

Income-Generating Projects (IGPs) of Public Schools in Davao de Oro Division: A Phenomenological Study

Rey S. Hanoyan^a, Jeffrey Z. Mata^b, and Marleonie M. Bauyot^c

^arey.hanoyan@deped.gov.ph

^bjeffrey.mata@ddosc.edu.ph

^cmmbauyot@addu.edu.ph

^aFaculty, Department of Education - Schools Division of Davao de Oro, Philippines

^bFaculty, Davao de Oro State College, Philippines

^cFaculty, Ateneo de Davao University, Philippines

Abstract

Income-generating projects are profitable options that schools can utilize to generate additional income for financing educational programs. This qualitative-phenomenological study navigates the income-generating projects of public schools in Davao de Oro Division. There were eight (8) public school teachers of Davao de Oro Division who are designated as school coordinators of income-generating projects in their respective schools that participated in the individual in-depth interview. As to the income-generating projects of public schools and the people involved in the operation, three major themes emerged: Gulayan sa Paaralan (school vegetable garden), rice production, and collaborative implementation. The challenges they encountered in implementing the school IGP revealed three major themes: bad weather conditions, pests and plant diseases, and work overload. Two major themes emerged regarding how they cope with the problems encountered in the IGP operation: community collaboration, and regular communication and constant monitoring. Lastly, their insights drawn from the actual experiences of managing and overseeing the school IGP revealed two major themes: income-generating projects provide additional funds to school, and operating income-generating projects requires skills for successful implementation. The results are significant to the Department of Education officials, school heads, IGP coordinators, teachers, and other stakeholders to create and support programs that strengthen the implementation of income-generating projects in public schools.

Keywords: income-generating project; school IGP coordinator; Davao de Oro Division; qualitative-phenomenological study

1. Introduction

Financial resources are essential in carrying out an organization's different programs and projects successfully. The people entrusted with the organization's financial operations know that an adequate budget is needed for any organization to meet its goals. Furthermore, as an institution, the education department requires a large enough budget to guarantee high-quality education to its students. However, the Philippine Constitution requires that the State allocate the most significant portion of its resources to education. Owing to constrained resources, the government can only fulfill some of the requirements of the education sector as competing sectors compete for budget allocations.

In Asian countries such as Pakistan, India, and Nepal, the common problems that these countries share about their education system are the lack of funding and resources. These problems have resulted in insufficient teacher training and a lack of school facilities such as classrooms, libraries, safe drinking water, sufficient sanitation, and even electricity, making it difficult for schools in these countries to provide quality education to their learners (Umair et al., 2023).

In the Philippines, according to a report from the Department of Education, approximately 10,000 individuals lack access to safe drinking water, and 5,000 schools in the country do not have access to electricity. The absence of essential facilities places students and teachers at a substantial disadvantage, negatively impacting their education quality. Furthermore, several educational institutions require additional facilities, such as classrooms, textbooks, and teaching materials, which significantly hinder students' ability to learn efficiently. The problem is not exclusive to rural areas; it also exists in urban locations (Bai, 2023). In addition, Mayor (2019) revealed that because of the high power and water costs, the Maintenance and Other Operating Expenses

(MOOE) Fund is insufficient to cover critical repairs and improvements to the school.

The limited funds provided by the Philippine government to public schools have driven some public schools to indulge in Income Generating Projects (IGPs) in which the money earned from these projects will be used to spend on the school's various expenses as well as to fund the implementation of the school programs, projects, and activities (PPAs). The implementation of IGP in schools aligns with Republic Act 9155 or the Governance of Basic Education Act of 2001, which empowers school officials to take initiatives to improve primary education quality. This law encourages teaching and non-teaching personnel to introduce new and innovative practices, procedures, and processes to achieve higher learning outcomes.

Most importantly, this research study was conducted because the researchers were particularly interested in determining public school income-generating projects (IGPs). Another thing is that the researchers have yet to come across a study that explicitly discusses the IGPs of public schools in the Davao de Oro Division. This study could provide relevant concepts that would give rich information about public schools' different income-generating projects (IGPs) and how these projects are successfully operated.

2. Research Questions

This study sought to answer the following questions:

1. What is the school's Income-Generating Project?
2. What are the challenges encountered in operating this Income-Generating Project?
3. How does the IGP coordinator cope with the problems encountered in the IGP operation?
4. What insights can be drawn from the actual experiences as an Income-Generating Project school coordinator?

3. Theoretical Lens

This study was derived from the Theory of Project proposed by Koskela and Howell (2002). The transformational perspective of operations encompasses the theoretical framework of the project. From a transformation perspective, a project is perceived as converting inputs into outputs. Various principles guide project management. These concepts propose, for instance, breaking down the overall transformation into smaller transformations and tasks hierarchically and reducing the cost of each activity individually.

This phenomenological study is anchored on the Organization Systems Theory by Knight (1993). Knight's description of the Organizations' System Theory model for school financial management characterizes a school as a "system" consisting of interconnected elements essential for the school's effective functioning. In this context, the school's objectives can only be accomplished via the collective efforts of the school administration, teachers, parents, learners, and all other available resources. As Knight highlighted, these factors rely on each other and are interconnected. School finance is an essential component of all these variables that interacts with several aspects of a school. Financial resources are crucial inputs in the educational system as they enable the operation of an institution and the acquisition of necessary resources to achieve institutional objectives.

4. Review of Related Literature

4.1. Income Generating Activities

Callaghan (2021) states that numerous schools across the country are experiencing financial difficulties. The continuous presence of financial hardship derives from overarching socioeconomic and political factors. Between 2009 and 2019, there was a 10.2% increase in the number of students attending schools, while the amount of money spent per student decreased by 8%. This indicates a fall in government funding and schools' financial capacity. However, managing school finances requires skillful coordination. Tightened budgets are confronted with the challenges of rising student enrollment and the need for resources to address mental health, safeguarding, and disparities in exam results. Schools bear the responsibility of managing their finances to ensure fiscal stability and enough support for their students. An activity worth doing is actively participating in alternative methods of generating income.

