

GULAYAN SA TAHANAN: A PARTNERSHIP PROGRAM OF DEPED AND LGU TOWARDS SUSTAINABLE FOOD PRODUCTION, CLEAN AND GREEN PROJECT IN MABINI, BATANGAS

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ABSTRACT: *This study aimed to determine the perception and level of involvement of parents in gulayan sa tahanan, the partnership program of DepEd and LGU towards sustainable food production, clean and green project in Mabini, Batangas. The respondents of the study were three hundred fifty eight (358) parents and seventy-five (75) teachers. The main source of data was a researchers-made questionnaire which was validated and tried out. The research instrument made use of Likert' Scale to determine the rating of the respondents to the level of their participation to the program. Part I dealt with the description of food production, clean and green program, the second part deals on strategies being utilized by the program implementers in encouraging the participants in sustainable food production. The impact of the program is the 3rd part of the questionnaire. The last part deals with the challenges encountered in the implementation of food production, clean and green program of LGU and DepEd. Findings revealed that program was properly implemented and parents are highly encouraged to participate in the program. It was also revealed that the perception of the respondents on the strategies utilized by the program implementers in encouraging the participants in sustainable food production was highly observed. The study also measured the impact of the program, the respondents expressed that this was also highly observed. Moreover, participants agreed that there were challenges encountered in the implementation of food production, clean and green program in the community. The study recommended that enhancement programs for parents and teachers in connection to food production, clean and green program may be conducted to increase their involvement, participation and to update their existing knowledge and skills in this program. A proposed intervention plan is necessary to enrich motivation and encouragement practices in the implementation of gulayan sa tahanan.*

CONTEXT AND RATIONALE

The Philippines is a highly agricultural country. It is blessed with fertile soil and highly desirable climatic condition which are very much suited for the promotion of soil cultivation, farming and gardening. Furthermore, the Filipinos are endowed with desirable work values inherited from their ancestors. Our brown skin signifies extraordinary industry and hard work. Given the proper motivation, our people could sustain their desirable attitudes and work values. Mabinians in particular have these attributes as reflected in the history of Mabini, Batangas. Most of the people in Mabini, Batangas have been engaged in farming specifically during the time when working abroad was not yet introduced in the community.

Concerning education, a well -nourished healthy body is essential in developing the children's mental and physical development. It is indeed very important for children to have proper nutrition to facilitate learning. In the Philippines today, malnutrition is one of most unabated health problems among public elementary schools. Studies shown that there are many children who come to school with empty stomach. Learning is affected when students are hungry. Hunger affects the physical and mental development and general wellness of children. Nevertheless, this problem could be solved through the help of parents, community and school officials. Implementation of Gulayan sa Tahanan is one of programs that can eliminate this problem. This is why DepEd personnel is not hesitant to join in this endeavor, not only to comply to the request of the Local Government Unit but for the welfare of the school children.

In Mabini, Batangas issues and concerns about Gulayan sa Tahanan have been prioritized by the local government through the leadership of our committed and dedicated municipal mayor. He is very particular to sustainable food production and to the observance of clean and green community. Last September 30, 2022 he spearheaded the launching of this signature project of his administration coincided to the celebration of Sub-Office teachers' day. It is worthy to mention that this initiative was supported by all school heads and teachers through signing to the pledge of commitment. There were meetings conducted in connection to the programs which have been attended by the concerned personnel from Municipal Agriculture, DepEd and Local Government Unit.

This extraordinary join project of DepEd and LGU is essential to the agenda of the local government for sustainable food production and clean and green program. With the pandemic almost shutting the entire world for years, business and economies were severely damaged and we are forced to adapt to what we call now as new normal. In this new normal, one thing that people should consider is survival. Thus, several countries including the Philippines are highly-encouraging growing our own food as the new normal. Home gardening has always been a household idea

and lately, more and more people are engaging and discovering the benefits of growing your own plants at home. Home gardening benefits our health, good for your soil, and good for the wildlife in your backyard. It's a great way to relieve stress, to set goals for yourself, and make our environment clean and green. (Veendras 2011).

Ultimately, therefore, the entire school, community and barangay become actively involved in increased vegetables production. And once a work has become a habit, everyone works interdependently and aspires to achieve the goals of Gulayan sa Paaralan: good health, combat of malnutrition, mental alertness and stamina, and increased earning for family sustenance. This Gulayan sa Paaralan has been the opening, eye-catching activity for the parents to encourage them in extending this sustainability program of the school in their respective home.

Home gardens have been recognized as an essential supplemental source that helps food and nutritional security, as well as livelihood, worldwide. Food production on tiny plots next to human settlement is the oldest and most lasting form of horticulture. Home gardens have been essential for family farming and local food systems for centuries. Actually, food production at home is also included in DO 1, s. 1991, or the Guidelines for the Implementation of the Education Sector Contingency Plans for All levels. For food production/livelihood program, all pupils/students and teacher will be involved in food production endeavors both in school and at home. Specifically, this program allows learners to monitor food and livestock production activities of pupils at home for proper accreditation in Home Economics and Livelihood Education and Practical Arts subjects.

