartholomew.

According to Engr. Bartholomew, he made squarefoot gardening system because of what he observed as wrong and wasteful system of farming and laborious way or method of farming.

He claimed on "Now, this system is a very condensed, natural organic method. In fact, you can grow 100 percent of the harvest compared to *regular single row gardening with only 50 percent* of the cost, and **20 percent of the space**, and then *10 percent of the water*, and *five percent of the seeds*, and only two percent of the work. It's all that easy".

Square foot gardening system has been here for a long time in America and other third world countries (1970s). In fact, they have now a worldwide foundation called Square Foot Gardening

Foundation. In the Philippines on the other hand, the adaptation was only recently and only a few individuals are practicing it even though the system is highly adaptable for urban dwellers.

One of the few who adapted the system is the 65 years old Cagayanon, a former Philippine Constabulary Colonel and an incumbent Councilor of Brgy. Pagatpat in Cagayan de Oro City in the person of Honorio Cervantes.

On the interview with Mr. Ronde Alicaya (DXCC-RMN CDO) Honorio Cervantes said "When I started this on April of 2014, I saw that I can share the system to my fellow farmers in Brgy. Pagatpat. I shared it to them that I have an advocacy in terms of a project that in my mind, I believe could help put food to the table of a family. Also, I notice that there is a lack of focus on the farming system that uses only a little space. Imagine, in a space of only three (3) or 4 by 4 squarefoot gardening, one can already produce vegetables instantly, if one chooses the right plant for the squarefoot gardening".

When asked whether he has some worries or is there something that inspire or urged him to advocate organic farming through squarefoot gardening, Cervantes said...

Honorio Cervantes stated "If you look at the statistics now of the profile of our farmers, you will be alarmed. You will wonder because the profile of our farmers now are 54 years old and above. It is quite alarming; there is no more next generation of farmers. So, what shall we do? How should we address this since our younger generation are hooked to the internet, vices and nobody focuses on gardening anymore?"

Honorio Cervantes is now active on propagating to the public the squarefoot urban gardening system which he adapted from Mel Bartolomew. And to attest to Filipinos ingenuity in innovating things, he put in some innovations to the system so it would suit to Philippine setting. According to Cervantes - because of what he saw as the potential of squarefoot gardening, he now make it as a

personal advocacy by teaching the technology to organizations and students, for free. He said, "I saw that one of the contributing factors on food sufficiency for the family is planting vegetables like, pinakbit, sinigang, etc that can be adapted in lowland agriculture. We are here in urban area so we have to plant vegetables that can be planted in lowland. Now, we also have climate change, that's a huge problem. How would we able to protect ourselves? And, one of my focuses also is the implementation of the Organic Act, agriculture in organic way to avoid eating food with pesticide", Cervantes said.

Maybe some people are thinking now how good this technology really is and how big its impact to the country? However, In order to appreciate more about the technology, one should take a look at what problems the country is now facing?

First, the Philippines is now facing the problem of diminishing number of next generation of farmers and fishermen who would produce food for the rest of us. Based on the data presented by the Department of Agriculture during the senate budget hearing in 2012, the average age of farmers and fishermen is 57 years old. Meaning, few years from now we might have a worst food deficiency problem.

Second, starting next month, it is expected that El Niño phenomenon will hit the entire world. According to experts abroad, this El Niño phenomenon is worse compared to 1983 and 1997 El Niño. And it might last a long time, that's why they called it a "Godzilla El Niño".

This crisis is also expected by our local weather experts in Philippine Atmospheric Geophysical Astronomical Services Administration (PAG-ASA)

According to PAG-ASA Weather Specialist Luz Mercado of El Salvador City, Misamis Oriental... Luz Mercado, weather specialist, PAG-ASA: "El Niño is global phenomenon. Since last quarter last year

—October 2014, we already have signs of weak El Niño and until now, even though we have some rains the phenomenon is still here. Currently, it is forecasted moderate, and for the last quarter of this year and until the first quarter next year, it was forecasted strong. The effect of the El Niño until next year is strong then it would terminate by May 2016. So, we advise our farmers these days not to plant indiscriminately but to choose crops that are drought resistant, like root crops. So, expected or forecasted that the effect of this El Niño phenomenon will be as strong as the 1983 and 1997 El Niño, respectively".

And since we might experience water supply deficiency, we have to conserve it. Now the question is what the people can do specially those who are urban settlers with limited space, limited time—because they have to work hard due to higher prices of commodities? Even water is also a problem here because aside from the lack of supply, it is also expensive.

According to Honorio Cervantes, squarefoot urban gardening can possibly answer the food sufficiency problem. Aside from that, it is proven an answer to laborious work in doing a single-row gardening because, *first*, it could be done easily with less time on land preparation. In fact, the land preparation can be done only in an hour. Also, it can be put beside the house, on the roof, on the backyard or from the ground up through vertical expansion. Or, indoor planting as long as it has fluorescent for lighting. Meaning it can be planted indoor or outdoor in residential areas and schools.

Third, this system and its design of gardening can be done by anybody, old young and even by persons with disabilities (PWDs).

Okay, let's say I have a box or a squarefoot space, can it be expanded into five or 10 storey? - Alicaya asks..

"Yes. As long as you put a "drift irrigation", you put a hose and empty bottle of mineral water, to

feed water evenly" – Cervantes' Response. He added, "The secret on squarefoot gardening is soil. It has three components: light, soil, and water" Cervantes answered. So, your squarefoot gardening system now is already a mixture of foreign technology and your ingenuity?" - Alicaya asks.

"Yes. It's like my guide and I add some innovations to it because, of course, what was taught here was an American style, they have their own mixture. They have three mixings there; they have vermiculite, peat moss and compost (Mel's Mix, derived from Engr. Mel Bartolomew's name). I did not follow it. For the soil mix (he called it "Cervantes' Mix"), I use animals manure. I have cow's manure, goat manure, vermicast from chicken dung. Then, I use lime which was washed out during typhoon Sendong, sand and gravel, and bamboo charcoal" , Cervates specified.

