Indonesian Journal of Agriculture and Environmental Analytics (IJAEA)
Vol. 5, No. 1, 2026: 21-38

Practices and Challenges of Small-Scale Corn Farmers of Cebu

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ABSTRACT: Corn farming practices are affected by various challenges and opportunities in the environment, training, and the agricultural program of the locality. This study explored the farming practices of the small-scale corn farmers in Cebu by identifying their farming practices, challenges and opportunities, and possible improvements. Through phenomenological method, the key informants' lived experiences show unconventional farming practices such as multiple sowing, unsystematic fertilizer application, indigenous pest control, and untimely harvesting. Farmers face political, logistical, environmental, and sociological challenges. However, it continues to thrive due to the farmers' commitment and belief on the potential of the industry. Hence, they require sustained oversight from professional assistance to monitoring and support them and encourage younger generations to continue the corn farming tradition.

Keywords: Corn Farming, Indigenous Practices, Phenomenology

Submitted: 24-11-2025; Revised: 30-12-2025; Accepted: 26-01-2026

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DOI: https://doi.org/10.55927/ijaea.v5i1.15545
https://journal.formosapublisher.org/index.php/ijaea

INTRODUCTION

Small-scale farming in the Philippines is challenged by an array of political, educational, ecological, and economic factors. Despite being an agricultural country, food security and productivity are still issues due to limited access to farming innovation and conservation practices (Brown et al., 2018). Such limitations led to resource and environmental degradation that small-scale farming in developing countries suffers from (Mango et al., 2017).

In Catmon, Cebu, small farming is the primary source of income and food, in which farmers have to rely on farming practices and knowledge that are passed on by their ancestors, even with the available training on commercial farming to grow their produce (personal communication, Catmon farmers). Amidst the sustainable small-scale farming programs of the Department of Agriculture, the small-scale farmers of Catmon, Cebu, continued to use their old farming practices. They believe that if it worked before, it should also work now. Most of these small-scale farmers that follow such principles are corn growers, much like the rest of the farming sectors in the country (Philippine Statistics Authority (PSA), 2004; National Statistics Office (NSO), 2012).

Moreover, farmers, especially the corn growers (Briones, 2010), are one of the basic sectors with high poverty incidence (PSA, 2023). Their financial status limits access to new innovation and practices, and in consequence, risks their crops in the adverse effects of natural disasters and pests (Manuel, 2018). Thus, they relied on the inherited farming practice. But unless their practices support and allow conservation of the soil to prevent its degradation, productivity and yields will be affected (Briones, 2010; Watts, 2017; Gray, 2019) as soil erosion is brought upon by substandard farming methods (Alam, 2014). Despite numerous advancements in the field, the practices of corn farmers in Catmon, Cebu remain underexplored and largely unknown.

Catmon, Cebu is just one of the municipalities of the province in which farming is the fundamental way of living. Understanding how farming practices affect soil quality and corn yield in this municipality provides opportunities for other municipalities to evaluate and correct their practices as well. As such, this study aimed to explore the farming practices of the small-scale farmers of Catmon, Cebu towards sustainable agriculture. This study further identifies the following: (1) farming practices of the small-scale corn farmers; (2) challenges and opportunities of the small-scale farmers; and (3) improvements for sustainable corn farming.

THEORETICAL REVIEW

The literature review on *Practices and Challenges of Small-Scale Corn Farmers of Cebu* indicates that small-scale corn farmers in Cebu largely rely on traditional farming practices, with relatively low adoption of modern agricultural technologies, particularly improved seed varieties, mechanization, and integrated pest management. Previous studies highlight limited access to capital, agricultural credit, and extension services as major constraints to improving farm productivity and efficiency. In addition, farmers face external challenges such as climate variability, unstable market prices, high input costs, and inadequate post-harvest infrastructure. These constraints not only affect crop yields but also

threaten income stability and household economic resilience. The literature emphasizes that supportive government policies, strengthened farmer institutions, and improved access to technology and agricultural information are essential to enhancing productivity, sustainability, and the overall livelihood of small-scale corn farmers in Cebu.

METHODOLOGY

Research Design

This study employed phenomenology research design. This is focused on the lived experiences of the informants (Groenewald, 2004; Arslan & Yildirim, 2015), who were the small-scale corn farmers. The design unraveled the experiences in the identified field of study through unstructured interviews and observations. In this study, it is imperative that research sampling ensure the unpacking of the identified phenomena (Groenewald, 2004; Arslan & Yildirim, 2015). Hence, the selected key informants were practitioners in corn-farming.