Home gardens have been also recognized as a global phenomenon. It's a significant supplementary source that contributes to food and nutritional security as well as livelihoods. 'Food production on tiny plots near to human settlements is the oldest and most lasting form of horticulture,' says the World Food Programme. Home gardens have been an important part of family farming and local food systems for millennia. Home gardening is a centuries-old and widely practiced practice all across the world. Home gardens are classified as mixed, kitchen, backyard, farmyard, compound, or homestead gardens in the literature. (Galhena, 2013)

Vegetable gardening is recommended for the young and old alike because of the numerous benefits it gives to people. It can be a main or supplementary source of family income. This is a healthful and satisfying activity. Growing vegetables fosters good physical and mental health. By working in a vegetable garden, one gets fresh air and sunlight, and do some forms of exercise. It increases the food supply in the community. When vegetables are plentiful, they sell at a lower price and become affordable to a greater number of people. It develops good work habits and cooperation among group workers in school and in the home. All of the necessary benefits of vegetable gardening have also motivating factors to do more on planting endeavors like planting of fruit bearing trees and other basic crops in agriculture activities. These also contributed much to make the environment clean and green for the safety and healthy living environment. (Mallari-Munsayac, Josephine, 2014)

Gardening is a rewarding activity that can provide fresh, flavorful produce. It offers many of the same benefits as other gardening activities, including exercise, fresh air, landscape beautification, enjoyment and make surroundings clean and green. Considering the selecting a site, planning the garden, preparing the soil, choosing the seeds and plants, planting crop, and nurturing the plants until they are ready for harvest. This also help provide us with fresh produce, clean air and create habitat for wildlife. They also help reduce food miles and carbon emissions.

Valarao (2012) has mentioned that it must not be called going green for nothing! More trees must be planted in school. A vegetable garden should also be made in campus. Many students must be gotten as possible to materialize these things. Beyond the benefits of having fresh plants within your midst, we want our students to get their hands dirty so they can really develop a close affinity to the environment. He also reiterated that the environment affects each and every one of us, so we should get involved, in order to make our students learn that they 're part of a community; that they care so much about the environment. On the other hand, the other members of the community should participate too and show that they also care.

Hunger and malnutrition are two problems that affect 19.0% or 3,268,000 families out of the 17,400,000 families/households in the country due to lack of food to eat or money to buy food. Children of poor parents fail to complete their education because hunger and malnutrition force them to drop out from school to as to help their parents earn a living. To address this situation, the government has put in place hunger mitigation and poverty alleviation schemes that will help promote food security and economic stability for the affected families. The Department of Education in close coordination with the Anti-Hunger Task Force, National Nutrition Council and Local Government Units implement the food for school program and other supplementary feeding schemes. Complementing such efforts is the strengthening of the implementation of school community food production under the Gulayan sa Paaralan project which shall be tied up with the Programang Agricultura Para sa Masa of the Department of Agriculture. This project Gulayan sa Paaralan seeks to raise the level of public consciousness on the health and nutritional dimension as well as economic benefits of establishing school household and community gardens. (DepEd Memorandum No.293, s. 2007)

For efficient and effective implementation of the National Greening Program (NGP) pursuant to Section 5.2 of Executive Order (EO) No. 26. s. 2011 and DepEd Memorandum No.58, s. 2011 entitled Creating the task force on National Greening Program, the DepEd issues these guidelines to concretize directions in the implementation of the National Greening Program. These guidelines integrate the Gulayan sa Paaralan, ecological solid waste management and tree growing and caring as key components to attain the goals of DepEd on poverty reduction, food security, biodiversity conservation and climate change mitigation and adaptation. The NGP shall be implemented in all public

elementary and secondary schools nationwide by establishing vegetable gardens to serve as food basket/main source of commodities to sustain supplementary feeding, practice waste management principles such as minimization, segregation at source, reduction, recycling, re use and composting, establish nurseries/seed banks for the propagation of vegetable seedlings, fruit bearing trees and small trees or saplings, and support the tree planting activity in schools and in the community or at home. (DepEd Order No. 5, s. 2014.)

Gulayan sa Tahanan as a family offers a host of benefits, including promoting healthy eating and exercise habits as well as family bonding and stress reliever. Growing our own vegetables is both fun and rewarding. It was conceptualized by our municipal mayor to be one of his signature programs in the municipality of Mabini. He believes that through Gulayan sa Tahanan everyone would be participating because through this program every family can produce their own food specifically vegetables and other plants that can be converted to rice particularly banana, cassava and other related crops.

Our needs and wants motivate us to work hard. They encourage and inspire us to get involved in productive endeavors that will help provide not just for the basic and social needs of the family, but also to have extra money to indulge in things we enjoy. Basic needs are things required by people to be able to survive. These include sufficient food, decent living, secure safety, clean air, and safe drinking water and clean environment. Every person needs these things for health and security. Health needs, on the other hand, are those that help us feel secure in our living. These can be anything from healthy environment, that is clean and green with full of variety of plants that make us free from any sickness and sadness. Managing healthy environment is the primary responsibility of parents. (Peralta et.al, 2016)

The school officials have a great responsibility to influence the future of the school, the pupils, the parents likewise can make significant impact on the environment. The right time to implement backyard gardening that will start in the learning gained from the implementation of Gulayan sa Paaralan. On the other hand, the integration of proper waste management in school should be also implemented, this calls for the importance of waste reduction and management to improve the health and well-being of the population not only in the city but also in rural places since population keeps on increasing. Most of the waste materials can be converted into compost specifically materials derived from the decomposition of plants and animal wastes. Compost application replenishes the organic matter or humus in the soil which is being depleted with continuous cropping. Also, application of compost activates soil micro-organism, thus increasing the availability of nutrients that plants feed on. (Marano, 2017)

Gulayan sa Tahanan for sustainable food production has been highlighted in the priority of LGU through the coordination of DepEd and the support of the entire community and this is aligned to the clean and green program of the Municipal Agriculture Office. The researchers have been motivated to conduct this study for them to support the aspiration of the Municipal Mayor in making Mabini, Batangas clean and green with sustainable food production. The researchers came up to this study which determine the readiness of the participants in the implementation of the program and how this project would become more meaningful to each Mabinian.

