



## RESEARCH PAPER

## OPEN ACCESS

## Status of agricultural goods as affected by the farmers' marketing practices and perception in Manukan, Zamboanga del norte, Philippines during the Covid-19 Pandemic

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### Abstract

We assessed the status of agricultural goods in the Municipality of Manukan, Zamboanga del Norte, Philippines through a well-structured questionnaire. The respondents were 20% of the farmers-vendors in the Barangay Food Terminals (BFTs) of the said locality. The questionnaire contained important parts such as (1) respondents' profiles, (2) marketing practices of the respondents, (3) problems encountered, (4) government interventions, and (5) the general perception of the respondents. Most of the respondents were females (70%), and 45% are college degree holders and have 20 years of experience in farming. They all make sure the palatability and healthiness of their products, thus they reached loyal customers (29%) and resellers (71%). The price of their products is affordable. They also supply sufficiently and some of them (10%) do promotional activities. 90% of the respondents chose the BFT to be the venue for selling their agricultural products since it is accessible to the customers. 88% of the respondents declared that the consideration of the 4Ps in marketing is very effective. This resulted in most of them did not have encountered serious problems. Thus, they perceived that their agricultural goods are marketable and profitable. The LGU supported the respondents by the means of maintaining orderliness in the BFTs. The respondents had also received support from the Office of the Department of Agriculture in their LGU by benefiting them from the projects.

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## Introduction

### *Background of the Study*

Agricultural products or goods sustain the lives of the entire humankind. Farmers are the main producers of foods from whom everyone is survived with or without new introduced new technology. Agricultural goods can either directly or indirectly be sold from farmers to consumers. Everything in foods undergoes the marketing perspective before it is consumed and profited by the consumers and producers, respectively. It is noticeable that the marketing status of agricultural goods and the countries' economies during the Covid-19 pandemic are different from those previous years (Varshney and Meenakshi, 2020). This means that the pandemic has an impact not only on the marketing strategies, practices, and livelihoods of almost all of the farmers but also on the agricultural economy across the world (Jaacks *et al.*, 2021). It is expected that the price of agricultural products is low thus resulted in the low income of the farmers (Ceballos *et al.*, 2021). This may be due to the loss of good quality products since they have been stored for so long during lockdown (kalogiannidis and Melfou, 2020). Good postharvest and intensive marketing management must be maintained to achieve sustainability and profitability despite the pandemic (Bouris, *et al.*, 2011; Kahramanglu *et al.*, 2021).

The poverty rate of the Philippines in 2021 is ranging between 15.5% and 17.5% from 16.6% in 2018 (Rivas, 2021). Thus, the Philippines belongs to the poorest Asian countries (World Population Review 2021). Most of the Filipino poor are those small farmers (Adriano, 2021) especially nowadays during the pandemic. One of the reasons why they remain poor may be because of lack of marketing strategies, low price of their products for many reasons, and lack of assistance from the government. What other Filipino households doing is that growing additional vegetables and root crops in their backyards for their home consumption to minimize their daily expenses from their small income (Biñas, 2020).

In this pandemic, however, the preference of consumers to agricultural products still depends also on the marketing strategies of the farmers-vendors that expectedly result in the marketing status of the

said products. The important factors affecting the marketing status are the 4Ps (product, price, promotion, place). Both farmers and consumers must consider these four Ps so that they will know how to deliver or manage and buy the products respectively that no one is aggravated. Many of the consumers are health conscious as they prefer organically grown products especially during the pandemic (Biñas and Baquiller, 2021) This may help the farmers increase the number of their customers and even the whole-buyers because they know the benefits and the good effects of organic inputs on the health and quality of products, respectively (Biñas and Cagasan, 2021; Biñas, 2021). Organically grown products are normally higher in price. But, due to reasons, both conventional and organically grown products can be bag down in price especially when they are stored for so long already and decreased its quality. In some cases, products can also be increased in price due to the high demand but since the low supply. This possibly happens during the pandemic all over the country. Regardless of these, how do the farmers promote their products, and where they should market them? In this time of the pandemic, farmers should think well about how they promote their products so that these will be bought as soon as possible to avoid longer stocking and not to decrease its price. The best place where they can display their products especially those vegetables and fruits is in the Barangay Food Terminals (BFT). Some farmers have already loyal customers and whole-buyers to whom their products are directly sold.