Research Locale

This study focuses on the farmers of Lower Purok 3 Lutac, Tinabyonan, Catmon, Cebu. The location was a mountainous area with steep rocky slopes that have sandy loam soil, ideal for planting corn (Canatoy, 2018). As such, the primary crop of the farmers in the area was corn. Most of the farming areas were found along the slope of the mountain due to its topography. The area has a limited water supply, especially in areas on top of the mountains. Figure 1 shows the location of the small-scale corn farms.

Figure 1. Map of Tinabyonan, Catmon, Cebu

Research Participants

The study made use of purposive sampling in identifying a key informant that understands and has experience in corn farming. The key informant is a farmer in the mentioned locality and one of the many farmers in Cebu who have successfully graduated the three phases of the Farmer-Scientist Training Program (FSTP) of the Department of Agriculture (DA) and University of the Philippines Los Baños (UPLB). The program aimed to liberate farmers from poverty (Davide, 2001; Business World, 2019). As a graduate of the program, the informant has been training farmers in Catmon to increase the yield and profit of the corn crops. He has been working closely with the Cebu Province Government and the Department of Agriculture branch in the locale in monitoring and teaching the corn farmers.

Then, snowball sampling is conducted as the key informant identifies two farmers that provided information in the achievement of the goals of the study. One of the farmers has been following methods and practices in planting corn of FSTP, whereas the other farmer continued to follow the passed-on practices and knowledge of their ancestors in planting corn despite being a participant in the same program.

Data Gathering

An ocular visit was conducted to search for the key informant in the area. A short unstructured interview was conducted with the key informant to determine his viability for the purposes of the study (Arslan & Yildirim, 2015). Then verbal consent was requested from the key informant, and an official date of visit was set so the key informant can get the consents of the other farmers to take part in the study. With the approval and consent secured, the researchers have immersed themselves in the work of the key informant for a week. Observations were recorded as the key informant and the other farmers were working in the field. Unstructured interviews were conducted to determine the (1) farming practices, (2) challenges, (3) opportunities, and (4) aspirations in farming corn in the area.

Furthermore, soil samples were collected and transported following the suggested procedure of the Department of Agriculture 7: Regional Soils Laboratory. Following the procedure, soil samples were collected after the harvest of the corn in the field before it was re-ploughed and applied with fertilizers. Only the topsoil which is approximately 20-30 centimeters deep was collected. Samples were collected from the three corners of the field based on the appearance of the soil. Collected soil samples were air-dried and brought to the laboratory for pH, percent of organic matter, available phosphorus, and potassium testing.

Data Analysis

Responses of the key informant and the farmers are collated into themes following the "Thematic Analysis" of Clark and Braun (2013). Step 1: Data familiarization–The unstructured interviews were transcribed, reread, and familiarized through memoing to understand covert meanings of the conversations. Step 2: Generation of Codes–The codes were crafted from the

memos made during the data. Step 3: Generation of themes–Themes were crafted from the combination of codes with similar meanings and implications. Step 4: Reviewing of Themes–Constant comparison among the themes, codes, and memos was conducted. Step 5: Determination of focal themes–Generated themes are integrated and synthesized to develop focal themes. Step 6: The master themes are interpreted and reported in the results and discussion of this paper.

The generated master themes and sub-themes were reported back to the farmers to check the accuracy of the interpretation and meaning. The farmers were given explanations on the results in their mother tongue. The suggestions and recommendations of the farmers were considered, and themes were reinterpreted. Furthermore, the soil analysis results were utilized to support the themes on soil management practices.

RESULTS AND DISCUSSION

From the observations, testimonies, and lived experiences of the farmers, the following themes have emerged. Figure 2 shows the superordinate and subordinate themes.

