

# Transaction Costs, Asymmetric Information, and Market Access among Small-Scale Salt Farmers in Indonesia

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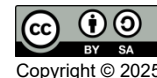
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## Abstract

This study examines transaction costs in the marketing of salt produced by small-scale farmers in Indonesia, focusing on the institutional arrangements that shape market access and farmer dependency. Using qualitative research design with a phenomenological approach, data were collected through in-depth interviews and document analysis involving salt farmers, intermediaries, letter owners, and related institutional actors in Pesanggrahan Village, Bangkalan Regency. The findings reveal that transaction costs arise primarily from asymmetric information, negotiation processes, and contractual constraints, particularly through the requirement to rent road permits issued by intermediaries to access salt processing firms. These costs, incurred outside production activities, limit farmers' ability to sell directly to factories and weaken their bargaining position. As a result, farmers become structurally dependent on intermediaries within the salt supply chain. This study contributes to the transaction cost economics literature by highlighting how informal institutional arrangements and market regulations generate persistent inefficiencies and dependency among small-scale agricultural producers, with important implications for policy interventions aimed at improving farmer autonomy and market efficiency.

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## 1. Introduction

Salt is a strategic commodity in Indonesia, serving both household consumption and industrial production needs. National demand for salt has continued to increase over time, reaching approximately 4.2 million tons in 2018, of which 3.7 million tons were required for industrial use (Ekon.go.id, 2018). Despite Indonesia's extensive coastal resources, domestic salt production has remained insufficient to meet this demand. In the same year, total national production reached only 1.94 million tons, forcing the government to rely on imports to fill the gap. East Java is the largest contributor to domestic salt production, accounting for more than one million tons annually, with Madura Island playing a central role due to its vast salt pond areas (Jatim.bps.go.id, 2019).

Bangkalan Regency, located in the western part of Madura Island, is one of the regions with significant salt-producing potential. Pesanggrahan Village in Kwanyar District represents an important production center, where local communities utilize seawater to produce salt through traditional

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methods. In 2018, salt farmers in this village cultivated approximately 28 hectares of salt ponds and produced more than 1,100 tons of salt (Bangkalankab.bps.go.id, 2019). However, despite their contribution to regional production, salt farmers continue to face persistent economic challenges, particularly related to low farm-gate prices, limited bargaining power, and restricted access to processing firms.

From a neoclassical economic perspective, market transactions are assumed to operate efficiently under conditions of perfect information and costless exchange, where prices reflect production costs and competition ensures optimal outcomes (Stone et al., 1992). Under such assumptions, farmers should be able to sell their output directly to buyers without incurring additional costs beyond production expenses. In reality, however, economic transactions are rarely free from frictions. Information asymmetries, institutional constraints, and contractual requirements often generate additional costs that influence market behavior and outcomes.

These additional costs are conceptualized in the literature as transaction costs. According to North (1992), transaction costs include all costs associated with specifying, monitoring, and enforcing exchange agreements, extending beyond mere production expenses. Williamson (1985) further emphasizes that transaction costs arise from bounded rationality, opportunism, and imperfect institutional arrangements. In agricultural markets, such costs frequently manifest in the form of information search costs, negotiation costs, and contract enforcement costs (Yustika, 2008b; Oki & Babulu, 2021). When information is unevenly distributed among market actors, asymmetric information emerges, often leading to unequal bargaining positions and inefficient market outcomes (Greenwald & Stiglitz, 1986).

Empirical studies have documented the significance of transaction costs across various sectors. Yustika (2008b) identified transaction costs in the relationship between sugarcane farmers and processing factories in Indonesia, while Fadhiela et al. (2018) demonstrated how transaction costs reduced farmers' profits in the Gayo Arabica coffee sector. More recent studies have extended transaction cost analysis to construction projects (Wu et al., 2022) and digital platforms (Li & Fang, 2022). Nevertheless, research focusing on transaction costs in salt farming remains limited, particularly in relation to institutional arrangements governing market access and farmer-factory relationships (Fauziyah & Ihsannudin, 2014).

In practice, salt farmers in Pesanggrahan Village are unable to sell their production directly to salt processing firms. Instead, they rely on intermediaries who possess road permits required for product delivery. These permits, commonly referred to as road letters, function as an informal institutional mechanism that shapes market access. Farmers are required to rent these permits, incurring costs outside their production activities. Such arrangements indicate the presence of transaction costs arising from asymmetric information, negotiation processes, and contractual constraints, which ultimately limit farmers' independence and reinforce dependency on intermediaries.

Given the limited empirical evidence on transaction costs in Indonesia's salt sector, this study aims to examine the nature and sources of transaction costs faced by small-scale salt farmers in Pesanggrahan Village, Bangkalan Regency. Specifically, it seeks to identify how asymmetric information, negotiation processes, and institutional requirements influence market access and farmer dependency. By applying a transaction cost economics perspective, this study contributes to the broader literature on new institutional economics and provides insights into policy interventions aimed at improving market efficiency and farmer autonomy in agricultural supply chains.