Furthermore, Campos (2021) revealed that income-generating activities result in the creation of revenues. These are the activities that one should always give priority to. Delegate non-revenue-generating tasks to someone else. As your business expands, your attention shifts. Priorities you previously regarded as necessary may have already been assigned to other individuals. At this point, you should transition from the stage of doing action to the stage of contemplation. This entails disengaging from the particular to have a broader perspective on the direction in which your organization is progressing.

4.2. Financial Challenges in Schools

Vanco (2024) shared that schools often encounter several challenges. Budgets are often tight. It takes much work to keep track of the financial transactions coming in and going out. Moreover, the regulations and rules are constantly changing. Schools often need financial resources and support to fund various programs and activities. These problems can affect the quality of education and student outcomes if not managed effectively.

The American University (2020) highlighted the ongoing problems related to education funding. Although the economy improved following the Great Recession, schools' budgets remained stagnant. There is an ongoing implementation of budget reductions in all areas, resulting in increased class sizes and decreased instructional time. As stated in a February 2020 Forbes article, before the COVID-19 outbreak, there was already an 8 percent reduction in education financing at the federal level. The COVID-19 pandemic has resulted in additional reductions in financing.

4.3. School-Based Management

Bayos (2022) highlighted that School-Based Management (SBM) is a tactic to enhance education by delegating substantial decision-making power from the Central Office to individual schools. SBM empowers administrators, teachers, students, and parents with increased authority over education by delegating budget, personnel, and curriculum decision-making. School-Based Management (SBM) helps establish a more efficient educational setting for students by engaging teachers, parents, and other community stakeholders in these crucial decisions.

Moreover, Valdez (2022) stated that granting schools autonomy and empowering school officials and district superintendents to make decisions on various matters will result in faster problem resolution. These officials have the necessary information to make informed decisions on resource allocation, improving educational techniques to enhance student learning, and developing and implementing health and safety protocols to protect the well-being of students and school staff.

5. Methodology

5.1. Research Design

This study utilized a qualitative phenomenological design. This sought to identify the income-generating projects (IGPs) implemented by public schools in the Davao de Oro Division.

Qualitative research is typically characterized by the utilization of methodologies like participant observation, which leads to the creation of a narrative, descriptive report of an area of study or activity (Parkinson & Drislane, 2011). In addition, Giorgi (2012) argued that phenomenology is suitable for this study as it enables the researchers to explore the perceptions, viewpoints, understandings, and emotions of those who have encountered or lived through the phenomena or situation.

This study is characterized as qualitative-phenomenological since it specifically examined the income generating projects (IGPs) of public schools in the Davao de Oro Division. The school IGP coordinators, who were selected and identified, were interviewed in-depth and served as the primary source of data for the project. The data collected from the comprehensive interviews were condensed, transcribed, translated, and examined.

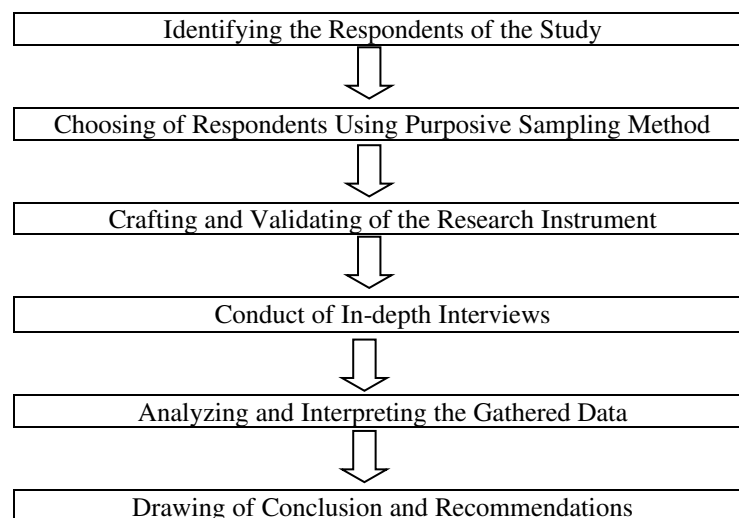
5.2. Research Participants

The study included eight (8) IGP coordinators responsible for overseeing their various school income-generating projects. The research participants were chosen and identified using purposive sampling, as Patton (2015) recommended. Patton emphasized that purposive sampling includes picking cases that provide rich information to use limited resources efficiently. In addition, Merriam (2009) observed that the choice and calculation of the sample size is contingent upon the research inquiries, gathered data, data analysis, and the accessibility of resources.

The selection criteria for participants consist of being employed full-time as a public school teacher in the Division of Davao de Oro and having at least three (3) years of experience managing a school income-generating project.

5.3. Data Collection

As researchers, we are aware of the procedures for data collection. Therefore, the following steps were taken to carry out productive results successfully:



5.4. Data Analysis

This study examined the transcripts of interviews, specifically analyzing the income-generating projects of public schools in Davao de Oro Division. Creswell (2009) outlined the subsequent stages of data analysis. Initially, the data was arranged and prepared for analysis. This entailed transcribing and translating interviews, scanning material using optical technology, transcribing field notes, and categorizing and organizing the data based on the sources of information. Furthermore, the data were meticulously examined and the researchers performed a thematic analysis to discover significant or intriguing patterns in the data. This entailed the process of coding or categorizing interconnected data segments. Additionally, the researchers produced and recognized patterns from the coding process. The researchers presented the results in a research report. Finally, the researchers analyzed the data to determine its more profound significance.

6. Results

Income-Generating Projects (IGPs) of Public Schools and the People Involved in the Implementation

Table 1 explores the income-generating projects of public schools in Davao de Oro Division and the people involved in the implementation, revealing three significant themes: *Gulayan sa Paaralan* (school vegetable garden), rice production, and collaborative implementation.

