PREO Journal of Business and Management EISSN: 2945-3933
Volume 5, Issue 2, October 2024

Profitability and Sustainability of Farm Tourism Business in Angeles City and Bacolor, Pampanga

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Abstract

This study investigated whether farm tourism business in Angeles City and Bacolor, Pampanga is profitable and sustainable. The study aimed to: (1) compare the business performance of farm tourism business in the study sites before and after the COVID-19 pandemic; and (2) identify farm tourism practices that are socially and environmentally sustainable. The study used the theory of the firm and the concepts of economic, social, and environmental sustainability as elements of its framework. The study used a survey research design. The needed data were collected through face-to-face interviews of the owners or operators of four farm tourism businesses in the study sites. The study found: (1) farm tourism business profitable, with an average profit of P2,388,500.00 in 2019 and P1,224,750.00 in 2023; (2) the average profit as percentage of total revenue declined from 64% in 2019 (before the pandemic) to 57% in 2023 (after the pandemic) as visitors have just begun going out again after the lifting of the pandemic restrictions; and (3) farm tourism business has socially sustainable practices such as the hiring of local people, allowing them to have a flexible work schedule, and providing them free housing and food. It also has environmentally sustainable practices such as imposing on average a carrying capacity of 69 visitors per hectare, organic farming, composting, and recycling. The study recommends: (1) farm tourism businesses to seek expanded financing options for farm improvement and innovation projects; (2) limiting the role of farm tourism business to a training venue for TESDA and other organizations; and (3) a conduct of a wider farm tourism study in Central Luzon.

Keywords: *farm tourism business, profitability, economic sustainability, social sustainability, environmental sustainability*

Introduction

Tourism is a big contributor to the Philippine economy. In 2019, tourism's direct gross value added was Php 2.5 trillion, which accounted for 12.8% of the country's GDP (Caynila et al., 2022). The border closures and mobility restrictions imposed by the government during the COVID-19 pandemic, however, decreased tourism's contribution to GDP to a mere 5% for the period 2020-2021 (Philippine Statistics

Authority, 2022). In 2022, the sector's GDP contribution increased to 6.2% due to the easing of mobility restrictions and reopening of borders (Gonzales, 2023).

Despite the tourism sector's recent recovery, the disruption and difficulty brought by the pandemic remains fresh in the memory of farmers. They had experienced difficulties at every stage, from planting to crop management, and from harvesting to marketing their produce (Dili, 2022). Since the pandemic, farmers have depended on farm tourism to offset their losses in crop production and at the same time, diversify their sources of income (Adom et al., 2021; Eballo & Bucton, 2018). According to Adom et al. (2021), local tourists considered farm tourism safe because the risk of contracting COVID-19 while doing it is minimal. Delos Reyes et al. (2021), on the other hand, pointed out that experiencing a new routine and environment has become the primary motivation of people in visiting farm tourism destinations. The pursuit of the said experience is now a key success factor for the farm tourism business (Mena, 2015).

Farm tourism in the Philippines was started by small-scale farmers in family-owned and family-run farms (Esguerra, 2020; Montefrio & Sin, 2019). Its huge potential to help the marginalized led to the passage of Republic Act No. 10816, otherwise known as the Farm Tourism Development Act of 2016 (Official Gazette, 2016). Farm tourism not only helps the marginalized sector, but also generates employment and economic activities that benefit communities (Hollas et al., 2021; Tugade, 2020).

Esguerra (2020) recognized the big potential of Central Luzon for farm tourism. Among Central Luzon's seven provinces, Pampanga is considered as the center of tourism, particularly of the culinary type (Department of Tourism, 2021). Within Pampanga, Angeles City is considered to have the most tourism potential. It has recorded a 14.42% increase in tourism for the 2014-2015 period as mentioned in its Comprehensive Development Plan (Angeles City Government, n.d.). Bacolor, meanwhile, recognized the potential of farm tourism in spurring economic development in the municipality, but at the same time, admitted the need for better infrastructure before such potential could be realized. This admission was made in the municipality's Comprehensive Land Use Plan for the period 2016-2025 (Bacolor Municipal Government, n.d.) as well as in its Tourism Development Plan in 2021 (Bacolor Municipal Government, 2021).