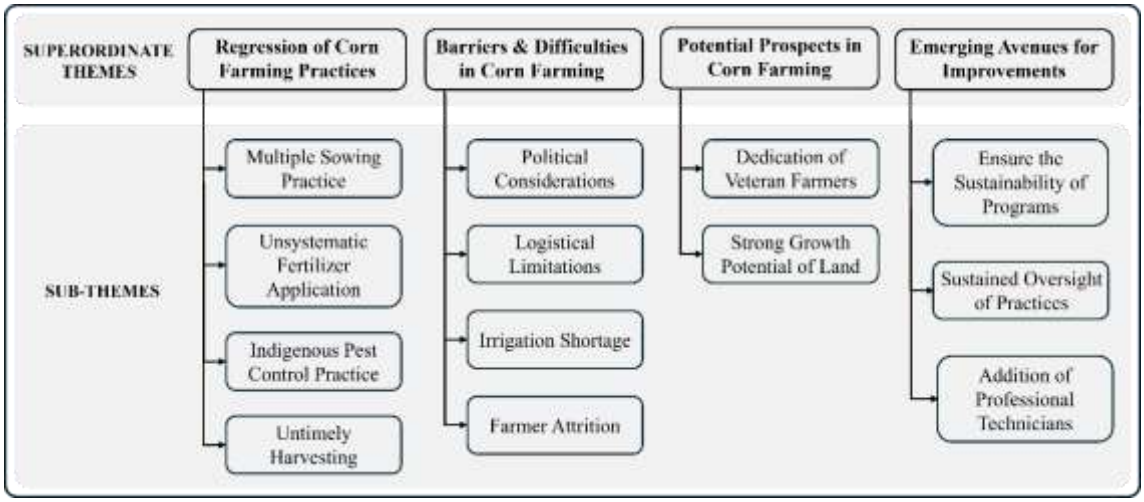

Figure 2. Emerging superordinate and sub-themes in small-scale corn farming.

Unconventional Corn Farming Practices

The Farmer-Scientist Training Program (FSTP) that has been adapted by the key informant in the training of the farmers of Catmon, Cebu is composed of three phases wherein each phase has a certain goal to achieve. Spearheading the implementation of the program and based on firsthand experience running the program, he attested that its deployment required close monitoring and supervision, as it involved rigorous effort and constant reporting of progress and results by the farmers.

For several years, the program has successfully trained several farmers, but only a few have successfully graduated. The requirements demanded that the farmers implement all the prescribed practices and train other farmers. Due to its rigorous requirements, several of the farmers have returned to their old practices. As such, amidst the successes of the FSTP, the farmers' practices have been gradually regressing through time. The key informant attributed the slow regression of the practices to poor monitoring and supervision of the program

throughout the years, especially that the implementation of the program has been put to a stop due to the change in provincial-government administration.

Based on the observation of the key informant in his recent evaluation of the farmers' corn field, supported by the testimonies of the other farmer-participants and the researcher's observation of the cornfields, the farmers have returned to the following practices: (a) multiple sowing, (b) unsystematic fertilizer application, (c) indigenous pest control, and (d) untimely harvesting.

Multiple Sowing Practice

Corn requires sufficient space to grow, enough for its leaves to spread out and for the corn fruit to grow undisturbed (Subedi & Ma, 2011; Drost, 2020). In the FSTP, corn is planted one corn grit at a time with 75 cm by 25 cm. In the study conducted by Achiri et al., (2019) on the effect of corn density on its morpho-physiological and yield parameters, the yield of the corn is influenced by the spacing of the plants. Older studies have supported such results, including that of Boomsma et al. (2009) on the effects of intense crowding of corn on its morphological responses and that of Ipsilandis and Vafias (2005) showing a negative correlation of the corn yield with its population density due to the competition for nutrients. However, as the practice regresses due to lack of monitoring, support, and tools farmers have returned to the old ways of sowing multiple corn grits in one area.

In the old practice, around three to four corn grits were sown in one plot, and the next plot after the previous one is measured through the size of the farmer's foot. Farmer-participant A perceived that sowing fewer corn grits in a spot will lower their income. Based on the researchers' observation on the cornfield of farmer-participant A, it was confirmed that there were two or three corn plants grown together in one spot. However, as pointed out by the key informant, the corn plants were thin and small. Ferreira and Teets (2017) found the same results in their study that increasing the population density of the plant will result in a great yield, but it can only be achieved if the nutritional composition of the soil is maintained to be enough for the corn plants in the area. However, the lack of enough supplements for multiple plants will lead to lower yield.

This suggests that although farmers were taught the right way of sowing corn, they still tend to go back to what they have used to do because they believe that they will get a higher income by multiple sowing without taking into consideration the nutritional needs of the plant. They prefer sowing in close distances without the need to measure with multiple corn grits at a time because it is faster and easier. But when we computed the income, it was low due to the quality of the corn grown. Based on the observation of the corn plants of farmer-participant A, the corn cobs, although ready for harvesting, were considerably small.

