

YANGON UNIVERSITY OF ECONOMICS
DEPARTMENT OF MANAGEMENT STUDIES
MBA PROGRAMME

**FACTORS AFFECTING MARKETING CHANNEL
CHOICES AND THE REVENUE OF MAIZE FARMERS IN
NYAUNG SHWE TOWNSHIP**

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EMBA II-26

EMBA 19th BATCH

JUNE, 2024

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ACADEMIC YEAR (2022-2024)

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“This thesis is submitted to the Board of Examiners in partial fulfillment of the requirements for the degree of Master of Business Administration (MBA)”

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ACCEPTANCE

This is to certify that the thesis entitled “**Factors Affecting The Marketing Channel Choices and The Revenue of Maize Farmers in Nyaung Shwe Township**” has been accepted by the Examination Board for awarding of Master of Business Administration (MBA) degree.

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ABSTRACT

This study aims to analyze the effect of transaction specific factors and relationship dynamics factors on marketing channel choices and to analyze the effect of marketing channel choices on revenue of maize farmers in Nyaung Shwe Township. By using Raosoft sample size calculator, the sample size is determined to be 83. 83 respondents among 200 farmers, are selected through a simple random sampling method. Primary data is collected by conducting personal interview using structured questionnaires with 5 point Likert scale. Secondary data are collected from USDA reports, IFPRI websites, Myanmar Corn Trader Association Reports, Myanmar Corn Industrial Association Reports, local microfinance companies and fertilizer companies, previous papers and relevant text books. The analysis is conducted with descriptive statistics and regression analysis. According to the findings from the analysis, price, payment and trust have positive and significant effect on direct marketing channel choice of maize farmers. Transportation, channels offer, personal relationship and bargaining power have positive significant effect on indirect marketing channel choices. To improve the marketing channel choices of maize farmers in Nyaung Shwe Township, timely and accurate manner of pricing and payment system are important. To enhance maize farmers' revenue in Nyaung Shwe Township, farmers should focus on strengthening their direct marketing channels by building and maintaining trustworthy relationships with trading partners such as animal feed factories and poultry farms.

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LIST OF ABBREVIATIONS

- CP - Charoen Pokphand
- IFPRI - International Food Policy Research Institute
- USDA - United States Department of Agriculture

CHAPTER 1

INTRODUCTION

Marketing channel choices play an important role in the success and sustainability of businesses across all industries. A marketing channel, also known as a distribution channel, refers to the pathway through which products or services move from the producer to the end consumer (Barrett, 2008). Marketing channels also defined as distribution channels, are sets of interdependent organizations involved in the process of making a product or service available for use or consumption by consumers or industrial users (Kotler & Keller, 2016). Marketing channels consist of both direct and indirect method of selling products. A direct marketing channel is a distribution channel in which producers sell directly to consumers without intermediaries. An indirect marketing channel is a distribution channel in which goods and services move from the producer to intermediaries and then to consumers (Armstrong & Kotler, 2017).

Whether it's a multinational corporation or a small-scale farmer, the selection of an appropriate marketing channel is crucial for achieving business objectives and increasing revenue. The marketing of agricultural commodities, including maize, remains a critical strategy for increasing farmers' income and alleviating rural poverty in developing countries.

Adu (2018) emphasized that both transaction-specific factors and relationship-dynmaic factors have influenced on the marketing channel choices of farmers. A crucial aspect of farmers' decision-making in selecting marketing channels is the consideration of transaction-specific factors. Transaction-specific factors refer to attributes of a particular exchange situation that affect the preferences of the firms involved for one channel over another (Rosenbloom, 2013). These factors include price, payment, transportation, and channel offer specific to the transaction(Coughlan et al., 2006).

Price is defined as the amount of money charged for a product or service, or the sum of the values that consumers exchange for the benefits of having or using the product or service (Kotler & Armstrong, 2016). Payment refers to the transfer of value (usually money) from one party (the buyer) to another (the seller) as a settlement for products or services rendered (Shapiro, 2019). Transportation is defined as the movement of goods

from one location to another (Bowersox et al., 2013). A channel offer is the combination of products, services, information, or experiences offered to a target market through a particular marketing channel (Bowersox et al., 2013).

In addition to the practical considerations of marketing channels, farmers' decisions are also significantly influenced by relationship-dynamic factors. Relationship dynamics factors are defined as the interpersonal interactions, communication patterns, and relational processes that occur between parties in a business relationship (Morgan & Hunt, 1994). These factors include trust, personal relationships and bargaining power among stakeholders which play crucial roles in shaping farmers' choices (Ouma et al., 2010).

Trust is defined as the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (Morgan & Hunt, 1994). A personal relationship refers to a close association between individuals characterized by mutual affection, trust, intimacy, and emotional support (Dindia & Canary, 2006). Bargaining power refers to the ability of one party in a negotiation to exert influence or control over the terms, outcomes, or decisions of the negotiation process (Lewicki et al., 2010). Therefore, transaction-specific factors and relationship-dynamic factors play vital roles in shaping the marketing channel choices of farmers, particularly in agricultural contexts.

Revenue of farmer refers to the total income generated from the sale of agricultural products produced on the farm. It represents the money received by the farmer from selling crops, livestock, or other agricultural goods (Gardner et al., 2008). Revenue is a crucial financial metric for farmers as it directly affects profitability and sustainability.

Maize cultivation in Nyaung Shwe Township helps diversify agricultural production, reducing dependence on a single crop and enhancing resilience to market fluctuations and environmental challenges. Understanding the effects of transaction-specific and relationship-dynamic factors on marketing channel choices and revenue of maize farmers in Nyaung Shwe Township is essential for optimizing profitability and sustainability. This study investigates how the transaction specific factors and relationship dynamic factors affect on the marketing channel choices and the revenue of maize

farmers in Nyaung Shwe Township, Myanmar.

1.1 Rationale of the Study

Maize farming constitutes a significant part of the agricultural landscape in Nyaung Shwe Township, with farmers relying heavily on the revenue generated from maize cultivation for their livelihoods. However, the efficiency and effectiveness of marketing channels utilized by maize farmers can significantly affect their ability to maximize revenue and ensure economic sustainability. Therefore, understanding the factors influencing marketing channel choices and their implications for revenue generation is essential for enhancing the welfare of maize farmers in the region.

Several key factors influence the selection of marketing channels by maize farmers, including transaction-specific factors and relationship dynamics factors. Transaction-specific factors such as price, payment terms, transportation, and channel offers play an important role in shaping farmers' preferences for specific marketing channels. Price plays a central role in farmers' decisions, as it directly affects their revenue and profitability. Payment terms also influence farmers' channel choices, as delayed payments or unreliable payment systems can pose financial risks and uncertainties. Transportation considerations are another critical factor. High transportation costs or challenges in accessing transportation options can deter farmers from choosing certain channels. Channel offer is a crucial factor for maize farmers as it determines their access to markets, pricing, distribution networks, and support services.

Additionally, relationship dynamics factors such as trust, personal relationships, and bargaining power influence the interactions between farmers and other actors within the marketing channels. Trust plays a crucial role as farmers seek reliable and credible partners within the marketing channel, particularly buyers or intermediaries who demonstrate honesty, integrity, and consistency in their dealings. Personal relationships also hold considerable sway, as farmers often prefer to engage with individuals or entities with whom they have established rapport and mutual understanding. Additionally, bargaining power is a critical factor, as it determines the farmers' ability to negotiate fair prices, terms, and conditions with buyers or intermediaries. Farmers with stronger bargaining power may have greater leverage in shaping the terms of their engagement within the channel, thereby influencing their choice of marketing partners and strategies.

Maize farmers in Nyaung Shwe Township employ various marketing channel choices to sell their produce, each with its own advantages and disadvantages. Direct marketing channels, such as local markets and feed mills, enable maize farmers to sell directly to customer, allowing for higher profit margins, increased control over pricing, and the opportunity to build direct relationships with customers. However, direct channels require additional effort in terms of marketing, distribution, and customer service.

In contrast, indirect marketing channels involve selling maize through intermediaries which provide access to larger markets, distribution networks, and potentially higher sales volumes. However, maize farmers in Nyaung Shwe Township receive lower prices due to intermediary margins and have less control over pricing and market access.

Understanding these marketing channel choices is crucial for maize farmers in Nyaung Shwe Township as it directly affect their revenue and profitability. By carefully evaluating the advantages and disadvantages of each channel, maize farmers can make informed decisions to optimize their marketing strategies, maximize their revenue, and enhance their overall economic well-being.

Revenue is vital for maize farmers in Nyaung Shwe Township as it sustains their livelihoods, covering production costs and supporting their families' basic needs. Stable revenue streams mitigate financial risks and contribute to the resilience of both farmers and the agricultural sector.

This study explores the factors such as transaction-specific factors and relationship dynamic factors affecting the marketing channel choices of maize farmers in Nyaung Shwe Township and their revenue.

1.2 Objectives of the Study

The main objectives of the study are as follows:

- (a) To analyze the effect of transaction specific factors and relationship dynamics factors on marketing channel choices of maize farmers in Nyaung Shwe Township.
- (b) To analyze the effect of marketing channel choices on revenue of maize farmers in Nyaung Shwe Township.

1.3 Scope and Method of the Study

This study focuses only on effect of transaction specific factors and relationship dynamics factors on marketing channel choices and revenue of maize farmers in Nyaung Shwe Township (Soe et al., 2015). The maize farmers who owned minimum 10 acres land as population are 200 in Nyaung Shwe Township. Using Raosoft sample size calculator, the sample size is determined to be 83 farmers among 200 farmers. Respondents are selected through a simple random sampling method from the total population. Primary data is collected by conducting personal interview method using structured questionnaires with 5 point Likert scale. Secondary data are collected from USDA reports, IFPRI Websites, Myanmar Corn Trader Association Reports, Myanmar Corn Industrial Association Reports, local microfinance companies and fertilizer companies, previous papers and relevant text books. The analysis of the collected data to draw meaningful conclusions is conducted with descriptive statistics and linear regression analysis.

1.4 Organization of the Study

This thesis consists of five chapters. The chapter (one) is introduction chapter including the rationale of the study, objectives of the study, scope and method of the study and organization of the study. Chapter (two) is literature review explaining the concept and theories, previous studies and conceptual framework of this study. Chapter (three) is background history of maize farming and marketing channels used by maize farmers in Nyaung Shwe Township. Chapter (four) is analysis on the effect of transaction specific factors and relationship dynamics factors on marketing channel choices and revenue of maize farmers in Nyaung Shwe township. Chapter (five) is conclusion chapter stating the general findings and discussions, suggestions and needs for further research.

CHAPTER 2

LITERATURE REVIEW

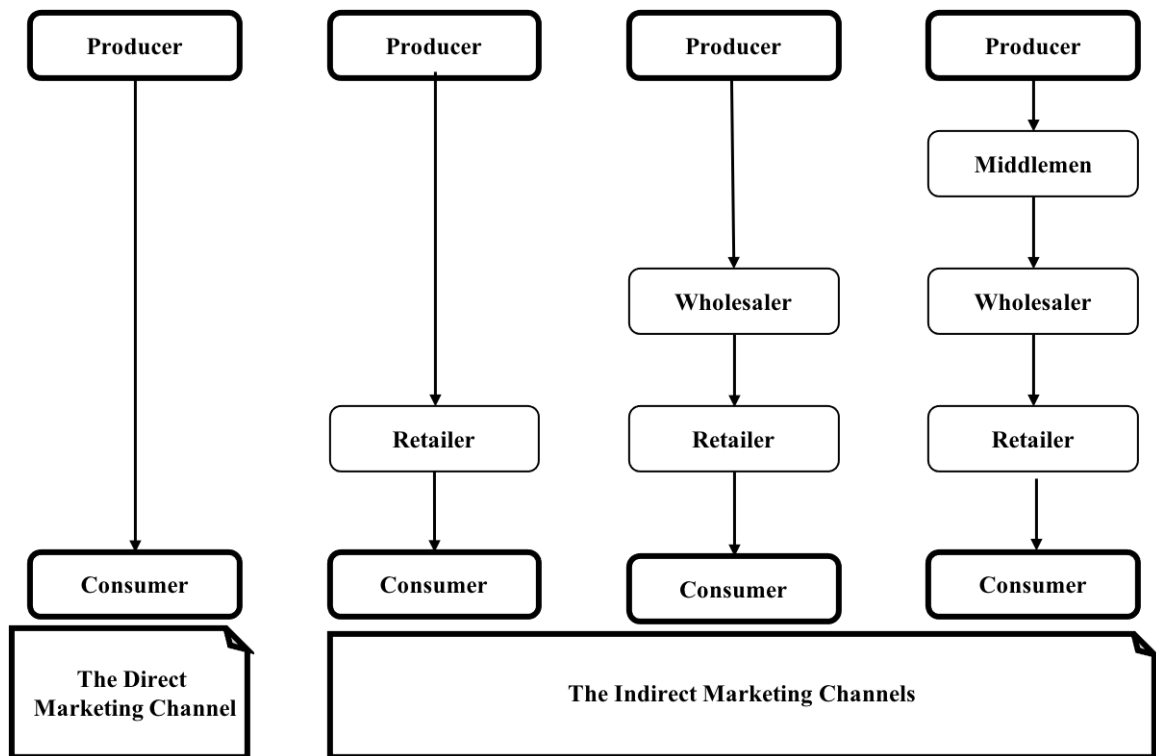
In this chapter, it highlights the theoretical background on four keys terms of transaction specific factors, relationship dynamics factors, marketing channel choices and revenue of farmers which are important factors in the maize farming industry. Previous studies and conceptual framework of this study are also described in this chapter.