Regardless of the volume of production during the pandemic, the consumers are constantly demanding foods. They still after the value-added products to be the best in their senses. Agricultural marketing is one of the ways in setting the producers and consumers together through a series of activities. This is all about satisfying the needs and wants through the exchange process. This is an essential element of the economy.

During lockdown between March and April 2020, most likely 20% of vegetables and fruits were dropped in the market in a few cities (Mahajan and Tomar, 2020).

There are also farmers-vendors selling agricultural goods online where the customers do not know the certain price for either in retail or wholesale form. Based on the analysis of Narayanan and Saha (2020), there is a tendency that the price of agricultural goods will increase every after lockdowns because of the movement restrictions that act to limit arbitrage possibilities.

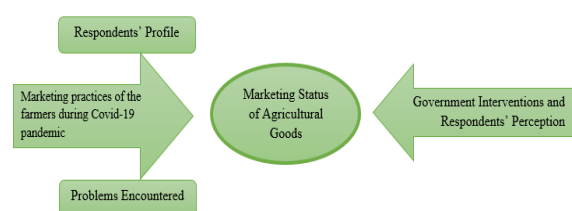
The Zamboanga del Norte has owned 730,100 hectares with more or less 1,008,000 households since 2015. This is the largest province of the Zamboanga Peninsula or Region IX where located at the north-western edge of Mindanao ([www.da.gov.ph](http://www.da.gov.ph)). Because of the large agricultural area, many farmers from the households, plus there is a good climatic condition suited to any of the commodities ([da.gov.ph](http://da.gov.ph)), the province is one of the highest numbers of agricultural goods being sold to different areas of the county (PSA, 2004). One of the Municipalities of Zamboanga del Norte that contributed a lot of agricultural goods is the Manukan. This Municipality is in the middle of the said province where many customers are drawn nearing this place to patronize agricultural goods in any form of buying. This municipality has Barangay Food Terminals (BFT) where the farmers coming from different barangays of this Municipality are gathering their agricultural goods ready to sell. However, due to the Covid-19 pandemic, restrictions even for the selling and buying of agricultural goods are raised also in the said Municipality. Hence, this survey was conducted to assess the farmers' marketing practices of agricultural goods in this place.

#### *Theoretical/Conceptual Framework*

This study is anchored to the concepts of Michael Porter's Five Competition Forces industry competitors, substitutes, buyers, suppliers, and potential entrants. As Porter's postulated the five forces are the elements of industry structure (Vining, 2011). Marketing is the business function that identifies customers' needs and wants, determines which target markets that organization can serve best,

and design appropriate products service programs to serve these markets (Parment *et al.*, 2011). It includes the coordination of four elements "4P's" of marketing identification selection and development of the products, determination in its price, selection of a distribution channel to reach the customers' place, and implementation of a promotional strategy (Goi, 2009). Place distributions ensure the utmost availability and visibility of the right products to their right target markets through the right distribution channel at the right place right quantity, right time, right condition, and right cost (Lao, 1998).

In response to that agricultural market of Manukan, Zamboanga del Norte, Philippines was still affected by the uncontrollable disease, due strictly implementation of health protocols, movement of goods was affected. Hence, Fig. 1 was formulated to show the schema of the study to determine the impact of the Covid-19 pandemic on the status of agricultural goods as affected by the farmers' marketing practices in the said town. It explains that in this time of the pandemic, the marketing practices of the farmers can be attributed to their profile and problems encountered that are normally affecting the marketing status of their agricultural products. This is also responded to by the local government unit and their perceptions on how to improve their strategies and income in dealing with their products in the market.