Unsystematic Fertilizer Application

The application of fertilizer and its kind to be utilized is crucial in corn production and highly dependent on factors such as residual nutrients, physical characteristics of the soil, type of fertilizer to be used, and the previously planted

crop (Subedi & Ma, 2011). Although the farmers in Catmon have had their soil tested and analyzed, the result came too late, and the unorganized soil sampling has caused the mixing of soil samples from various farms. As such, for the results to be utilized in the least, they were given a general recommendation for fertilizer which is a combination of urea and complete fertilizer. However, the kind and quality of the soil in their farmlands differ. Hence, soil analysis was conducted to check on the soil quality of their farms. Table 1 shows the soil analysis test of the farmlands of three farmer-participants.

Table 1. Soil analysis results

Field No.	pH	Percent of Organic Matter	Phosphorus (P) (ppm)	Potassium (K) (ppm)
A1	7.93	1.40	0.50	33.00
A2	7.79	0.81	11.20	33.00
B1	7.50	1.31	8.00	25.00
B2	7.68	2.09	0.10	30.00
B3	7.58	2.46	11.30	25.00
B4	7.65	2.28	5.60	30.00
C1	7.72	2.76	10.60	28.00
C2	7.98	0.72	2.10	13.00
C3	7.93	1.50	5.90	43.00
C4	7.93	1.45	11.00	30.00

Indeed, the quality of soil among the three farmers is different, and as such, different qualities and quantities of fertilizers must be applied. The pH level of all the soil samples is above the optimum level of pH 6–7 needed by the corn plant (Oelke, 2023). Most of the soil samples have reached the ideal 1-6% organic matter (Larson, 2024). Furthermore, the phosphorus and potassium content of the soil is below the standard range of 30 – 50 ppm and 48,000 – 50,000 ppm respectively (Beegle, 2017). These suggest a degradation of soil nutrients and that specific fertilizers that boost potassium and phosphorus content be added.

The timing of the application of fertilizer is also crucial in the growth of the corn plant. In the studies compiled by Subedi and Ma (2011) and Crop Science United States (2024), it was found that corn plants need sufficient nitrogen to absorb fertilizers. This is usually applied before and during planting and as a sidedress. Furthermore, if organic manure is employed, it should be well incorporated beforehand. The same was done in the application of organic chicken manure among the farmers in Catmon. However, the key informant attested that further application and kind of fertilizer is left on the farmer's discretion. Farmer-participant A, who has been following the old practice, even revealed that he only applies chicken manure before the planting process.

Side-dressing of nitrogen should be applied during the mid- to late stages of the plant (Ruiz Diaz et al., 2008). Furthermore, it is more effective and efficient to apply the fertilizer underneath the soil (Nkebiwe et al., 2016). Such methods are consistent with FSTP practice followed by Farmer-participant B. However, as observed by the key informant, other farmers were applying fertilizers on the surface of the soil measuring the amount through a bottle crown. Farmers called

it target method wherein fertilizers are poured at the base of the plant. Although the application is fast, the fertilizer is susceptible to run-off when it rains and evaporates on sunny days.

Indigenous Pest Control Practice

The FSTP endorsed the use of Trichogramma and earwigs as part of the Integrated Pest Management (IPM). The farmers have found out that using both works best. The same results were found by Gagnon et al. (2017) that making use of both Trichogramma and earwigs were effective in pest management.

The application of pesticide or predatory animal on the corn to manage pests is one of the many methods to be used in the Integrated Pest Management (IPM). Apart from that, the framework includes the scouting for the common pests, adhering to cultural practices of planting early or during the recommended time frame, tilling of the soil, and weed control (Knodel & Mcmullen, 2002). Most of the farmers in Catmon, to avoid the pest from damaging their crops as well as the typhoons, have adapted intercropping (Gerpacio et al., 2004). Farmer-participant B explained that following the FSTP, the first planting season starts in late May or early June and the second one in December. On the other hand, farmer-participant A, following the old practice, does not really have a clear time frame of when to plant and would only depend on the rainy season.