2.1 Marketing Channels

A marketing or distribution channel is an organization or agency that performs activities to link producers with consumers, thereby making products or services available in the market (Baines et al., 2017). Jobber and Chadwick (2012) defined marketing channel as the organization of products moving from producer to customer. Arinloye et al. (2012) further explained by describing the marketing channel as the downstream segment of the value chain, consisting of various chain actors across different outlets, ultimately making final products accessible to end consumers.

In the context of the agri-food sector, the marketing channel refers to the diverse pathways through which food products are brought to the end users (Rhodes, 2007). Within the published literature on marketing channels, distribution channels are commonly categorized as either direct or indirect (Armstrong et al., 2015).

Figure (2.1) Types of Marketing channels



Source: Armstrong et al. (2015)

In the selection of marketing channels, suppliers face the dilemma of choosing between selling through indirect channels at a relatively lower price in larger volumes, or selling directly to consumers at a higher price but risking unsold products (Seemanon et al., 2015).

(a) Direct Marketing Channel

A direct marketing channel allows a business to sell its products directly to consumers or end-users without intermediary levels. As advantage, direct marketing channels offer farmers greater control over branding, pricing strategies, and customer experiences, empowering them to differentiate their products in competitive markets. Additionally, direct marketing channels enable producers to gather valuable feedback and insights directly from consumers, facilitating product improvements and customization (Kotler et al., 2017).

However, direct marketing channel requires significant capital and resources to provide products directly to buyers or consumers (Baines et al., 2017). Establishing a

direct marketing channel often involves investing in marketing and promotional efforts to reach and attract target customers, increasing overall operational costs (Roberts & Zahay, 2013). Moreover, maintaining direct relationships with customers also entails greater responsibility for customer service, order fulfillment, and after-sales support, which can be resource-intensive. Therefore, understanding the complexities and trade-offs associated with direct marketing channels is crucial for farmers seeking to optimize their marketing strategies and maximize revenue generation (Baines et al., 2017).

(b) Indirect Marketing Channel

Producers may lack the capacity to add substantial value to their products, which limits their ability to trade directly with the final users (Seemanon et al., 2015). According to Armstrong et al. (2015) indirect marketing channel involve multiple intermediaries and the flow of products differed from producer to retailer to consumer, producer to wholesaler to retailer to consumer and producer to middlemen to wholesaler to retailer to consumer. Indirect marketing channels offer farmers access to larger markets, distribution networks, and potentially higher sales volumes (Seemanon et al., 2015).

However, farmers may have less control over pricing and complexity within the marketing channel can result in reduced marketing margins for producers, as the presence of numerous intermediaries means that the marketing margins are shared among them (Brennan, 2015). Furthermore, the complexity of indirect marketing channels can lead to longer lead times and increased transaction costs for farmers, affecting their overall efficiency and profitability (Armstrong et al., 2015). Therefore, understanding the trade-offs and opportunities associated with different marketing channels is essential for farmers to optimize their revenue streams and sustainably manage their operations.

2.2 Factors Affecting Marketing Channel Choices

Farmers face a multitude of considerations when selecting marketing channels for their produce. Transaction-specific factors such as pricing, payment methods, transportation logistics, and the offers provided through different distribution channels weigh heavily in their decisions. Additionally, relationship dynamic factors, including trust, personal relationships, and bargaining power with intermediaries, significantly

influence channel selection (Adu, 2018).

2.2.1 Transaction Specific Factors

Transaction-specific factors refer to operational elements directly related to individual transactions between maize farmers and buyers. These factors include the pricing scheme, payment term, transportation and channel offer (Williamson, 1985). These factors are pivotal in determining whether farmers decide to sell their products directly to consumers, through intermediaries, or to processors. Transaction-specific factors play a crucial role in farmers' decisions regarding their choice of marketing channels for agricultural products. These factors shape farmers' choices and influence their overall profitability and success in the market (Gong et al., 2007).

Understanding transaction-specific factors including price, payment, transportation and channel offer is essential for farmers as they navigate market complexities to optimize profits and minimize transaction costs (Gong et al., 2007). In the context of smallholder farmers in developing countries, transaction costs are considered significant barriers to market participation (Jagwe et al., 2010). High transaction costs impose additional burdens on farmers, affecting their decisions regarding market engagement and choice of marketing channels.

(a) Price

Price is defined as the monetary value assigned to a product or service, which consumers are willing to pay in exchange for obtaining the desired item. In the context of agricultural marketing, price represents the amount received by farmers for their maize produce, which is influenced by market demand, supply conditions, production costs, and pricing strategies employed by buyers (Baker et al., 2020). One of the key transaction specific factors that significantly influence smallholder farmers' marketing channel choices is the price factor. Prices play a pivotal role in farmers' decisions on when, where, and how to sell their agricultural products. The price factor encompasses several aspects related to the pricing of products in the market, including market prices, price negotiation, price fluctuations, and price information availability.

Market prices directly affect farmers' decisions on which marketing channel to

choose. Farmers often face with market price uncertainty, which significantly affects their profitability. Transaction-specific factors related to price certainty include the stability and predictability of prices offered by various marketing channels. Channels that provide farmers with price guarantees or stable pricing structures are favored, as they mitigate the risk associated with market fluctuations (Nkhori, 2004).

(b) Payment

Payment is defined as the transfer of funds from buyers to sellers in exchange for goods or services rendered (Petersen & Rajan, 2002). The payment factor is another critical element within transaction-specific factors that significantly influences farmers' choice of marketing channels (Barkley & Barkley, 2016). Several studies have highlighted the importance of payment terms in farmers' decision-making processes. Within agricultural marketing channels, payment terms comprise the methods, timing, and conditions under which payments are made, including cash transactions, credit arrangements, trade credit, letter of credit, or electronic payment systems (Kotler et al., 2022).

Barkley and Barkley (2016) emphasized that the payment terms offered by different marketing channels can significantly affect farmers' choices. Farmers are more inclined to select channels that offer prompt and fair payments for their produce. Channels offering faster payment enable farmers to reinvest in their operations, meet immediate financial needs, and improve cash flow. Conversely, channels that delay payments or offer lower prices may deter farmers from participating.

(c) Transportation

Transportation means the physical movement of goods from their point of origin to their destination, encompassing various modes of transportation such as road, rail, air, water, and pipeline (Coyle et al., 2020). Transportation costs significantly affect farmers' profitability, particularly those in rural areas with limited market access. Transaction-specific factors related to transportation costs include distance to markets, availability of transportation infrastructure, and associated expenses. Channels with lower transportation costs or easier access to transportation facilities are preferred, as they allow farmers to

maximize revenue by reducing overhead costs (Machethe, 2004).

Barrett (2008) emphasized that transportation costs pose a significant barrier for farmers, particularly those in remote rural areas, as geographical isolation due to distance creates a gap between farm gate prices and market prices. Additionally, Maina (2016) discovered a negative and significant relationship between transportation costs and farmers' choice of marketing channels. They explained that higher transportation costs resulted in reduced profit margins for farmers, leading them to avoid channels that would incur high transport costs.

(d) Channel Offer

Channel offer is defined as the bundle of products, services, and benefits provided to maize farmers by various distribution channels available to them (Rosenbloom, 2004). The channel offer factor, within transaction-specific factors, plays a vital role in farmers' decisions regarding their choice of marketing channels (Ouma et al., 2010). Farmers consider various aspects of what each channel offers in terms of services, benefits, and support. Transaction-specific factors related to channel offerings include the value-added services provided by each channel (Nkhori, 2004).

Ouma et al. (2010) also highlighted the importance of channel offers in farmers' decisions. They found that farmers were more likely to choose channels that provided marketing support, such as assistance with packaging, grading, and market linkage. Channels that offered better prices and market information were preferred by farmers as they provided a competitive edge and increased profitability. Furthermore, Barkley and Barkley (2016) found that farmers were influenced by the quality of services offered by different marketing channels, such as access to credit, input supply, and extension services. Channels that provided comprehensive support and assistance were more appealing to farmers.

2.2.2 Relationship Dynamics Factors

Relationship-dynamic factor means interpersonal interactions and trust-based relationships between maize farmers and stakeholders within marketing channels. These factors include communication effectiveness, conflict resolution mechanisms, mutual

respect, shared goals, and willingness to invest in long-term partnerships (Anderson & Narus, 1990). Relationship dynamics factors in agricultural marketing comprise the trust, personal relationship and bargaining power that influence farmers' decisions in selecting their marketing channels. These factors are essential for understanding how farmers engage with buyers, intermediaries, and other actors within the agricultural value chain (Morgan & Hunt, 1994). Wong and Sohal (2002) found that the dynamic of a relationship with the channel, in terms of trust, personal relationships and power in negotiations, is likely to be significant.

(a) Trust

Trust, in the context of marketing channels, can be defined as the expectation that one party will act with integrity, reliability, and goodwill towards another party, even in situations involving uncertainty or vulnerability (Doney & Cannon, 1997). Trust is built and maintained through consistent behavior, transparency, fairness, empathy, and responsiveness in interactions between buyers and sellers, contributing to the development of strong, enduring relationships and the achievement of mutual objectives (Ganesan, 1994). Trust is fundamental in agricultural marketing relationships as it reduces uncertainty and perceived risk, leading to more stable and efficient exchanges (Lewicki & Bunker, 1996). Farmers are more likely to choose marketing channels where they have established trust with buyers, intermediaries, or cooperatives. When farmers trust the reliability and honesty of a channel partner, they are more inclined to engage in transactions and share sensitive information (Jensen & Meckling, 1976).

(b) Personal Relationship

Personal relationships refer to the familiarity and connection that farmers have with the buyers, which can lead to trust and smoother transactions (Arinloye et al., 2015). In marketing channels, personal relationships mean the development of connection between channel members who interact frequently, communicate openly, and collaborate closely to achieve common goals (Palmatier et al., 2006). Personal relationship with buyers can enhance farmers' willingness to choose specific channels for their agricultural products.

Tsourgiannis et al. (2008) highlighted the importance of personal relationships between farmers and buyers in influencing farmers' choice of marketing channels. Furthermore, the length of these relationships, indicating how long farmers have known the buyer, is also a significant factor (Escobal & Caverro, 2012). Longer relationships may imply greater trust, reliability, and understanding between the parties involved in the transaction.

(c) Bargaining Power

Bargaining power is defined as the relative ability of a party in a negotiation or exchange relationship to influence the terms, outcomes, or behavior of the other party (Lax & Sebenius, 1986). Bargaining power is a crucial factor influencing farmers' decision-making when it comes to choosing a marketing channel. Tsourgiannis et al. (2008) revealed the significant influence of bargaining power on the marketing channel choices of sheep and goat farmers in the east Macedonia region of Greece.

Gong et al. (2006) found that in China, an increase in bargaining power among cattle farmers led them to prefer selling directly to processors. Conversely, small-scale farmers with lower bargaining power were more inclined to sell to spot markets or intermediaries. Soe et al. (2015) reported that paddy rice farmers in Myanmar often sold immediately after harvest because of their lack of bargaining power and the need to repay loans. These findings revealed the challenges faced by rice farmers, particularly their relatively low bargaining power, which affects their choice of marketing channels.

2.3 Revenue of Farmers

The revenue of farmers refers to the total income generated from the sale of agricultural products, including crops, livestock, and other farm commodities, over a specific period, typically a year. It represents the monetary value received by farmers for their produce after deducting production costs, such as seeds, fertilizers, labor, and equipment expenses (Lichtenberg & Zilberman, 1986). The revenue of farmers in the farming industry is a crucial aspect that significantly affects their livelihoods and the agricultural sector as a whole. Farmers' revenue represents the income they generate from selling their agricultural products, which in turn affects their standard of living,

investment capabilities, and overall sustainability. The concept of revenue in farming is closely tied to the economic viability and success of agricultural operations. Higher revenue allows farmers to expand their operations, adopt sustainable farming practices, and contribute to economic growth in rural areas.