For now Honorio Cervantes have given free trainings about the technology to students in region 10 and Luzon, organizations, foundations and schools here and abroad like the Land Care University of Australia. All this can be found in his logbook at his office in Brgy. Pagatpat, Cagayan de Oro City inside his garden. A garden wherein a hidden fishpond is underneath which can be seen through a bamboo opening on the floor.

Your area here is 300 square meters, right? (And recently expanded into 400sqm), How many varieties have you planted here—aside from the tilapia under our feet? - Alicaya asks.

"I have here 22 varieties all in all, vegetables and root crops. And this is only basic, Cervantes answered.

We all know that every now and then prices of basic commodities fluctuates, like prices of vegetable. In some instances the increase in prices is artificial because of some alleged hording. But, most often than not, the adjustment of prices is up. What squarefoot gardening can do to combat this concern?" Alicaya asks.

Cervantes stated - "My answer to that is very simple, it's really simple: do it in squarefoot gardening so that you will not buy from the market anymore. Self-reliance, self sufficiency. You should start from your own. If everybody in the house plant vegetables, what would a family will be needing for? -

For now, Honorio Cervantes plan is to continue spreading the information regarding square foot urban gardening system. This even, according to him, the government lacks support for this kind of project.

"When I studied about doing an all-organic seedling, I think it's difficult as of this time. So, we have instead semi-organic seedling because what we got now for organic farming is 30-70 or 50-50 combination. We cannot implement immediately a sudden change to all-organic to those who are using fertilizer but to nudge them little by little. I get my seed from local seed company. However, some local seedling grows improperly. We have supplies from the government but, sometimes it's also problematic. We cannot really blame the government entirely but maybe in the process of procurement and transportation because sometimes the seedlings do not grow" – Cervantes stated.

In retrospect, in 2011, Senate Bill No. 2095 or Urban Agriculture and Vertical Farming Act were pushed. Also, in 2013, a similar Bill, House Bill No. 720 or the Urban Agriculture Act of 2013 was filed, purposely to address the food sufficiency concern in the country. However, until now the two House Bills was not enacted into law.

"In my age, I am already a senior citizen. For me these days, my concern is to focus on my

advocacy, that I can share the method on saving spaces, to enable the people to plant right to reduce their problems, like; land preparation, pest control management. And we still have to face the climatechange which is unpredictable. This (squarefoot urban gardening) is our defense. Squarefoot Urban Gardening is one of the methods in agriculture that can be done even in almost no space. It can be done in subdivisions, resettlement, and even in high-rise building. This is what we need so we can eat" – Cervantes said. My intention here is to impart to the public what I introduced to them and for them to realize its advantage. I don't want anything but to give free training, as long as I can", He added.

DISCLAIMER : Part of the investigative report is to look for reference to be used as a supply - information needed for the program. The bright leaf awards of Ronde Alicaya was found suited to be used as reference for this queries. The interview of Ronde Alicaya to Mr. Honorio Cervantes – had the same context as how Mr. Cervantes explain to the Students of PHINMA-COC BACOMM 4th year STUDENTS during their inquiries on the innovative backyard gardening.

Acknowledgment : Mr. Ronde Alicaya is one of THE DXCC-RMN personnel, Cagayan de Oro. And received an award from The bright leaf awards – Agriculture Journalism Awards 2015 as BEST AGRICULTURE RADIO PROGRAM OR SEGMENT on **Square foot urban gardening: Saving space, saving water, saving effort, saving earth.**

CREDIT : Mr. Ronde Alicaya DXCC-RMN CDO & <http://thebrightleafawards.com/2015-best-agriculture-radio-program-or-segment/> - where the statements found by Mr. Johnny Fuentes – BACOMM-04 PHINMA-COC, Group leader / facilitator.

Mel Bartholomew
SQUARE FOOT GARDENING
BACKGROUND
(www.growveg.com)

Square Foot Gardening (commonly referred to as SFG) is a planting method that was developed by American author and TV presenter Mel Bartholomew in the 1970s. It's a simple way to create easy-to-manage gardens with raised beds that need a minimum of time spent maintaining them. SFG rapidly gained popularity during the 1980s through Mel's first book and television series and since then has spread across the world, eventually going 'mainstream' with several companies offering ready-to-assemble SFG gardens. SFG advocates claim it produces more, uses less soil and water and takes just 2% of the time spent on a traditional garden. So what makes Square Foot Gardening special and why don't all gardeners use it?

SFG was developed as a reaction to the inefficiencies of traditional gardening. In 1975 Mel Bartholomew had just retired as an engineer and decided to take up gardening as a hobby. It was only natural that he would apply his analytical skills to the problems he encountered. In particular he found the average gardener was spending hours weeding the big gaps between long rows of plants, creating unnecessary work for themselves. It soon became clear that getting rid of rows and using intensive deep-beds could dramatically cut the amount of maintenance the garden required. Add a one-foot square grid on top and it became easy to space and rotate crops.

The Square Foot Gardening System

Over the years the SFG system has evolved into a precise set of rules:

- **Create Deep Raised Beds:** Typically 4 feet by 4 feet, with a square foot lattice placed on top to visually separate the crops. Beds are between 6 and 12 inches deep which gives the plants plenty of rich nutrients, while maintaining good drainage.
- **Use a Specific Soil Mix:** One third each of compost, peat moss and vermiculite. This starts the raised beds completely weed-free as well as being water retentive and full of nutrients.
- **Don't Walk on the Soil:** This is now common practice with raised bed gardening but back in the 1970s it was revolutionary to suggest that you wouldn't need to dig your soil if you didn't tread on it.

- **Plant in Squares:** To keep the planting simple there are no plant spacings to remember. Instead each square has either 1, 4, 9 or 16 plants in it depending on the size of the plant – easy to position in each square by making a smaller grid in the soil with your fingers. As an exception to this there are a few larger plants that span two squares. Climbing peas and beans are planted in two mini-rows of 4 per square.
- **Thin with Scissors:** Instead of pulling up excess plants which can disturb the root systems of the plants you want to grow you snip them off with scissors.
- **Accessories:** As well as details of all the above the All New Square Foot Gardening book has practical instructions for constructing various accessories including protective cages that easily lift on and off the SFG beds, covers to extend the season and supports for vertical growing.