**Fig. 1.** Schema of the Study.

#### *Statement of the Problem*

The study was conducted to determine the status of agricultural goods as affected by the farmers' marketing practices and perception in the Municipality of Manukan. Specifically, the study aimed to answer the following questions:

1. What are the respondents' profiles?

2. What are the marketing practices of the farmers considering the 4Ps (products, price, promotion, place) during the Covid 19 pandemic?
  - a. Factors considered during covid 19 as product promotions and marketing.
  - b. Marketing practices in terms of porter's five competitive forces.
3. What are the problems encountered by the farmers during the Covid-19 pandemic?
4. What are the intervention measures from the LGU?
5. What is the general perception of the respondents on agricultural goods as to marketability, profitability?

## Materials and methods

### Research Design

The study used a descriptive type of research using well-structured questionnaires made by the researchers. This research determined the current marketing practices of the farmers in Manukan, Zamboanga del Norte, Philippines that affected the marketing status of agricultural goods. The researchers-made questionnaire was based on the statement of the problem.

### Research Setting

The study was conducted in the identified barangays' BFTs establishments of the Municipality of Manukan, Zamboanga del Norte, Philippines.



**Fig. 2.** Map of Zamboanga del Norte showing the Municipality of Manukan in red

### Respondents of the Study

The respondents of the study were identified first through a pre-survey conducted before the final conduct of the research. The selection of respondents was 20% of the number of farmers-vendors who were randomly interviewed from the BFTs.

### Research Instrument

The primary data of the said study was collected using a researchers-made's well-structured questionnaire. This was backed up with the activities to evaluate personal observations. The first part of the questionnaire was the profile of the respondents. The second part was the marketing practices of the farmers during the Covid-19 pandemic, associated with the factors considered during Covid-19 as product promotions and marketing, and the marketing practices in terms of porter's five competitive forces. The third part was the problems encountered. The fourth part was the government interventions. The last part was the general perception of the respondents on agricultural goods as to marketability and/or profitability.

### Validation of Research Instrument

The validity of the research instrument was employed to improve the questionnaire. This was done through proper consultations with the experts and professors. Feedback, opinions, and suggestions were used for the finalization of the survey questionnaire.

### Statistical Treatment

Simple frequency distribution analysis was employed upon analyzing the problem. Rating scales were used to identify the level of the responses.

## Results and discussion

### Respondents' Profiles

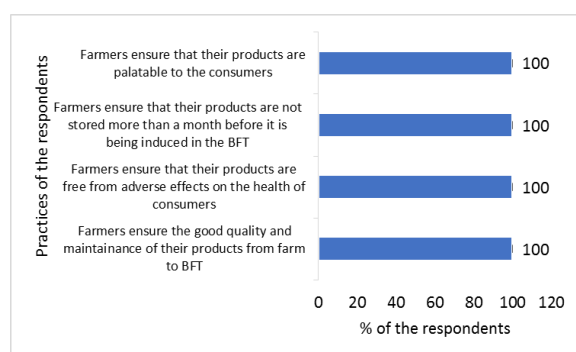
The respondents are 70% female adults and 30% are male adults. 45% of the respondents are college degree holders who chose to be a farmer, and 55% consist of elementary, high school, and undergraduate in college levels. They are almost more than 20 years of living selling agricultural goods. Most of the products they are selling in the BFT are perishables like vegetables and fruits.

The majority of them are Roman Catholic in religion with 3 to 7 members in the family that are spending an average of PHP 4,000.00 expenses per month.