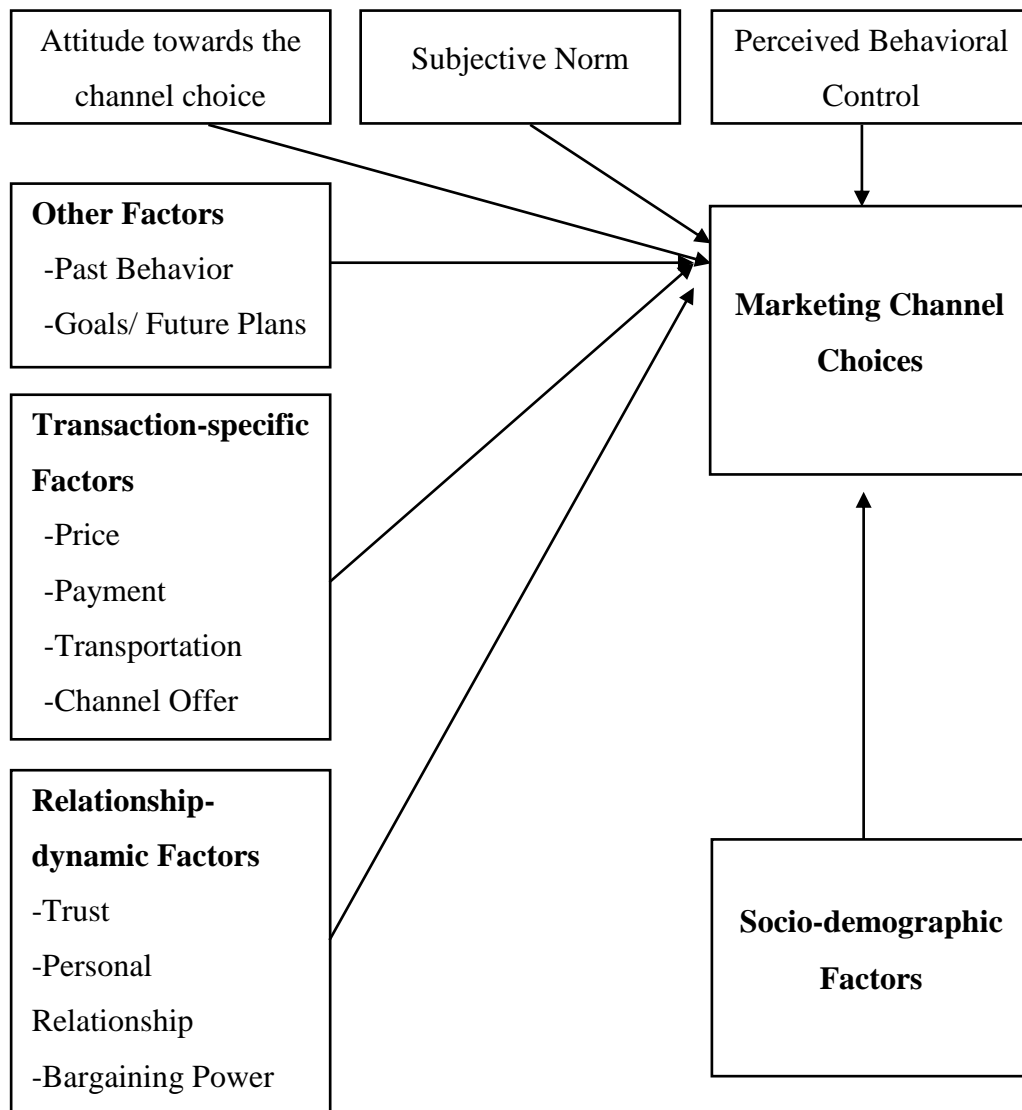
The revenue of farmers is essential for understanding farmers' economic well-being, farm profitability, and overall agricultural sustainability. By analyzing factors that influence farmers' revenue, policymakers and stakeholders can develop strategies to support farmers, improve market access, and enhance the economic viability of the agricultural sector.

2.4 Previous Studies

In this section, two related studies about the factors affecting marketing the marketing channel choices and their effect on revenue of farmers are discussed. Thamthanakoon (2018) analyzed the factors affecting marketing channel selection by rice farmers in Thailand. The objective was to examine the effect of transaction specific factors, relationship dynamics factors and socio-economic factors on marketing channel choices of Thai rice farmers. The study conducted a face-to-face questionnaire survey with 661 rice farmers across three main rice production regions in Thailand.

In Figure (2.2), the conceptual framework of Thamthanakoon (2018) for the effect of transaction specific factors, relationship dynamics factors, socio-demographic factors and other factors on marketing channel choices was presented.

Figure (2.2) Conceptual Framework of Thamthanakoon

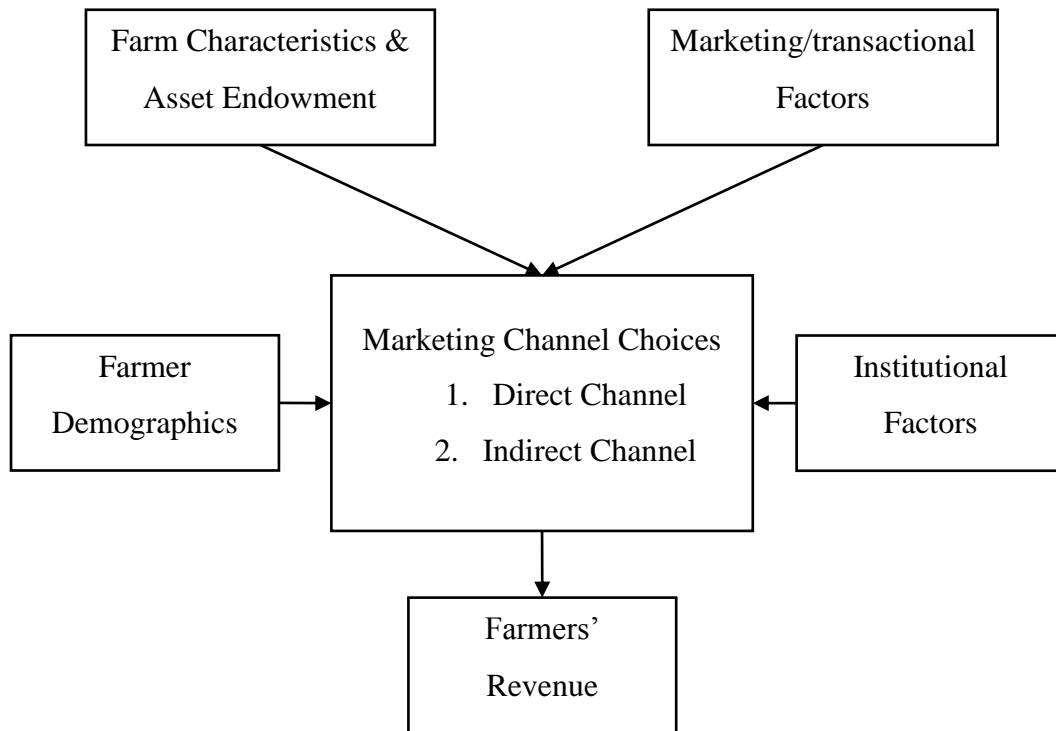


source: Thamthanakoon (2018)

The findings of the study highlighted that farmers with limited market information chose direct channel while farmers with the preference of convenience and with the recommendation from family and friends favored the indirect channel with intermediaries. Adu (2018) also analyzed factors affecting smallholder paddy rice farmer's choice of marketing channel in the northern region of Ghana. The purpose of the research was to find out and analyse the relationship between transactional factors, institutional factors, farmer demographics, farms characteristics and asset endowment that influence paddy rice farmers' choices of marketing channels for their rice products in Ghana.

The research was focused on 200 farmers who generated 60% or more of their income from rice production. The conceptual framework of Adu (2018) for the effect of marketing/transactional factors, institutional factors, farmer demographics, farm characteristics and asset endowment on marketing channel choice and farmers' revenue is shown in Figure (2.3).

Figure (2.3) Conceptual Framework of Adu



Source: Adu (2018)

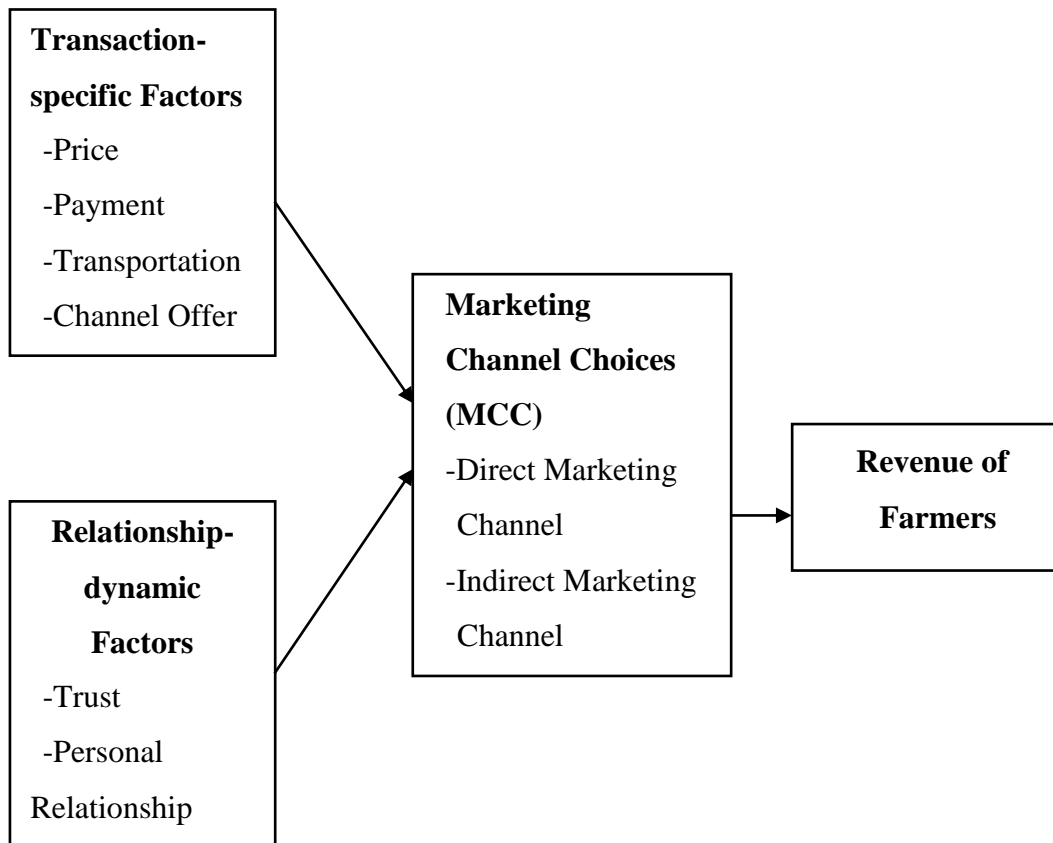
The findings of the research revealed that a lower percentage of farmers chose to sell their sell their paddy rice output directly to processors, indicating a preference for the indirect marketing channel through middlemen. Factors such as farm size, price of paddy rice output per 85kg bag, access to market information, and access to credit were found to increase farmers' participation in the direct marketing channel. Conversely, factors such as payment period and ownership of a bicycle were associated with reduced participation in the direct channel.

2.5 Conceptual Framework of the Study

The conceptual framework is developed based on previous studies to analyze the

factors affecting the marketing channel choices and the revenue of maize farmers in Nyaung Shwe Township. The first part of the conceptual framework, the effect of transaction-specific factors and relationship-dynamic factors on marketing channel choices is mainly based on the conceptual model developed by Thamthanakoon (2018) and the second part, the effect of marketing channel choices on revenue of farmers is supported by the conceptual framework of Adu (2018). The following Figure (2.4) presents the conceptual framework of this study.

Figure (2.4) Conceptual Framework of the Study



Source: Own Compilation (2024)

On first part, the independent variables are transaction-specific factors which includes price, payment, transportation and channel offer, and relationship-dynamic factors which contains trust, personal relationship and bargaining power while marketing channel choices which include direct marketing channel and indirect marketing channel are independent variables. On second part, the independent variable is marketing channel choices which includes direct marketing channel and indirect marketing channel while revenue of farmers is dependent variable.

CHAPTER 3

BACKGROUND HISTORY OF MAIZE FARMING AND MARKETING CHANNELS USED BY MAIZE FARMERS IN NYAUNG SHWE TOWNSHIP

This chapter is composed of three parts. The first part is about background history of maize farming at Nyaung Shwe Township, Shan State, Myanmar. The second part is about maize value chain and the final part is marketing channels in Nyaung Shwe Township.

3.1 Background History of Maize Farming in Nyaung Shwe Township

Maize farming in Nyaung Shwe Township, located in Myanmar's Shan State, has evolved significantly over time, transitioning from subsistence farming in the early 20th century to a more commercial agricultural practice. This shift has had a profound affect on the local economy, enabling farmers to produce surplus maize that is sold in local markets, thus generating a steady income for many households and stimulating economic activity within the township.

In recent decades, both domestic and international demand for maize from Nyaung Shwe has grown. Government and non-governmental organizations have supported this expansion by promoting sustainable agricultural practices, offering training on modern farming techniques, introducing high-yield and disease-resistant maize varieties, and improving infrastructure for better transportation and storage. Initiatives to promote organic farming and environmentally friendly practices have also helped the local maize market adapt to global trends favoring sustainable agriculture.