Despite following the seasons of planting, corn plants cannot totally avoid the pests. When worse comes to worse, the farmers just let things go. In most cases, they apply their homemade pesticides, which were "ginamos" or fermented anchovies, and a concoction of the extracts of Madre de Cacao (G. sepium) leaves, garlic, and ginger mixed with detergent powder. Farmer-participant A admitted that he learned this method from his grandfather and left the rest to fate. Surprisingly, the same testimony is expressed by farmer-participant B despite following FSTP practices. Although madre de cacao leaves extract has been effective as a bio-pesticide for golden apple snails (Cruzado, 2018), rice weevils, bugs, and worms (Calasagsag, 2010; Mohammad et al., 2024), its effectiveness on corn pests and synergy effect with the garlic, ginger, chili, and detergent powder have yet to be confirmed.

Untimely Harvesting

Farmers in Catmon, Cebu have the habit of cutting off the top part of the corn as soon as it produces the ear. The corn plants on the farmland of farmer-participant A had their top part cut off on the belief that it would cause nutrient depletion. Contrary to this practice, the key informant disagreed with topping as it causes the corn kernels to shrink in size and become watery. Several articles support that topping is not advisable until the corn reaches its maturity and is ready for harvest when the leaves and the husks are dry and the kernels are nearly glazed (Layuk et al., 2021), which happens about 20 days after the silk of the corn ear starts to appear (Carroll, 2018 & Decker, 2019). Heidari & Hosseini (2022) found that the practice of no topping produces bigger and heavier corns than topping. Amidst the strong recommendation of the key informant, most go back to the old practice of cutting off the top part of the corn plant before harvest,

because they find it inconvenient to wait for the whole corn plant to wilt. They want to harvest the corn as soon as possible.

Although the practice of cutting the top part of the corn, which is its tassel that contains the pollen grains, is backed with experimentation and research, this practice is done before the corn produces the ear. This process called detasseling is done to produce hybrid seeds that are more resilient to diseases and pests (Iowa Agriculture Literacy Foundation, 2015). In fact, there are several older studies that have shown negative correlation results of detasseling and the number of yields (Grogan, 1956; Hunter et al., 1969), as well as the defoliation of the plant, which has significantly decreased the number of yields (Heidari, 2013).

Barriers and Difficulties in Corn Farming

In the present scenario, the agricultural sector of the country is performing low in comparison to the other sectors and that of the other ASEAN countries, as it is affected by several structural transformations in the industry, environment, and economy (Brown et al., 2018). The small-scale corn farming in Catmon, Cebu, as observed and based on testimonies of the farmers, is currently struggling with the challenges of (a) bureaucratic restrictions, (b) logistical limitations, (c) irrigation shortage, and (d) farmer attrition.

Political Considerations

The agricultural sector of the country is affected by its political changes and transformation (Archer et.al, 2008). The key informant attested that the FSTP in Cebu was put on hold due to the change in leadership in the governor position with different perspectives, views, and vision for agriculture since July 2019. The stoppage of the program has affected the monitoring of the farmers, their practices, and the corn produced in locality. This is consequent to the further degradation of the corn farming practices of the province.

Based on the testimonies of the key informant, the government agencies in the province had an interdependent relationship with FSTP coordinators like him in the monitoring, training, and reporting of the status of the corn production. When the program was halted, their responsibilities as the coordinators of the program were also put into a stop. He revealed that strict implementation of the program was stopped when the support was cut-offed.

Logistical Limitations

Even before the FSTP was discontinued, graduates of the program like the key informant have already served as extension workers of the Department of Agriculture and of the provincial government. They were handling the training of other farmers, monitoring their practices, and the submission of reports to the government agency. Based on the testimonies of the farmers, their farms are rarely visited by technical personnel from the agency, which unfortunately does not specialize in crops but in livestock.

Aside from the lack of technical personnel, the extension workers lack financial support. The financial aid and honorarium that they have received are insufficient to support the work that they are doing. The work that an extension worker does goes beyond just training, monitoring, and submission of results.

They include taking responsibility for taking soil samples and sending them for soil analysis. So, he further mentioned that the allowance cannot suffice for their fare in going to and from their meetings, training, and monitoring considering that the places are very far from each other. Sometimes, they end up using their honorarium to supplement the lack of money.

Lastly, the farmers testified that the only logistical assistance received from the government agency is the start-up kit for their corn farming. After which, they are left on their own. According to farmer-participant B they were only given the seminar and starter seeds but the fertilizer, tractors, and even animal helps are left for the farmers to provide.