ACTION RESEARCH OBJECTIVES

This study sought to answer the following:

1. How do the program implementers manage the Gulayan sa Tahanan, clean and green project in Mabini, Batangas?
2. What are the strategies utilized by the program implementers in encouraging the participants to take active part in the undertaking?
3. What are the impacts of food production, clean and green program of LGU and DepEd in Mabini, Batangas
4. What are the challenges encountered in by the participants?
5. Are there significant differences in the perception of the two groups of respondents?
6. Based on the analysis, what intervention plan may be proposed to sustain the food production, clean and green program in Mabini, Batangas?

PROPOSED INNOVATION, INTERVENTIONS AND STRATEGY

This prepared intervention plan maybe a step to enhance the involvement of parents and teachers to sustain the Gulayan sa Tahanan, as one of the signature projects of the municipal mayor in support and coordination of DepEd, Mabini Sub-Office towards sustainable food production, clean and green project in Mabini, Batangas.

Action Steps	% to Accomplish	Time Line	Resource Requirement		Success Indicators and MOVs
			Materials	Financial	
1.Meeting of School Heads, Municipal Agriculture Officer (MAO) and Mabini Sub-Office PTA Federation Officers with special participation of the	•100% of the expected guests and participants had	November 09, 2023	Issuances and concerns about Gulayan sa Tahanan/Paaralan	SEF /3,000.00	Significant issues and concerns were tackled and well-managed election of officers had been administered.

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Municipal Mayor and Election of Officers on Task Force on Gulayan sa Paaralan: Sustainable Food Production, Clean and Green Program	attended the meeting. •Preparation of plans for the Gulayan/Halaman sa Tahanan Project Preparation for the Search in Best Gulayan sa Paaralan				Scheduled Search for the Search Best Gulayan sa Paaralan as initial Search before the Search for the Best Gulayan sa Tahanan
2.Search for The Best Gulayan sa Paaralan	All schools are expected to participate	December 11-13, 2023	Awards: Set of Garden tools for all categories, Cash Awards, Criteria for Judging	SEF/MAO funds /50,000.00	Categories to be awarded: Small School Medium School Big School
3.Benchmarking to Dr. Oliver Bautista's Farm in San Pascual, Batangas	100% of the expected participants was able to attend	Depends upon to the approval of Dr. Bautista	Request letter for Dr. Oliver Bautista, Transportation and meals expenses	MAO or personal expenses	100% of the participants were able to know the strategies and techniques in producing vegetables and level up the skills in the implementation of clean and green program
4.Conduct one-day meeting with the municipal mayor, school heads, MAO and those with high support to the join program of LGU and DepEd about food-production, clean and green program	100% of the expected participants will join the activity	January 11, 2024	Appointment with the mayor and to the concerned participants, Foods	SEF/MAO funds/ 4,000.00	•Ideas/thoughts/concepts learned from the meeting would serve guide in the realization of the success of the program •Well-organized plan for the Gulayan/Halaman sa Tahanan Project
5.Simulation activities on project implementation of food production, clean and green program -Venue: Mabini Central School	Parents, school heads and select teacher-participants were able to participate and accomplish the 100% target output.	January 18, 2024	See the schedule of activities to be prepared by the Sub-Office TLE coordinator Garden Tools Monitoring Tool	MAO/Personal Fund/2000 .00	•Each participant was able to finish the expected output. •Parents applied the different techniques or strategies on putting up home gardens.
6.Home Visit	•100% of the target households	January 20, 2023	Monitoring tool	1,000.00	Households have their prepared backyard gardening

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	with backyard gardening •Monitor the established home gardens at home.					
7.Sub-Office Contest-Search for the best Gulayan sa Tahanan	100% of the participants was able to participate	Based on the suggested schedule	Evaluators, Evaluation tools	3,000.00	Identified the deserving winners.	
8.Awarding Ceremony	Invited guests and participants are expected to attend.	Based on the suggested schedule	Program/Invitation and other materials to be needed in the awarding ceremony/Plaque/Certificate of Recognition/Cash awards	20,000.00	Recognized the best implementer of the Gulayan sa Tahanan Project	
9.Seedlings distribution	100 % quality seedlings were able to distribute to parents and teachers	February 23, 2024	MAO staff/Seedlings DepEd personnel Record Book for distribution of seedlings	2,000.00	Acceptance of seedling in respective household	
10.Meeting with the Officers and Technical Working Group (TWG) of Gulayan sa Tahanan	The expected agenda would be highlighted in the meeting such as: Soliciting the support of the Mabini Business Club Organization for the greenhouse and Material Recovery Facilities (MRF)for every school as the model nursery of the parents, teachers and learners.	February 29, 2024	Foods and other materials to be used in the meeting	District Funds/2,500.00	Resolution/request letter to be addressed to President of the Business Cycle/Club of Mabini, Batangas for the proposed Green House and MRF for every school.	