## **2. Literature Review**

### **Transaction Cost Economics**

In neoclassical economic theory, market transactions are assumed to operate under conditions of perfect information and costless exchange. Buyers and sellers are expected to interact efficiently, with

prices reflecting production costs and competitive market forces ensuring optimal outcomes (Stone et al., 1992). Under this framework, efficiency is measured primarily through production costs, while non-production factors are largely ignored. However, such assumptions rarely hold in real-world economic activities, particularly in agricultural markets where institutional constraints and information imperfections are prevalent.

The limitations of neoclassical assumptions are addressed by Transaction Cost Economics (TCE), a core component of New Institutional Economics. North (1992) defines transaction costs as the costs of specifying, monitoring, and enforcing contracts underlying economic exchange. Williamson (1985) further emphasizes that transaction costs arise due to bounded rationality, opportunism, and imperfect institutional arrangements. These costs include expenses related to information search, negotiation, coordination, and contract enforcement, all of which influence the organization and performance of markets.

In agricultural contexts, transaction costs are unavoidable because market actors often possess unequal access to information. According to Yustika (2008a), transaction costs emerge when institutional arrangements fail to facilitate efficient exchange, leading to inefficiencies that disproportionately affect small-scale producers. Such costs are not recorded as production expenses but significantly shape farmers' economic outcomes and market participation.

### **Types of Transaction Costs**

Transaction costs can be categorized into several components. Yustika (2008b) and Oki and Babulu (2021) consolidate these components into three main categories: (1) search and information costs, (2) negotiation and contract execution costs, and (3) monitoring, enforcement, and compliance costs. Search and information costs arise when economic actors must expend resources to obtain market information. Negotiation costs occur during bargaining processes and contract formation, while monitoring and enforcement costs are incurred to ensure contractual compliance.

Empirical studies have shown that these costs are particularly pronounced in agricultural supply chains. Yustika (2008b) identifies transaction costs in the relationship between sugarcane farmers and sugar factories, while Fadhiela et al. (2018) demonstrate how transaction costs reduce profitability among Gayo Arabica coffee farmers. These studies highlight that transaction costs often function as structural barriers, limiting farmers' access to markets and weakening their bargaining position.

### **Asymmetric Information and Market Inefficiency**

Asymmetric information occurs when one party in a transaction possesses more or better information than another. Greenwald and Stiglitz (1986) argue that information asymmetry leads to market inefficiencies, as prices and contractual arrangements no longer reflect true market conditions. In such situations, actors with superior information can exploit their position, often at the expense of weaker parties.

In agricultural markets, asymmetric information commonly affects price determination, quality assessment, and access to buyers. Susetyo (2006) notes that farmers frequently rely on intermediaries for price information, which limits their bargaining power. This condition reinforces dependency relationships and perpetuates unequal market structures. Yustika (2008b) further emphasizes that asymmetric information is a key driver of transaction costs, as farmers must incur additional expenses to reduce uncertainty or accept unfavorable contractual terms.

### **Institutional Arrangements and Intermediation**

Institutional arrangements play a critical role in shaping market interactions. Furubotn and Richter (2005) explain that agency relationships arise when principals delegate authority to agents, often

resulting in information asymmetry and potential opportunism. In agricultural supply chains, intermediaries frequently occupy dual roles as agents and principals, depending on their position in the transaction chain.

Several studies document the role of intermediaries in increasing transaction costs. Fauziyah and Ihsannudin (2014) highlight how weak marketing institutions constrain salt farmers' access to markets, while Yustika (2008b) shows that intermediaries often control information flows between farmers and processing firms. As a result, farmers become dependent on intermediaries who possess institutional authority, market access, or regulatory permits.

In the context of salt farming, institutional requirements such as road permits function as informal contracts that determine market access. According to North (1992), such institutional constraints shape economic behavior by defining the rules of exchange. When these rules are costly or difficult to fulfill, transaction costs increase, leading farmers to rely on intermediaries who can navigate institutional barriers.

### Conceptual Framework

Based on Transaction Cost Economics, this study conceptualizes transaction costs as arising from asymmetric information, negotiation processes, and contractual constraints within the salt supply chain. These elements interact to influence farmers' access to markets and their dependency on intermediaries.

**Figure 1.** Transaction Purchase in the Neoclassical Economics Paradigm

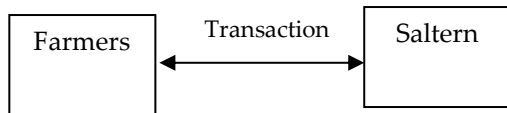


Figure 1 illustrates a costless exchange between farmers and salt processing firms, assuming perfect information and direct market access.