Irrigation Shortage

Aside from nitrogen, corn plants need a sufficient supply of water (Berning & Jeschke, 2021). Duan et al. (2025) found that corn yield is significantly affected by the frequency of irrigation. As such, irrigation is important in corn farming. However, the lack of irrigation can be observed in the farms of Catmon province. Their farmlands are found on highlands and mountain tops. As such, they rely naturally on rainwater like most of the corn farms in the country (Gerpacio et al., 2004). But on days when rain is scarce, they would have to purchase water from the lowlands and rent a pickup truck to deliver the drums of water to their fields. Farmer-participant A mentioned that supply of water is indeed a major problem. They must buy the water at an additional cost for farming. Farmer-participant B added that there is no strong source of water in the area for them to build their irrigation due to the climate and type of soil. These farmers then expressed their pleas with the government to provide them with an irrigation system.

Farmer Attrition

The farming industry is an aging one. In the survey conducted by the Department of Agriculture, the average age of farmers in the country is sixty (Inso, 2018). It has been observed that the younger generation has shunned away from farming as a vocation or profession. The same is true among the farmers in Catmon province. Fewer members of the younger generations are entering the farming industry. Based on the farmers' testimonies, their children do not even want to follow the way of living their family has. Farmer-participant B, saddened by this reality, shared that the young generation opt to become construction workers or laborers in the factories. Only a few have chosen to work in the farm fields. Most of the farmers in Catmon are aged fifty to sixty years old.

The farmers have predicted that if this kind of trend continues, then the corn farming industry will cease to exist. They have observed that once their young ones have seen the comfort of the city and of the high-paying jobs, they prefer to do those rather than farming because the payout is faster. Moreover, even those that have stopped school do not have the interest to tend to the farm. Amidst the effort of the older generation farmers to encourage the younger ones to be involved in the farming, turnouts every year have been decreasing. This had led them to succumb to the idea that soon, they might just sell their land.

Potential Prospects in Corn Farming

Despite the hardships that the farming industry in Catmon province is facing, several farmers who have lived through and are passionate about corn farming strived to liven it up. Although resources and support were limited, they found ways and kept the industry alive. This just shows that (a) veteran farmers are dedicated and (b) there is a strong growth potential that is yet to be explored and developed.

Dedication of Veteran Farmers

The community of farmers in Catmon was composed of older generations. Despite their age, their passion and commitment to making farming conditions better was highly evident. They even established their own cooperative group with an ad hoc committee to solve immediate concerns and help other farmers in the community. Sometimes, they shared their own money to provide the needs of the community. The key informant is one of the forerunners. He took pride in being a farmer and that he is a graduate of the agricultural program. He used his expertise to build the self-confidence of other farmers and develop their farming practices as well. He had to leave his own farm to assist other farmers through monitoring and training farmers and coordinating with the government agencies in the province. Such dedication to farming has influenced other farmers to be committed as well in their vocation and passion. So, when the FSTP was put on hold, it affected not only the farming practices but also the morale of the farmers. Nevertheless, he persistently continued serving even without the honorarium.

Strong Growth Potential of Land

The province is hilly and rocky with sandy soil composition. It is not ideal for other farming conditions, but it is for corn farming, as corn grows in this kind of environment (Li et al., 2025). But because of the characteristics of the area, several investors have declined the offers to capitalize farming in the area. Although the land is challenging to manage but not impossible. In the integrated farm of the key informant, it can be observed that the hillsides were contoured, and each contour was supported by arrays of rocks. It is evident in his field that different plants are planted in each step in each contour. He mentioned that one just must be inventive to make use of the resources available. He showed the other farmers his methods and influenced others to do the same.

Emerging Avenues for Improvements

The agricultural industry of the country is indeed faced with issues and concerns. De Guzman (2018) described agriculture as a dying industry due to less prioritization of local farmers, labor migration of farmers, and lack of technological innovations (Madayag & Estanislao, 2021). Other reasons include concerns about small farm size, inadequate supply and support for soil, pests, diseases, and equipment management, and the absence of programs for irrigation and to cope with climate change. These concerns trickle down to the various farming sectors. Based on the challenges and opportunities of corn farming in Catmon, Cebu, the following improvements need to be put in place:

(a) Ensure the Sustainability of Programs, (b) Sustained Oversight of Practices, and (c) Additional Professional Technicians.