	Other matters				
11. Recognition of Stakeholders/Supporters for Gulayan sa Tahanan & Gulayan sa Paaralan. Venue: Mabini Central School	100% of expected stakeholders had attended the recognition	March 06, 2024	Mayor, Sangguniang Members, MAO, School Heads, parent-participants, Select Teachers	SEF/10,000.00	Recognition of Stakeholders had been implemented
12. Proposed Special Project- Basic Handbook in Management Gulayan sa Tahanan and Paaralan	The researchers were able to compile relevant topics about sustainable Gulayan sa Tahanan for significant output.	March 2024 to December 2024	Researchers	Personal Fund/5,000.00	Handbook in Management Gulayan sa Tahanan/Paaralan was accomplished

ACTION RESEARCH METHODS

a. Participants and/or other Sources of Data and Information

The participants of the study were three hundred fifty-eight (358) parents and seventy-five (75) teachers. The researchers sought the consent of the Schools Heads regarding the study securing them that it is primary intended to find support for the DepEd & LGU joint program.

b. Data Gathering Methods.

The study employed the descriptive (quantitative) type of research. It is also action research since it is a form of investigation designed for use by the researchers which, according to (Parson and Brown,2002), is an attempt to solve problems and improve professional practices. The main source of data was a researcher-made questionnaire which was validated and tried out. The research-instrument made use of Likert’ Scale to determine the rating of the respondents to the level of their participation to the LGU and DepEd program on Gulayan, clean and green project in the community. Part 1 dealt with the description of food production, clean and green program in Mabini, Batangas, the second part deals on strategies being utilized by the program implementers in encouraging the participants in sustainable food production. Impact of food production, clean and green program of the DepEd and LGU Mabini, Batangas is the 3rd part of the questionnaire. The last part deals with the challenges encountered in the implementation of food production, clean and green program of LGU and DepEd in Mabini, Batangas.

Frequency, ranking and weighted mean were used to interpret and analyze the data. Pearson and Chi-square test and ANOVA were the statistical tools utilized to treat the data.

Data Analysis Plan

SOP 1

Table 1. shows the level of perception of the respondents on food production, clean and green program in Mabini, Batangas as observed.

Food production, clean and green program in Mabini, Batangas as observed:	Parents		Teachers	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
11. Manifested knowledge of R.A. 9003 & R.A. 7607; understanding ecological solid waste management and magna carta of small farmers respectively	3.20	Observed	3.39	Highly Observed
2. Practiced food production, clean and green program in every household	3.30	Highly Observed	3.55	Highly Observed
3. Advocate of proper waste management and segregation program	3.31	Highly Observed	3.48	Highly Observed
4. Practiced composting in every home to produce organic fertilizer	3.13	Observed	3.11	Observed
5. Maintained a well-balanced vegetable garden	3.28	Highly Observed	3.29	Highly Observed

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6. Applied the concept of gardening program at home and in the community	3.26	Highly Observed	3.43	Highly Observed
7. Planted variety of vegetables in the backyard	3.28	Highly Observed	3.41	Highly Observed
8. Planted variety of indigenous vegetables	2.96	Observed	3.08	Observed
9. Planted quality fruit-bearing trees in vacant spaces	3.14	Observed	2.77	Observed
10. Produced plants for animal consumption in the backyard like ipil-ipil, madre cacao etc.	2.91	Observed	2.75	Observed
11. Required parent-learner partnership in food production	3.18	Observed	3.19	Observed
12. Engaged LGU in seedlings production in every school and home	3.16	Observed	3.32	Highly Observed
13. Monitored the program through home visitation of teachers	3.15	Observed	3.35	Highly Observed
14. Awarded incentives for the best implementers as shouldered by the LGU	2.99	Observed	3.33	Highly Observed
Over-all Weighted Mean	3.16	Observed	3.25	Highly Observed

Legend:

3.25 – 4.00 *Highly Observed*

2.50 – 3.24 *Observed*

2.75 – 2.49 *Less Observed*

1.00 – 1.74 *Not Observed*

Based on the data, the parents are advocate of proper waste management and segregation program with weighted mean of 3.31, it may be concluded that the parents' awareness on Local Government Unit initiative for zero waste management are highly observed among the respondents. This supports the opinion of Marano, (2017) that the school officials have a great responsibility to influence the future of the school, the pupils, the parents likewise can make significant impact on the environment. The right time to implement backyard gardening that will start in the learning gained from the implementation of Gulayan sa Paaralan. On the other hand, the integration of proper waste management in school should be also implemented, this calls for the importance of waste reduction and management to improve the health and well-being of the population not only in the city but also in rural places since population keeps on increasing. Most of the waste materials can be converted into compost specifically materials derived from the decomposition of plants and animal wastes. Practiced food production, clean and green program in every household is also highly observed in the part of the parents. This observation is parallel to the first conclusion that had mentioned.

As assessed by the teacher-respondents, they noted that the food production, clean and green program in Mabini, Batangas that practiced of food production, clean and green program in every household is highly observed which is strongly supported by the highest obtained weighted mean of 3.55. This shows that most of the parents give importance and priority to the battle cry of the LGU for food production, clean and green program in the locality. Furthermore, they are advocate of proper waste management and segregation program and applied the concept of gardening program at home and in the community with weighted means of 3.48 and 3.43 respectively. These indicate that clean and green program are priorities of the respondents and the food production as well. This is in line with Peralta et.al (2016) idea that basic needs are things required by people to be able to survive. These include sufficient food, decent living, secure safety, clean air, and safe drinking water and clean environment. Every person needs these things for health and security. Health needs, on the other hand, are those that help us feel secure in our living. These can be anything from healthy environment, that is clean and green with full of variety of plants that make us free from any sickness and sadness. Managing healthy environment is the primary responsibility of parents.