### Marketing Practices of the Farmers During Covid-19 Pandemic

#### Product

Marketing practices of farmers in terms of products are shown in Fig. 3. The result reveals that farmers 100% ensure the palatability, storability limit, health benefits, and quality of their agricultural products since most of the products are perishables which intensive care is needed. This could be attributed to the knowledge they applied in the marketing aspects. As adults and educated, as they are, they meticulously care for products until it is eaten by the consumers. It means that despite the pandemic, our farmers-vendors are still taking care of the health of the consumers even though there are also a lot of difficulties on their sides. This is the reason why the Municipality of Manukan is known for the good quality of agricultural goods. For the farmers, maintaining the quality of their products is also maintaining their relationships with their loyal customers (29%) and resellers (71%). The preservation and maintenance of products cannot be denied despite the pandemic. This is very important to practice nowadays to even combat and mitigate the tremendous rampant of the Covid-19 pandemic (Yin *et al.*, 2021).

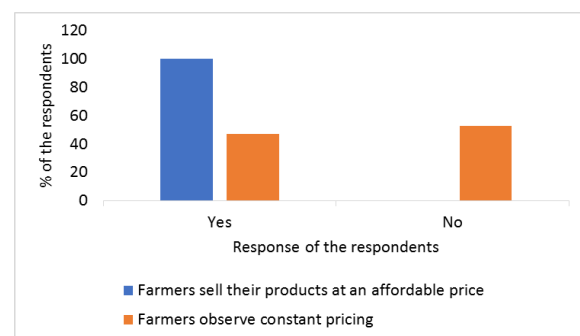


**Fig. 3.** Marketing practices of farmers in terms of products.

#### Price

Marketing practices of farmers in terms of dealing with the price of their products are shown in Fig. 4. The result indicates that all farmers-vendors are selling their products at an affordable price (100%).

However, 53% of them are sometimes changing their prices depending on situations and many reasons but still affordable. On the other hand, 47% are constant in pricing (Fig. 4). Why affordable? Because our farmers-vendors also consider the financial availability of the consumers nowadays. They understand that everyone is affected by the Covid-19 pandemic. The important is that no one is aggravated in terms of the selling-buying situation. This might be due to the case of farmers who cannot find or access other market outlets where they can demand a high price since lockdown is regularly implemented (World Bank 2020; Mead *et al.*, 2021). Besides, their products are mostly perishables. There is a tendency that these products cannot be bought as soon as possible if the price is high. It is hard for them also to both store for a long period or gathers it back to their home.



**Fig. 4.** Marketing practices of farmers in terms of dealing with the price.

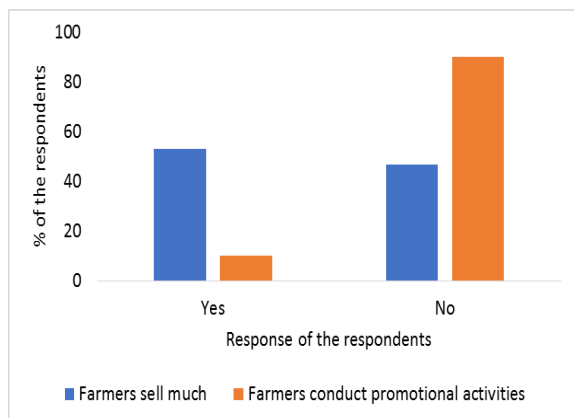
#### Promotion

The marketing practice of farmers in terms of selling products in response to the demands is shown in Fig. 5. The result shows that there are 53% of the respondents said that the demand is increasing. This might be due to the need of eating vegetables and fruits especially nowadays during the pandemic. This conforms to the study of Leone *et al.*, (2021) that the interest in eating healthy foods like vegetables and fruits is increasing nowadays during the Covid-19 pandemic. This observation motivates 53% of the respondents (who believe that the demand is increasing) to supply more agricultural goods in the BFT while 47% (do not believe that the demand is increasing) are just supplying in accordance to the availability of their products, needs of the consumers in their locality, and the availability of buyers to go to

BFT since they also consider the restrictions especially for those places where the Covid cases and enhance community quarantine (ECQ) are increasing and observed, respectively (Fig. 5).