Aside from the economic benefits and potential of farm tourism, it also has benefits for the environment. On the one hand, it allows people to appreciate nature and wildlife. On the other hand, it helps preserve nature and wildlife (Manalo et al., 2019). It promotes the reduction, reuse, and recycling (the 3Rs) of materials. It also utilizes unsold food as animal feed or organic fertilizer for crops (Ammirato et al., 2020).

The City Government of Angeles and the Municipal Government of Bacolor had done their homework on environmental protection and preservation. Angeles City Ordinance No. 365 mandated waste segregation (Angeles City Government, n.d.). Bacolor's Municipal Ordinance Nos. 13 and 14, on the other hand, institutionalized its environment code and solid waste management respectively (https://www.bacolorpampanga.gov.ph., 2021). These local ordinances complement the executive issuances of national government agencies such as the Department of Tourism – Department of Agriculture (DOT-DA) Joint Memorandum Circular No. 2020-002 which set the rules and regulations governing the accreditation of farm tourism camps (DOT-DA, 2020).

Aside the above-mentioned pieces of local legislation and executive issuances of national government agencies, this study failed to find previous studies that look into the profitability and sustainability of farm tourism business, particularly in Angeles City and Bacolor, Pampanga. This is the literature gap that this study hopes to fill. To reiterate, this study's research question is whether farm tourism business in Angeles City and Bacolor Pampanga is profitable and sustainable. Its objectives, on the other hand, are the following: (1) to compare the business performance of farm tourism business in the study sites before and after the COVID-19 pandemic (or the years 2019 and 2023); and (2) identify farm tourism practices that are socially and environmentally sustainable.

Framework

This study used the theory of the firm and the concepts of economic, social, and environmental sustainability as elements of its framework. In the succeeding paragraphs each of these framework elements are concisely explained.

In the neoclassical theory of the firm, a firm is defined by a set of feasible production plans completely described by a production function, and the assumed objective of the firm is profit maximization, which incorporates cost minimization (Church & Ware, 2000). In other words, the theory of the firm is "an explanation of how a firm makes cost-minimizing production decisions and how its cost varies with its output" (Pindyck & Rubinfeld, 2013, p. 202). In this study, a farm tourism business is treated as a firm that is both profit-maximizing and cost-minimizing.

However, since the publication of the World Commission on Environment and Development (otherwise known as the Brundtland Commission) in 1987, firms, citizens, and governments have all been prompted to think about sustainable development. Sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, p. 43). Hence, in this study, a farm tourism business, while pursuing its profit maximization objective, must ensure that it is not compromising the ability of future generations to meet their own needs.

Sustainable development has three pillars, namely: economic, social, and environmental or ecological. These pillars are not only interconnected but also mutually reinforcing. Economic sustainability refers to practices or activities that promote economic growth while carefully considering social and environmental impacts. Social sustainability, on the other hand, is primarily concerned with the well-being of individuals and communities. Finally, environmental sustainability involves practices that reduce the negative impact on the environment, conserve biodiversity, and maintain the natural environment (Ghimire, 2023). In this study, therefore, a farm tourism business must ensure that its practices are economically, socially, and environmentally sustainable. This implies that there is a concept of sustainable tourism.

But what exactly is sustainable tourism? According to the Technical Centre for Climate Change and Agricultural Development (2024), sustainable tourism is travelling with the aim of making a positive impact on the environment, society, and economy. Conversely, it is travelling with minimal negative impact on the environment and the people who depend on it. This study examines whether farm tourism in Angeles City and Bacolor, Pampanga has these characteristics of sustainable tourism.