**Figure 2.** Schematic of Marketing Channels in Pesanggrahan Village, Kwanyar

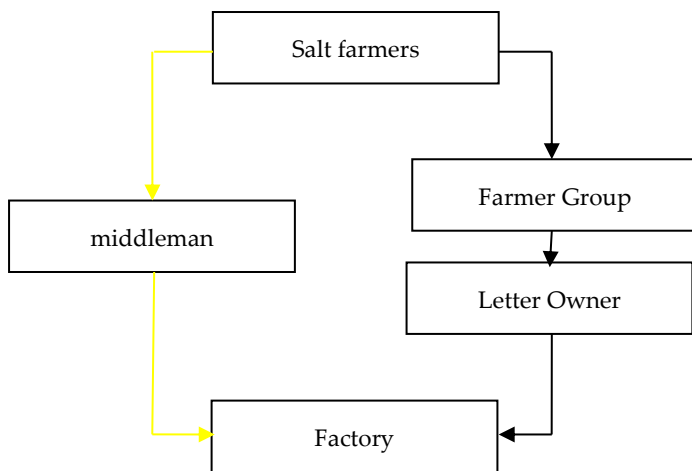


Figure 2 depicts the two dominant marketing channels, highlighting the role of intermediaries and letter owners in facilitating transactions. Information  $\rightarrow$  : The first marketing;  $\longrightarrow$  : The Marketing Funnel

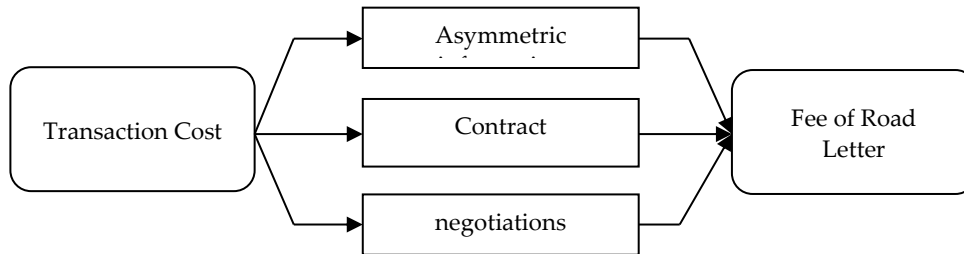
**Figure 3.** Schematic Transaction Fee

Figure 3 presents the relationship between asymmetric information, negotiation processes, contractual arrangements, and the emergence of transaction costs.

These conceptual illustrations demonstrate how deviations from neoclassical assumptions lead to the emergence of transaction costs and farmer dependency.

### Empirical Evidence and Research Gap

Previous studies have examined transaction costs across various sectors, including agriculture (Yustika, 2008b; Fadhiela et al., 2018), construction (Wu et al., 2022), and digital platforms (Li & Fang, 2022). While these studies confirm the pervasive role of transaction costs in shaping economic outcomes, research focusing specifically on salt farming remains limited. Existing studies on salt farmers primarily address production and institutional development without explicitly analyzing transaction costs and market access (Fauziyah & Ihsannudin, 2014).

This gap underscores the need for empirical research that examines how transaction costs, driven by asymmetric information and institutional arrangements, affect small-scale salt farmers. By focusing on Pesanggrahan Village in Bangkalan Regency, this study extends the transaction cost literature to an underexplored agricultural sector and provides context-specific insights into farmer dependency and market inefficiency.

## 3. Methodology

### Research Design

This study employs a qualitative research design with a phenomenological approach. This approach is appropriate for exploring how economic actors experience and interpret institutional arrangements and transaction costs within their everyday economic activities. Phenomenology allows researchers to capture lived experiences and subjective meanings embedded in market interactions, particularly in contexts where informal institutions and non-market mechanisms play a significant role.

The qualitative design is consistent with the objective of this study, which seeks to identify and understand the nature of transaction costs, asymmetric information, and contractual constraints faced by small-scale salt farmers, rather than to quantify causal relationships.

### Study Area

The research was conducted in Pesanggrahan Village, Kwanyar District, Bangkalan Regency, East Java, Indonesia. This location was purposively selected due to its significance as one of the major salt-producing areas in Bangkalan Regency. Pesanggrahan Village has approximately 28 hectares of salt

ponds managed by small-scale farmers and represents a typical salt-farming community in Madura Island.

The village was selected because salt farmers in this area do not sell their production through conventional middlemen but instead rely on specific institutional arrangements involving farmer groups and road-letter owners to access salt processing firms. This unique marketing structure provides a relevant setting for examining transaction costs and institutional dependency.

### **Informants and Sampling Technique**

This study involved two categories of informants: key informants and supporting. Key informants consisted of salt farmers actively engaged in salt production and marketing activities in Pesanggrahan Village. Supporting informants included non-farming residents, road-letter owners, factory workers, and officials from the local Fisheries and Maritime Affairs Office.

Informants were selected using purposive sampling, based on their direct involvement and knowledge of salt production, marketing processes, and institutional arrangements. This technique ensured that the data informants collected reflected diverse perspectives across different roles within the salt supply chain.

### **Data Collection Techniques**

Data were collected through in-depth interviews, field observations, and document analysis. In-depth interviews were conducted using semi-structured interview guides to allow flexibility in exploring emerging themes related to transaction costs, negotiation processes, and information asymmetry. Field observations were used to capture contextual information regarding production activities, marketing practices, and interactions among actors. Document analysis included reviewing relevant administrative documents, institutional regulations, and records related to salt marketing and road permits.