Meanwhile, that table shows that the parent-respondents perceived that they are just observers on the awards and incentives for the best implementers as shouldered by the LGU and they are not particular in planting variety of indigenous vegetables. Producing plants for animal consumption in the backyard like ipil-ipil, madre cacao and other is not also their priority with weighted means of 2.99, 2.96 and 2.91 respectively. These dimensions got the lowest ranks. These findings conform to the reality that the said activities are not always placed in the priorities. Furthermore, validation of the data was done by conducting survey to teachers. Based from their assessment, it can be seen that they have observed only how to produce plants for animal consumption in the backyard like ipil-ipil, madre cacao etc and in planting quality fruit-bearing trees in vacant spaces with the lowest weighted means of 2.77 and 2.75 respectively. This denotes that these particular activities are for those with wide farms.

Looking at the result of the parent-respondent's assessment responses, it can be inferred that the respondents are just in the level of observed in connection to their perception on food production, clean and green program in the municipality of Mabini with a composite mean of 3.16 while in the part of the teachers this is highly observed with a

composite mean of 3.25. These could be attributed to the fact that the teachers are most knowledgeable in the observance of food production, clean and green program in the entire municipality of Mabini, Batangas.

SOP 2

Table 2.1 shows the level of perception of the respondents on Strategies being utilized by the program implementers in encouraging the participants in sustainable food production (Parents)

Strategies being utilized by the program implementers in encouraging the participants in sustainable food production	Parents		Teachers	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
1. Conducted a formal launching of the program	3.15	Observed	3.32	Highly Observed
2. Scheduled regular meeting of the implementers	3.08	Observed	3.27	Highly Observed
3. Engaged Municipal Mayor to lead the program implementation	3.22	Observed	3.20	Observed
4. Coordinated with DepEd Mabini Sub-Office and Municipal Agriculture Office	3.28	Highly Observed	3.28	Highly Observed
5. Prioritized provision of seedlings and other agricultural materials	3.22	Observed	3.24	Observed
6. Guided by the crafted monitoring tool	3.02	Observed	3.09	Observed
7. Aligned the objectives of the program to the needs of the clientele	3.05	Observed	3.19	Observed
8. Informed and coordinated with the barangay officials	3.27	Highly Observed	3.39	Highly Observed
9. Discussed the implementation of the program in PTA conferences and meetings	3.35	Highly Observed	3.43	Highly Observed
10. Sought the support of the Business Circle of Mabini, Batangas and other stakeholders	3.16	Observed	3.24	Observed
11. Allocated budget for the program through the Municipal Agriculture fund	3.19	Observed	3.31	Highly Observed
12. Crafted action plan for continuous improvement using gathered/analyzed documents	3.07	Observed	3.21	Observed
Over-all Weighted Mean	3.17	Observed	3.27	Highly Observed

Legend:

3.25 – 4.00 Highly Observed

2.50 – 3.24 Observed

2.75 – 2.49 Less Observed

1.00 – 1.74 Not Observed

The are strategies being utilized by the problem implementers in encouraging the participants more active and participative to come up to the goal for the sustainable food production in the locality. Table 2 shows the perception of the among parents and teachers.

Based on the conducted survey, the parents are aware that the implementation of the program in PTA conferences and meetings have been clearly discussed that’s why this indicator has the highest weighted mean of 3.43, this was followed of the program was coordinated with DepEd Mabini Sub-Office and Municipal Agriculture Office with weighted mean of 3.28 and the third in rank is there is scheduled regular meeting of the implementers with weighted mean of 3.27. All of the indicators have been highly observed by the parent-respondents. As mentioned by Peralta et.al. (2016), our needs and wants motivate us to work hard. They encourage and inspire us to get involved in productive endeavors that will help provide not just for the basic and social needs of the family, but also to have extra money to indulge in things we enjoy. Basic needs are things required by people to be able to survive. These include sufficient food, decent living, secure safety, clean air, and safe drinking water and clean environment. Every person needs these things for health and security. Health needs, on the other hand, are those that help us feel secure in our living. These can be anything from healthy environment, that is clean and green with full of variety of plants that make us free from any sickness and sadness. Managing healthy environment is the primary responsibility of parents. These are the reasons why parents are get involved in PTA meetings and they aware how the school administrators have been engaged also to government agencies for the welfare of school clients particularly the parents and the learners.

Moreover, the data in the table revealed that the teacher-respondents perceived that in Gulayan sa Tahanan parents practiced food production, clean and green program in every household with weighted mean of 3.55 and they are advocate of proper waste management and segregation program with weighted mean of 3.48 and the they are also

applied the concept of gardening program at home and in the community with a weighted mean of 3.43. These results indicate that teachers are familiar with the strategies of the DepEd and LGU to inculcate the important of food production not only in word by in deed. As mentioned in DepEd Order No. 5, s. 2014, for efficient and effective implementation of the National Greening Program (NGP) pursuant to Section 5.2 of Executive Order (EO) No. 26. s. 2011 and DepEd Memorandum No.58, s. 2011 entitled Creating the task force on National Greening Program, the DepEd issues these guidelines to concretize directions in the implementation of the National Greening Program. These guidelines integrate the Gulayan sa Paaralan ecological solid waste management and tree growing and caring as key components to attain the goals of DepEd on poverty reduction, food security, biodiversity conservation and climate change mitigation and adaptation. The NGP shall be implemented in all public elementary and secondary schools nationwide by establishing vegetables gardens to serve as food basket/main source of commodities to sustain supplementary feeding, practice waste management principles such as minimization, segregation at source, reduction, recycling , re use and composting, establish nurseries/seed banks for the propagation of vegetable seedlings, fruit-bearing trees and small trees or saplings, and support the tree planting activity in schools and in the community or at home.