In 2015, the United Nations adopted 17 Sustainable Development Goals (SDGs) to end poverty, protect the environment, and ensure that all people enjoy peace and prosperity by the year 2030. These SDGs

are integrated and cognizant of the imperative for an economically, socially, and environmentally sustainable development (United Nations Development Programme, n.d.). This study on the profitability and sustainability of farm tourism business in Angeles City and Bacolor, Pampanga addresses the SDGs on poverty, hunger, good health and well-being, clean water and sanitation, decent work and economic growth, responsible consumption and production, climate action, and life on land.

Methodology

This study used a combination of quantitative and qualitative research approaches, and a survey research design. The units of analysis were the farm tourism businesses in Angeles City and Bacolor, Pampanga. The needed data for the study were collected through a survey and face-to-face interview of the owners or operators of four farm tourism businesses in the study sites (three in Bacolor and one in Angeles City). These four farm tourism businesses were chosen purposively from a consolidated list of six tourism businesses or sites identified by the Business Permit and Licensing Division of Bacolor and the Angeles City Tourism Office. Two of the six tourism businesses or sites in Bacolor were not considered for this study because they are not of the farm tourism type. The survey and face-to-face interviews were conducted from December 2023 to January 2024. Prior to the survey and interviews, free and informed consent of the farm tourism business owners or operators was obtained.

The survey and face-to-face interviews were guided by a questionnaire. The questionnaire was validated through actual use with one of the four farm tourism businesses in December 2023. It included questions on the socio-demographic profile of business owners or operators, the location and size of their farms, their farms' carrying capacity or maximum number of guests that they can accommodate in a day or night, their agricultural production management practices, environmental management practices, and human resource or personnel management practices. It also included questions on costs and returns or revenues for operating years 2019 (before the COVID-19 pandemic) and 2023 (after the COVID-19 pandemic). The interviewees' responses on costs and returns or revenues were validated by comparing them with the financial statements provided by the business owners or operators for the said operating years. There were no financial data during the pandemic years 2020, 2021, and 2022 due to the government-imposed lockdowns and mobility restrictions. The qualitative responses on agricultural production management practices, environmental management practices, and human resource or personnel management practices, on the other hand, were validated through direct observation during site visits in December 2023 and January 2024.

The survey and interview responses were encoded in a spreadsheet to facilitate analysis. The data on costs and returns or revenues were used to compute for profits or losses in operating years 2019 and 2023. They were also used in computing for profitability indicators such as profit as percentage of total revenue and profit as percentage of total cost. In turn, these indicators were used to assess the profitability of the farm tourism business in the study sites. Meanwhile, the modal or most frequent qualitative responses were noted to meet the study's objective of identifying farm tourism business practices that are socially and environmentally sustainable. The study's authors personally processed all quantitative and qualitative data to ensure their confidentiality. The identities of the farm business owners or operators were also kept anonymous.

Results and Discussion

This section of the paper describes the four farms and their owners or operators, determines their profitability, compares their business performance before and after the COVID-19 pandemic or the years 2019 and 2023, and identifies their practices which are socially and environmentally sustainable.

Profile of the Farms and Their Owners

Four farm tourism businesses participated in this study. The first three – Farms A, B, and C – are located in Bacolor while the fourth one – Farm D – is located in Angeles City. Only one farm tourism business was recommended by the Angeles Tourism Office because Angeles City is an urban area and lacks farms and other natural attractions. Farm A with a land area of 3.5 hectares is the largest among the four farms. Farm D is the second largest with a land area of 3 hectares, while Farms B and C are the smallest with a land area of 2.5 hectares. Farm A is a venue for events and overnight stay, while Farms B, C, and D, are for day trips only. Farm C is the oldest among the four farms. It was established in 2010. Farm D was the most recently established. It was built in 2016.

Farms A and B are operated by married couples, while Farms C and D are operated by single females. Farm D's operator is the oldest at 80 years while Farm B's operators are the youngest at 55 years. All operators reside and work on the farm. All their household members reside and work on the farm too except for the household members of Farm B. The operators of Farms A, C, and D are college graduates, while Farm B's operators do not have a college degree. A higher and a more stable income was the primary motivation of the operators of Farms A and C for entering the farm tourism business. The operators of Farms B and D were motivated by their advocacy for organic agriculture. Table 1 summarizes the profile of the four farms and their owners.