Table 1
Income-Generating Projects (IGPs) of Public Schools and
the People Involved in the Implementation

Major Themes	Core Ideas
--------------	------------

<i>Gulayan sa Paaralan</i> (School Vegetable Garden)	<ul style="list-style-type: none"> ● Implementing the <i>Gulayan sa Paaralan</i> (School Vegetable Garden) Program of DepEd ● Rich with loamy soil, which is suitable for gardening ● Accustomed to gardening and easy to do ● Healthy to the buyers ● Marketable and easy to sell
Rice Production	<ul style="list-style-type: none"> ● The school has a vast land and enough water ● The school is located in a low-lying area, and rice production is the common livelihood of the people
Collaborative Implementation	<ul style="list-style-type: none"> ● School head, teachers, parents, and selected learners are involved in the operation ● Internal stakeholders are involved in implementing the IGP ● Teachers, students, and parents are involved in the operation ● School head, teachers, learners, and parents work together to make the project successful ● Teachers, parents, and students are involved in implementing the IGP

6.1. *Gulayan sa Paaralan (School Vegetable Garden)*

One of the main livelihoods in the province of Davao de Oro is farming because it is rich in fertile soil where plants can grow well. Thus, it is unsurprising that the participants mostly answered *Gulayan sa Paaralan* (school vegetable garden) when asked about their respective school income-generating project (IGP).

As expressed by IDI-P1,

"We are implementing the Gulayan sa Paaralan (School Vegetable Garden) Program of DepEd in our school, that is why our IGP is Gulayan sa Paaralan (School Vegetable Garden)."

IDI-P2 stressed,

"Our school is rich with loamy soil suitable for gardening, so we decided to have Gulayan sa Paaralan (School Vegetable Garden) as our school IGP."

IDI-P3, on her part, pointed out,

"We are accustomed to gardening, and it is easy to do. Thus, our school income generating project is Gulayan sa Paaralan (School Vegetable Garden)."

As revealed by IDI-P7,

"Gulayan sa Paaralan (School Vegetable Garden) is our IGP because vegetables are healthy for buyers."

On the other hand, IDI-P8 shared,

"Gulayan sa Paaralan (School Vegetable Garden) is our chosen IGP because vegetables are marketable and easy to sell."

6.2. *Rice Production*

Davao de Oro province is known for its agricultural products such as rice, coconut, corn, durian, and banana. As expected, for it can be seen visibly in their respective school premises, some participants answered

rice production as their school income generating project.

As confirmed by IDI-P5,

"Our school IGP is rice production because we have a vast land and enough water to operate this kind of IGP in our school."

Moreover, IDI-P6 described,

"Our school is situated in a low-lying area which is suitable for rice production. Besides, this is the common livelihood of the people living in this place, so we chose this kind of IGP."

6.3. Collaborative Implementation

For a school program or project to become successful, it needs collaborative effort by a group of people, as the famous saying states, "No man is an island." As the participants revealed during the interview, they are assisted by the school stakeholders in implementing the school IGP.

IDI-P1 shared,

"Our school head, teachers, parents, and selected learners are involved in the IGP operation."

Moreover, IDI-P2 revealed,

"Internal stakeholders are involved in implementing our IGP. We have different tasks. Selected learners must water the vegetables every morning and late afternoon before going home. As the coordinator, I clean the garden every day with the help of my learners, while other teachers are assigned to harvest the vegetables and sell them. And every time we encounter problems in the operation, our school head and teachers find solutions to resolve them."

Similarly, IDI-P3 stressed,

"The people involved in the operation are the teachers, students, and parents."

Furthermore, IDI-P4 disclosed,

"In implementing our school IGP, the school head, teachers, learners, and parents work together to make the project successful."

IDI-P7, on his part, revealed,

"The teachers, parents, and students are involved in implementing our IGP."

Challenges Encountered in the Implementation of the School Income-Generating Project (IGP)

Table 2 delves into the challenges encountered by the coordinators in implementing the school Income Generating Project (IGP), where three major themes have emerged: bad weather conditions, pests and plant diseases, and work overload.

Table 2
Challenges Encountered in the Implementation of the
School Income-Generating Project (IGP)

Major Themes	Core Ideas
--------------	------------

Bad Weather Conditions	<ul style="list-style-type: none"> ● Climate change or bad weather ● Calamities ● Unpredictable weather patterns ● Heavy rains and storms ● Extreme heat
Pests and Plant Diseases	<ul style="list-style-type: none"> ● Presence of pests ● Attack of stemborers ● Various pests and disease
Work Overload	<ul style="list-style-type: none"> ● Many school activities ● Multiple works and tasks ● Overloaded Work

6.4. Bad Weather Conditions

The weather is an essential factor for income generating projects such as *Gulayan sa Paaralan* (school vegetable garden) and rice production to thrive. Surely, weather extremes such as droughts, floods, and storms have devastating effects on these IGPs.

As revealed by IDI-P1,

“The challenges we encountered implementing the IGP are climate change or bad weather.”

IDI-P2, on his part, shared,

“The calamities such as floods and storms are the problems I have encountered in operating the Gulayan sa Paaralan (School Vegetable Garden).”

For IDI-P6,

“Unpredictable weather patterns are giving me headaches because the ever-changing weather conditions are not good for the plants.”

IDI-P7 disappointedly shared,

“Heavy rains and storms are the challenges that worried me, for they can cause a flood, which could destroy my vegetable plants.”

IDI-P8, on his part, divulged,

“It is the extreme heat that I consider the biggest problem in making my vegetable garden high-yielding.”

6.5. Pests and Plants Disease

When venturing into agriculture or farming, the common problem you may encounter is the presence of pests and diseases among the plants that will destroy your plants if not remedied immediately. Hence, you must know how to resolve these problems so your effort will not be wasted.

As IDI-P2 shared,

“The presence of pests to my vegetables has challenged me because they destroyed my vegetable plants, especially the leaves.”

IDI-P5 revealed,

“The attack of stemborers on our rice plants made me panicked, for they resulted to a significant loss of grain/harvest.”

IDI-06, on his part, expressed,

“The detrimental attack of various pests and diseases on our rice plants is a challenge that needs to be resolved immediately.”