Lowest in rank in the parts of parent-respondents were allocated budget for the program through the Municipal Agriculture fund; sought the support of the Business Circle of Mabini, Batangas and other stakeholders and crafted action plan for continuous improvement using gathered/analyzed documents with obtained weighted means of 3.19, 3.16 and 3.07 respectively these indicate that parents are not aware on the strategies initiated by DepEd personnel and LGU to make the program more meaningful and functional.

Further validation of the data was done to the lowest ranks obtained in the part of the teacher-respondents, the crafting of action plan for continuous improvement using gathered/analyzed documents with weighted mean of 3.21, Engaging the Municipal Mayor to lead the program implementation with weighted mean of 3.21 and aligning the objectives of the program to the needs of the clientele with weighted mean of 3.19. These show that teacher-respondents are not informed what the Sub-Office through the leadership of the District Supervisor and the support of the school heads in doing such activities as reflected in the Sub-Office Action Plan.

SOP 3

Table 3.1 shows the level of perception of the respondents on the Impact of food production, clean and green program of the DepEd and LGU Mabini, Batangas

Impact of food production, clean and green program of the DepEd and LGU Mabini, Batangas	Parents		Teachers	
	Weighted Mean	Verbal Interpretation	Weighted Mean	Verbal Interpretation
1. Harvested crops resulted to better income generation and healthier food intake	3.29	Highly Observed	3.31	Highly Observed
2. Developed cleaner environment	3.42	Highly Observed	3.48	Highly Observed
3. Promoted healthy living and stress-free environment	3.43	Highly Observed	3.40	Highly Observed
4. Reduced symptoms of any sickness/disease and improved physical and emotional conditions through planting and gardening exercises.	3.37	Highly Observed	3.37	Highly Observed
5. Provided fresh air, enough food and clean habitat for animal wildlife	3.39	Highly Observed	3.44	Highly Observed
6. Created opportunities for input suppliers, processors, small manufacturers, traders and other service providers, as well as generating income	3.10	Observed	3.19	Observed
7. Made profitable business when managed properly	3.12	Observed	3.16	Observed
8. Promoted socialization by getting outside, interacting with other gardeners, and taking in charge of their own food need	3.15	Observed	3.35	Highly Observed
9. Motivated children/students to participate in gardening	3.45	Highly Observed	3.37	Highly Observed
10. Alleviated poverty	3.18	Observed	3.25	Highly Observed
Overall Weighted Mean	3.29	Highly Observed	3.33	Highly Observed

Legend:

3.25 – 4.00 Highly Observed

2.50 – 3.24 Observed

2.75 – 2.49 Less Observed

1.00 – 1.74 Not Observed

Based on the parents' responses, they assessed the level of perception on the impact of food production, clean and green program. They believe that this motivates children/students to participate in gardening with highest weighted mean of 3.45. This is highly observed by the parents. This is in conformity to the opinion of Valarao (2012), He discussed that don't call it going green for nothing! Plant more trees in your school, create a vegetable garden on campus. Yes, get as many students as you can do it. Beyond the benefits of having fresh plants within your midst, we want our students to get their hands dirty so they can really develop a close affinity to the environment. He also reiterated that the environment affects each and every one of us, so we should get involved, in order to make our students learn that they 're part of a community that care so much about the environment, the other members of the community should participate too and show that they also care. Second in rank is promoted healthy living and stress-free environment which is highly observed too with weighted mean of 3.43 and the third one is developed cleaner environment with weighted mean of 3.42 and interpreted to highly observed also. Summarizing the parents' perception to the impact of the program they have 3.29 composite mean and interpreted to highly observed.

Moreover, it can also be seen that the teacher-respondents believed this developed cleaner environment with weighted mean of 3.48 showing highly observed perception; provided fresh air, enough food and clean habitat for animal wildlife and promoted healthy living and stress-free environment with weighted mean of 3.40 respectively which are both interpreted with highly observed. These findings are in line with Mallari (2014), opinion that by working in a vegetable garden, one gets fresh air and sunlight, and do some forms of exercise. It increases the food supply in the community. When vegetables are plentiful, they sell at a lower price and become affordable to a greater number of people. It develops good work habits and cooperation among group workers in school and in the home. All of the necessary benefits of vegetable gardening have also motivating factors to do more on planting endeavors like planting of fruit bearing trees and other basic crops in agriculture activities. These also contributed much to make the environment clean and green for the safety and healthy living environment. The composite mean of 3.33, interpreted to highly observed showed that teachers are knowledgeable of the impact of food production, clean and green program in the community.

Parent-respondents manifested their lowest perceptions in making profitable business when managed properly with weighted mean of 3.12 interpreted to observed then the second one is created opportunities for input suppliers, processors, small manufacturers, traders and other service providers, as well as generating income with weighted mean of 3.10 and interpreted to observed also. On the other hand, teacher-respondents' perception in the lowest ranking with obtained weighted means of 3.12 and 3.10 respectively and interpreted to observed only are made profitable business when managed properly and created opportunities for input suppliers, processors, small manufacturers, traders and other service providers, as well as generating income as perceived by the parents. On the other hand, teachers' lowest perception among the indicators are created opportunities for input suppliers, processors, small manufacturers, traders and other service providers, as well as generating income with weighted mean of 3.19 and made profitable business when managed properly with weighted mean of 3.16 interpreted also to observed. These indicate that both parents and teachers are agreed that they are neophytes in connection to the establishment of Gulayan sa Tahanan and they have no enough space for the backyard gardening to produce more vegetables to harvest for business or earn for profitable income from Gulayan sa Tahanan.