Data collection was carried out over multiple visits to the study site to ensure data saturation and consistency across informants.

### **Data Analysis**

Data analysis followed an interpretive qualitative approach. Interview transcripts and field notes were systematically organized and analyzed through thematic categorization. The analysis focused on identifying patterns related to three main components of transaction costs: (1) information search and asymmetry, (2) negotiation and contract execution, and (3) institutional constraints affecting market access, as conceptualized in transaction cost economics (Yustika, 2008b; Furubotn & Richter, 2005).

The analytical process involved data reduction, data display, and interpretation, allowing the researchers to link empirical findings with theoretical constructs from New Institutional Economics.

### **Validity and Reliability**

To ensure the trustworthiness of the findings, this study applied data triangulation by comparing information obtained from different types of informants and data sources. Prolonged engagement in the field and repeated interviews were conducted to enhance credibility. The consistency of interpretations was maintained through careful documentation of analytical procedures and reflective interpretation.

### **Ethical Considerations**

Ethical considerations were observed throughout the research process. Informants participated voluntarily and were informed about the purpose of the study. Anonymity and confidentiality were maintained to protect the identities of participants and ensure the integrity of the data.

**Notes on Tables, Figures, and Formulas**

This study does not employ quantitative models, mathematical formulas, or statistical tables, as it adopts a qualitative phenomenological approach. All figures and tables presented in the manuscript are conceptual illustrations used to support theoretical explanations and are discussed in the Results and Discussion section.

**4. Results****Institutional Actors and Marketing Structure**

The results indicate that several institutional actors are involved in the salt marketing system in Pesanggrahan Village, Kwanyar District, Bangkalan Regency. These actors include salt farmers, farmer groups, intermediaries, road-letter owners, and salt processing firms. In practice, salt farmers do not interact directly with processing firms but instead rely on intermediaries who possess road permits required for product delivery.

Two main marketing channels were identified. The first channel involves salt farmers selling their production to intermediaries, who then deliver the salt to processing firms. The second channel involves salt farmers selling through farmer groups, which coordinate with road-letter owners before the salt is delivered to processing firms. Among these two channels, the second channel is more commonly used by farmers in Pesanggrahan Village due to lower perceived costs and fewer logistical constraints.

These marketing structures are illustrated in Figure 2. Schematic of Marketing Channels in Pesanggrahan Village, Kwanyar, which shows the role of intermediaries and road-letter owners as key actors bridging farmers and factories.

**Road Permits as an Institutional Requirement**

A central finding of this study is the importance of road permits, commonly referred to as road letters, in facilitating salt transactions. Road letters are mandatory documents required by processing firms to legally accept salt deliveries. Although salt farmers are theoretically allowed to obtain these permits, informants reported that the process is complex and difficult to fulfill.

The requirements include a recommendation letter from the local Fisheries and Maritime Affairs Office, the ability to supply a minimum quantity of salt on a regular basis, sufficient capital to purchase salt from other farmers if needed, and established relationships with processing firms. The final decision to issue road permits remains entirely under the authority of the processing firms. As a result, most salt farmers are unable to meet these conditions and choose not to apply for road permits.

Due to these constraints, farmers depend on road-letter owners who already possess valid permits. This institutional arrangement limits farmers' direct access to markets and reinforces intermediary roles within the salt supply chain.

**Emergence of Transaction Costs**

The reliance on road-letter owners generates transaction costs that are incurred outside production activities. These transaction costs primarily arise from the need to rent road permits, negotiate selling arrangements, and access market information. The presence of these costs indicates a deviation from the neoclassical assumption of costless exchange.

The relationship between transaction costs, asymmetric information, and negotiation processes is illustrated in Figure 3. Schematic Transaction Fee, which depicts how institutional constraints give rise to additional costs borne by salt farmers.

Informants consistently reported that renting road permits is a routine expense that must be paid for each transaction. These costs are not recorded as production costs but directly reduce farmers' net income from salt sales.

**Composition of Transaction Costs**

The specific components of transaction costs incurred by salt farmers are presented in Table 1. Total Expenditure of Salt Farmer in the Purchase Process. The table shows that transaction-related expenses include road permit rental fees, transportation costs, loading costs, and packaging costs.