There's a purpose to each of these 'rules' and together they make up a powerful and almost fail-safe method for successful gardening. It's a great method for new gardeners, people who have little time, the elderly or disabled (SFG gardens can be built at a raised height to make them more accessible) and children. Many schools have embraced the SFG method because it's easy to install and maintain without becoming an additional burden for the teacher. However, there are some limitations:

- **Easy to Outgrow:** Although many vegetables can be grown in SFG gardens it struggles to accommodate larger plants (squash, melons, main-crop potatoes etc), perennials (globe artichokes, rhubarb) and fruit bushes/trees. Once new gardeners experience the success of SFG gardens they often want to expand the range of crops they grow beyond the standard SFG crops.
- **Non-renewable Resources:** There's no doubt that 'Mel's Mix' makes an excellent soil for vegetables. However, two of the three ingredients come from non-renewable sources. Peat takes thousands of years to develop and is a valuable natural sink for greenhouse gases. Vermiculite is mined and is therefore also a non-renewable resource with a significant carbon footprint. In common with many gardeners I won't use peat and would prefer not to use vermiculite.

Expensive for Large Gardens: Although SFG beds are cheap to maintain they are quite expensive to set up if you have a large area and want to fill it quickly.

- None of these reasons prevent SFG from being a useful part of a garden though – you can use 100% recycled compost in the beds instead of Mel's Mix, gradually build up the number of SFG beds and combine it with areas of your garden which are set aside for fruit trees and larger crops. Many of the SFG techniques that were revolutionary in the 1980s are now commonly used for vegetable gardening – deep raised beds, not compacting soil, removable covers and plant supports etc.

Planning a Square Foot Garden

At GrowVeg we regularly get inquiries from gardeners following the SFG method who want to plan their beds using our Garden Planner. So we introduced Square Foot Gardening mode in the Garden Planner that makes it easy to add one-foot squares of plants as well as using all the other powerful features of the software such as crop rotation, tracking varieties etc. Best of all is that the SFG plants can be part of a larger garden plan that includes more traditional planting layouts and large plants, so there's the flexibility to combine different methods in a plan of a single garden area.

Square Foot Gardening was revolutionary when it was first invented and it's still a great system for people who are starting out, have limited space or want a highly organized method to follow. However, you don't need to follow SFG to benefit from gardening with raised beds and good organization. There's a great quote: "If the only tool you have is a hammer, you tend to see every problem as a nail." SFG works really well for many situations but it doesn't fit everything. Despite my reservations I still recommend it as being the right option for many and the book is really easy to follow. The success it brings can often lead people on to discovering the delights of fruit trees, using barrels to grow huge crops of potatoes or managing a greenhouse full of high-value crops. It's a great stepping-stone to the world of growing your own food and that's why 35 years on it's still going strong.

1. Improve your family's health. Eating more fresh fruits and vegetables is one of the most important things you and your family can do to stay healthy. When they're growing in your backyard, you won't be able to resist them, and their vitamin content will be at their highest levels as you bite into them straight from the garden. *Parents, take note:* A study published in the Journal of the American Dietetic Association found that preschool children who were almost always served homegrown produce were more than twice as likely to eat five servings of fruits and vegetables a day and to like them more than kids who rarely or never ate homegrown produce.

Save money on groceries. Your grocery bill will shrink as you begin to stock your pantry with fresh produce from your backyard. A packet of seeds can cost less than a dollar, and if you buy heirloom, non-hybrid species, you can save the seeds from the best producers, dry them, and use them next year. If you learn to dry, can, or otherwise preserve your summer or fall harvest, you'll be able to feed yourself even when the growing season is over.

2. Reduce your environmental impact. Backyard gardening helps the planet in many ways. If you grow your food organically, without pesticides and herbicides, you'll spare the earth the burden of unnecessary air and water pollution, for example. You'll also reduce the use of fossil fuels and the resulting pollution that comes from the transport of fresh produce from all over the world (in planes and refrigerated trucks) to your supermarket.

3. Get outdoor exercise. Planting, weeding, watering, and harvesting add purposeful physical activity to your day. If you have kids, they can join in, too. Be sure to lift heavy

objects properly, and to stretch your tight muscles before and after strenuous activity.

Gardening is also a way to relax, de-stress, center your mind, and get fresh air and sunshine.

4. Enjoy better-tasting food. Fresh food is the best food! How long has the food on your supermarket shelf been there? How long did it travel from the farm to your table? Comparing the flavor of a homegrown tomato with the taste of a store-bought one is like comparing apples to wallpaper paste. If it tastes better, you'll be more likely to eat the healthy, fresh produce that you know your body needs.

5. Build a sense of pride. Watching a seed blossom under your care to become food on your and your family's plates is gratifying. Growing your own food is one of the most purposeful and important things a human can do—it's work that directly helps you thrive, nourish your family, and maintain your health. Caring for your plants and waiting as they blossom and "fruit" before your eyes is an amazing sense of accomplishment!

6. Stop worrying about food safety. With recalls on peanut butter, spinach, tomatoes and more, many people are concerned about food safety in our global food marketplace. When you responsibly grow your own food, you don't have to worry about contamination that may occur at the farm, manufacturing plant, or transportation process. This means that when the whole world is avoiding tomatoes, for example, you don't have to go without—you can trust that your food is safe and healthy to eat.

Credit : Liza Barnes & Nicole Nichols, Health Educators -

http://www.sparkpeople.com/resource/nutrition_articles.asp?id=1275&page=2

-----Other claim-----

*Generate good income, No need of big space, No need for more water, Everyone can do gardening unlike the conventional one that only adults are capable, 100 % of good harvest, Bonding with children, Good physical exercise and **Can improve the community**; these are claims to be observed during the discussions of SOA on SFG and should highlighted to be part of the program first airing.*

E. INCOME MATRIX

SAMPLE COMPUTATION CHINESE KANGLONG

Mr. Cevantes has 200 sqm Organic Square Foot Garden. He planted it with Chinese Kangkong.

How Square Foot Gardening can produce good value in terms of income per harvest and how long would it take?

Chinese kangkong can be harvested in just 19-22 days for 20 pesos per bunch. Mr. Cervantes has 5 plots, each plot is divided into 7 blocks.