The maize produced in Nyaung Shwe is used for various purposes, including human consumption and animal feed. CP, a major agribusiness company, has been actively involved in contract farming in the region, providing seeds and technical support to local farmers. This partnership has not only increased maize yields but also improved the quality of the produce, making it more competitive in both domestic and export markets.

Nyaung Shwe's maize is largely transported to major wholesale markets such as Mandalay and exported to neighboring countries like China, Thailand, and Vietnam. Recent years have seen a substantial increase in Myanmar's maize exports, with China being a major importer. During the 2020-2021 period, a significant portion of Myanmar's total maize production was allocated for animal feed, accounting for 187 thousand metric tons (Ministry of Agriculture, Livestock and Irrigation, 2021). This growth in production and export highlights the increasing importance of maize as a commercial crop in regions like Nyaung Shwe, driven by improved agricultural practices and rising international demand.

Overall, maize farming in Nyaung Shwe Township significantly contributes to the local economy and supports the livelihoods of many farmers. The integration of modern agricultural techniques and strategic partnerships with large agribusinesses have positioned the township as a key player in Myanmar's maize industry.

3.2 Marketing Channels in Nyaung Shwe Township

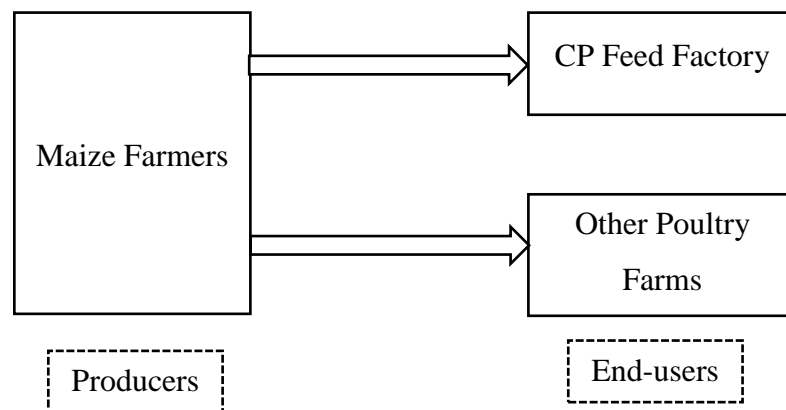
The importance of efficient marketing channels in maize trading business in Nyaung Shwe Township cannot be overstated. Firstly, well-organized marketing channels can ensure a smooth flow of maize from producers to consumers, reducing transaction costs and market inefficiencies. This enhances market access for farmers and improves their bargaining power, leading to better prices and higher returns for their produce. Additionally, efficient marketing channels enable timely delivery of maize to meet consumer demand, thereby reducing post-harvest losses and maximizing market opportunities. Moreover, by linking farmers to larger markets and value-added processing industries, marketing channels can stimulate economic growth, generate employment opportunities, and contribute to poverty reduction in the region. Overall, optimizing marketing channels in maize trading business is essential for enhancing agricultural productivity, livelihoods, and overall economic development in Nyaung Shwe Township.

In terms of marketing channels, Nyaung Shwe Township's maize reaches consumers through multiple pathways. Traditionally, farmers sell their product directly to consumers or rely on local traders and middlemen to sell their produce at regional markets.

(a) Direct Marketing Channel

Direct marketing channels involve transactions where the maize moves directly from the producer to the consumer or end-user without intermediaries. In this context, some maize farmers in Nyaung Shwe Township choose for direct sales of their maize products to CP feed factory or other poultry farms.

Figure (3.1) Direct Marketing Channels Used by Maize Farmers in Nyaung Shwe Township



Source: Own Compilation (2024)

A significant shift occurred with the entry of large-scale buyers like CP Group, a major agribusiness conglomerate with operations in Myanmar. CP's involvement in the maize supply chain has introduced a direct marketing channel that benefits local farmers. By purchasing maize directly from farmers, CP eliminates the need for middlemen, ensuring that farmers receive a fair and stable price for their produce. This direct procurement system is part of CP's integrated supply chain strategy to secure quality raw materials for their feed mills, which produce animal feed for the poultry and livestock industries.

The relationship between CP and local farmers has fostered a more structured and predictable market for maize in Nyaung Shwe. Farmers are motivated to improve their crop quality and yield to meet CP's standards, which in turn enhances their income and livelihoods. Additionally, CP often provides technical assistance, training, and resources to farmers, further boosting productivity and sustainability in maize farming.

By engaging in direct marketing, maize farmers can establish direct relationships with consumers, communicate the quality and provenance of their maize, and potentially

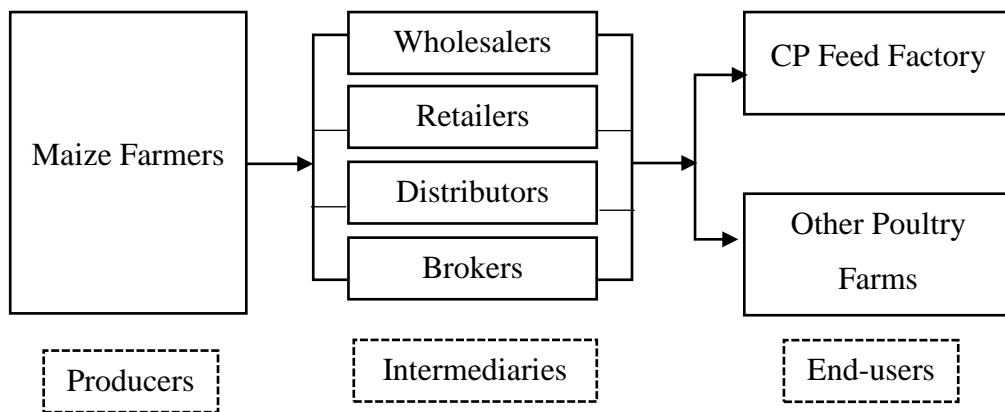
command higher prices for their products. Overall, the development of maize farming and its marketing channels in Nyaung Shwe Township reflects a broader trend of agricultural modernization and commercialization. The direct marketing channel established by CP has not only streamlined the supply chain but also empowered farmers by providing them with better market access and opportunities for growth. This dynamic has contributed to the economic development of the region, making maize farming a vital component of Nyaung Shwe's agricultural economy.

Despite these advantages, there are challenges associated with direct marketing channels, including the need for farmers to invest time and resources in marketing, distribution, and customer service. Farmers may also face regulatory hurdles, logistical constraints, and competition from larger retailers. However, for many maize farmers, the benefits of direct marketing, including higher profitability, closer relationships with consumers, and the promotion of sustainable agriculture, outweigh these challenges.

(a) Indirect Marketing Channels

Indirect marketing channels in maize trading business at Nyaung Shwe Township refer to pathways through which maize products are distributed and sold to consumers, involving intermediaries between producers and end-users. These intermediaries include wholesalers, retailers, distributors, brokers, and other middlemen who facilitate the movement of maize products from farmers to consumers. In the context of Nyaung Shwe Township, where maize farming is prevalent, indirect marketing channels play a crucial role due to various factors.

Figure (3.2) Indirect Marketing Channels Used by Maize Farmers in Nyaung Shwe Township



Source: Own Compilation (2024)

Firstly, the geographical dispersion of maize farms and the nature of production necessitate intermediaries to aggregate and consolidate maize products for distribution to larger markets. Intermediaries can help bridge the gap between small-scale farmers and larger markets by pooling resources and coordinating logistics.

Secondly, intermediaries provide market information, pricing transparency, and risk mitigation services to both farmers and buyers. They often have better market knowledge, access to market intelligence, and negotiating power, enabling them to secure better prices for farmers' produce while fulfilling the demand requirements of buyers.

Furthermore, indirect marketing channels offer efficiency gains and cost savings through economies of scale in transportation, storage, and processing. By consolidating maize products into larger quantities, intermediaries can optimize transportation routes, reduce handling costs, and minimize post-harvest losses, thus improving overall profitability for both producers and buyers.

To conclude, indirect marketing channels in maize trading business at Nyaung Shwe Township provide vital linkages between producers and consumers, offering efficiency, market access, risk mitigation, and value-added services. Their role is indispensable in the maize supply chain, contributing to the overall development and sustainability of the agricultural sector in the region. However, this system often resulted in lower profit margins for farmers due to the multiple layers of intermediaries involved.

3.3 Factors Affecting Marketing Channel Choices of Maize Farmers in Nyaung Shwe Township

In Nyaung Shwe Township, the choice of marketing channels among maize farmers is influenced by a complex interplay of transaction-specific and relationship-dynamic factors. Most farmers are keen to maximize their revenue, and the allure of higher prices offered by direct marketing channels, such as CP and poultry farms, is undeniable. However, not all farmers can easily switch to direct marketing channels.

3.3.1 Transaction-specific Factors

(a) Price

For maize farmers in Nyaung Shwe Township, direct marketing channels, such as selling to CP and poultry farms, typically offer significantly higher prices compared to indirect channels. For instance, CP hybrid maize has been reported to fetch around K15,000 per basket, whereas the price for maize in indirect channels can be as low as K9,000 per basket. This price difference represents a substantial premium of approximately 67% for maize sold through direct channels like CP.

(b) Payment

Farmers selling directly to entities like CP and poultry farms benefit from higher prices and better payment terms. These channels are attractive because they offer immediate cash flow and reduced financial uncertainty, which are crucial for sustaining agricultural activities and improving financial stability. Additionally, the CP group not only offers convenient payment scheme but also engages in contract farming, providing farmers with seeds and other necessary inputs, which can further enhance productivity and profitability. These factors make direct channels particularly attractive for farmers aiming to maximize their revenue.

(c) Transportation

Maize farmers prefer indirect marketing channels for transportation due to cost-effectiveness, time savings, and access to specialized logistics expertise. By utilizing

intermediaries like transport companies or cooperatives, farmers can efficiently manage logistics without the complexities of direct transportation. Indirect channels also offer risk management benefits, ensuring smoother operations and compliance with regulatory requirements. Moreover, these channels provide enhanced market access, enabling farmers to reach distant markets and larger buyers that demand consistent volumes. Overall, indirect channels streamline transportation logistics, allowing farmers to focus on their core agricultural activities while benefiting from economies of scale and reliable service.

(d) Channel Offer

Channel offers from intermediaries in indirect marketing channels provide maize farmers in Nyaung Shwe Township with several key benefits. These include bulk purchasing agreements, which ensure that farmers can sell large volumes of their produce reliably. Additionally, intermediaries offer valuable services such as packaging, storage, and transportation, reducing logistical burdens for farmers and allowing them to focus more on production.

3.3.2 Relationship-dynamic Factors

(a) Trust

Maize farmers in Nyaung Shwe Township have more trust in direct marketing channels primarily because these channels offer higher prices and more favorable payment terms, providing immediate financial stability. Direct buyers like CP and poultry farms typically ensure prompt and reliable payments, which reduces financial risks and uncertainties for farmers. Additionally, direct channels often involve fewer intermediaries, leading to more transparent transactions and reduced opportunities for exploitation.

(b) Personal Relationship

Maize farmers in Nyaung Shwe Township have higher personal relationships with indirect marketing channels because these channels involve more frequent and direct

interactions with intermediaries such as wholesalers, traders, and brokers. Over time, these repeated transactions build trust and mutual understanding, creating a strong bond between farmers and intermediaries. Intermediaries often provide personalized services, such as flexible payment terms and logistical support, which cater to the specific needs of the farmers, further strengthening these relationships. Additionally, local intermediaries are typically more accessible and embedded within the community, allowing for more consistent communication and support. As a result, the close, personalized interactions and tailored services offered by intermediaries foster deeper personal relationships compared to the more transactional nature of direct marketing channels.

(c) Bargaining Power

Additionally, the bargaining power of farmers significantly impacts their channel preferences. Farmers with higher production volumes or superior quality maize have greater leverage to negotiate better prices and terms with intermediaries. This bargaining power ensures that even within the indirect marketing channels, they can achieve competitive prices that might rival those offered by direct channels.

In summary, while the promise of higher prices, favorable payment terms and trust draws many maize farmers in Nyaung Shwe Township towards direct marketing channels, the practical benefits of transportation, attractive channel offers, personal relationships, and bargaining power keep indirect channels equally relevant. The choice of marketing channel is thus a balancing act, where farmers weigh the immediate financial benefits against the logistical support and trusted relationships they have cultivated over time. By navigating these factors judiciously, farmers aim to optimize their revenue and ensure market stability.

3.4 Reliability Analysis

The reliability concerning with a measure is established by testing for both consistency and stability. Consistency means that how well the items measuring a variable of concept hang together as a set. Cronbach's alpha is a reliability coefficient that indicates how closely related a set of items. The reliability level of Cronbach's alpha is generally interpreted as alpha value of less than 0.7 is unacceptable and alpha value of

larger than 0.7 is acceptable.

Table (3.1) shows that the validity test results of all variables including transaction-specific factors, relationship-dynamic factors, marketing channel choices and revenue of farmers in Nyaung Shwe Township.