**Table 1.** Total Expenditure of Salt Farmer in the Purchase Process.

No	Description	Cost (IDR / Ton)	Total
1	Rental costs of road letter	25,000	25,000
2	Transport costs	20,000	20,000
3	Transport costs to trucks	30,000 x 2 people	60,000
4	Sack cost	32,000	32,000
5	Total costs	107,000	137,000

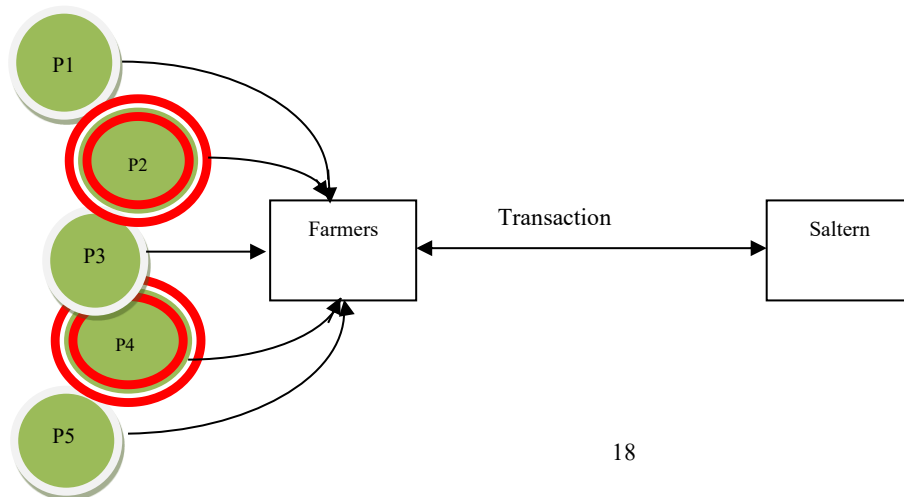
Based on the reported figures, the total transaction cost incurred by farmers reaches IDR 137,000 per ton. Among these expenses, the rental cost of the road permit constitutes a fixed and unavoidable cost that must be paid whenever farmers sell their salt through intermediaries. These costs significantly affect farmers' profitability, especially during periods of low salt prices.

**Asymmetric Information in Price and Market Access**

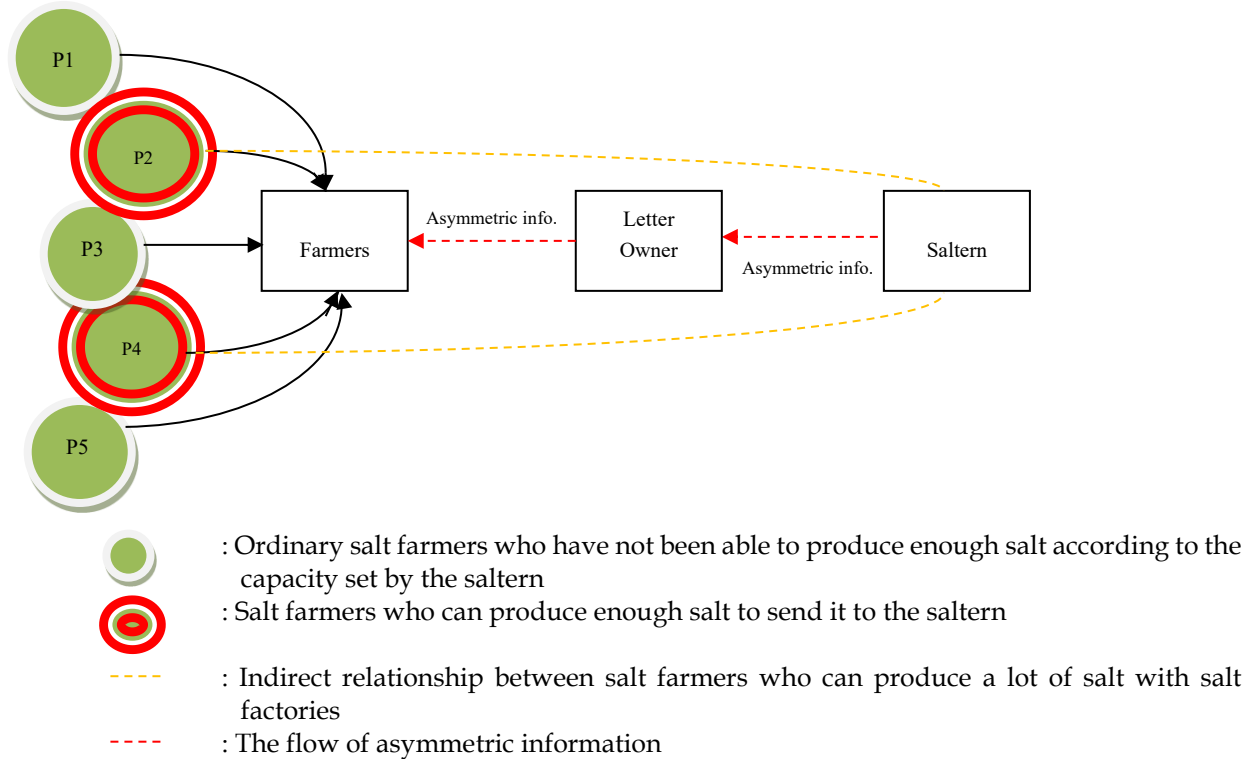
The results further reveal the presence of asymmetric information in the salt marketing process. Most salt farmers do not have direct access to information regarding market prices, quality standards, or factory purchasing schedules. Instead, they rely on intermediaries and road-letter owners for such information.

Interviews with key informants indicate that farmers are often unaware of the prices set by processing firms and have limited ability to verify the accuracy of the information they receive. This condition weakens farmers' bargaining power and constrains their ability to negotiate favorable prices.