So let's figure out how much he earned for every 19-22 days for Chinese Kangkong harvest.

24 - Bunch of kangkong per square feet
x 20 - Bunch Price

P 480.00 - (19-22 days)

x 7 - Blocks

P 3,360.00 - Per plot

x 5 - He has 5 plots

P 16, 800 For every 200 sqm you can have 5 plots , with 7 blocks, he harvested 16,800 pesos (IN 19-22 DAYS) CHINESE KANGLONG –

So if you have an 800 sqm available at home. Lets divide it into 4, how much will he earned from 800 sqm?

P 16, 800 - Per 5 plots

x 4 - Blocks

P 67, 200 - INCOME in 19-22 days for 800 sqm available, such a Good Income!

F. OTHER INCOME GENERATOR

COMMON INCOME GENERATOR of SITIO LOMBOY

The residents of Sitio Lomboy are linked into these three common income generators, Backyard Piggery, root crops and Farming. How long does each of these productions can generate income to the said residents.

The table shown below illustrates the tracing per month.

Products	Feeds	Fertilizer	Qty.	Area Size	Expense	Harvest	Income
Farming / Corn – High breed		2,800 20k 6k 4k		10 bags seed/ 1 hectare Sprouting 4 sacks Pesticides 5 chems	More or less 40k	3 months & 20 days	60-80 thousand
B. piggery	900+ 3-5 Sacks / month		4		3200	3 months / 45-60 kilos	20,000.00
Root Crop						3-4 months native kind	Depends on the demand.

Square Foot Gardening offers 19-22 days kangkong harvest, as most common supply in the market. For every 200 sqm you'll be earning 16,800 for every 5 plots. In farming, root crops and backyard piggery you'll wait a minimum of 3 months to harvest each and the income expected is quiet long to wait.

G. HOW INTERESTED THE RESIDENTS OF SITIO LOMBOY ON BACKYARD GARDENING

WHAT THE RESIDENTS OF SITIO LOMBOY WANT TO LEARN ON SOA

Sitio Lomboy, Brgy Indahag is one of the producers of root crops, coconut and corn in the city. Farming is their common source of income and they have developed farming skills. However, when it comes to gardening only few have the knowledge on how to plot, what soil to be used and what products to be planted for a small size of garden. During the ocular visit, there are questions raised by the evaluation committee, the reason is to know how deep is their knowledge with regard to Backyard Gardening, what certain problem they have encountered so far, and how they do their gardens. And the group of evaluation committee listed down their concerns.

Most of them (the residents) said that the purpose of their gardens are for consumption only, and they sell products to their neighbor or some of their neighbor asks to buy some. Others said, that their gardens are just a hobby or to add beauty in their backyard or front-yards. Some do gardens because they want to try it for business. In general, the residents of Sitio Lomboy aware what is gardening, however, they have a lower cognizant on the topic, they believe that gardening needs an intensive care for it to become productive.

According to the study conducted by the World Health Organization (WHO) and Food and Agriculture organization (FAO) that fruits and vegetables are higher by eight percent (8%) in the market price, compared to other crops due to seasonal -demand. The world Health Organization of the United States promotes backyard gardening to ensure healthy intake specially for the minors who have a lower immune system defense in micro-organism that are found in the chemicals produced in

the mass-production of farming.

On the other hand gardening is very hectic when it comes to proper handling, however once proper knowledge is acquired money is just a number to count. A claim by Mr. Honorio Cervantes stated during the interview.

Based on the survey conducted by the SOA personnel (evaluation committee, these are the things that residents want to know:

- How much is the total investment in farming?
- How to determine a healthy soil for planting?
- How deep is the soil for planting?
- What are the proper ways of watering the plants?
- What are the varieties of fertilizer and their effects?
- What is the process of making organic fertilizer?
- What is the process of making inorganic fertilizer?
- Which is more effective, organic or inorganic fertilizer?
- It is necessary to put fertilizers on plants? Why?
- What kinds of vegetables/plants those are for short term process?
- How long would it take to harvest the products?
- How to get rid of pests and wild grasses?
- How to raise a healthy plant?

H. CONCLUSION

Why Sitio Lomboy, Barangay Indahag?

Upon the survey or ocular visitation conducted by the evaluation committee last August 11, 2016, the suggested area Sitio Lomboy is best recommended to be part and/or to be the recipient of the School On the Air on Square Foot gardening, where enough space for the specialized kind of backyard gardening is sited. Aside from that, the residents of the said area is very open to adopt the new method or technique in farming. Based on the survey conducted by the team it shows that the residents of Sitio Lomboy are knowledgeable enough in basic farming including the Backyard gardening, however the survey revealed that Square Foot Gardening is too way from their knowledge.

Furthermore, a research on the importance of soil testing were also administrated, According to Mr. Welson B. Borja, there are two key ways to collect soil samples. **Conventional** sampling methods typically represent 15-20 acre fields or plots. For farmers with small farms or small fields spread out over multiple locations, this method is usually sufficient in fertility management. But for those farmers who have larger fields the **Precision Ag** approach may be more practical. The idea behind *Precision Ag* is to sample smaller areas than conventional sampling which allows the division of an area by factors such as soil type, soil fertility, problem areas or yield data. Variable Rate Technology and the ability to apply nutrients to only areas that the soil test requires allow producers to manage soil nutrients more efficiently.

No matter which soil sampling approach is taken, a soil test plays a major role in managing fertilizer programs, increasing plant growth and yield, and managing costs, he added.

To support the claim for the said area, a soil testing was also conducted. Last August 17, 2016 as the group administer their Pre-test survey, soil sampling was conducted by Mr. Johnny Fuentes and Phil. Bryan Pajo. The said sampling was submitted to **SOIL BORINGTEST SPECIALTIES Inc.** located at Unit F 7945 NR, Narra Street, Barangay Sta. Clara, Santa Maria, Bulacan 3022, Philippines last August 18, 2017.