Table 1. Profile of the Four Farms and their Owners

Attribute	Farm A	Farm B	Farm C	Farm D
Land area (in hectares)	3.5	2.5	2.5	3.0
Location	Santa Barbara, Bacolor	Cabalantian, Bacolor	San Isidro, Bacolor	Cutcut, Angeles City
Year established	2012	2013	2010	2016
Civil status and gender of operator	Married male and female	Married male and female	Single female	Single female
Operator lives and works on the farm?	Yes	Yes	Yes	Yes
Other household members live and work on the farm?	Yes	No	Yes	Yes
Operator has a college degree?	Yes	No	Yes	Yes
Primary motivation of operator	Higher and more stable income	Advocacy for organic agriculture	Higher and more stable income	Advocacy for organic agriculture

Business Performance of Farm Tourism Business Before and After the COVID-19 Pandemic

In the year before the pandemic or in operating year 2019, Farm C earned the biggest total revenue (TR) of Php 7,560,000.00, while Farm B had the smallest TR of Php 510,000.00. The average TR of all four farms in 2019 was Php 3,727,500.00. Their revenues were mostly from farm-to-table dining, rent, guided tour, and agriculture training.

In the same year, Farm A incurred the largest total cost (TC) of Php 2,500,000.00, while Farm B had the smallest TC of Php 276,000.00. The average TC of all four farms in 2019 was Php 1,339,000.00. The fixed costs (FC) of Farms B, C, and D were significantly lower than their variable costs (VC). On the other hand, the FC and the VC of Farm A were both Php 1,250,000.00.

The profit of each of the four farms was known by subtracting TC from TR. For operating year 2019, Farm C earned the biggest profit of Php 6,000,000.00 while Farm B had the smallest profit of Php 234,000.00. The average profit of all four farms in 2019 was Php 2,388,500.00. Farm C turned out as the most profitable among the four farms in 2019 because its profit was 79% of its TR. For every peso of TR, it earned 79 centavos of profit. Farm D, meanwhile, was the least profitable among the four farms in 2019. Its profit was only 45% of its TR. For every peso of TR, it earned a mere 45 centavos as profit. In general, all four farms were profitable considering that, on average, their profit was 64% of their TR. That means, for every peso of TR, they earned 64 centavos as profit.

Farm C also came out as the most profitable among the four farms in 2019 because its profit was 385% of its TC. For every peso of TC incurred, Farm C earned a profit of Php 3.85. Farm D, meanwhile, was the least profitable among the four farms in 2019. Its profit was only 80% of its TC. For every peso of TC, it earned a mere 80 centavos as profit. In general, all four farms were profitable considering that, on average, their profit was 178% of their TC. That means, for every peso of TC, they earned Php 1.78 as profit.

Farm C came out as the most profitable among the four farms because it specializes in offering accommodation. Unlike Farms A, B, and D, it chose not to offer diversified services or activities to visitors to prevent costs from rising. Farm D, on the other hand, turned out as the least profitable among the four farms because it only admits visitors who share the advocacy for organic agriculture. This strict adherence to advocacy severely limited its revenues. These observations were confirmed by the operators during the interviews.

In general, all four farms were considered profitable when their 64% profit as percentage of TR and their 178% profit as percentage of TC are compared to the opportunity costs of capital. The simplest opportunity costs of capital are the annual interest rate on ordinary savings account and the annual interest rate on time deposit. In the country's oldest and one of the biggest universal banks, for instance, the annual interest rate on ordinary savings account is only 0.0625% while the annual interest rate on times deposit for deposit amount between Php 1,000,000.00 and Php 4,999,999.00 is only 0.5% (Bank of the Philippine Islands, n.d.). Table 2 summarizes the costs and returns of all four farms in operating year 2019.