Table (3.1) Results of Cronbach's Alpha Value

Scale	No. of Items	Cronbach's Alpha	Reliability Level
Price	5	0.913	Excellent
Payment	5	0.891	Good
Transportation	5	0.731	Acceptable
Channel Offer	5	0.719	Acceptable
Trust	5	0.908	Excellent
Personal Relationship	5	0.801	Good
Bargaining Power	5	0.702	Acceptable
Direct Marketing Channel	5	0.903	Excellent
Indirect Marketing Channel	5	0.882	Acceptable
Revenue of Farmer	5	0.891	Acceptable

Source: Survey Data (2024)

The Cronbach's alpha values for all scales exceed 0.7, indicating excellent internal consistency and reliability within the scale. The scales used to measure transportation, channel offer, bargaining power, indirect marketing channel and revenue of farmer in the study have acceptable levels of internal consistency, the scales used to measure payment and personal relationship have a good level of internal consistency and while the scale used to measure price, trust and direct marketing channel have an excellent level of internal consistency.

CHAPTER 4

ANALYSIS ON EFFECT OF TRANSACTION SPECIFIC FACTORS AND RELATIONSHIP DYNAMIC FACTORS ON MARKETING CHANNEL CHOICES AND REVENUE OF MAIZE FARMERS IN NYAUNG SHWE TOWNSHIP

This chapter is dedicated to the interpretation of results that were gathered from the questionnaire. It contains research design, respondents' profile in this research, analytical methods and tools used in this research, and multiple linear regressions.

Each point on 5-point Likert scale represents a different level of agreement or frequency as 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree. For data analysis, for descriptive analysis, Best (1977) identification is based. According to Best (1977), the mean scale of 1.00 – 1.80 is for Strongly Disagree, 1.81 – 2.60 for Disagree, 2.61 – 3.40 for Neutral, 3.41 – 4.20 for Agree and 4.21 – 5.00 for Strongly Agree. For data analysis, the descriptive and regression analysis are applied. For regression analysis, data reliability is tested in advance.

4.1 Demographic Profile of Respondents

In this study, the sample 83 maize farmers who owned minimum 10 acres land and cultivating maize in Nyaung Shwe Township are surveyed. The demographic profile of respondents are shown in Table (4.1).

According to Table (4.1), the majority of the respondents are female (75.9%) compared to male (24.1%). This gender distribution shows that female farmers play a significant role in maize cultivation within the surveyed population. The largest age group of respondents was between 46-50 years old (48.2%), followed by 40-45 years old (45.8%). This age range indicates that the middle-aged farmers, constituting the majority of respondents, are likely to have accumulated substantial experience and knowledge in agricultural practices, potentially influencing their preferences and behaviors regarding marketing channels and revenue generation. The majority of respondents have no formal education (62.7%) and primary education (33.7%). The generality of individuals with limited education level highlights potential challenges in accessing and utilizing

information related to marketing channels and revenue optimization strategies. The majority of households among the respondents consist of 4-6 members (57%), followed by households with 7-9 members (39%).

Table (4.1) Demographic Profile of Respondents

Sr. No.	Particular	Number	Percentage
1	Gender		
	Male	20	24.1
	Female	63	75.9
2	Age		
	36-40 years	1	1.2
	41-45 years	38	45.8
	46-50 years	40	48.2
	Above 50 years	4	4.8
3	Education (Level)		
	No Formal Education	52	62.7
	Primary Education	28	33.7
	Higher Education	3	3.6
4	Household Size		
	4-6	47	57.1
	7-9	32	39.2
	Above 9	4	3.7
5	Maize Growing Experience		
	5-10 years	23	27.9
	11-15 years	59	71.1
	16-20 years	1	1
	Total	83	100.0

Source: Survey Data (2024)

Base on the demographic profile of respondents, the majority are female farmers in the working age of 41 to 50 years with no formal or primary education level. Most of the respondents have 4 to 6 family members with 11 to 15 years maize growing experiences. The survey data reveals that a majority of respondents, 71.1%, have 11-15 years of experience in maize growing, while 28% have 5-10 years of experience. This significant proportion of experienced farmers indicates a well-established knowledge base and familiarity with maize cultivation practices in Nyaung Shwe Townships. Their familiarity with market dynamics and trust in specific channels can influence their choice, favoring those that have consistently provided reliable prices and services.

4.2 Size and Production of Selected Firms

The farm related characteristics including land size for growing maize and total quantity of maize production in a year are shown in Table (4.2). The majority of farmers are found to have medium scale land size with medium quantity of maize production.

Table (4.2) Size and Production of Selected Firms

Sr. No.	Particular	Number	Percentage
1	Total Land size for Growing Maize		
	Small Scale (10-30 acres)	21	25.3
	Medium Scale (31-60 acres)	45	54.2
	Large Scale (above 61 acres)	17	20.5
2	Total Quantity of Maize Production in a Year		
	Small Production (below 5,000 visses)	4	4.8
	Medium Production (5,000- 10,000 visses)	46	55.4
	Large Production (over 10,000 visses)	33	39.8
	Total	83	100.0

Source: Survey Data (2024)

According to Table (4.2), total land size for maize growing data shows that 54.2% of the respondents are medium-scale farmers, with land sizes dedicated to maize cultivation ranging from 31 to 60 acres. The maize yearly production data indicate that the majority of farmers fall within the medium production category, with 55.4% of respondents reporting maize production ranging from 5,000 to 10,000 visses. This finding shows that a significant portion of farmers in the townships are engaged in moderate-scale maize production while a substantial proportion of farmers, representing 39.8% of respondents, report large-scale maize production, exceeding 10,000 visses. This indicates the presence of a considerable segment of farmers who are involved in high-volume maize cultivation which prioritizes marketing channels that allow for bulk sales and distribution, while small-scale producers choose for channels that offer more personalized or localized marketing opportunities.

4.3 Factors Influencing Marketing Channel Choices in Nyaung Shwe Township

The factors which influence the marketing channel choices of respondents in Nyaung Shwe Township include available marketing channels in the area, distance from farm to chosen channel, mode of transport, main source of information about price and market and usage of direct and indirect marketing channels are shown in Table (4.3).

According to Table (4.3), the majority of respondents (80.7%) use both direct and indirect marketing channels. This diversified approach allows farmers to maximize their market reach and flexibility, balancing the benefits of both channel types. The farm to channels data reveals that a significant 78.3% of respondents have their farms located very far from the marketing channels (above 20 miles). Local traders, wholesalers, and cooperatives often provide collection services, reducing the burden of transportation and this convenience can outweigh the potentially lower prices offered by intermediaries compared to direct sales.

The survey data on how maize products are transported in Nyaung Shwe Townships provides important insights into the logistical aspects of maize marketing and its affect on farmers' marketing channel choices and revenue. The significant use of hired vehicles (49.4%) and intermediaries (48.2%) indicates that while personal transportation is limited, farmers have adapted by outsourcing logistics to maintain efficiency and manage costs.

Table (4.3) Factors Influencing Marketing Channel Choices in Nyaung Shwe Township

Sr. No.	Particular	Number	Percentage
1	Available Marketing Channels in the Area		
	Only Indirect Marketing Channel	16	19.3
	Both Direct and Indirect Channels	67	80.7
2	Distance from Farm to Chosen Channel		
	Very Close (1-5 miles)	5	6.0
	Moderately Far (5-20 miles)	13	15.7
	Very Far (Above 20 miles)	65	78.3
3	Mode of Transport		
	By own vehicles	2	2.4
	Hire	41	49.4
	Intermediaries	40	48.2
4	Main Source of Information about Price and Market		
	Direct Marketing Channel	67	80.7
	Indirect Marketing Channel	15	18.1
5	Usage of Direct Marketing Channel		
	Rarely (in less than 10% of transaction)	2	2.4
	Occasionally (in about 30% of transaction)	7	8.4
	Sometimes (in about 50% of transaction)	7	8.4
	Frequently (in about 70% of transaction)	29	35
	Usually (in more than 90% of transaction)	38	45.8
6	Usage of Indirect Marketing Channel		
	Rarely (in less than 10% of transaction)	63	75.9
	Occasionally (in about 30% of transaction)	2	2.4
	Sometimes (in about 50% of transaction)	5	6
	Frequently (in about 70% of transaction)	7	8.5
	Usually (in more than 90% of transaction)	6	7.2
	Total	83	100.0

Source: Survey Data (2024)

Vast majority of respondents (80.7%) chose direct marketing channels as their main source of market information and price which highlights the potential influence of transaction-specific and relationship dynamic factors on marketing channel choices. Moreover, the majority of farmers in Nyaung Shwe Townships heavily rely on direct marketing channels, with 45.8% usually engaging in direct transactions in over 90% of their interactions.

Conversely, indirect marketing channels are less commonly utilized, with 75.9% of respondents rarely using such channels. Within each category, direct marketing channels are consistently favored across various transaction frequencies compared to indirect channels, which are used less frequently and more sporadically. These findings indicate a strong preference for direct engagement with buyers or marketplaces among farmers in the region, potentially influenced by factors like transaction specificity, relationship dynamics, and the scale of maize production. Overall, the data highlight the dominance of direct marketing channels and provide insights into the factors shaping farmers' marketing channel choices in Nyaung Shwe Townships.

4.4 Transaction-specific Factors

In this study, the transaction-specific factor is approached from four aspects; price, payment, transportation and channel offer. Transaction-specific factor is analyzed with descriptive analysis by calculating the mean values for each question items of each variable (price, payment, transportation and channel offer).

(a) Price

In this study, total respondents are asked to answer five questions to identify the perceptions of respondents on price. According to 5-point Likert scale with respect to price, the result of mean values is as shown in Table (4.4).

Table (4.4) Price

Sr.No.	Description	Mean
1	This channel offers competitive prices for Maize farmers' maize product	3.93
2	The pricing information provided by this channel is transparent and clear	4.27
3	Maize farmers believe that this channel practices fair pricing that benefits their farm.	3.89
4	Maize farmers have confidence that this channel offers prices that align with the current market rates.	3.83
5	This channel allows for flexibility in negotiating prices that suit their farm's needs	4.11
	Overall Mean	4.01

Source: Survey Data (2024)

As shown in Table (4.4), mean values including overall mean except the transparency of pricing information provided by the channel fall in between 3.41 and 4.20. It can be generally concluded that most farmers agreed with the price offered by the channel. Most farmers agreed that the marketing channels are offering competitive prices, fair pricing practices, current market price and providing transparent pricing information.

One mean value falls in between 4.21 and 5.0, it can be concluded that farmers strongly agree with the transparent and clear pricing information provided by the channel.

(b) Payment

Regarding the perceptions of respondents on payment practices, total respondents are asked to answer five questions. Payment contains five items in this study. The result of mean values is shown in Table (4.5).

Table (4.5) Payment

Sr.No.	Description	Mean
1	Maize farmers receive payments from this channel in a timely manner.	4.02
2	Maize farmers trust that this channel accurately calculates and disburses payments for their maize output.	4.18
3	The payment methods offered by this channel are convenient and easy to use	3.69
4	This channel provides transparent information regarding payment terms for their maize products	3.49
5	Maize farmers are satisfied with the frequency and reliability of payments received from this channel	3.76
	Overall Mean	3.83

Source: Survey Data (2024)

According to Table (4.5), the mean values including overall mean fall in between 3.41 and 4.20 and it can be seen that farmers agreed regarding payment-related aspects of marketing channels. It can be concluded that most farmers agreed with the timely payment manners, accurate payment calculations, convenient payment methods, transparent payment terms and reliable payment schemes of marketing channels.

(c) Transportation

Regarding the perceptions of respondents on transportation service, five questions are asked. The result of mean values is shown in Table (4.6).

Table (4.6) Transportation

Sr.No.	Description	Mean
1	Transportation services provided by this channel are cost-effective	2.41
2	This channel's location is easily accessible and convenient for transportation of their maize products	2.95
3	Transportation services provided by this channel help reduce their operational expenses	2.47
4	Maize farmers trust that this channel ensures timely delivery of their maize to desired destinations	2.29
5	This channel handles transportation of their maize with care to maintain its quality.	2.40
	Overall Mean	2.50

Source: Survey Data (2024)

As shown in Table (4.6), mean values including overall mean except the accessibility of channel's location fall in between 1.81 and 2.60. It can be generally concluded that most farmers disagreed and have negative perceptions regarding transportation services provided by the channels in cost-effectiveness, operational expenses reduction, the trustworthiness of channel's timely delivery and the handling of their maize when transporting to the channel. The mean value for convenience of the channel's location falls into neutral level which means famers are neither agree nor disagree with the accessibility of the location of the channel.

(c) Channel Offer

Regarding the perceptions of respondents on channel offer, total respondents are asked to answer five questions. The result of mean values is shown in Table (4.7).

Table (4.7) Channel Offer

Sr.No.	Description	Mean
1	This channel buys any quantity of maize farmers' maize output	3.20
2	This channel buys any type/quality of maize	2.30
3	This channel offered them monetary incentives.	2.33
4	This channel offered them non-monetary incentives or good services	2.14
5	Maize farmers believe that the channel's offer aligns with their requirements and preferences	2.64
	Overall Mean	2.49

Source: Survey Data (2024)

As shown in Table (4.7), mean values including overall mean except willingness of channels to buy any quantity of maize and the alignment of channel's offer with farmers' preferences fall in between 1.81 and 2.60. It can be generally concluded that most farmers disagreed the channel offer provided by the channels regarding willingness of channel to buy any quality of maize and monetary and non-monetary incentives provided by the channel.