The group narrated the purpose of the said soil testing. According to the result as received by the team last August 22, 2016 Monday , the response of **SOILBORINGTEST SPECIALTIES,**

Recommended organic approved soil amendments, per 4x4 SQF

Agricultural Lime, 39%Ca: **80 lb** (32lb Ca)

Dolopril type Dolomite Lime: **15 lb** (2lb Mg, 3.3lb Ca)

Potassium as sulfate of potash 50%K: **18 lb** (9lb K, 3lb S)

Sodium, as sea salt: **6 lb** (3lb Na plus Chlorine and trace minerals)

Montana rock phosphate: **60 lb** (approx. 18lb total P2O5)

Boron as Solubor 20%B: **7 oz** (2ppm B)

Copper as Copper sulfate 25% Cu: **13 oz** (4.5ppm Cu)

Zinc as Zinc sulfate 35.5% Zn: **8 oz** (3.5ppm Zn)

Azomite volcanic trace minerals: **10 lb**

Kelp Meal: **10 lb**


Quality compost or chicken manure: **1"**

Application: The Zinc, Copper, and Boron should be mixed with the lime or potash to ensure even spreading. After all of the nutrients are applied they should be tilled into the top *4-6 inches of soil.*

With this result, the group is convinced that Sitio Lomboy is highly recommended to be the

recipient of the SOA on SFG.

Detailed Report is attached next page

Unit F 7945 NR, Narra Street, Barangay Sta. Clara, Santa Maria, Bulacan 3022																					
		SOIL BORING TEST SPECIALTIES, INCORPORATED Unit F 7945 NR, Narra Street, Barangay Sta. Clara, Santa Maria, Bulacan 3022										+63(2)7109545 August 19, 2016 - Saturday Special Order : TBG network Inc. Purpose : SOA on SFG, SOIL SAMPLING									
Agronomist Comments:																		C - 12			
Field Information		Applied Lime		Recommendations																	
Sample No.	Last Crop	Mo	Yr	T/A	Crop or Year		Lime	N	PO5	KO	Mg	Cu	Zn	B	Mn	See Note					
NB1	Bahiagrass				1st Crop: Berm Hay/Pas,E		1.7T	60-80	90-110	40-60	0	0	0		0	12					
					2nd Crop: Berm Hay/Pas,M		0	180-220	80-100	120-140	0	0	0		0	12					
Test Results																					
Soil Class	HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	Mn-I	Mn-Al (1)	Mn-Al (2)	Zn-I	Zn-Al	Cu-I	S-I	SS-I	NO3-N	NH4-N	Na
MIN	0.41	0.84	3.8	53.0	1.8	4.5	21	44	34.0	13.0	2089	1263	1263	48	48	77	78	24			0.1
Field Information		Applied Lime		Recommendations																	
Sample No.	Last Crop	Mo	Yr	T/A	Crop or Year		Lime	N	PO5	KO	Mg	Cu	Zn	B	Mn	See Note					
W2	Bahiagrass				1st Crop: Berm Hay/Pas,E		1.2T	60-80	0	0-20	0	0	0		0	12					
					2nd Crop: Alfalfa, E		0	10-30	0	50-70	0	0	0	5	0	12					
Test Results																					
Soil Class	HM%	W/V	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	Mn-I	Mn-Al (1)	Mn-Al (2)	Zn-I	Zn-Al	Cu-I	S-I	SS-I	NO3-N	NH4-N	Na
MIN	0.36	0.82	3.8	66.0	1.3	4.9	87.0	71	44.0	13.0	2353	1421	1421	683	683	1492	60	17			0.1



**SOIL BORING TEST SPECIALTIES,
INCORPORATED**

August 19, 2016 - Saturday
Special Order : TBG network Inc.
Purpose : SOA on SFG, SOIL SAMPLING

Field Name: SOA on SFG, SOIL SAMPLING

Lab Number: August 19, 2016 - Saturday

County: Sitio Lomboy, Brgy. Indahag Cagayan de Oro North Mindanao Phils.

Intended Crop: vege

Yield Goal:

Test Run: Test A

Sample Depth	pH	Buffer Index	Pounds per Acre Extractable Nutrient							Soluble Salts (ppm)	Organic Matter %	Cation Exchange Capacity (meq/100 gm)	Parts Per Million Extractable Nutrient				
			Nitrogen NO ₃	Phosphorus P	Potassium K	Calcium Ca	Magnesium Mg	Sodium Na	Sulfur SO ₄				Iron Fe	Zinc Zn	Manganese Mn	Copper Cu	Boron B
0-6" TOP	7.20	Neutral	6	18 Slightly Deficient	292 Sufficient	16350 Adequate	370 Adequate	52 Normal	352	3.8	45.0						

**Fertilizer Recommendations
(Pounds per Acre Actual Nutrient)**

N Nitrogen	P ₂ O ₅ Phosphorus	K ₂ O Potassium
160	40	0
Tons Lime per Acre		0.0
100% ECCB		

Recommendations and Comments:

Apply 100 lb N at planting time. An additional 60 lb N may be needed in Feb depending on forage production and moisture.

Apply 40 lb P at planting. Phosphorus rate is for band application. If fertilizer will be broadcast increase rate by 1.5x.

The recommended phosphorus could be supplied with 37 pounds of 18-46-0 per acre. This would account for 16 lb N.

Labwork Analyzed by Ward Laboratory Inc., Kenner, NE
Recommendations by Hobbs Foundation Specialists

Jim Johnson, Jr.
Jim Johnson

I. SOIL IN SITIO LOMBOY BRGY. INDAHAG, CAGAYAN DE OTO CITY

The queries and observation conducted by the Evaluation Committee, the type of soil in the target area Sitio Lomboy, Barangay Indahag is a *Loam soil* - It contains a balance of all three soil materials – silt, sand and clay – plus humus. It has a higher pH and calcium levels because of its previous organic matter content. Loam soil is a dark in color and is mealy – soft, dry and crumbly – in our hands. It has a tight hold on water and plant food but it drains well, and air moves freely between soil particles down to the roots. The feel test for loam yields a smooth, partly gritty, partly sticky ball that crumbles easily. A reason why some of the residents have their growing gardens in their backyard, with this, the SOA on Backyard gardening is suited to the target area and is highly

recommended to be conducted.