6.6. Work Overload

As shared by the participants, as class advisers, they are already overloaded with work; thus, to be assigned as the income-generating project coordinator is an additional task that they need to perform. Apart from being class advisers, they revealed that there are reports or papers that they need to accomplish and submit, thus making it difficult for them to monitor regularly the income-generating project.

IDI-P1 pointed out,

“We have many activities in school. Thus, I need help in monitoring the vegetable garden.”

In addition, IDI-P4 voiced out,

“I have multiple work and tasks to attend to. Hence, there are times that I cannot visit the garden.”

Moreover, IDI-P8, on his part, revealed,

“I am overloaded with work because apart from being a class adviser, I also have other tasks to accomplish. Hence, sometimes I can't oversee our school IGP.”

Coping Mechanisms of the Coordinators in the Challenges Encountered in IGP Operations

Table 3 shows the coordinators' coping mechanisms for the challenges encountered in the IGP operation, comprising two significant themes: community collaboration, and regular communication and constant monitoring.

Table 3
Coping Mechanisms of the Coordinators to the
Challenges Encountered in IGP Operations

Major Themes	Core Ideas
Community Collaboration	<ul style="list-style-type: none"> • Collaborate with the community, including the school head, teachers, young farmers, and potential partners/stakeholders • Attending trainings and seminars initiated by the Department of Agriculture • Importance of collaboration and community engagement • There should be a brainstorming session with other stakeholders, an action plan, and continuous monitoring of the implementation of the projects
Regular Communication and Constant Monitoring	<ul style="list-style-type: none"> • Coordination with the school head • Conduct of meetings and constant monitoring of projects • The school head calls the attention of all teachers to discuss the encountered IGP problems • Regular monitoring of the area ensures proper irrigation and water management. • Conduct regular monitoring

-
- Water the vegetables regularly and put some fertilizers
-

6.7. Community Collaboration

Community collaboration is an important participant coping mechanism, especially in managing challenges and difficulties. It is evident when the participants share their experiences.

As disclosed by IDI-P1,

"Whenever we encounter challenges in operating our IGP, we usually collaborate with the community, including the school head, teachers, young farmers, and potential partners/stakeholders to discuss possible solutions to the problems."

IDI-P5, on the other hand, shared,

"I am attending trainings and seminars initiated by the Department of Agriculture through Agricultural Training Institute Region XI to learn more about rice farming."

Moreover, IDI-P6 stressed,

"As our school's Income Generating Project (IGP) coordinator, I know it is important to collaborate and engage with the community. I realized that the success and sustainability of the IGP are deeply rooted in building strong partnerships with teachers, students, parents, and members of the local community."

IDI-P7 on his part admitted,

"There should be a brainstorming session with other stakeholders, an action plan, and continuous monitoring of the implementation of the projects."

6.8. Regular Communication and Constant Monitoring

Regular communication and constant project monitoring are coping mechanisms for the school income-generating project (IGP) coordinators. Having clear and consistent communication can help address the problems. Additionally, constant monitoring of the project can identify possible risks or problems.

IDI-P1 exclaimed,

"Coordination with the school head is needed to resolve whatever problem we encounter in implementing of our school IGP."

IDI-P2 added,

"Conduct of meetings for possible solutions and constant monitoring are what we do to cope with whatever challenges we encounter in implementing of our IGP."

Other participants also admitted,

"The school head calls the attention of all teachers to discuss the encountered IGP problems." (IDI-P5)

"Early detection and diagnosis through regular monitoring of the area, ensuring proper irrigation and water management, rotate rice cultivation to disrupt the pest and disease cycle." (IDI-P6)

“Water the vegetables regularly and put some fertilizers in them.” (IDI-P8)

Insights Drawn from the Actual Experiences of the School Coordinator of Income-Generating Project

Table 4 reveals the insights drawn from the actual experiences of the school coordinator of income-generating projects, which includes two major themes: income-generating projects provide additional funds to school, and operating income-generating projects require skills for successful implementation.

Table 4
Insights Drawn from the Actual Experiences of the School
Coordinator of Income-Generating Project

Major Themes	Core Ideas
Income-Generating Projects Provide Additional Funds to School	<ul style="list-style-type: none"> Income-Generating Projects in school provides additional funding Serve as a reserve fund in case of financial emergencies IGP plays a vital role in the fulfilment of the Department's mission and vision IGP serves as a supplemental budget of the school
Operating Income Generating Projects requires Skills for Successful Implementation	<ul style="list-style-type: none"> Teamwork is essential for the success of IGP Good capital leads to a positive return on investment Have a planting calendar to achieve the production targets We need to persevere to reap a good harvest Learn skills on how to deal with, manage, and cultivate rice fields Honing entrepreneurial skills

6.9. Income-Generating Projects Provide Additional Funds to School

Income-generating projects provide additional funds to schools, as one of the insights revealed by the participants during the interview. IGPs provide a source of additional income for schools and essential opportunities for teachers, students, and other stakeholders.

As these participants stated,

“Having Income-Generating Project in school provides additional funding.” (IDI-P1)

“Income-generating project is a great help in addressing financial emergencies or urgent needs in school. This serves as a reserve fund.” (IDI-P2)

“IGP plays a Vital Role in fulfilling the Department's mission and vision.” (IDI-P3)

“The money we earned from our income-generating project serves as a supplemental budget of our school.” (IDI-P5)

6.10. Operating Income-Generating Projects requires Skills for Successful Implementation

Operating income-generating projects offers learning opportunities, enabling the acquisition of knowledge

and skills that may be utilized to enhance future projects and optimize their effectiveness. This was revealed as one of the participants' insights during the interview.

IDI-P1 shared,

"For the Income-Generating Project to become successful, teamwork is needed."

Moreover, IDI-P3 stated,

"What you sow is what you reap. Good capital will give you a good return on investment."

In addition, IDI-P4 said,

"I realized that by having a planting calendar, we can achieve our production targets, giving us a year-round supply of harvests."