As mean values which fall in between 2.61 and 3.40, some farmers are neither agree nor disagree with the willingness of channels to buy any quantity of maize and the alignment of channel's offer with their requirement and preferences.

4.5 Relationship-dynamic Factor

The relationship-dynamic factor is approached from three aspects: trust, personal relationship and bargaining power. Relationship-dynamic factor is analyzed with descriptive analysis by calculating the mean values for each question items of each variable. The descriptive analysis results for each variable are shown from Table (4.8) to Table (4.10).

(a) Trust

Regarding the trust, total respondents are asked to answer five questions. The result of mean values is described in Table (4.8).

Table (4.8) Trust

Sr.No.	Description	Mean
1	Maize farmers choose this channel because they don't have to worry about being cheated on weighing scale.	3.96
2	Maize farmers choose this channel because they don't have to worry about being cheated on grade assessment.	4.07
3	Maize farmers choose this channel because they believe this channel treated them fairly.	4.17
4	Maize farmers choose this channel because this channel had a good reputation	4.04
5	Maize farmers choose this channel because they trusted this channel.	4.00
	Overall Mean	4.05

Source: Survey Data (2024)

According to Table (4.8), the mean values including overall mean fall in between 3.41 and 4.20 and it can be seen that most farmers agreed regarding trust-related aspects of marketing channels. It can be concluded that most farmers agreed with the reliability of weight scale and grade assessment of marketing channels. They also agreed with the good reputation of marketing channels and they have trust on them.

(b) Personal Relationship

To identify the personal relationship of farmers, five questions are asked and mean results are shown in Table (4.9).

Table (4.9) Personal Relationship

Sr.No.	Description	Mean
1	Maize farmers have secure relationship with this channel by making the contract with this channel	3.95
2	Maize farmers have no regret that they are in debt with this channel.	2.14
3	Maize farmers have been familiar with this channel	4.25
4	Maize farmers have a good relationship with this channel members	3.90
5	Maize farmers trust the individuals representing the channel due to their personal relationship	2.06
	Overall Mean	3.26

Source: Survey Data (2024)

According to Table (4.9), the overall mean values falls in between 2.61 and 3.40 and it can be concluded that farmers neither agreed nor disagreed with personal relationship with marketing channels. With mean value between 4.21 and 5.0, it can be concluded that most farmers strongly agreed that they are familiar with the channel members. With mean values between 3.41 and 4.20, it can be concluded that most farmers also agreed with secure and good relationship with the channel. With mean values 1.81 and 2.60, most farmers disagreed with trustworthiness of individuals representing the channel and regret about the debt with the channel.

(c) Bargaining Power

To identify the bargaining power of farmers, total respondents are asked to answer five questions. The result of mean values is described in Table (4.10).

Table (4.10) Bargaining Power

Sr.No.	Description	Mean
1	Maize farmers can negotiate with this channel members for price	2.12
2	Maize farmers can negotiate with this channel members for payment	2.17
3	Maize farmers can negotiate with this channel members for grading	2.28
4	Maize farmers are generally satisfied with the outcomes of bargaining with the members of this channel	2.21
5	Maize farmers feel that they have sufficient bargaining power when negotiating with the channel members	2.15
	Overall Mean	2.18

Source: Survey Data (2024)

According to Table (4.10), the mean values including overall mean fall in between 1.81 and 2.60 and it can be concluded that most farmers disagreed regarding bargaining power with marketing channels. It can be concluded that most farmers disagreed with the negotiation with channels, including price, payment, grading, and overall outcomes. They also disagreed with the ownership of sufficient bargaining power when negotiating with the channel members.

4.6 Marketing Channel Choices

The marketing channel choices of farmers are analyzed with descriptive analysis by calculating the mean values for each question items of each variable (direct marketing channel choices and indirect marketing channel choices).

(a) Direct Marketing Channel Choices

To identify the direct marketing channel choices of farmers, total respondents are asked to answer five questions. The result of mean values is described in Table (4.11).

Table (4.11) Direct Marketing Channel Choices

Sr.No.	Description	Mean
1	Maize farmers prefer to sell their maize directly to consumers through direct marketing channels	3.96
2	Establishing direct relationships with individual customers benefits their farm	3.70
3	Direct marketing channels allow them to receive higher prices for their maize compared to other channels.	4.35
4	Maize farmers value the opportunity to communicate directly with consumers and educate them about their maize products	3.72
5	Direct marketing channels are more profitable for their farm compared to indirect channels.	4.23
	Overall Mean	3.99

Source: Survey Data (2024)

As shown in Table (4.11), mean values including overall mean except direct marketing channel offer higher price and more profitable for farmers than other channel fall in between 3.41 and 4.20, it can be concluded that most farmers generally agreed with the perception of farmers towards direct marketing channel in farmers' preferences to sell, ability to receive benefits from direct relationship and value the opportunity to establish direct relationships. With the mean values fall in between 4.21 and 5.0, it can be concluded that most farmers strongly agreed with ability to receive higher prices and more profitable with direct marketing channel than indirect marketing channel.

(b) Indirect Marketing Channel Choices

To identify the perceptions of farmers towards the indirect marketing channel choices, total respondents are asked to answer five questions. The result of mean values is described in Table (4.12).

Table (4.12) Indirect Marketing Channel Choices

Sr.No.	Description	Mean
1	Maize farmers prefer to sell their maize through wholesalers or distributors who then sell to retailers.	2.01
2	Using intermediaries to handle marketing and distribution tasks is efficient for their maize products.	1.95
3	Indirect marketing channels provide broader market access for their maize products.	4.18
4	Relying on intermediaries to handle logistics and sales processes is convenient for their maize products.	4.14
5	Indirect marketing channels are more scalable and less labor-intensive for their farm compared to direct channels.	2.16
	Overall Mean	2.93

Source: Survey Data (2024)

According to Table (4.12), the overall mean values falls in between 2.61 and 3.40 and it can be concluded that farmers neither agreed nor disagreed with indirect marketing channel. With mean values between 3.41 and 4.20, it can be concluded that most farmers also agreed with broader market reach and convenience of logistics offered by intermediaries in indirect marketing channel. With mean values 1.81 and 2.60, most farmers disagreed with preferences to sell to indirect channel, the efficiency of marketing and distribution tasks offered by indirect marketing channel and less labor-intensiveness for their farm with indirect channel compared to direct channel.

4.7 Revenue of Farmer

To identify the revenue of farmers regarding the marketing channel choices, total respondents are asked to answer five questions. The result of mean values is described in Table (4.13).

Table (4.13) Revenue of Farmer

Sr.No.	Description	Mean
1	Maize farmers receive the good market price which effectively increased in revenue.	4.0
2	Maize farmers gain significant growth in revenue due to fair practices of stakeholders in inspecting the quality and weight of their maize.	3.83
3	Maize farmers can expand their farm's market reach, resulting in increase in revenue.	2.28
4	The bargain for free transportation throughout the distribution channel increased the maize farmers' revenue.	2.13
5	Their farms have competitive advantage due to higher revenue.	3.29
	Overall Mean	3.24

Source: Survey Data (2024)

According to Table (4.12), the overall mean values fall in between 2.61 and 3.40 and it can be concluded that farmers neither agreed nor disagreed with revenue of farmers. With mean values between 3.41 and 4.20, it can be concluded that most farmers also agreed with receiving good market price effect the revenue growth and fair practices in inspecting quality and weight of their maize increased their revenue. With mean values 1.81 and 2.60, most farmers disagreed with expansion in market reach and free transportation would increased their revenue.

4.8 Effect of Transaction-specific factors and Relationship-dynamic factors on Marketing Channel Choices

In this section, the effect of transaction-specific factor including price, payment, transportation and channel offer and relationship-dynamic factors which consists of trust, personal relationship and bargaining power on marketing channel choices of maize farmers in Nyaung Shwe Township are analyzed. These are presented based on the linear regression results from the analysis.

4.8.1 Effect of Transaction-specific Factors on Direct Marketing Channel Choices

Multiple linear regression analysis is performed to reveal the effect of the

independent variable (transaction-specific factors of price, payment, transportation and channel offer) on direct marketing channel choices. The Table (4.14) shows the effect of transaction-specific factors on direct marketing channel choices of maize farmers in Nyaung Shwe Township.

Table (4.14) Effect of Transaction-specific Factors on Direct Marketing Channel Choices

Dependent Variable: Direct marketing Channel Choices	Unstandardized Coefficients		β	t	Sig.	VIF
	B	Std. Error				
(Constant)	1.841	0.623		2.953	0.004	
Price	0.150**	0.065	0.262	2.314	0.023	3.785
Payment	0.366***	0.089	0.697	4.106	0.000	8.475
Transportation	-0.058	0.088	-0.099	-0.659	0.512	6.618
Channel Offer	0.118	0.092	0.181	1.288	0.202	5.825
R	.857					
R Square	0.735					
Adjusted R Square	0.722					
F Value	54.111***					
Durbin Watson	1.936					

Source: Survey Data (2024)

Statistically significant indicate *** at 1%, ** at 5%, and * at 10% level

According to Table (4.14), the adjusted R-squared value is 0.722 which indicates that model explains 72.2% about the variance of the independent variables (price, payment, transportation and channel offer) and dependent variable (direct marketing channel choices). The F-value of 54.111 with a 1% significance level confirms that the model is statistically significant. Price and payment have positive significant effect on the direct marketing channel choices of maize farmer.

Price plays a pivotal role in enhancing the revenue growth of farmers and the sustainability of the farming business. Higher prices offered by direct marketing channels translate directly into increased revenue and profitability for farmers, making such channels more attractive.

Maize farming, like many agricultural pursuits, often operates on thin profit margins. Therefore, payment terms that offer favorable conditions, such as prompt payment or advance payments, can provide much-needed liquidity and cash flow for farmers to meet operational expenses, invest in inputs, and manage financial risks. Therefore, farmers prefer the direct marketing channel which offers timely, accurate and convenient payment. Transportation and channel offer do not have significant effect on direct marketing channel choices.

4.8.2 Effect of Relationship-dynamic Factors on Direct Marketing Channel Choices

Multiple linear regression analysis is performed to reveal the effect of the independent variable (trust, personal relationship and bargaining power) on dependent variable (direct marketing channel choices). The result of the linear regression is illustrated in the following Table (4.15).

Table (4.15) Effect of Relationship-dynamic Factors on Direct Marketing Channel Choices

Dependent Variable: Direct marketing Channel Choices	Unstandardized Coefficients		β	t	Sig.	VIF
	B	Std. Error				
(Constant)	2.753	0.490		5.623	0.000	
Trust	0.281***	0.066	0.536	4.273	0.000	3.980
Personal Relationship	0.169	0.108	0.121	1.558	0.123	1.532
Bargaining Power	0.206	0.073	0.384	2.836	0.146	4.632
R	.829					
R Square	0.687					
Adjusted R Square	0.676					
F Value	57.914***					
Durbin Watson	1.637					

Source: Survey Data (2024)

Statistically significant indicate *** at 1%, ** at 5%, and * at 10% level

According to Table (4.15), the adjusted R-squared value is 0.676 which indicates that model explains 67.6% about the variance of the independent variables (trust, personal relationship and bargaining power) and dependent variable (direct marketing channel choices). The F-value of 57.914 with a 1% significance level confirms that the model is statistically significant.

Trust has significant and positive effect on direct marketing channel choices. Trust plays a crucial role in fostering confidence and assurance among farmers that direct marketing channels will honor their commitments regarding pricing, quality standards, and fair treatment. This trust allows farmers to feel secure in following the pricing and evaluation schemes laid down by direct marketing channels, enhancing their willingness to engage in such arrangements. Personal relationship and bargaining power do not have significant effect on direct marketing channel choices.

4.8.3 Effect of Transaction-specific Factors on Indirect Marketing Channel Choices

Multiple linear regression analysis is performed to reveal the effect of the independent variable (transaction-specific factors of price, payment, transportation and channel offer) on indirect marketing channel choices. The result of the linear regression is illustrated in the following Table (4.16).

Table (4.16) Effect of Transaction-specific Factors on Indirect Marketing Channel Choices

Dependent Variable: Indirect marketing Channel Choices	Unstandardized Coefficients		β	t	Sig.	VIF
	B	Std. Error				
(Constant)	4.285	0.623		6.880	0.000	
Price	0.067	0.088	0.105	0.770	0.444	6.618
Payment	-0.005	0.092	-0.008	-0.060	0.952	5.825
Transportation	0.186***	0.065	0.297	2.866	0.005	3.785
Channel Offer	0.589***	0.089	1.026	6.616	0.000	8.475
R	.882					
R Square	0.779					
Adjusted R Square	0.767					
F Value	68.645***					
Durbin Watson	1.654					

Source: Survey Data (2024)

Statistically significant indicate *** at 1%, ** at 5%, and * at 10% level

According to Table (4.16), the adjusted R-squared value is 0.767 which indicates that model explains 76.7% about the variance of the independent variables (price, payment, transportation and channel offer) and dependent variable (indirect marketing channel choices). The F-value of 68.645 with a 1% significance level confirms that the model is statistically significant. Transportation and channel offer have positive significant effect on indirect marketing channel choices of maize farmers.