**Figure 4.** Buying and Selling Transactions before the Presence of Asymmetric Information



**Figure 5.** Buying and Selling Transactions after the Presence of Asymmetric Information



The flow of asymmetric information before and after the involvement of intermediaries is illustrated in Figure 4. Buying and Selling Transactions before the Presence of Asymmetric Information and Figure 5. Buying and Selling Transactions after the Presence of Asymmetric Information. These figures show that the introduction of intermediaries alters information flows and increases farmers' dependence on third parties.

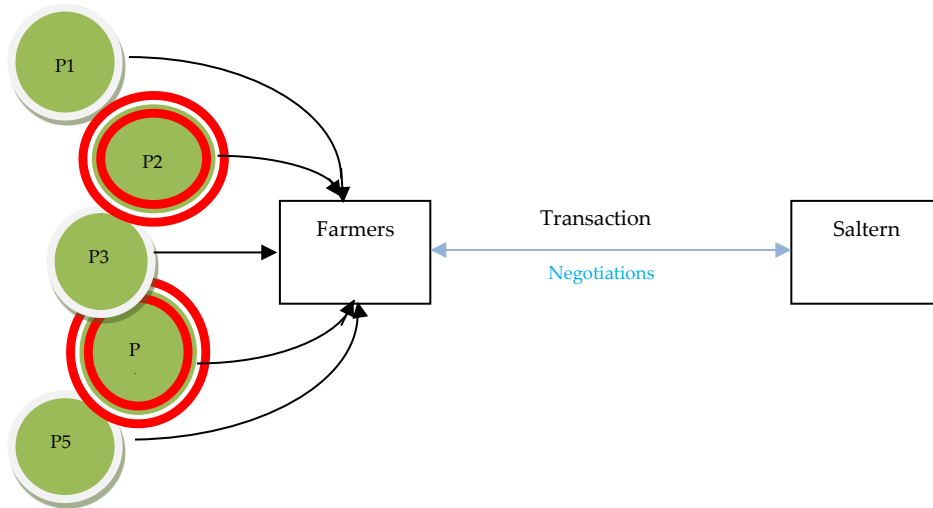
### Negotiation Processes and Contractual Constraints

Negotiation processes are an integral part of salt transactions in Pesanggrahan Village. Negotiations occur not only between farmers and road-letter owners but also between road-letter owners and processing firms. However, the results show that farmers occupy the weakest bargaining position within these negotiations.

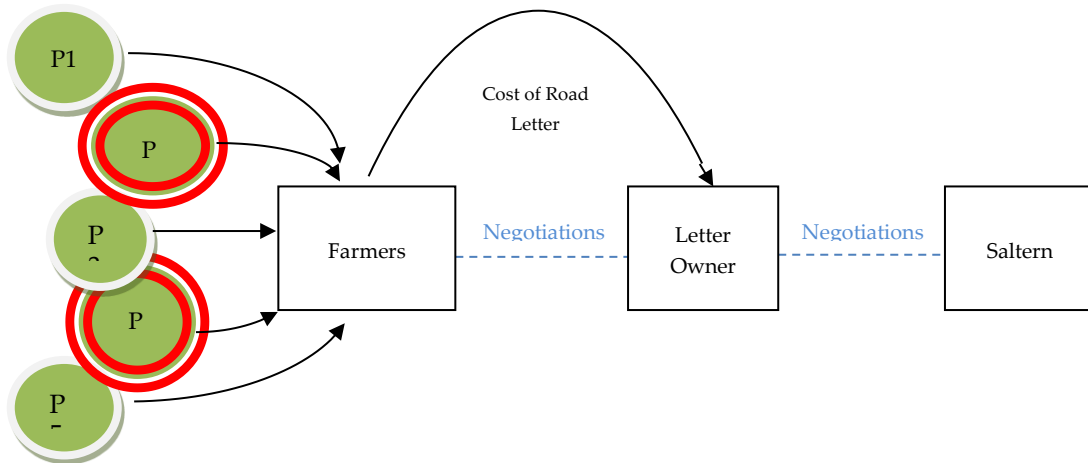
Figures 6 and 7 illustrate the negotiation process before and after transaction costs emerge. When farmers lack direct access to processing firms, negotiations become more complex and time-consuming, leading to additional costs. In many cases, farmers accept predetermined prices set by intermediaries due to limited alternatives and the urgency to sell their production.

Contractual arrangements between farmers and processing firms are largely informal and mediated by intermediaries. As shown in Figures 8 and 9, the execution of contracts shifts from direct farmer-factory relationships to arrangements involving road-letter owners. This shift further reinforces farmers' dependency and reduces their autonomy in market participation.