Ensure the Sustainability of Programs

In the Philippines, changes in government programs come with the change in leadership. This is true to the agricultural sector of the country, in which there are policy constraints involved in the importation and distribution of technological advancements in the sector (De Guzman, 2018). In fact, as mentioned in the previous discussions, the change of provincial leadership has brought significant changes in the corn industry in Catmon, Cebu.

Desperately, the key informant hoped for agricultural programs to continue in the province regardless of the change in leadership. Still, if changes must be done, hopefully a better program will be put in place. With the change of the program, the key informant feared that they might start over again and the efforts that they have made and practices that they have built for years will be gone. He expressed that instead of changing the program, it is more important to further develop other programs that would help to sustain the existing programs, such as irrigation, fertilizer, pest control, and technological advancements. Farmer-participant B hopes that in the future they will be provided with their needs. Farmer-participant A aspires to programs that encourage the younger generations back to farming.

Sustained Oversight of Practices

In the report of the Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCCAARD), it was found out that most of the supervision, monitoring, and support relied mainly on extension workers. Although there are dedicated farmers, there should be monitoring done by the personnel from the Department of Agriculture. The presence of a trained professional from the government will help build the morale of the farmers knowing that their practices are monitored and approved. Furthermore, constant supervision and monitoring would help identify the support that the farmers need, such as fertilizer and pest control. This would also help develop rapport among the farmers to be able to work closely on problems and concerns.

Additional Professional Technicians

The above improvement is only possible with the increase in the number of professionals and experts in agriculture in the field. As observed by the farmers, the government personnel rarely visit and monitor. Some even testified to it being once a year only. Furthermore, according to the key informant, the visiting personnel were not an expert on the crops but of animal science. As such, to improve the program, there is a need to provide additional professional technicians that are experts on corn farming. Someone that would make effort to go up in the mountains and tend to the farmers' needs and concerns. Otherwise, corn production will continue to drop and eventually collapse.

CONCLUSIONS AND RECOMMENDATIONS

Based on testimonies and lived experiences of the farmer, it is evident that the practice has regressed back to unscientific methods of corn farming. These practices have in turn diminished the soil quality far beyond its optimum range. Leaving it unfixed with the inappropriate use of fertilizer and irrigation may lead to barren land. This will further cause corn production to drop and may eventually threaten the food security of the country.

Moreover, the practices and production have regressed further due to the challenges faced by the farmers, such as bureaucratic restrictions, logistical limitations, irrigation shortages, and farmer attrition. Although the commitment of the farmers and the potential of the province for agricultural development are opportunities to increase production yield, unless the program improves and becomes sustainable through maintained oversight of the practices and additional professional agricultural technicians and guidance, these resources will be underutilized. Subsequently, as these problems continue to worsen, farmers will lose their livelihood as they utilize their own finances in providing themselves with the lacking materials and services they need.

Furthermore, since corn farming is a sector that requires programs that consistently and constantly monitor progress and provide support to farmers, the government must improve policies that aid the success of the program. Likewise, the succession program for the next generation of farmers should be improved to ensure the continuity of the corn farming industry.

FURTHER STUDY

Based on farmers' testimonies and lived experiences, this study reveals a regression in corn farming practices toward unscientific methods that have significantly degraded soil quality beyond optimal thresholds, posing serious risks of land barrenness, declining yields, and long-term threats to national food security. This deterioration is exacerbated by structural constraints, including bureaucratic inefficiencies, logistical and irrigation limitations, and farmer attrition, which collectively undermine production capacity. Although strong farmer commitment and regional agricultural potential remain key assets, their impact is constrained by the absence of sustainable program design, consistent oversight, and adequate technical assistance. Without systematic monitoring, professional agricultural guidance, and supportive policy reforms—particularly those ensuring intergenerational succession—these challenges will continue to erode farmer livelihoods and jeopardize the continuity and resilience of the corn farming sector.

ACKNOWLEDGMENT

The researcher would like to express sincere gratitude to the small-scale corn farmers of Lower Purok 3 Lutac, Tinabyonan, Catmon, Cebu for their significant contribution to the successful completion of the study and the warm welcome in their community. Special thanks to Dr. Rosario B. Fantonial, whose assistance in facilitating the connection to the key informants has made the study possible. Appreciation is also extended to Sacred Heart School – Ateneo de Cebu

for their support in this endeavor. Finally, heartfelt gratitude is extended to family and friends for their support and encouragement.

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