Transportation is very important in facilitating access to markets and distribution channels for farmers. In regions like Nyaung Shwe Township, where infrastructure and transportation networks may be limited or underdeveloped, the availability of reliable transportation options can significantly impact farmers' ability to access distant markets or intermediaries. Therefore, when indirect marketing channels provide efficient transportation solutions, such as reliable transport services or logistical support, farmers become more inclined to choose these channels to overcome geographical barriers and

reach a wider customer base.

Furthermore, the channel offer includes the range of services, facilities, and support provided by intermediaries or entities within indirect marketing channels. When indirect marketing channels offer comprehensive support and value-added services to farmers, they enhance the attractiveness of these channels by addressing farmers' needs and preferences beyond pricing and payment considerations. Therefore, farmers prioritize indirect channels that offer superior channel offers, even if the pricing and payment terms are not significantly different from other channels. Price and payment do not have significant effect on direct marketing channel choices.

4.8.4 Effect of Relationship-dynamic Factors on Indirect Marketing Channel Choices

Multiple regression analysis is also performed to reveal the effect of the independent variable (relationship-dynamic factors) on dependent variable (indirect marketing channel choices). The result of the linear regression is illustrated in the following Table (4.17).

Table (4.17) Effect of Relationship-dynamic Factors on Indirect Marketing Channel Choices

Dependent Variable: Indirect marketing Channel Choices	Unstandardized Coefficients		β	t	Sig.	VIF
	B	Std. Error				
(Constant)	3.238	0.509		6.360	0.000	
Trust	0.006	0.113	0.004	0.054	0.957	1.532
Personal Relationship	0.231***	0.068	0.402	3.367	0.001	3.980
Bargaining Power	0.278***	0.076	0.473	3.672	0.000	4.632
R			.847			
R Square			0.717			
Adjusted R Square			0.707			
F Value			66.808***			
Durbin Watson			1.823			

Source: Survey Data (2024)

Statistically significant indicate *** at 1%, ** at 5%, and * at 10% level

According to Table (4.17), the adjusted R-squared value is 0.707 which indicates that model explains 70.7% about the variance of the independent variables (trust, personal relationship and bargaining power) and dependent variable (indirect marketing channel choices). The F-value of 66.808 with a 1% significance level confirms that the model is statistically significant. Personal relationship and bargaining power have positive significant effect on indirect marketing channel choices.

For maize farmers in Nyaung Shwe Township, the personal relationships significantly impact their marketing decisions. Farmers who have established strong personal connections with traders, wholesalers, or cooperative leaders are more likely to rely on indirect marketing channels. These relationships can lead to better communication, trust, and more favorable terms, making indirect marketing a viable and beneficial option.

Additionally, the analysis highlights the importance of bargaining power. Farmers with greater leverage, perhaps due to higher production volumes or better-quality maize, are more inclined to choose indirect marketing channels. This increased bargaining power allows them to negotiate better prices and conditions, making indirect marketing channels more attractive and profitable. Trust do not have significant effect on indirect marketing channel.

4.9 Effect of Marketing Channel Choices on Revenue of Farmer

Multiple regression analysis is also performed to reveal the effect of the independent variables (direct marketing channel choices and indirect marketing channel choices) on dependent variable (revenue of farmer). The result of the regression analysis is illustrated in the following Table (4.18).

The result of Table (4.18) indicates that the value of F is 12.676 with significant level at 1% (p-value=0.000). The multicollinearity statistics were measured by using variance inflation factors (VIF) and multicollinearity does not exist among independent variables in this study because VIF values are less than 10.

Table (4.18) Effect of Marketing Channel Choices on Revenue of Farmers

Dependent Variable: Revenue of Farmers	Unstandardized Coefficients		β	t	Sig.	VIF
	B	Std. Error				
(Constant)	2.022	0.684		2.955	0.004	
Direct Marketing Channel	0.315***	0.108	0.471	2.922	0.005	2.739
Indirect Marketing Channel	-0.015	0.099	-0.024	-0.149	0.882	2.739
R	.491					
R Square	0.241					
Adjusted R Square	0.222					
F Value	12.676***					
Durbin Watson	1.874					

Source: Survey Data (2024)

Statistically significant indicate *** at 1%, ** at 5%, and * at 10% level

According to Table (4.18), the adjusted R-squared value is 0.222 which indicates that model explains 22.2% about the variance of the independent variables (direct marketing channel and indirect marketing channel) and dependent variable (revenue of farmers). The F-value of 12.676 with a 1% significance level confirms that the model is statistically significant.

Direct marketing channel has positive significant effect on revenue of farmers. The analysis result also shows that choosing direct marketing channels significantly increases their revenue. This could be due to the elimination of middlemen, allowing farmers to capture a larger share of the profit. On the other hand, choosing indirect marketing channels does not have a significant impact on their revenue. This might be because the benefits of indirect channels, such as reduced effort in finding buyers, do not translate into higher profits for the farmers. Indirect marketing channel has no significant effect on revenue of farmers.

CHAPTER 5

CONCLUSION

This conclusion chapter presents finding and discussion drawn from the results of data analysis regarding the factors affecting the marketing channel choices and the revenue of maize farmers in Nyaung Shwe Township. Then, the recommendation section presents the showion and the needs for further studies.

5.1 Findings and Discussions

The study aims to analyze the effect of transaction-specific factors and relationship-dynamic factors on marketing channel choices of maize farmers in Nyaung Shwe Township and to investigate the effect of their marketing channel choices on revenue of farmers. The findings from the study reveal several key insights into the relationship between transaction-specific factors, relationship-dynamic factors, marketing channel choices and the revenue of farmers in Nyaung Shwe Township.

Firstly, the demographic analysis of the respondents provides the valuable insights into the demographic characteristics, farming practices, and marketing channel preferences of maize farmers in Nyaung Shwe Townships. Female farmers constitute a significant majority, showing their important role in maize cultivation. Middle-aged farmers, predominantly with limited formal education, form the core demographic, indicating potential challenges in accessing marketing information. The majority of farmers engage in moderate to large-scale maize production, favoring diversified marketing strategies involving both direct and indirect channels. While direct marketing is the preferred choice for market information and transactions, indirect channels are less utilized, indicating a strong preference for direct engagement among farmers. These demographics provide valuable insights into the profile of the farmers and how their farming characteristics influence their perceptions and attitudes towards direct marketing channel and indirect marketing channel.

The descriptive statistics indicates that most farmers agreed with the price offered by the channels. Some farmers strongly agree with the transparent and clear pricing information provided by the channel. For payment terms, farmers agreed with the timely

payment manners, accurate payment calculations, convenient payment method, transparent payment terms and reliable payment schemes of marketing channels. However, most farmers generally disagreed and have negative perceptions regarding transportation services provided by the channels in cost effectiveness, expenses reduction, the trustworthiness of timely delivery of channels and handling the maize during transporting to the channel. Most farmers disagreed and have negative perceptions towards channel offer provided by the channels regarding willingness of channel to buy any quality of maize and monetary and incentives provided by the channel. The results show that some farmers are neither agree nor disagree with the willingness of channels to buy any quantity of maize and the alignment of channel's offer with their requirement and preferences.

Most farmers found to be agreed with the trust related aspects of marketing channels. In terms of personal relationship with channel members, most farmers neither agreed nor disagreed with personal relationship with marketing channels. It can be found that most farmers strongly agreed that they are familiar with the channel members and also agreed with secure and good relationship with the channel but disagreed with trustworthiness of channel members. Most farmers disagreed regarding bargaining power with marketing channels. For marketing channel choices, most farmers generally agreed with the perceptions towards direct marketing channels and strongly agreed with direct marketing channel is more profitable than indirect marketing channel. Farmers neither agreed nor disagreed with revenue of farmers. While farmers agreed with receiving good market price effect the revenue growth and fair practices in inspecting quality and weight of their maize increased farmers' revenue. However, some portion of farmers disagreed with expansion in market reach and free transportation would increased their revenue.

The findings from the regression analyses provide valuable information into the factors influencing marketing channel choices and revenue generation among maize farmers in Nyaung Shwe Township. Price and payment have positive significant effect on direct marketing channel choices of farmers. The findings suggest that farmers are more likely to choose direct marketing channels that provide better payment terms and higher prices for their produce. This preference indicates that financial incentives play a crucial role in decision-making processes for farmers. When direct marketing channels offer prompt and reliable payments, along with competitive pricing, they become more attractive to farmers who seek to maximize their revenue and ensure financial stability.

The assurance of higher income and favorable payment conditions reduces the financial risks and uncertainties associated with agricultural production, encouraging farmers to engage more actively in these marketing channels. As a result, direct marketing channels that prioritize fair and advantageous financial terms can gain a competitive edge, attracting a larger number of farmers who aim to optimize their earnings from their agricultural endeavors.

Additionally, trust has positive significant effect on direct marketing channel choices with farmers favoring channels they perceive as reliable and transparent. Furthermore, the positive significant effect of trust on direct marketing channel choices of maize farmers in Nyaung Shwe Township highlights that farmers feel secure and safe to be traded directly with animal feed factories and poultry farms. Their trust relies on strong, reliable relationships, allowing them to negotiate better terms and ensure fair transactions. As a result, farmers prefer direct marketing channels, as the trust built with these businesses helps them achieve higher revenue and stability in their sales. By relying on trusted partners, farmers can avoid the uncertainties often associated with indirect marketing channels and maximize their profits through direct, dependable trade relationships.

The regression analysis conducted in this study also revealed the positive significant effect of transportation and channel offer on indirect marketing channels. Transportation and channel offer significantly influence their preference for indirect marketing channels. Reliable and efficient transportation serve as important functions in making indirect marketing channels more attractive. Good transportation infrastructure ensures that maize can be transported quickly and safely from farms to intermediaries, reducing spoilage and transportation costs. This reliability in transportation makes it easier for farmers to trust and use indirect channels, as they can be confident that their products will reach the market in good condition and on time. Additionally, attractive channel offers from intermediaries, such as traders and wholesalers, enhance the appeal of indirect marketing channels. These offers might include better prices, bulk purchasing agreements, and additional services like packaging and distribution. Such benefits make indirect channels more attractive and less burdensome for farmers, who might otherwise have to invest time and resources into these activities themselves.

For maize farmers in Nyaung Shwe Township, personal relationships and

bargaining power has positive significant effect on their preference for indirect marketing channels. Strong personal relationships with intermediaries, such as wholesalers, retailers, traders and brokers, make indirect marketing channels more attractive. These relationships, built on mutual trust and understanding, facilitate smoother transactions and better terms, making it easier for farmers to sell their maize.

Additionally, bargaining power has positive effect on indirect marketing channel choices. Farmers with greater bargaining power, often due to higher production volumes or good quality of maize, find indirect marketing channels beneficial. Their bargaining power allows them to negotiate better prices and conditions with intermediaries. This ensures that even though they are not selling directly to end-users, they still achieve competitive prices and terms. In summary, maize farmers in Nyaung Shwe Township benefit from leveraging personal relationships and bargaining power in indirect marketing channels. These factors help them navigate the complexities of the market, secure better deals, and ensure steady sales, enhancing their overall profitability and market stability.

The findings from the regression analyses shed light on the factors influencing marketing channel preferences and revenue generation among maize farmers in Nyaung Shwe Township. Direct marketing channels are favored by farmers due to factors such as favorable payment terms, higher prices, and the trust. Trustworthiness in trading partners, particularly with animal feed factories and poultry farms, allows for secure transactions and better negotiation terms, ultimately leading to higher revenue and market stability.

Alternatively, indirect marketing channels thrive on the backbone of personal relationships and bargaining power, as strong connections with intermediaries enable smoother transactions and favorable terms. Furthermore, the appeal of indirect channels is augmented by reliable transportation infrastructure and attractive offers from intermediaries, which remove burdens for farmers and enhance the overall efficiency of the marketing process. In general, both direct and indirect channels present their merits, but the presence of trust, robust relationships, and logistical efficiency emerge as important factors shaping farmers' revenue in the region.

5.2 Suggestions and Recommendations

Based on the findings, price and payment play an important role in choosing direct marketing channel which also effect the revenue of farmers. Therefore, farmers should

focus on negotiating favorable payment conditions, including upfront payments and reduced payment periods, to enhance financial stability. Enhancing product quality and branding can justify higher prices, attracting premium-paying customers. Additionally, adopting technology for e-commerce and mobile payments can streamline sales processes and ensure quicker transactions. Finally, building strong relationships with buyers and participating in farmer cooperatives can improve bargaining power and provide access to shared resources, further boosting profitability.