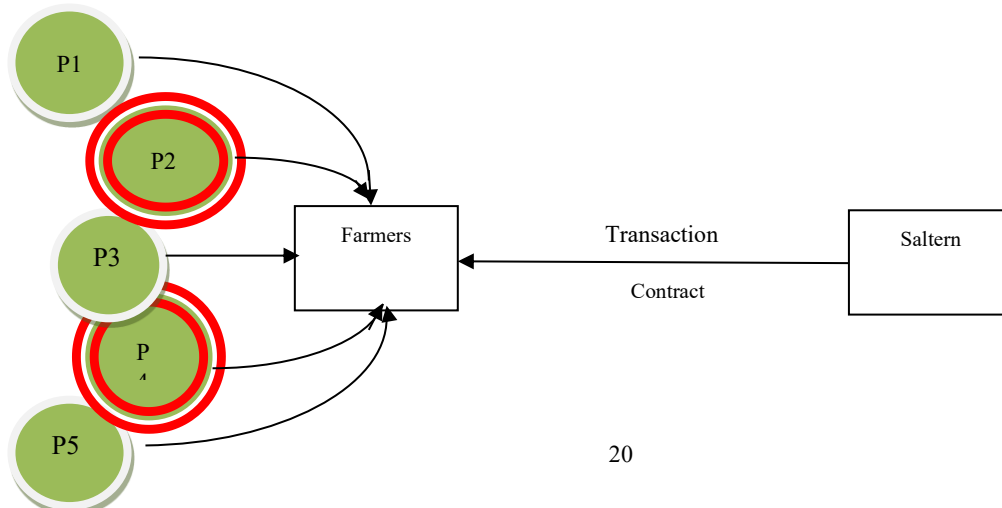
**Figure 6.** Purchase Transactions with the negotiation process before transaction costs



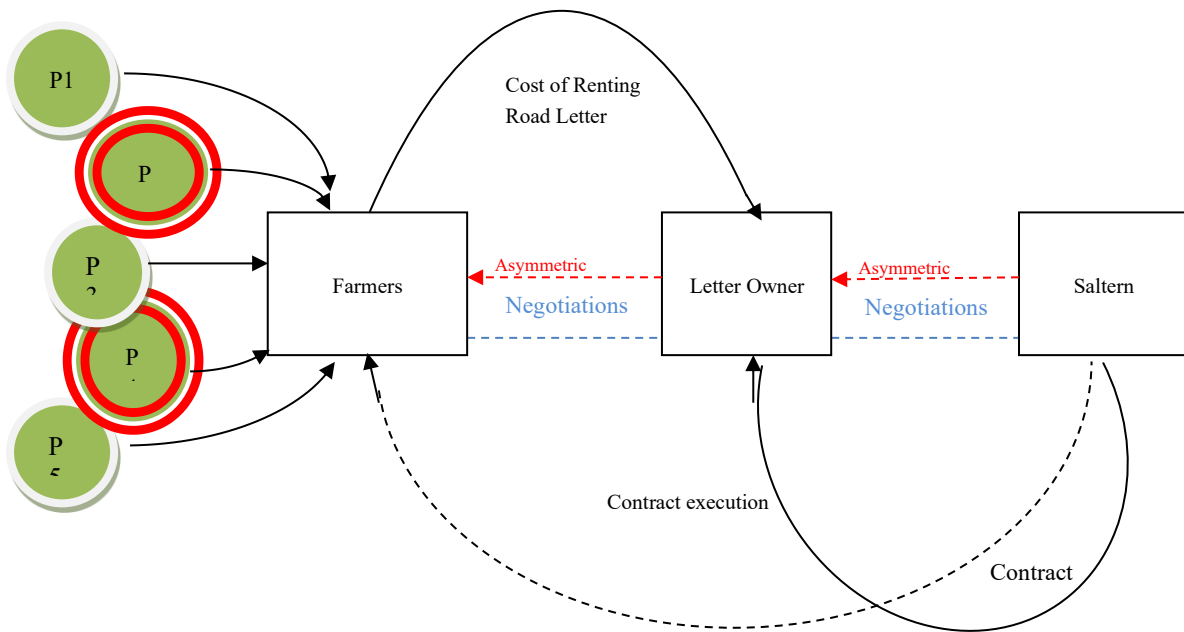
**Figure 7.** The negotiation process after the transaction cost



**Figure 8.** The contract before the transaction cost



**Figure 9.** The Contract after the transaction cost



### Farmer Dependency on Intermediaries

The findings demonstrate that transaction costs, asymmetric information, and institutional barriers collectively contribute to farmer dependency on intermediaries. Salt farmers perceive road-letter owners as indispensable actors who facilitate market access, despite the additional costs involved. Over time, repeated interactions foster long-term relationships characterized by trust and dependence.

Although intermediaries provide short-term solutions for selling salt, this dependency constrains farmers' ability to improve their bargaining position or pursue independent market strategies. As a result, farmers remain embedded in an institutional structure that perpetuates transaction costs and limits market efficiency.

## 5. Discussion

### Transaction Costs and Institutional Inefficiency

The findings of this study confirm that transaction costs play a central role in shaping salt marketing practices in Pesanggrahan Village. Contrary to the neoclassical assumption of costless exchange under perfect information (Stone et al., 1992), the empirical evidence demonstrates that salt farmers incur substantial non-production costs in order to access markets. These costs arise not from technological inefficiencies but from institutional arrangements that govern market access.