Other participants shared their insights,

"Let us not become weary of doing good, for at the proper time, we will reap a good harvest if we persevere." (IDI-P5)

"We need to learn skills on how to deal with, manage, and cultivate rice fields for the success of our IGP." (IDI-P6)

"Through handling our school IGP, my entrepreneurial skills have been honed." (IDI-P8)

7. Discussion

Income-Generating Projects (IGPs) of Public Schools and the People Involved in the Implementation

The in-depth interviews revealed that the income-generating projects of public schools in Davao de Oro Division are either Gulayan sa Paaralan (School Vegetable Garden) or rice production. The interviews also revealed that collaborative implementation is employed in the IGP operation.

7.1. Gulayan sa Paaralan (School Vegetable Garden)

Most participants answered Gulayan sa Paaralan as their school Income-Generating Project (IGP) because this kind of IGP suits their respective schools. Their schools have enough land where to place the vegetable garden. Besides, the climate of their schools is good enough for the growth of vegetables.

The result aligns with Division Memorandum No. 237, series of 2022, issued by the Schools Division Office of Catanduanes. This memorandum states that the Governance of Basic Education Act of 2001 encourages all teaching and non-teaching staff to develop projects to enhance the teaching-learning process and school governance. An income-generating project is a method of gathering resources to raise finances to support a program or project. It can also be a component of an innovation project.

Additionally, the Department of Education – Region Office III (2022) states that the Gulayan sa Paaralan (School Vegetable Garden) Program is a component of the National Greening Program of the Department of Education. This program aims to promote and increase awareness about food insecurity in the country. The Department of Education Regional Office III (DepEd) RO III established a collaboration with the Department of Agriculture Regional Field Office III and East-West Seed Foundation to enhance the implementation of the Gulayan sa Paaralan Program (EGPP) through Project GAME "Gulayan para sa Aktibong Mag-aaral ng Rehiyon Tatlo," aiming for improved efficiency and effectiveness. This project aims to empower schools to treat nutritional deficits among students independently. 60% of the product obtained from the EGPP-Project GAME will be used for the school nutrition program, while the remaining 40% can be sold in the community or market as part of the school's income-generating project.

7.2. Rice Production

Rice production is one of the everyday livelihoods of the people living in the province of Davao de Oro. Many farmers engage in rice farming because of the favorable locations and promising profit they can earn from selling their rice products. This is also true for schools; some schools choose to operate this type of IGP for the potential profit they can get from this venture. Thus, some participants are expected to answer rice production as their school income-generating project.

This result aligns with Division Memorandum No. 108, series of 2022, issued by the Schools Division of Zamboanga del Norte. The memorandum acknowledges the significant role of income-generating projects (IGPs) in mobilizing resources to support school programs or projects. Similarly, the SDO mandates filing the IGP Completion Report upon the completion of the project.

In addition, the Department of Agriculture (2022) highlights that the Philippines continues to be a prominent global rice producer, ranking eighth after China, Indonesia, India, and other Southeast Asian countries. Ongoing research on rice cultivation is being conducted at several institutes and universities across the Philippines to enhance rice production and support local farmers in increasing crop resilience and yield. Rice researchers consistently perform studies to improve the rice sector and provide farmers with technological breakthroughs and ways to promote agricultural resilience. This research encompasses the creation of new varieties of rice and the enhancement of the rice crop's maturation process to alleviate the impact of climate change on rice production.

7.3. Collaborative Implementation

Collaboration is vital for any organization to succeed. By working together, it is not impossible to realize the different objectives of the organization. As the participants revealed during an interview, the school stakeholders must work together to implement the income-generating project to ensure its success and sustainability.

This result aligns with Ribeiro's (2020) emphasis: collaboration improves the effectiveness of teamwork and problem-solving. As a result, this leads to increased innovation, more efficient processes, more significant achievements, and improved communication. Through active participation in attentive listening and knowledge acquisition from colleagues, you can collaboratively assist one another in accomplishing your goals. Collaboration necessitates responsible exertion and a limited length of time, although the ensuing advantages for your team render it valuable.

In addition, Low (2023) also emphasizes that collaboration is essential for success in any team-oriented setting. A collaborative work environment is characterized by a working culture emphasizing teamwork, transparent communication, and communal resolution of problems. Within this setting, employees collaborate harmoniously towards common aims and objectives, exchange information and concepts, and assist one another in attaining personal and collective accomplishments. An interactive and collaborative atmosphere is vital for organizations aiming to maintain their competitiveness in today's dynamic and rapidly evolving business arena. The success of every firm hinges on the employees' capacity to collaborate successfully, and fostering a collaborative work environment facilitates this. Collaboration improves productivity, fosters creativity and innovation, and results in more effective decision-making.

Challenges Encountered in the Implementation of the School Income Generating Project (IGP)

The challenges encountered by the participants in implementing the school income-generating projects revealed three major themes: Bad Weather Conditions, Pests and Plants Disease, and Work Overload.

7.4. Bad Weather Conditions

The participants revealed that one of the challenges they keep encountering in operating the school income-generating project is the bad weather conditions, which can cause damage to the vegetables and rice plants.

The result parallels the findings reported by Windish (2022), which indicate that insufficient water hampers the plant's capacity to generate sustenance via photosynthesis, leading to a deficiency of nutrients.

Excessive water can also harm plants. Prolonged or excessive precipitation can cause soil compaction and erosion, leading to unfavorable circumstances for plant growth. Erosion can extract nitrogen and other essential nutrients from the soil, resulting in a deficiency of nutrients that plants require to grow and flourish. The prolonged saturation of the soil leads to oxygen depletion, resulting in the degradation of the plant's root system. When plants experience root loss, they cannot absorb sufficient moisture and nutrients from the soil.

Furthermore, according to Hubbard (2023), elevated temperatures typically accelerate the maturation process of plants, but excessive heat can impede their growth. Elevated temperatures will induce the premature flowering and seed production of cool-season plants, such as lettuce, a phenomenon known as bolting. Extreme cold temperatures have a detrimental impact on plant growth, causing certain plants to enter a state of dormancy in order to survive the harsh conditions. Following hibernation, some plants may necessitate a cooling period before recommencing growth in the spring. Extreme temperature variations can harm plants, particularly during the winter season. Shallow-rooted plants are prone to heaving due to the repeated freezing and thawing of the soil. Extreme temperatures, whether excessively hot or cold, can hinder the process of fruit set in tomatoes and other vegetables, ultimately impacting their qualities.