SOP 4

Table 4.1 The ranking of parents and teachers on the Challenges encountered in the implementation of Food Production, Clean and Green Program of LGU and DepEd Mabini, Batangas.

Challenges encountered in the implementation of Food Production, Clean and Green Program of LGU and DepEd Mabini, Batangas	Rank	
	Parents	Teachers
Availability of space in backyard for gardening and plant production	1	1
Minimal knowledge in basic principles of food production specifically in backyard gardening.	2	3
Limited support from the government on the supplies of needed materials for backyard gardening	3	6
Lack of interest of every Mabinian in the LGU and DepEd project in food production, clean and green program	4	5
Overlapping/conflict of time	5	2
Climate change and natural disaster that affect in the production of Gulayan and quality of vegetables	6	4
Others:		
Lack of water supply		
Lack of resources in gardening		

The implementation of Gulayan sa Tahanan: Partnership program of DepEd and LGU towards sustainable food production, clean and green project in Mabini, Batangas faces challenges and issues. Table 4 shows the challenges, the availability in backyard for gardening and plant production got the highest point for both parents and teachers' perception. This is contradicted to the idea of Veendras, (2011) that home gardening has always been a household idea and lately, more and more people are engaging and discovering the benefits of growing your own plants

at home. Home gardening benefits of growing your own plants at home. Home gardening benefits our health, good for soil, and good for the wildlife in your backyard. It's a great way to relieve stress, to set goals for yourself, and make our environment clean and green. There are ways on how to put up Gulayan sa Tahanan, one of these is the implementation of vegetable in pots and other innovative procedures in establishing Gulayan sa Tahanan. This could be one of the topics that should be discussed with our parents. Parent-respondents encountered minimal knowledge in basic principles of food production specifically in backyard gardening, this is the second challenge for them. Third in rank is limited support from the government on the supplies of needed materials for backyard gardening. Then, parents stated that lack of interest of every Mabinian in the LGU and DepEd project in food production, clean and green program is one of the challenges, this point rank No. 4 among the indicators. Then, overlapping/conflict of time is another one which ranked No. 5 and last among the challenges is the climate change and natural disaster that affect in the production of Gulayan and quality of vegetables.

The study revealed that the teacher-respondents assessment in challenges encountered in food production, clean and green program, number 1 is availability of space in backyard for gardening and plant production the same as to the 1st challenge met by the parents. The data also revealed that the second challenge is overlapping/conflict of time. Then the 3rd is minimal knowledge in basic principles of food production specifically in backyard gardening. Fourth in the rank is climate change and natural disaster that affect in the production of Gulayan and quality of vegetables. Then, number 5 is lack of interest of every Mabinian in the LGU and DepEd project in food production, clean and green program then the last challenge is limited support from the government on the supplies of needed materials for backyard gardening.

Lack of water supply and lack of resources in gardening are the other challenges shared by the respondents.

SOP 5

Table 5.1 Descriptive statistics of the perception of respondents on Food production, clean and green program in Mabini, Batangas as observed:

Sources	N	Mean	Standard Deviation
Parents	358	3.16	0.53
Teachers	75	3.25	0.45

From the data reflected in the table, it can be gleaned from that among 433 respondents, 358 are parents and 75 are teachers. It implies that majority of the respondents are parents which have 3.16 average mean and 3.25 average mean for the teachers.

Table 5.2 Independent t-test of the perception of respondents on Food production, clean and green program in Mabini, Batangas as observed by parents and teachers.

Sources	Mean Difference	p-value	Decision	Interpretation
Parents and Teachers Responses	-0.09	0.100	Accept Ho	Not Significant

The computed -0.09 mean difference, with the p-value of 0.100 greater than 0.05, indicating that the null hypothesis was not rejected. It shows that the perception of parents and teachers in food production, clean and green program in Mabini, Batangas does not have significant relationship. The results were supported by Harvard Family Research Project (2010). It is clearly stated that the support of the teachers, parents and other stakeholders, including it community, is integral in this program. Building school-community partnerships will increase the likelihood of achieving a positive outcome. It was found that partnership can improve program quality, resource efficiency, and better goal. Working together and sharing responsibilities towards the common goal will expedite solutions to children's education problems. Collaboration between the school and the community would foster communication concerning educational programs and children's progress in both directions which will lead to success.

Table 5.3 Descriptive statistics of the perception of respondents on Strategies being utilized by the program implementers in encouraging the participants in sustainable food production by parents and teachers.

Sources	N	Mean	Standard Deviation
Parents	358	3.16	0.59
Teachers	75	3.26	0.62

In the descriptive statistics of the perception of respondents on strategies being utilized by the program implementers in encouraging the participants in the sustainable food production by parents and teachers. As shown in the table, there were 358 participants from the group of parents equivalent to 3.16 average mean, then 75 teachers which has 3.26 average mean. There standard deviation score was 0.59 and 0.62 respectively.

Table 5.4 Independent t-test of the perception of respondents on Strategies being utilized by the program implementers in encouraging the participants in sustainable food production by parents and teachers.

Sources	Mean Difference	p-value	Decision	Interpretation
Parents and Teachers Responses	-0.10	0.190	Accept Ho	Not Significant

Since the p-value is higher than 0.05 level set in the study, results failed to reject the null hypothesis that there is no significant difference in the extent of perception of respondents on strategies being utilized by the program implementers in encouraging participants in sustainable food production does not determine on the perception of both parents and teachers.