Furthermore, there is 10% of the respondents conduct promotional activities. Different styles were observed from them, such as posting their products on social media, sales talking with customers through both personally with social distancing and texting, chatting, and phone calls.

They also offer free delivery to nearby places. This could be attributed to their knowledge and experience on how to promote their products since most of them had high educational attainment and almost 20 years in farming and selling. This activity is supported by the perception of Castronovo and Huang (2021) that promoting your products on social media can help increase your customers.



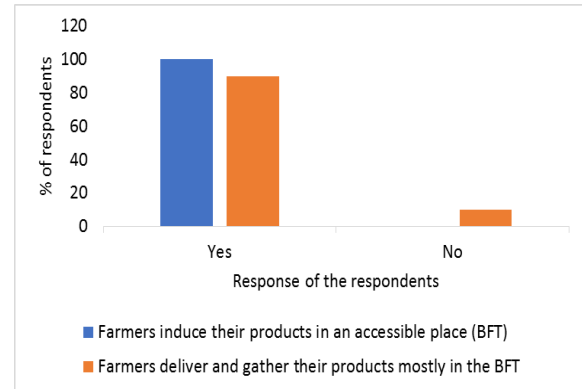
**Fig. 5.** The marketing practice of farmers in terms of selling products in response to the demands.

*Place*

Marketing practices of farmers in terms of choosing a place where they can sell are indicated in Fig. 6. It was found that all respondents chose to induce their products in an accessible place which is the BFT because it is just placed along the streets (100%). This contributed to the farmers-vendors to 90% chose the BFT to be their venue for marketing their products in this time of pandemic (Fig. 6).

BFT is a good venue for marketing products, especially for the farmers. They can have more

linkages with the resellers and loyal customers. Consumers always think that the BFT is the venue of fresh and good-quality products (davao.da.gov.ph). This resulted in the experience of all respondents that the BFT helps their profitability even in this time of the pandemic because local consumers preferred to buy there than other outlets.



**Fig. 6.** Marketing practices of farmers in terms of choosing a place where they can sell.

*Factors Considered During Covid-19 Pandemic, as Product Promotions and Marketing*

Table 1 shows the factors identified in terms of marketing that may help boost or maintain the current market. It was categorized into 4 as based on the 4Ps of marketing.

Results showed that 88% of the respondents rated their products, prices, promotion, and place “very effective” to the customers with all the factors mentioned in Table 1.

The rest 12% of the respondents declared “effective”. This could be attributed to their years of existence in selling agricultural goods that made them aware of the best thing to do in the factors affecting the marketing status.

The long years in entrepreneurial activities the higher is the chance to develop skills contributing to the enhancement of product promotion and marketing (Ucbasaran *et al.*, 2003).

Also, in terms of sex, the respondents are mostly females as Ritson (2013) reported that women are more skilled in marketing or entrepreneurial activities than men.

**Table 1.** Factors considered during the Covid-19 pandemic, as product promotions and marketing.

	5	4	3	2	1
1.	%				
<b>Product</b>					
2. Product quality					
3. Promoting consumers' health					
4. Product shelf life					
5. Palatability					
<b>Price</b>					
1. Product affordability					
2. Just pricing	88	12	0	0	0
3. Price movement					
<b>Promotion</b>					
1. Method of marketing					
2. Power of promotion to increase demand					
3. Marketing cost					
<b>Place</b>					
1. Product availability					
2. Product accessibility					

Rating Scale:

Continuum	Interpretation
4.21 – 5.00	Very Effective
3.41 – 4.20	Effective
2.61 – 3.40	Fairly Effective
1.81 – 2.60	Not so Effective
1 – 1.80	Not Effective

*Porter's Five Competitive Forces*

Table 2 contains the responses of farmers to the questions based on Porter's five competitive forces. Among the respondents, there is 65% declared that the demand for agricultural goods nowadays during the Covid-19 pandemic is high, while the other 35% noticed low. This result is supported by the analysis of Becdach *et al.*, 2020 and Islam *et al.*, 2021 that the demand for products especially those healthy goods during the global pandemic is still high due to panic buying. However, according to some of them, some of the customers or buyers are not permitted to go to the BFT due to the strict implementation of ECQ in their respective barangays.