7.5. Pests and Plants Disease

As shared by the participants, the presence of pests and diseases among the plants is one of the problems that worry them in keeping their vegetables and rice plants healthy, for these pests attack the plants, especially the leaves, which results in multiple holes found on the leaves.

As stated in Kelby's (2021) data, destructive insect pests such as caterpillars, grasshoppers, and locusts feed on crops' leaves, seeds, and fruits. Occasionally, swarms of locusts can amass in enormous numbers, reaching several million, resulting in extensive destruction of crops and triggering starvation. Additional insects, such as aphids, thrips, and weevils, extract the sap from plants, leading to potential consequences for plant growth and development and increased vulnerability to disease. Pests have detrimental consequences, as they serve as carriers and disseminators of plant diseases that negatively influence crops.

Furthermore, as indicated by Ofuya's (2023) research, insect pests are responsible for global crop productivity reductions. The global losses in vegetable production are estimated to be 27.7%, with 8.7% of these losses being caused by insect pests. If these pests are not controlled, they have the potential to cause even more significant losses. According to the Food and Agriculture Organisation (FAO), the yearly worldwide losses of vegetables caused by insects during field production are expected to be around 15-20%, while during storage the losses are projected to be around 18-20%. Insect pests provide a significant obstacle to increasing vegetable production in farming systems in Nigeria. They are the principal source of low-quality and poor yields.

7.6. Work Overload

As the school income-generating project coordinator, the participant's primary responsibility is to monitor their respective IGP regularly. However, as they revealed during the interview, they need help from other stakeholders to monitor their income-generating projects due to overloaded work and multiple tasks assigned to them.

This result aligns with the data presented by Cherry (2023), which indicates that although multitasking may appear to be an efficient method for accomplishing numerous activities simultaneously, scientific study has demonstrated that our cognitive abilities are not as adept at managing multiple projects as we tend to believe. Indeed, certain studies indicate that multitasking might hinder productivity by diminishing comprehension, concentration, and overall effectiveness. Contrary to widespread assumption, multitasking often leads to slower and less efficient work performance. They are engaging in multitasking, which results in what psychologists call "task switch costs," which are the adverse consequences of transitioning between different tasks. Task switch costs, such as decreased working speed, arise due to the heightened cognitive effort required while transitioning between different tasks. Furthermore, according to the research conducted by Campos (2021), multitasking has been found to decrease productivity by as much as 40% and negatively impact the quality of work. This means that individuals who engage in multitasking tend to create work of lower quality and make more errors.

Coping Mechanisms of the Coordinators to the Encountered Challenges in IGP Operations

The participants' coping mechanisms for the challenges encountered in IGP operations include

community collaboration, regular communication and constant monitoring.

7.7. Community Collaboration

The participants expressed their coping mechanisms for the challenges they faced in operating their income-generating project at their school, and one of them was community collaboration. The participants found that collaborations with other stakeholders helped them overcome some of the challenges they had experienced.

The result aligns with the proposition stated by Boqueo (2023) that income-generating projects in schools can foster partnerships with local communities and businesses, thereby creating opportunities. This cultivates a sense of collaboration and involvement as community members become invested in the school's prosperity. This partnership has the potential to result in the sharing of resources, knowledge, and a greater sense of community. Consequently, students can learn about community development, a crucial facet of entrepreneurship.

7.8. Regular Communication and Constant Monitoring

Regular communication and constant monitoring are crucial for efficiently managing school income-generating projects. Effective communication promotes transparency, responsibility, and cooperation, allowing stakeholders to collaborate toward shared objectives. In addition, constant monitoring projects entails examining and evaluating income-generating projects to consistently monitor their success, identify areas that require improvement, and make informed decisions.

The result corresponds with the information shared by Radkevych (2021) that effective communication is crucial in project activities, particularly in coordination and project interaction. Project participants, the individuals concerned, and stakeholders enable communication in project activities. The success of a project is based on the level of expertise and specialized skills acquired by its management. Further, Anugrah et al. (2022) point out the importance of regular reporting and accountability in the administration of school operational budgets, which encompasses income-generated projects.

Insights Drawn from the Actual Experiences of the School Coordinator of Income-Generating Project

The participants' responses regarding their insights as the school coordinator of the income-generating project revealed two themes: income-generating projects provide additional funds to school, and operating income-generating projects require skills for successful implementation.

7.9. Income-Generating Projects Provide Additional Funds to School

Most participants disclosed that income-generating projects produce additional funds for the school. By generating additional funds beyond traditional sources, such as government funding and tuition fees, schools can supplement their budgets for their financial needs.

The result is in line with Maulidi & Mtebe's (2022) study, which reveals that school-based income generation projects are crucial because they enable school administrators to generate supplementary funds for enhancing the quality of education instead of relying on donor loans, grants, and school fees. In addition, Moses and Kasujja (2020) assert that income-generating activities are crucial in funding many components of universal primary education. These operations encompass constructing and maintaining physical infrastructure, facilitating student evaluations, procuring educational resources, incentivizing teachers, supporting school meal programs, promoting student retention, providing financial assistance through bursaries, and hiring and compensating staff. These activities enhance the overall efficacy of teaching and learning in schools. Furthermore, Division Memorandum No. 097, series of 2021 of Schools Division of South Cotabato, states that an income-generating project is a resource mobilization method aimed at generating finances to support a program or project. This type of project must be submitted for the examination of the Review Committee and endorsement of the Schools Division Superintendent.

7.10. Operating Income-Generating Projects requires Skills for Successful Implementation

Operating income-generating projects requires skills for successful implementation and sustainable outcomes projects. Skills and knowledge in managing IGPs can effectively contribute to the projects' success, positively impacting the school community's educational enrichment and overall success.