Table 2. Costs and Returns of the Four Farms in 2019

Attribute	Farm A	Farm B	Farm C	Farm D	Average
TR (Php)	5,000,000	510,000	7,560,000	1,840,000	3,727,500
VC (Php)	1,250,000	255,000	1,200,000	840,000	886,250
FC (Php)	1,250,000	21,000	360,000	180,000	452,750
TC (Php)	2,500,000	276,000	1,560,000	1,020,000	1,339,000
Profit (Php)	2,500,000	234,000	6,000,000	820,000	2,388,500
Profit as % of TR	50	46	79	45	64
Profit as % of TC	100	85	385	80	178

All four farms were closed during the COVID-19 pandemic or the period 2020-2022. But in 2023, they reopened and resumed operations after the government had declared the end of the pandemic.

In operating year 2023, among the four farms, Farm C received the biggest TR of Php 5,060,000.00. Farm B, on the other hand, received the smallest TR of Php 660,000.00. The average TR of the four farms in 2023 was Php 2,145,000.00.

In the same year, Farm C incurred the biggest TC among the four farms with Php 1,560,000.00, while Farm B incurred the smallest TC of Php 351,000.00. The average TC of all four farms in 2023 was Php 920,250.00. Just like in 2019, the FC of Farms B, C, and D in 2023 were significantly lower than their VC. On the other hand, the FC and VC of Farm A were both Php 375,000.00. Apparently, this is one limitation of the study. The operator of Farm A completely relies on the services of an external accountant and could not explain why in 2019 and 2023, their FC and VC were exactly the same amounts.

In 2023, Farm C earned the biggest profit of Php 3,500,000.00, while Farm B earned the smallest profit of Php 309,000.00. The average profit of all four farms in 2023 was Php 1,224,750.00. Just like in 2019, Farm C turned out as the most profitable among the four farms in 2023. Its profit was 69% of its TR. That means, for every peso of TR, it earned 69 centavos as profit. Farm D was also the least profitable among the four farms in 2023. Its profit was only 25% of its TR. That means, for every peso of TR, it earned a mere 25 centavos as profit. In general, all four farms were profitable in 2023. Their profit was 57% of their TR. This means that for every peso of TR, they earned 57 centavos as profit.

In 2023, Farm C also came out as the most profitable among the four farms. Its profit was 224% of its TC. That means, for every peso of TC incurred, it earned Php 2.24 as profit. In the same operating year, Farm D was also considered the least profitable among the four farms. Its profit was only 33% of its TC. Implying that for every peso of TC incurred, it earned a mere 33 centavos as profit. Nevertheless, all four farms, in general, were considered profitable because their profit was 133% of their TC. That means, for every peso of TC incurred, they earned Php 1.33 as profit.

The operator of Farm C attributed the profitability of their farm tourism business to their focus on offering accommodations only instead of diversifying their services. Specializing in accommodations allowed them to prevent costs from rising. Farm D, on the other hand, came out as the least profitable because of limiting admission to guests who have an advocacy for organic agriculture. Once again, discriminating against guests who do not share the said advocacy severely reduced its TR and profit.

All four farms, however, were considered profitable in 2023 because their 57% profit as percentage of TR and 133% profit as percentage of TC were both substantially bigger than the 0.0625% annual interest rate of ordinary savings account and the 0.5% interest rate of a time deposit with a 365-day maturity period. The profit of the farm tourism business was clearly bigger than the opportunity cost of capital. Table 3 summarizes the costs and returns of the four farms in 2023.

Table 3. Costs and Returns of the Four Farms in 2023

Attribute	Farm A	Farm B	Farm C	Farm D	Average
TR (Php)	1,500,000	660,000	5,060,000	1,360,000	2,145,000
VC (Php)	375,000	330,000	1,200,000	840,000	686,250
FC (Php)	375,000	21,000	360,000	180,000	234,000
TC (Php)	750,000	351,000	1,560,000	1,020,000	920,250
Profit (Php)	750,000	309,000	3,500,000	340,000	1,224,750
Profit as % of TR	50	47	69	25	57
Profit as % of TC	100	88	224	33	133