Table 5.5 Descriptive statistics of the perception of respondents on the Impact of food production, clean and green program of the DepEd and LGU Mabini, Batangas

Sources	N	Mean	Standard Deviation
Parents	358	3.28	0.51
Teachers	75	3.33	0.56

As shown in the table, most of the respondents are parents with 358 participants while there are 75 parents only. Based on descriptive statistics of the perception of respondents on the impact of food production, clean and green program of the DepEd and LGU parents have 3.28 average mean and 0.51 standard deviation, while teachers have 3.33 equivalent to 0.56 in standard deviation.

Table 5.6 Independent t-test of the perception of respondents on the Impact of food production, clean and green program of the DepEd and LGU Mabini, Batangas by parents and teachers

Sources	Mean Difference	p-value	Decision	Interpretation
Parents and Teachers Responses	-0.05	0.444	Accept Ho	Not Significant

The computed t-test of -0.05 with the p-value < 0.05 reject HO otherwise Accept. Since 0.444 > 0.05 hence Accept HO. This further implies that there is no significant difference on the responses between the parents and teachers. According to Molijon and Dela Rama (2014), vegetables gardens are one of the government’s National Greening Program’s strategies to promote food security. Gulayan sa Paaralan Program helped the school and their families financially.

CONCLUSIONS

1. The two groups of respondents were one in describing the program management and the strategies utilized in the implementation of gulayan sa tahanan as partnership program of DepEd and LGU towards sustainable food production, clean and green project in Mabini, Batangas as highly observed.
2. The parents and teachers have no significant difference in their assessment to the importance of the program.
3. The proposed intervention plan focused on the implementation of basic activities to sustain the effectiveness of the joint program of DepEd and LGU of Mabini, Batangas.

RECOMMENDATIONS

1. Enhancement programs for the parents and teachers in connection to food production, clean and green program may be conducted to increase their involvement and participation.
2. The Department of Agriculture and Department of Education may organize formal trainings for parents and teachers to update their existing knowledge and skills in food production program, clean and green program in the community.
3. The proposed intervention plan may be presented to Municipal Agriculture Office (MAO) for their review and suggestions before it could be implemented.
4. A similar study may be conducted tracing the effectiveness of the proposed activities for sustainable food production, clean and green program in Mabini, Batangas.

Action Research Work Plan and Timelines:

TARGET DATES		
End of Project	Dissemination Period	Final Report
November 15, 2023	December 2023	February 26, 2024

Cost Estimates:

Budget Item	Budget Requirement
Bond Paper	160.00 X 1 ream = 160.00
Food for the peer validation	50.00 X 8 peers = 400.00
Statistician	1,500.00X 1 = 1,500.00
Printing	500.00
Total	2,560.00

Plans for Dissemination and Utilization:

Dissemination Activities	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
1. Apply for the DCBER and other research presentations						
2. Review all comments and suggestions from the presentations had been participated for the improvement of the study						
3. Apply for the publication of my study.						
4. Utilization of the result through the conduct of programs, projects and other activities as reflected in the prepared intervention plan.						
5. Documentation/compilation of all accomplished programs/projects/activities						
6. Reporting of accomplishment to the concerned offices.						
7. Planning for the next/follow up study.						

REFERENCES

- [1] Galhena et al (2013).: Home gardens: a promising approach to enhance household food security and wellbeing. Agriculture & Food Security
- [2] Mallari-Munsayac, Josephine, (2014), Growing Up with Home Economics and Livelihood Education, FNB Educational Inc. ISBN 978-971-514-830-6, 202 Quirino Highway, Baesa, Quezon City, p.137.
- [3] Marano, Erlinda S. (2017), Valuing Wastes in Schools Through Proper Management, Modern Teacher, Volume 66. Papi Publishers Association of the Philippines, Inc. pp. 15-17
- [4] Moliyon, A, & De la Rama, J. (2014) Baseline Assessment of the Vegetables Gardens (Gulayan sa Paaralan) in Public Elementary and Secondary Schools
- [5] Harvard Family Research Project, (2010). Partnership for learning: Promising practices in integrating schools and out-of-school time program support. Retrieved from <http://www.hfrp.org/publications> resources/brown-our-publications/partnership-for-learning
- [6] Imperial, Prima Lou B. (2011), New Gulayan sa Paaralan to Begin, 23 trainings set up, Department of Agriculture, ATI in Bicol: Igniting the power of knowledge, Retrieved from http://ati.da.gov.ph/bicol/news/2011/new_gulayan_sa_paaralan_begin_23_training_set
- [7] Valarao, Carlos,(2012),Going Green, Creating an Environment Friendly Campus, Educator, Magazine for Teachers, MPR Publications, Annapolis St., San Juan, Metro Manila, pp.38-39.
- [8] Peralta, Gloria A, et.al (2016), Living Skills Through Technical and Livelihood Education (TLE), Department of Education, Republic of the Philippines, ISBN 978-971-07-3872-4, Copyright @ 2016 by Vibal Group Inc. p.98
- [9] Veendran, B. (2011), Home Gardening 101: Basic Guide in Growing Your Own Food at Home, <https://primer.com.ph/tips-guides/homewardening-101-basic-guide-in-growing-your-own-food>.
- [10] Issuances /Memorandum
- [11] DepEd Order No. 293, s. 2007, Tanggapan ng Kalihim, Office of the Secretary, July 27, 2007
- [12] DepEd Order No. 5, s. 2014, Implementing Guidelines on the Integration of Gulayan sa Paaralan, Solid Waste Management and Tree Planting Under the National Geening Program (NGP)

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