The result is congruent with the proposition of Obadia & Mhagama (2022), which highlights the need to acquire knowledge and skills in operating and managing school income-generating projects, explicitly advocating for equipping school heads with these skills. Additionally, it provides school administrators with knowledge and skills in establishing and managing IGP. Moreover, school administrators must include all staff members in the process of initiation and management. Furthermore, Mas et al. (2021) emphasize the importance of project management for school principals in enhancing their entrepreneurial skills, particularly in fostering creativity and innovation in establishing productivity. This will involve effectively harnessing available resources to generate independent sources of income, which can be used to fund educational initiatives in schools and enhance the well-being of school community members.

8. Implication for Teaching Practice

The income-generating project provides significant assistance to schools that are adopting it. Once the MOOE, PTA, and other school monies have been depleted, the revenue generated from the income-generating initiative will act as a contingency fund for school expenses. Therefore, the individual responsible for supervising and controlling the school's income-generating project must possess the knowledge and skills to operate it in a highly effective and efficient manner to generate substantial profits that can be utilized to meet the diverse expenses of the school. The results of this study guide school administrators who have not yet implemented an income-generating project in their schools. It suggests potential projects that are highly likely to succeed in their specific school context.

Moreover, this study can provide teachers with valuable insights into the support and aid required by the school's income-generating project coordinator to manage the school IGP effectively. The results of this study may inspire the DepEd Authority to enhance the implementation of the school income-generating project by encouraging numerous public schools to establish their separate income-generating projects (IGPs).

Finally, the project concentrated on the income-generating projects of public schools in Davao de Oro Division. Therefore, this could serve as a foundation for future researchers to investigate this phenomenon further.

9. Recommendation for Further Research

This study focused on the perspectives of public school IGP coordinators and income-generating projects from eight (8) public schools in Davao de Oro Division, it is recommended that future research be conducted with a larger sample size to verify the responses provided by the participants.

This study used a qualitative methodology, hence, we recommend that future researchers investigate this issue using quantitative methods. This research opens the door for future research similar to the study about the income-generating projects of public schools, given that this is an interesting topic, because we would be able to know the various income-generating projects of public schools.

10. Concluding Remarks

The researchers had challenges finding participants for this study, as only a limited number of public schools within the Division of Davao de Oro have implemented income-generating projects (IGP). Additionally, the study found that only two income-generating initiatives are now being carried out in the Division: Gulayan sa Paaralan (School Vegetable Garden) and Rice Production. These efforts aim to enhance the implementation of income-generating projects (IGPs) by the Department of Education in public schools. Additionally, they should offer training and seminars on implementing several IGPs that can be utilized in public schools.

Insufficient funding is a prevalent issue in public schools. Therefore, it is advantageous for a school to have an additional source of income that can be utilized to cover various educational expenses. Implementing an income-generating project (IGP) is a technique that schools can use to create extra revenue. Therefore, it is imperative for all individuals involved in the school, such as administrators, teachers, parents, and students, to work together cooperatively to guarantee the effective and enduring execution of the school's income-generating projects (IGP).