Backyard gardening, doesn't have to be as complicated as it may seem. It is entirely dependent upon what the SOA could publish for them to grow good products; and how much gardening the listener in the target area would like to do by listening the broadcast on backyard gardening. A good choice of soil is much important to be discussed during the lectures.

Any plant, if cared properly, even without the needs of chemicals will have a natural and good product by just choosing the right soil to plant. This is part of nature and suggests that only organic compounds be introduced to any backyard garden. This includes mulch, compost, and any forms of weed control. Nasty, synthetic substances can weaken the plants immunities and make them more susceptible to common diseases; and is also harmful to human once in-take. When in need of a particular pest control, always look for the organic variety and which the Department of Agriculture is promoting than the use inorganic substance that may cause human body-failure and/or d early death.

One of the most fundamental steps of backyard gardening is preparing and examining the soil before planting. If the soil used is not the right kind or is in poor quality, then it will be much harder to keep a successful garden. Different plants have different soils in which they thrive. That also means that no matter amazing your personal soil is, if the plant is not in the right kind of soil, then it is going to struggle. Many plants placed in the wrong soil will die, with this SOA on backyard gardening will help the residents of the target area to examine what type of soil they have in their backyards.

ENROLLED STUDENTS Sitio Lomboy, Indahag CdOC

NAMES	NO. OF PLOT	NO. OF BLOBK	SITIO BLOCK NO	CONTACT No.
Maria Roa	2	14	1	0917-766-1544
Roger Lara	2	14	1	0926-755-2574
Christina Loro	2	14	1	0926-743-3975
Aber Monic	2	14	1	0905-744-5264
Jessa Loro	2	14	1	0917-753-4333
Perlito Amoc	3	21	1	0926-734-5754
Jocelyn Abil	3	21	1	0926-722-3825
Noah Guro	3	21	1	0926-744-2242
Nathan Baclaan	3	21	1	0926-785-4859
Arnel Baclaan	2	14	1	0905-766-1544
Jose Lonoc	2	14	1	0917-755-2574
Marvin Aber	2	14	1	0917-743-3975
Joseph Nolo	2	14	1	0994-744-5264
Bernadeth Losac	1	7	1	0926-753-4333
Crhistina Manoc	1	7	1	0986-734-5754
Lethy Betal	1	7	1	0917-722-3825
Bryan Coresma	1	7	1	0905-744-2242
Nathaniel Laac	1	7	1	0926-785-4859
Mary Grace Lato	2	14	1	0917-766-1544
Maureen Naboc	2	14	2	0926-755-2574
Salina Gomes	2	14	2	0926-743-3975
Maricar Losac	2	14	2	0905-744-5264
Abner Tulak	1	7	2	0917-753-4333
Meron Tablada	1	7	2	0926-734-5754
Augusto Austien	1	7	2	0926-722-3825
Alfonso Roblan	1	7	2	0926-744-2242
Teodoro Avergan	2	7	2	0926-785-4859
Chirtina Payak	2	7	2	0905-766-1544

Monica Loro	3	21	2	0917-755-2574
Alona Loro	4	28	2	0917-743-3975
Marlon Cabalon	4	4	2	0994-744-5264
Mani Calos	5	32	2	0926-753-4333
Litoy Manac	3	2	2	0986-734-5754
Jeson Maloc	5	5	2	0917-722-3825
Andrew Llagas	3	7	2	0905-744-2242
Marlon Barbosa	2	5	2	0926-785-4859

NAMES	NO. OF PLOT	NO. OF BLOK	SITIO BLOCK NO	CONTACT No.
Mark Llgas	2	14	3	0917-766-1544
Jessa Campo	2	14	3	0926-755-2574
Marvin Larot	2	14	3	0926-743-3975
Arnel Jomoc	2	14	3	0905-744-5264
Mabelle Lysis	2	14	3	0917-753-4333
Anthony Abriol	3	21	3	0926-734-5754
Jomboy Polictico	3	21	3	0926-722-3825
Javier Manac	3	21	3	0926-744-2242
Kyra Lotas	3	21	3	0926-785-4859
Manille Abril	2	14	3	0905-766-1544
Silicia Mantok	2	14	3	0917-755-2574
Arnel Letos	2	14	3	0917-743-3975
John Mitos	2	14	3	0994-744-5264
Kiley Ablitada	1	7	3	0926-753-4333
Nancy Joloc	1	7	3	0986-734-5754
Maria Ann Ioto	1	7	4	0917-722-3825
Francise Polistco	1	7	4	0905-744-2242
Naba Fuentes	1	7	4	0926-785-4859
Nathalia Nova	2	14	4	0917-766-1544
Jesus Minoc	2	14	4	0926-755-2574
Jesie Alfon	2	14	4	0926-743-3975

Jaquelyn Spiritu	2	14	4	0905-744-5264
Grace Esclamado	1	7	4	0917-753-4333
Lito Fuentes	1	7	4	0926-734-5754
Jocelyn Reyes	1	7	5	0926-722-3825
Mario Reyes	1	7	5	0926-744-2242
Ana Limit	2	7	5	0926-785-4859
Jolito Ablisa	2	7	5	0905-766-1544
Welson Calibri	3	21	5	0917-755-2574
Nathan Limok	4	28	5	0917-743-3975
Natie Lamot	1	7	5	0994-744-5264
Mark Leysis	1	7	5	0926-753-4333
Anthony Matois	1	7	5	0986-734-5754
Abril Barbosa	2	7	5	0917-722-3825
Linda Litog	2	5	5	0905-744-2242
Samantha mUray	3	3	5	0926-785-4859
Lani Marinao	1	7	6	0926-734-5754
Jessa Lao	1	7	6	0926-722-3825
Manilyn Lao	1	7	6	0926-744-2242
Jeany Lao	2	7	6	0926-785-4859
Perlita Roa	2	7	6	0905-766-1544
Karidad Limit	3	8	6	0917-755-2574
Mario Lagos	4	1	6	0917-743-3975
Jimmy Limot	1	7	6	0994-744-5264
Pititasyo Margas	1	7	6	0926-753-4333
Reminto Lisos	1	7	6	0986-734-5754
Mariano Lamot	2	7	6	0917-722-3825
Jocelyn Juliada	2	21	7	0905-744-2242
Maricar Juliada	3	28	7	0926-785-4859
Charlie Juliada	1	7	7	0926-734-5754
Carlita Juliada	1	7	7	0926-722-3825
Maniryn Kitonas	1	7	7	0926-744-2242
James Campo	2	7	7	0926-785-4859