Their regular customers are all adults with 29% local consumers and 71% resellers that composed of 30% males and 70% females. 82% of the respondents said that they are just a few sellers in the BFT, and 18% noticed that they are many. This might be due to the irregular chances of sellers being in the BFT since sometimes their LGU or even the barangay officials do not permit once ECQ is being observed.

This conforms to the findings of Kalogiannidis and Melfou (2020) that anywhere in the world lockdown or ECQ is one of the hinders in changing the chances of sellers in the markets.

Regardless of the percentage of sellers, all respondents said that they continuously supply their product to the BFT with 50% much sufficient and 50% moderate sufficient. 82% of the respondents said that many of their neighbors or co-vendors are their competitors and some of them said that it is just a few of them. But then, the costumers of one are the costumers of all.

**Table 2.** Farmers' responses based on Porter's five competitive forces.

Porter's Five Competitive Forces	Percentage
1. In terms of demand for agricultural products	
a. The demand for agricultural goods is	
High	65
Low	35
Moderate	0
2. In terms of customers (sellers)	
a. Usual buyers in terms of age	0
Teens	0
Adult	100
Senior Citizen	0
b. Type of buyers in terms of:	
From another town	0
Local consumer	29
Reseller	71
c. In terms of gender	
Male	30
Female	70
3. In terms of competitor	
a. How many sellers are similar to you?	
Many	18
Few	82
b. Is there a continuous supply of your product in the BFT?	
Yes	100
No	0
If yes, how sufficient?	0
Much sufficient	50
Moderate sufficient	50
Insufficient	0
4. In terms of competitions	
a. Who are your competitors?	
Association	0
Neighbors	100
none	0
b. How many competitors?	
Many	18
Few	82
None	0
c. Do your customers are theirs too?	
Yes	100
No	0

*Levels of Problems Encountered*

Potential levels of problems encountered by the farmers-vendors were identified among the 4Ps of marketing (Table 3). Researchers found that most of the respondents (59%) said that they do not experience a serious problem, however, the rest (12% and 29%) admitted that they experience fairly serious to very serious problems when it comes to products. This might be due to the most likely perishable kinds of products they are selling which is hard to handle when it comes to transportation and storing when it is not sold immediately that made some encountered problems. In the time of the pandemic, it is expected that some of the sellers could encounter difficulties and problems in marketing (Czerny *et al.*, 2021). Fortunately, respondents do not experience serious problems in price, promotion, and place. This contributed to the desirable situations and flows of their marketing events in the BFT.

**Table 3.** Levels of problems encountered by the respondents.

4Ps in Marketing	5	4	3	2	1
	%				
Product (Product quality, Product shelf life, Palatable taste)	29	0	12	0	59
Price (Affordability, Just pricing, Price movement)	0	0	0	0	100
Promotion (Method of marketing, Power of promotion to increase demand, Promoting consumers' health)	0	0	0	0	100
Place 1. Product availability 2. Product accessibility	0	0	0	0	100

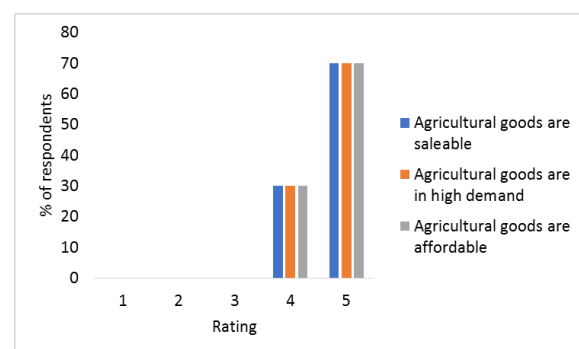
Rating Scale:

Continuum	Interpretation
4.21 – 5.00	Very serious
3.41 – 4.20	serious
2.61 – 3.40	Fairly serious
1.81 – 2.60	Not so serious
1 – 1.80	Not serious

*General Perception of the Respondents on Agricultural Goods*

The general perception of respondents on agricultural goods is presented in fig. 7. 70% of the respondents perceived that the agricultural goods are saleable,

high demand, and affordable during the pandemic. The saleability of their agricultural goods is due to the good and proper settlement of the selling-buying relationships between them and the customers where no one is goaded. The high demand is due to their observations that customers need healthy foods from agricultural goods especially during the pandemic. The affordability can be attributed to the practice of the right pricing especially the time of pandemics when everyone needs consideration from each other when it comes to financial matters.



**Fig. 7.** The general perception of respondents on agricultural goods.

Continuum	Interpretation
4.21 – 5.00	Very Profitable
3.41 – 4.20	Profitable
2.61 – 3.40	Fairly Profitable
1.81 – 2.60	Not so Marketable
1 – 1.80	No demand

*Government Intervention*

The LGU of the Municipality of Manukan maintains the cleanliness and proper implementation of market flow in the BFT so that farmers will continually gain income from their produces. Some employees of the LGU check and assist the needs of the farmers such as the proper place in the portion of the BFT where they can display their products. The LGU always monitors the safety and orderliness of the farmers-vendors and consumers. They aim to help farmers have livelihoods and also the consumers access healthy foods in their locality even despite the pandemic. All of these contributed to the continuous peaceful marketing status of agricultural goods in the BFTs and motivates farmers to further enhance their marketing practices.



The Office of the Department of Agriculture also supports the farmers by registering them in the Registry System on Basic Sector for Agriculture (RSBSA). They also build a Farmers Association in which farmers can be grouped and gathered easily to be benefited from their projects that could boost the flow of the agricultural products from farm to market. Bollido (2020) also reported that the LGU of San Jorge, Samar, Philippines also supported the farmers (who were the most affected by the Covid-19 pandemic in terms of the depletion of economic security in their locality) in the form of financial assistance and assessment of their needs. This initiative could even combat the fears and concerns among people especially the farmers.

### Conclusion

The farmers in the Municipality of Manukan, Zamboanga del Norte, Philippines properly practice marketing of their agricultural products. Their profile made them knowledgeable on how to deal and manage accordingly. Farmers are selling good quality and healthy agricultural goods. To maintain the palatable taste, they make sure that the storage period of their products must not be exceeded by more than a month. The farmers' agricultural goods are affordable to the consumers as well as accessible in the BFT where the farmers induce their products in this place. Some of the farmers conduct promotional activities online, chats, and text messages because most of them declare that the agricultural products nowadays during the pandemic are high in demand.

The application of the 4Ps concept in marketing is very effective according to 88% of the farmers-respondents. This is the reason why they reach an optimum number of buyers or loyal customers. Thus, they continuously supply agricultural products in the respective BFTs of their locality. They have no bigger competitors but only their neighboring farmers-vendors where the customers of one are just customers of all as well.

The majority of the farmers do not encounter problems in any aspect of the marketing since the LGU of Manukan, Zamboanga del Norte, Philippines

is maintaining the orderliness of the BFT with the involvement of the farmers' participation and cooperation. Besides, the Department of Agriculture of the said locality has initiated also to help farmers receive benefits from their projects.

All of these contributed to the perception of the farmers to the status of their agricultural goods to be marketable and profitable. To maintain this good status of agricultural goods, continuous support and give priority for the farmers must also be maintained first.

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