References

- American University (2020). School Funding Issues: How Decreasing Budgets are Impacting Student Learning and Achievement. Retrieved April 17, 2024, from <https://someonline.american.edu/blog/school-funding-issues/>
- Anugrah, A., Mulawarman, W.G., & Nurlaelah, N. (2022). School Operational Assistance Management to Lighten School Burden: A Literature Review. *EduLine: Journal of Education and Learning Innovation*.
- Bai, N. (2023). Educational Challenges in the Philippines. Retrieved March 1, 2024, from chrome extension://efaidnbmnnnibpcajpcglclefindmkaj/https://pidswebs.pids.gov.ph/CDN/document/1691385120_64d07d20eab5b.pdf
- Bayos, A. (2022). School-Based Management (SBM). Retrieved April 18, 2024, from <https://www.slideshare.net/ArnulfoJrBayos1/schoolbased-management-sbmptx-251721664>
- Beren, M. (2023). Gulayan sa Paaralan an Income Generating Project. Retrieved April 28, 2024 from chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://depedbataan.com/wp-content/uploads/2023/03/GULAYAN-SA-PAARALAN-AN-INCOME-GENERATING-PROJECT.pdf
- Boqueo, J. (2023). Sowing Prosperity: Income-Generating Projects Transforming Schools. Retrieved from: <https://depedbataan.com/wp-content/uploads/2023/10/SOWING-PROSPERITY-INCOME-GENERATING-PROJECTS-TRANSFORMING-SCHOOLS.pdf>
- Callaghan, C. (2021). 10 Income Generating Activities for Schools. Retrieved April 17, 2024, from <https://blog.schoolsandacademiesshow.co.uk/income-generating-activities-for-schools-top10>
- Campos, M. (2021). Income Generating Activities to Grow Your Business Fast. Retrieved April 17, 2024 from <https://www.dvphilippines.com/blog/income-generating-activities-to-grow-your-business-fast>
- Campos, M. (2021). What are the Effects of Multitasking in the Workplace? Retrieved April 24, 2024 from <https://www.dvphilippines.com/blog/what-are-the-effects-of-multitasking-in-the-workplace>
- Cherry, K. (2023). How Multitasking Affects Productivity and Brain Health. Retrieved May 20, 2024 from <https://www.verywellmind.com/multitasking-2795003>
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Thousand Oaks, CA: Sage.
- DA (2022). From Business Mirror: Philippine Rice Production, Varieties and Research: What We Know So Far. Retrieved April 28, 2024, from <https://www.da.gov.ph/from-business-mirror-philippine-rice-production-varieties-and-research-what-we-know-so-far/>
- DepEd, Catanduanes Division (2022). Division Policy Guidelines in the Conduct of Innovation Projects and Income Generating Projects. Retrieved May 20, 2024 from https://www.depedrocatanduanes.com/files/DM-No.-237-s.-2022---Division-Policy-Guidelines-in-the-Conduct-of-Innovation-Projects-and-Income-Generating-Projects.pdf?fbclid=IwZXh0bgNhZW0CMTAAR3j4vjMncJZ8pn87lgqudHdzgPSq_ukcRTnEwrm3s4cp89I78UgbvA0TTn4_aem_AXVkXE-6Z_YKiAW-BGttEXgRISqJ33lDXz4hOBOaLtvemPUPybs8gJzGSYICdFlrMoNwOxGtbnTYr9xGt2VhUUyk
- DepEd, RO III (2022). DepEd RO III intensifies Enhanced Gulayan sa Paaralan Program. Retrieved March 16, 2024 from <https://region3.deped.gov.ph/deped-ro-iii-intensifies-enhanced-gulayan-sa-paaralan-program/>
- DepEd, Schools Division of Zamboanga del Norte. Guidelines on School Income Generating Project. Retrieved May 20, 2024 from <https://depedzn.net/division-memo.php?ac=issuances&t=DM-108-s-2022>
- DepEd, South Cotabato Division (2021). CONTEXTUALIZED GUIDELINES ON INCOME GENERATING PROJECT AND PROGRAM/PROJECT INNOVATION. Retrieved May 20, 2024 from <https://depedsouthcotabato.org/wp-content/uploads/2021/04/DM-OSDS-NO.-097-S.-2021-CONTEXTUALIZED-GUIDELINES-ON-INCOME-GENERATING-PROJECT-AND-PROGRAM-OR-PROJECT-INNOVATION.pdf>
- Giorgi, A. (2012). The descriptive phenomenological psychological method. *Journal of Phenomenological Psychology*, 43(1), 3–12.
- Hubbard, P. (2023). How To Much Rain Affects Your Garden. Retrieved May 20, 2024 from <https://extension.psu.edu/how-to-much-rain-affects-your-garden#:~:text=A%20high%20temperature%20generally%20causes,them%20to%20withstand%20the%20cold>
- Kelby (2021). What are the Harmful Effects of Insects? Retrieved April 24, 2024, from <https://sciencing.com/advantages-disadvantages-biological-control-8088>
- Knight (1993). *Financial Management for Schools: The Thinking Manager's Guide*. Oxford: Heinemann Educational.
- Koskela L. & Howell G. (2002). *The Theory of Project Management: Explanation to Novel Methods*. Retrieved March 17, 2024, from <https://iglcstorage.blob.core.windows.net/papers/attachment-8ef324db-750a-40c3-9c17-273db32b54e2.pdf>
- Kumar, N. (2023). Challenges and Progress in the Indian Education System. Retrieved March 16, 2024, from <https://timesofindia.indiatimes.com/readersblog/vedasnee/challenges-and-progress-in-the-indian-education-system-50151>
- Low, T. (2023). What is a Collaborative Work Environment: Promoting Teamwork and Productivity. Retrieved May 4, 2024 from <https://www.linkedin.com/pulse/what-collaborative-work-environment-promoting-teamwork-travis-low>
- Mas, S.R., Masaong, A.K., & Sukung, A. (2021). School Principal Entrepreneurial Competency Development Model to Optimize Generating Production Unit Income. *Journal of Educational and Social Research*.
- Maulidi, M., & Mtebe, W.L. (2022). The Influence of School Self-Reliance Projects in Enhancing Students' Academic Performance in Morogoro Municipality. *East African Journal of Arts and Social Sciences*.
- Mayor, J. (2019). Overcoming Challenges in Liquidation of MOOE of School Heads in Public Schools. Retrieved March 19, 2024 from <https://www.philstar.com/the-freeman/opinion/2019/04/05/1907383/overcoming-challenges-liquidation-mooe-school-heads-public-schools>
- Merriam, S. B. (2009). *Qualitative Research: A Guide to Design and Implementation*. San Francisco, CA: John Wiley & Sons.
- Moses, A., & Kasujja, J.P. (2020). Influence of School Income Generating Activities on Financing Universal Primary Education Schools in Uganda: A Case of Lira Municipality, Lira District.
- Obadia, E., & Mhagama, M. (2022). Contribution of School Income Generating Projects on Teaching and Learning Process in Secondary Schools at Ngara District in Kagera Region, Tanzania. *Asian Journal of Education and Social Studies*.
- Ofuya, T. (2023). A Review of Insect Pest Management in Vegetable Crop Production in Nigeria. Retrieved May 20, 2024 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9963591/>
- Parkinson, G., & Drislane, R. (2011). Qualitative research. In *Online dictionary of the social sciences*. Retrieved March 24, 2024, from <http://bitbucket.icaap.org/dict.pl>
- Patton, M. (2015). *Qualitative Research and Evaluation Methods*. 4th Edition, Sage Publications, Thousand Oaks.
- Radkevych, O. (2021). Communication in Project Activities of the Teaching Staff in Vocational Education Institutions. <https://jrnls.ivet.edu.ua/index.php/1/article/view/621>
- Ribeiro, S. (2020). The Real Benefits of Team Collaboration in the Workplace. Retrieved May 4, 2024 from <https://blog.flock.com/benefits-team-collaboration-work>
- Simkhada, R. (2023). The Education System in Nepal faces various Challenges and Issues. Retrieved March 16, 2024 from www.ijrp.org

- file:///C:/Users/Aspire3/Downloads /IJEP22Jan23_RKS%20(1).pdf
- Umair, A. (2023). Education in Pakistan: Problems, Challenges, and Their Solution. Retrieved March 1, 2024 from <https://www.nation.com.pk/13-Apr-2023/education-in-pakistan-problems-challenges-and-their-solution>
- Valdez, M. (2022). The Importance of a School-Based Management System. Retrieved April 18, 2024 from <https://www.pressreader.com/philippines/manila-times/20220517/281672553544989>
- Vanco (2024). Common Challenges in Financial Accounting for Schools and How to Overcome Them. Retrieved April 18, 2024 from <https://www.vancopayments.com/education/blog/challenges-in-financial-accounting-for-schools>
- Windish, B. (2022). How the Weather Affects Landscape Plants. Retrieved April 18, 2024 from <https://www.fairwaygreeninc.com/how-the-weather-affects-landscape-plants/>