As shown in Table 4, the average profit of the four farms as percentage of their TR declined from 64% in 2019 to 57% in 2023. Likewise, their average profit as percentage of their TC also decreased from 178% in 2019 to 133% in 2023. All operators attributed this decline in profitability measures to the fact that people have only started going out again since the lifting of the pandemic restrictions in 2023. They expect better profitability in 2024 and the years ahead due to their ongoing efforts to increase in farm size and farm innovation. Currently, however, they are experiencing difficulty in financing their farm improvement and innovation projects due to limited financing

Table 4. Average Profit as Percentages of TR and TC in 2019 and 2023

Profitability Measure	2019	2023
Average Profit as % of TR	64	57
Average Profit as % of TC	178	133

Despite the decline in their profitability measures, the four farms, in general, behaved consistently with the theory of the firm. They tried to maximize profits and minimize costs in 2019 or the year before the pandemic, as well as in 2023 or the year after the pandemic. These profit maximization and cost minimization objectives were confirmed by the operators during their interviews.

Socially Sustainable Practices

Tourism is socially sustainable when it is concerned with the well-being of individuals and communities (Ghimire, 2023) and if it is equitable (Swarbrooke, 1999). During the interviews, the operators expressed satisfaction with the lifestyle offered to them by farm tourism. They take pride in the positive impact that their farm tourism business is making to the community and in raising awareness on organic agriculture. Their testimonies confirm the positive impact of tourism on the community as previously discussed by Hollas et al. (2021) and Tugade (2020).

The socially sustainable practices of the four farm tourism businesses included in this study are: (1) the hiring of local people; (2) allowing them to have a flexible work schedule; and (3) providing them free housing and food. By hiring local people, the owners or operators are able to provide the much-needed

employment, and at the same time, secure a steady supply of affordable labor for their farm tourism business. In general, they pay their employees a monthly salary of Php 7,000.00. In addition, by allowing a flexible work schedule, their staff are able to perform their tasks at work, and at the same time, take good care of their family members, particularly their children. Finally, the provision of free housing and food is clearly a non-wage benefit for their employees. It is a way of ensuring that two of their basic needs or necessities – food and housing – are met. Collectively, these socially sustainable farm tourism practices address the SDGs on poverty, hunger, good health and well-being, decent work and economic growth, responsible consumption and production, and life on land. Table 5 summarizes the socially sustainable practices of the four farms included in this study.

Table 5. Socially Sustainable Practices of the Four Farms

Socially Sustainable Practice	Farm A	Farm B	Farm C	Farm D
Hiring of local people	Yes	Yes	Yes	Yes
Allowing a flexible work schedule	Yes	Yes	Yes	Yes
Providing free housing and food	Yes	Yes	Yes	Yes

A problem that was articulated by the operator of Farm A is the overwhelming tasks given to them by the Technical Education and Skills Development Authority (TESDA). These tasks include the preparation and conduct of modules on organic agriculture, and the receipt and care of trainees. These are on top of managing the farm as a venue for TESDA's training on organic agriculture. Given their limited number of employees, the operator of Farm A is afraid that they cannot sustain the performance of these tasks.

Environmentally Sustainable Practices

According to Ghimire (2023), tourism is environmentally sustainable if it involves practices that reduce the negative impact on the environment, conserve biodiversity, and maintain the natural environment. In general, the four farms included in this study have practices that are consistent with this definition of environmentally sustainable tourism such as imposing an average carrying capacity of 69 visitors per hectare, organic farming, composting, and recycling.

Liabastre and Rieder (2022) defined tourism carrying capacity as the maximum number of persons that can visit a location within a given time frame such that the local environmental, physical, economic, and sociocultural characteristics are not compromised, and do not reduce satisfaction with tourism. The average carrying capacity of all four farms is 69 visitors per hectare. Farm B has the biggest carrying capacity of 100 visitors per hectare, while Farm D has the smallest with just 10 visitors per hectare. Farm D's carrying capacity turned out as the smallest because it only admits visitors who share the organic agriculture advocacy. Meanwhile, Farm C's carrying capacity of 80 visitors per hectare is limited to accommodation for an overnight stay. Table 6 indicates the carrying capacity of each of the four farms.