Ana Limit	2	5	7	0905-766-1544
Jolito Ablisa	3	8	7	0917-755-2574
Welson Calibri	4	6	7	0917-743-3975
Nathan Limok	1	7	7	0994-744-5264
Natie Lamot	1	7	7	0926-753-4333
Mark Leysis	1	7	7	0986-734-5754
Anthony Matois	2	7	7	0917-722-3825
Abril Barbosa	2	6	8	0905-744-2242
Linda Litog	3	2	8	0926-785-4859
Samantha mUray	1	7	8	0926-753-4333
Lani Marinao	1	7	8	0986-734-5754
Jessa Lao	1	7	8	0917-722-3825
Manilyn Lao	2	7	8	0905-744-2242
Jeany Lao	2	7	8	0926-785-4859
Perlita Roa	3	7	8	0926-734-5754
Karidad Limit	4	2	8	0926-722-3825
Mario Lagos	1	9	9	0926-744-2242
Jimmy Limot	1	7	9	0926-785-4859
Maria Roa	1	7	9	0905-766-1544
Roger Lara	2	7	9	0917-755-2574
Christina Loro	2	7	9	0917-743-3975
Aber Monic	3	6	9	0994-744-5264
Jessa Loro	1	4	10	0926-753-4333
Perlito Amoc	1	7	10	0986-734-5754
Abril Barbosa	1	7	10	0917-722-3825
Linda Litog	2	7	10	0905-744-2242
Samantha mUray	2	7	10	0926-785-4859
Lani Marinao	3	7	10	0926-734-5754
Jessa Lao	4	21	10	0926-722-3825

Important Note : All the data or information above are not authentic and are only used as a representation for the completion of the task assigned to the field coordinators and evaluating committee.

**MONITORING PERSONNEL
per BLOCK of Sitio Lomboy**

BLOCK 1		BLOCK 2
Assistant Field Coordinator: Minda Daguimol		Assistant Field Coordinator: Shiena Pamna
Field Coordinator : Maureen Baja		Field Coordinator : Maureen Baja

BLOCK 3		BLOCK 4
Assistant Field Coordinator: Jennifer Patria		Assistant Field Coordinator: Rosenilda Virtego
Field Coordinator : Grace Barbosa		Field Coordinator : Grace Barbosa

BLOCK 5		BLOCK 6
Assistant Field Coordinator: Reynaldo Jaducot		Assistant Field Coordinator: Karen Tagaro
Field Coordinator : Phil Bryan Pajo		Field Coordinator : Phil Bryan Pajo

BLOCK 6		BLOCK 8
Assistant Field Coordinator: Tony Villegas		Assistant Field Coordinator: Ma. Sarah Pringo
Field Coordinator : Pearl Betacura		Field Coordinator : Pearl Betacora

BLOCK 9		BLOCK 10
Assistant Field Coordinator: Elena Carizo		Assistant Field Coordinator: Antonio Ajan
Field Coordinator : Kyramie Ga-a		Field Coordinator : Kyramie Ga-a

Assistant Field Coordinator : One of the students / assigned to monitor his fellow students / Block Leader / Collect feedback form

Field Coordinator : The organizer / To collect the Feedback Form / Contact from Office to field

AVAILABLE PRODUCTS

SOIL MIX	SACK PER PLOT	QTY. DELIVERED	APROOVED RELEASE
Goat Manure	2 FOR EVERY 1 PLOT PER HOUSEHOLD	208 SACKS <i>25 KILO PER SACK</i>	EVALUATED & APPROVED
Cow Manure	1 FOR EVERY 1 PLOT PER HOUSEHOLD	128 SACKS <i>20 KILO PER SACK</i>	EVALUATED & APPROVED
Chicken Dunk	1FOR EVERY 1 PLOT PER HOUSEHOLD	118 SACKS <i>30 KILO PER SACK</i>	EVALUATED & APPROVED
Vermicast	2 FOR EVERY 1 PLOT PER HOUSEHOLD	248 SACKS <i>15 KILO PER SACK</i>	EVALUATED & APPROVED
CRH (CORBONIZE RICE HALL)	3 FOR EVERY 1 PLOT PER HOUSEHOLD	468 SACKS <i>20 KILO PER SACK</i>	EVALUATED & APPROVED
Bamboo Charcoal	4 FOR EVERY 1 PLOT PER HOUSEHOLD	548 SACKS <i>25 KILO PER SACK</i>	EVALUATED & APPROVED

- Extra and Excess upon delivery must be returned to the Department of Agriculture R.O 10.
- One month Supply only.
- Not exactly measured per plot/per block from the students backyard.

APPROVED BY DA _____

CHRISTINA E. LABRADOR
DEPARTMENT OF AGREICULTURE
PRODUCT SPECIALIST

O.N CODE: SGH7856

DATE RELEASED : AUSGUT 30, 2016

FORWARDED :
TBG NETWORK (SOA PRODUCTION)

DELIVERED BY ATI _____

CHARLITO A. BORGOS
AGRICULTURAL TRAINING INSTITUTE
PRODUCT EVALUATOR

TO BE EVALUATED BY FIELD COMMITTEE _____

JOHNNY FUENTES
SOA – FIELD AND EVALUATIION MANAGER

AVAILABLE PRODUCTS

PRODUCTS	PACK PER PLOT	QTY. DELIVERED	APPROVED RELEASE
Eggplant	2 FOR EVERY 1 BLOCK PER HOUSEHOLD	543 PACKS	EVALUATED & APPROVED
Chinese Kangkong	6 FOR EVERY 1 BLOCK PER HOUSEHOLD	634 PACKS	EVALUATED & APPROVED
Cabbage	3 FOR EVERY 1 BLOCK PER HOUSEHOLD	145 PACK	EVALUATED & APPROVED
Peachy	2 FOR EVERY 1 BLOCK PER HOUSEHOLD	45 PACK	EVALUATED & APPROVED
Celery	3 FOR EVERY 1 BLOCK PER HOUSEHOLD	343 PACK	EVALUATED & APPROVED
Carrots	4 FOR EVERY 1 BLOCK PER HOUSEHOLD	345 PACK	EVALUATED & APPROVED
Okra	2 FOR EVERY 1 BLOCK PER HOUSEHOLD	289 PACK	EVALUATED & APPROVED
Radish	6 FOR EVERY 1 BLOCK PER HOUSEHOLD	24 SPACK	EVALUATED & APPROVED

- Extra and Excess upon delivery must be returned to the Department of Agriculture R.O 10.
- One month Supply only.
- Not exactly measured per plot/per block from the students backyard.