Trust also play a vital role in choosing direct marketing channel. Therefore, to increase their revenue through direct marketing channels, farmers should prioritize building trust with buyers by establishing transparent and reliable relationships. By ensuring consistent quality and fulfilling commitments, farmers can negotiate better terms and secure fair transactions with trusted partners like animal feed factories and poultry farms. Leveraging these dependable relationships helps farmers avoid the uncertainties of indirect marketing channels and achieve higher revenue stability. Additionally, focusing on transparency and reliability in their operations can further enhance their reputation, attracting more trustworthy partners. Ultimately, cultivating strong, trustworthy relationships in direct marketing channels enables farmers to maximize their profits and ensure financial stability.

Transportation and channel offer play an important role in indirect marketing channel choices of maize farmers in Nyaung Shwe Township. To increase farmers revenue through indirect marketing channels, farmers should invest in reliable and efficient transportation infrastructure to ensure their maize reaches intermediaries quickly and safely. By reducing spoilage and transportation costs, farmers can enhance the profitability of their sales. Exploring partnerships with transportation companies can streamline logistics and reduce delays, ensuring timely delivery of their produce. Improving transportation reliability will build trust with intermediaries, making these channels more attractive and ensuring steady sales. Additionally, farmers should seek out attractive channel offers from intermediaries such as traders and wholesalers. These offers might include better prices, bulk purchasing agreements, and additional services like packaging and distribution, which can significantly reduce the burden on farmers. By taking advantage of these benefits, farmers can focus more on production and less on marketing logistics. Engaging with intermediaries who provide comprehensive support can help farmers achieve better deals, increasing their overall revenue and market

stability

Personal relationship and bargaining power play an important role in indirect marketing channel choices. To increase maize farmers' revenue in Nyaung Shwe Township through indirect marketing channels, farmers should continue to cultivate strong personal relationships with intermediaries such as wholesalers, retailers, traders, and brokers. These relationships, built on mutual trust and understanding, facilitate smoother transactions and better terms, making it easier for farmers to sell their maize. Participating in networking events and industry gatherings can help farmers expand their connections with reliable intermediaries. Strengthening these personal relationships will ensure that farmers continue to benefit from favorable terms and smoother sales processes. Moreover, farmers should focus on enhancing their bargaining power to secure better prices and conditions from intermediaries. This can be achieved by increasing their production volumes through the adoption of improved farming techniques and technologies. Higher production volumes and superior maize quality will make farmers more attractive to intermediaries, giving them leverage to negotiate better deals. Additionally, farmers can join cooperatives or associations to combine their bargaining power, enabling them to secure more favorable terms collectively. By enhancing their production capacity and quality, and leveraging collective bargaining, farmers can ensure they achieve competitive prices and advantageous conditions in indirect marketing channels.

By implementing these suggestions, maize farmers in Nyaung Shwe Township can optimize their marketing strategies, increase revenue, and achieve greater market stability in the long term.

5.3 Needs for Further Researches

Further studies could explore into the intricacies of trust-building mechanisms within direct marketing channels, perhaps through in-depth interviews or focus groups with farmers, traders, and intermediaries. Understanding the specific strategies and practices that contribute to trust formation could offer valuable insights into how these relationships impact marketing decisions and overall market outcomes. Additionally, comparative analyses could explore not only the differences between direct and indirect marketing channels but also variations within each approach. For example, comparing the

effectiveness of different types of intermediaries or examining how market dynamics vary across different regions or seasons could provide an understanding of optimal marketing strategies. Longitudinal studies could track changes in market conditions and farmers' responses over time, allowing for a deeper exploration of factors influencing marketing decisions and revenue generation.

Moreover, investigating the potential of technological interventions, such as mobile applications or online platforms, to improve market access and efficiency for maize farmers could offer practical insights for enhancing agricultural marketing practices. Lastly, considering the socio-cultural context in which marketing decisions are made, including the role of social networks, community norms, and cultural practices, could enrich our understanding of the broader influences shaping farmers' choices. By addressing these research gaps, future studies can contribute to a more comprehensive understanding of marketing strategies among maize farmers in Nyaung Shwe Township and inform targeted interventions to support agricultural development in the region.

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APPENDIX - I
SURVEY QUESTIONNAIRE

Dear Respondents,

This questionnaire is an academic survey to examine the factors affecting the marketing channel choices and the revenue of maize farmers in Nyaung Shwe Township. This research paper is to understand the effect of transaction-specific factors and relationship-dynamic factors on marketing channel choices and the effect of marketing channel choices on revenue of maize farmers in Nyaung Shwe Township. All responses will be kept highly confidential and used for academic purposes only. Thank you for your participation and giving precious time.

Yours Faithfully,

.....

Phoo Pwint May

Roll No-26

EMBA-II (19th Batch, On Campus)

Section A: Demographic Profile

Please put a tick mark on the racket of the correct answer to the following questions.

Completion of information is voluntary and its confidentiality is assured. No individual data will be reported.

1) Farmer	
1.1 Gender	1. 1. Male 2. 2. Female
1.2 Age	1. 36-40 years 2. 41-45 years 3. 46-50 years 4. Above 50 years
1.3 Education Level	1. No Formal Education 2. Primary Education 3. Secondary Education 4. Higher Education
1.4 Household Size (Including yourself)	1. 1-3 2. 4-6 3. 7-9 4. Above 9
1.5 Maize growing experience	1. 5-10 years 2. 11-15 years 3. 16-20 years 5. Above 20 years

2) Farming Related Characteristics	
2.1 Total land size for growing maize?	1. Small Scale (10-30 acres) 2. Medium Scale (31-60 acres) 3. Large Scale (above 61 acres)
2.2 Total quantity of maize production in a year	1. Small Production (<5,000 visses) 2. Medium Production (5,000-10,000 visses) 3. Large Production (over 10,000 visses)

3) Factors Influencing Marketing Channel Choices in Nyaung Shwe Township	
3.1 Available Marketing Channels in the Area	<ol style="list-style-type: none"> 1. Only Direct Marketing Channel 2. Only Indirect Marketing Channel 3. Both Channels
3.2 Distance from Farm to Chosen Channel	<ol style="list-style-type: none"> 1. Very Close (1-5 miles) 2. Moderately Far (5-20 miles) 3. Very Far (Above 20 miles)
3.3 Mode of Transport	<ol style="list-style-type: none"> 1. By own vehicles 2. Hire 3. Intermediaries
3.4 Main Source of Information about Price and Market	<ol style="list-style-type: none"> 1. Direct Marketing Channel 2. Indirect Marketing Channel 3. Others
3.5 Usage of Direct Marketing Channel	<ol style="list-style-type: none"> 1. Rarely (in less than 10% of transaction) 2. Occasionally (in about 30% of transaction) 3. Sometimes (in about 50% of transaction) 4. Frequently (in about 70% of transaction) 5. Usually (in more than 90% of transaction)
3.6 Usage of Indirect Marketing Channel	<ol style="list-style-type: none"> 1. Rarely (in less than 10% of transaction) 2. Occasionally (in about 30% of transaction) 3. Sometimes (in about 50% of transaction) 4. Frequently (in about 70% of transaction) 5. Usually (in more than 90% of transaction)

Section B: Transaction-specific Factors

This section of questionnaire is to describe the **transaction-specific factors** which influence the marketing channel choices of maize farmers in Nyaung Shwe Township. You are requested to rate yourself against each statement to indicate your level of agreement with what the statement is suggesting. Use the following scale to select the number.

1 = Strongly Disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly Agree

No.	Price	Scale				
		1	2	3	4	5
1	This channel offers competitive prices for my maize product					
2	The pricing information provided by this channel is transparent and clear					
3	I believe that this channel practices fair pricing that benefits their farm.					
4	I have confidence that this channel offers prices that align with the current market rates.					
5	This channel allows for flexibility in negotiating prices that suit their farm's needs					

No.	Payment	Scale				
		1	2	3	4	5
1	I receive payments from this channel in a timely manner.					
2	I trust that this channel accurately calculates and disburses payments for their maize output.					
3	The payment methods offered by this channel are convenient and easy to use					
4	This channel provides transparent information regarding payment terms for my maize products					
5	I am satisfied with the frequency and reliability of payments received from this channel					

No.	Transportation	Scale				
		1	2	3	4	5
1	Transportation services provided by this channel are cost-effective					
2	This channel's location is easily accessible and convenient for transportation of my maize products					
3	Transportation services provided by this channel help reduce my operational expenses					
4	I trust that this channel ensures timely delivery of my maize to desired destinations					
5	This channel handles transportation of my maize with care to maintain its quality.					

No.	Channel Offer	Scale				
		1	2	3	4	5
1	This channel buys any quantity of my maize output					
2	This channel buys any type/quality of maize					
3	This channel offered me monetary incentives.					
4	This channel offered me non-monetary incentives or good services					
5	I believe that the channel's offer aligns with my requirements and preferences					

APPENDIX – II

The Effect of Transaction-specific Factors on Direct Marketing Channel Choices

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.857 ^a	0.735	0.722	0.29183	1.936
a. Predictors: (Constant), CO, PR, TSport, PMent					
b. Dependent Variable: DMC					

ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	18.433	4	4.608	54.111	.000 ^b
	Residual	6.643	78	0.085		
	Total	25.076	82			
a. Dependent Variable: DMC						
b. Predictors: (Constant), CO, PR, Tsport, PMent						

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.841	0.623		2.953	0.004		
	PR	0.150	0.065	0.262	2.314	0.023	0.264	3.785
	PMent	0.366	0.089	0.697	4.106	0.000	0.118	8.475
	TSport	-0.058	0.088	-0.099	-0.659	0.512	0.151	6.618
	CO	0.118	0.092	0.181	1.288	0.202	0.172	5.825
a. Dependent Variable: DMC								

The Effect of Relationship-dynamic Factors on Direct Marketing Channel Choices

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.829 ^a	0.687	0.676	0.31498	1.637
a. Predictors: (Constant), BP, PRship, TR					
b. Dependent Variable: DMC					

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17.238	3	5.746	57.914	.000 ^b
	Residual	7.838	79	0.099		
	Total	25.076	82			
a. Dependent Variable: DMC						
b. Predictors: (Constant), BP, PRship, TR						

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	2.753	0.490		5.623	0.000		
	TR	0.281	0.066	0.536	4.273	0.000	0.251	3.980
	PRship	0.169	0.108	0.121	1.558	0.123	0.653	1.532
	BP	0.206	0.073	0.384	2.836	0.006	0.216	4.632
a. Dependent Variable: DMC								

The Effect of Transaction-specific Factors on Indirect Marketing Channel Choices

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.882 ^a	0.779	0.767	0.29156	1.654
a. Predictors: (Constant), CO, PR, TSport, PMent					
b. Dependent Variable: INMC					

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.342	4	5.836	68.645	.000 ^b
	Residual	6.631	78	0.085		
	Total	29.973	82			
a. Dependent Variable: INMC						
b. Predictors: (Constant), CO, PR, TSport, PMent						

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	4.285	0.623		6.880	0.000		
	PR	0.067	0.088	0.105	0.770	0.444	0.151	6.618
	PMent	-0.005	0.092	-0.008	-0.060	0.952	0.172	5.825
	TSport	0.186	0.065	0.297	2.866	0.005	0.264	3.785
	CO	0.589	0.089	1.026	6.616	0.000	0.118	8.475

a. Dependent Variable: INMC

The Effect of Relationship-dynamic Factors on Indirect Marketing Channel Choices

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.847 ^a	0.717	0.707	0.32752	1.823
a. Predictors: (Constant), BP, PRship, TR					
b. Dependent Variable: INMC					

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.499	3	7.166	66.808	.000 ^b
	Residual	8.474	79	0.107		
	Total	29.973	82			
a. Dependent Variable: INMC						
b. Predictors: (Constant), BP, PRship, TR						

Coefficients ^a								
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	3.238	0.509		6.360	0.000		
	TR	0.006	0.113	0.004	0.054	0.957	0.653	1.532
	PRship	0.231	0.068	0.402	3.367	0.001	0.251	3.980
	BP	0.278	0.076	0.473	3.672	0.000	0.216	4.632

a. Dependent Variable: INMC

The Effect of Marketing Channel Choices on Revenue of Farmers

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.491 ^a	0.241	0.222	0.32626	1.874
a. Predictors: (Constant), INMC, DMC					
b. Dependent Variable: ROF					

ANOVA ^a						
Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	2.699	2	1.349	12.676	.000 ^b
	Residual	8.516	80	0.106		
	Total	11.214	82			
a. Dependent Variable: ROF						
b. Predictors: (Constant), INMC, DMC						

Coefficients ^a								
Model	Unstandardized Coefficients	Standardized Coefficients		t	Sig.	Collinearity Statistics		
		B	Std. Error			Beta	Tolerance	VIF
1	(Constant)	2.022	0.684		2.955	0.004		
	DMC	0.315	0.108	0.471	2.922	0.005	0.365	2.739
	INMC	-0.015	0.099	-0.024	-0.149	0.882	0.365	2.739
a. Dependent Variable: ROF								