Table 6. Carrying Capacity per Day of the Four Farms

Attribute	Farm A	Farm B	Farm C	Farm D	Average
Farm Size (in hectares)	3.5	2.5	2.5	3.0	2.9
Maximum Number of Daily Visitors Accommodated	300	250	200	30	195
Carrying Capacity (visitors per hectare)	86	100	80	10	69

Except for Farm C, the farms included in this study are open to organic farming. Farm A practices crop rotation, while Farm B has an integrated farming system. Crop rotation is the systematic sequencing of different crops in a specific field over several seasons to enhance soil fertility, control pests and diseases, and optimize crop yield (Cropaia, n.d.). Integrated farming, on the other hand, is having a mixture of farming enterprises to which a farm family allocates its resources in order to efficiently utilize the existing environment for the attainment of family goals (Eusebio & Labios, 2001). The operators of Farms A, B, and D consider their farming organic. Direct observation during site visit, however, revealed that Farm D is not fully organic because it uses a chemical pesticide.

Farms A, B, and C practice composting and recycling of waste materials. Farm B, in addition, has a material recovery facility (MRF). In contrast, Farm D does not practice composting and recycling despite its advocacy for organic agriculture. Water use, meanwhile, varies across the four farms. Farm A applies chemical treatment on the water it uses. Farm B uses a Jetmatic water pump for surface irrigation. Farm C collects its wastewater in a pond. Finally, Farm D also impounds wastewater using a pump. Table 7 summarizes the environmentally sustainable practices of the four farms included in this study. These environmentally sustainable practices address the SDGs on clean water and sanitation, responsible consumption and production, climate action, and life on land.

Table 7. Environmentally Sustainable Practices of the Four Farms

Environmentally Sustainable Practice	Farm A	Farm B	Farm C	Farm D
Imposing a carrying capacity	Yes	Yes	Yes	Yes
Organic farming	Yes	Yes	No	Yes
Composting	Yes	Yes	Yes	No
Recycling	Yes	Yes	Yes	No

Summary and Conclusion

The study concludes that the farm tourism business in Angeles City and Bacolor, Pampanga is generally profitable, with an average profit of P2,388,500.00 in 2019 and P1,224,750.00 in 2023. The average profit as percentage of total revenue declined from 64% in 2019 (before the pandemic) to 57% in 2023 (after the pandemic) as visitors have just begun going out again after the lifting of the pandemic restrictions. The study also concludes that the farm tourism business in the study sites has socially sustainable practices such as the hiring of local people, allowing them to have a flexible work schedule, and providing them free housing and food. It also has environmentally sustainable practices such as imposing on average a carrying capacity of 69 visitors per hectare, organic farming, composting, and recycling. These socially and environmentally sustainable practices address the SDGs on poverty, hunger, good health and well-being, clean water and sanitation, decent work and economic growth, responsible consumption and production, climate action, and life on land.

Recommendations

The study recommends farm tourism business in Angeles City and Bacolor, Pampanga to seek expanded financing options for its farm improvement and innovation projects. Instead of merely relying on retained earnings, it should avail loans from banks and other financial institutions.

To avoid being overwhelmed with tasks that are beyond its expertise, the study recommends farm tourism business to limit its role to a mere training venue for TESDA and other organizations. It was clear from the experience of Farm A that tasks such as preparing and conducting modules on organic agriculture, and the receipt and care of trainees are overwhelming and may not be sustainable.

The study also recommends Farm D to practice composting and recycling since these environmentally sustainable practices are compatible with organic agriculture. Moreover, the study recommends farm tourism business to adopt integrated farming system for more efficient utilization of farm resources and the attainment of family goals.

Finally, the study recommends conducting a wider farm tourism study in Central Luzon that can lead to the adoption of more economically, socially, and environmentally sustainable tourism practices.

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