APPROVED BY DA _____

CHRISTINA E. LABRADOR
DEPARTMENT OF AGRICULTURE
PRODUCT SPECIALIST

O.N CODE: SGH8YT56 - 454

DATE RELEASED : AUGUST 30, 2016

FORWARDED :
TBG NETWORK (SOA PRODUCTION)

DELIVERED BY ATI _____

CHARLITO A. BORGOS
AGRICULTURAL TRAINING INSTITUTE
PRODUCT EVALUATOR

TO BE EVALUATED BY FIELD COMMITTEE _____

JOHNNY FUENTES
SOA – FIELD AND EVALUATION MANAGER

**TALLY / ITEMIZED
ON PRETEST ANALYSIS**

1. Unsa'y naka bentaha sa pag gamit og Grid-lines sa SFG?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	2	2	4	2	4	13
B	2	1	3	2	6	14
C	0	1	1	1	4	7
D	3	4	0	5	4	16
						= 50

2. Hain ang dili lakip sa ingredients sa Soil-Mix?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	3	1	0	2	1	7
B	2	3	1	5	14	12
*C	3	3	7	2	2	28
D	0	1	0	1	1	3
						= 50

3. Unsa ang dili angayan'g ibutang sa compost (organic fertilizer)?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
*A	6	4	8	7	16	24
B	0	2	0	1	1	19
C	0	1	0	3	1	5
D	1	1	0	0	0	2
						= 50

4. Si kinsa ang makatanom sa Square foot Garden?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	0	1	0	0	2	3
B	2	3	0	4	4	13
C	0	1	0	0	0	1
*D	5	3	8	6	12	33
						= 50

5. Unsay hustong pamaagi sa pag-layout sa imong SFG?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
*A	8	1	4	4	10	22
B	3	6	1	4	7	20
C	0	0	0	0	0	0
D	1	1	3	2	1	8
						= 50

6. Sa pagpangita og luna o ispasyo alang sa SFG, unsa ang angayang timan-an?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	3	5	0	4	5	19
B	5	0	2	0	1	3
5	3	0	1	1	1	6
*D	1	1	7	4	10	22
						= 50

7. Unsa ang minimum nga distansiya sa pasilyo (aisles) taliwala sa matag kahon?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	3	2	1	5	5	16
B	1	4	1	2	7	14
*C	2	2	0	3	6	13
D	1	0	6	0	0	7
						= 51

8. Unsa ang tulo ka mga gamit nga kinahanglan sa SFG?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	2	2	2	3	4	13
*B	0	0	1	0	0	1
C	3	1	3	3	7	17
D	2	5	2	4	7	20
						= 50

9. Pila ka carrot seed ang sulod sa average packet?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	4	5	8	7	12	35
B	3	3	0	2	4	12
C	0	0	0	0	0	0
*D	0	0	0	0	1	1
						= 50

10. Ang SFG maghatag kanimog 100% nga harbis, sa unsa nga porsiyento ang kadak-on sa luna?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	1	1	1	3	6	12
B	2	6	7	4	7	27
*C	1	1	0	2	2	6
D	1	0	0	1	0	2
						= 50

11. Sa luna nga kinahanglan sa SFG, unsa katas-on kini angayang masidlakan sa adlaw?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	4	3	0	1	6	14
B	0	1	3	7	3	14
*C	3	2	5	1	8	18
D	0	2	0	1	1	4
						= 50

12. Aron molambo ang SFG, asa o hain kini angayang ibutang?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	2	0	0	1	3	6
B	3	1	0	0	7	11
*C	1	7	8	6	3	24
D	1	0	0	3	5	9
						= 50

13. Sa pagmonitor sa progreso sa imong SFG, hain kini angayang mahimotang?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
*A	5	2	1	5	8	23
B	2	4	7	5	10	27
C	0	0	0	0	0	0
D	0	0	0	0	0	0
						50

14. Sa matag ulan, unsa ang imong unahon sa pagtan-aw?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	1	2	2	2	3	10
B	1	1	0	2	2	5
C	0	1	3	1	2	7
*D	5	4	3	5	11	28
						= 50

15. Kabahin sa yuta, kini anganyan nga?

TALLY	PAJO	BAJA	BETACURA	BARBOSA	ESCALA	TOTAL
A	5	4	6	5	11	30
B	1	1	1	2	3	8
C	0	1	0	2	2	6
*D	0	2	1	1	2	6
						50

**AWARENESS LEVEL
TALLY SHEET
FOR PRODUCTION'S TOPIC
RECOMMENDED / NOT RECOMMENDED
+/-**

NO.	PRODUCTION TOPIC	RECOMMENDED	NOT RECOMMENDED
		+	-
QSTN	CORRECT ANSWER	UNAWARE	KNOWLEDGEABLE
1	D	34	16
2	C	22	28
3	A	26	24
4	D	17	33
5	A	28	22
6	D	24	26
7	C	37	13
8	B	49	1
9	D	49	1
10	C	44	6
11	C	31	19
12	C	26	24
13	A	37	23
14	D	13	37
15	D	44	6
TOTAL	764	481	282

General Findings

No. of respondents who got the average correct answer: 4 out of 15 topics are known to the respondents about SFG – the specialized kind of Backyard gardening or 3% of the respondents out of 100% are knowledgeable on the Topic.

No. of respondents who got the lower average answer: 11 out of 15 topics are not known to the respondents about SFG – the specialized kind of Backyard gardening or 97% of the respondents out of 100% are unaware on the Topic.