As illustrated in Figure 1, neoclassical theory assumes direct transactions between farmers and processing firms without intermediaries. However, the actual marketing structure depicted in **Figure 2** shows that farmers must rely on intermediaries and road-letter owners to reach salt processing firms. This deviation highlights institutional inefficiency, where formal market access is restricted by administrative and contractual barriers rather than economic capability.

Consistent with Transaction Cost Economics, these findings support the argument that institutional constraints increase the cost of exchange and reduce overall market efficiency (North, 1992; Williamson, 1985).

### **Road Permits as a Source of Transaction Costs**

Road permits function as an informal institutional mechanism that directly generates transaction costs. Although formally intended to regulate product delivery, road permits effectively act as a market-entry barrier for small-scale farmers. The inability of farmers to obtain these permits independently forces them to rent permits from road-letter owners, resulting in recurring transaction costs.

The composition of these costs, detailed in Table 1, demonstrates that permit rental fees constitute a fixed and unavoidable expense for farmers. This finding aligns with Yustika (2008b), who argues that transaction costs often emerge from institutional arrangements that are beyond the control of small producers. These costs are not efficiency-enhancing but instead function as a redistributive mechanism that shifts income away from farmers toward intermediaries.

### **Asymmetric Information and Bargaining Power**

Asymmetric information is a key mechanism through which transaction costs persist in the salt supply chain. The results indicate that salt farmers lack direct access to price information, quality standards, and purchasing schedules set by processing firms. Instead, information flows through intermediaries, creating information inequality between market actors.

This condition is consistent with the theoretical framework proposed by Greenwald and Stiglitz (1986), which suggests that information asymmetry leads to inefficient market outcomes and unequal bargaining positions. The contrast between Figure 4 and Figure 5 illustrates how the introduction of intermediaries disrupts direct information flows, reinforcing farmers' dependency and reducing transparency. As a result, farmers are unable to verify market prices or negotiate effectively, which limits their capacity to improve income outcomes despite producing a strategic commodity.

### **Negotiation Processes and Contractual Dependency**

Negotiation processes observed in this study further demonstrate the unequal power relations within the salt supply chain. While negotiation is theoretically expected to facilitate mutually beneficial agreements, the findings reveal that negotiations primarily serve to legitimize prices and conditions already determined by intermediaries and processing firms.

The comparison between Figures 6 and 7 shows that negotiation becomes more complex and costly once transaction costs emerge. Farmers face prolonged bargaining processes with limited outcomes, often accepting predetermined prices to avoid the risk of unsold production. This outcome reflects the presence of contractual constraints that restrict farmers' autonomy.

Furthermore, the shift in contractual relationships depicted in Figures 8 and 9 indicates that contract execution no longer occurs directly between farmers and processing firms. Instead, contracts are mediated by road-letter owners, reinforcing farmers' dependency and weakening their institutional position. This finding supports Furubotn and Richter's (2005) argument that agency relationships can exacerbate opportunism and inefficiency when information and authority are unevenly distributed.

### **Farmer Dependency and Institutional Lock-in**

The cumulative effect of transaction costs, asymmetric information, and contractual barriers is the emergence of long-term dependency relationships between farmers and intermediaries. While road-letter owners provide short-term solutions by facilitating market access, they also entrench farmers in an institutional structure that limits independence and innovation.

This condition reflects what Yustika (2008a) describes as institutional lock-in, where economic actors remain trapped in inefficient arrangements due to limited alternatives and structural constraints. Over time, such dependency weakens farmers' incentives to seek institutional change, reinforcing the persistence of transaction costs within the system.

### **Policy Implications and Recommendations**

The findings of this study suggest that reducing transaction costs in the salt supply chain requires institutional reforms that improve market access for small-scale farmers. Simplifying administrative requirements for road permits would enable farmers to sell directly to salt processing firms and reduce their dependence on intermediaries. Strengthening farmer groups or cooperatives can enhance collective bargaining power, lower individual transaction costs, and facilitate access to market information. In addition, the provision of transparent and timely price information by government agencies or processing firms is essential to reduce asymmetric information and improve farmers' negotiation capacity. Capacity-building programs focusing on negotiation skills and institutional literacy would further empower farmers to engage more effectively in market transactions. Finally, promoting clearer and more inclusive contractual arrangements between farmers and processing firms can help minimize opportunistic behavior, improve market efficiency, and enhance the economic sustainability of small-scale salt farming in Indonesia.

## **6. Conclusion**

This study demonstrates that transaction costs are an inherent and significant feature of salt marketing activities among small-scale farmers in Pesanggrahan Village, Bangkalan Regency. These costs arise not from production processes but from institutional arrangements that regulate market access, particularly the requirement to obtain road permits through intermediaries. The findings reveal that asymmetric information, negotiation processes, and contractual constraints collectively generate transaction costs that limit farmers' ability to sell directly to salt processing firms and weaken their bargaining position.

The reliance on road-letter owners reflects the presence of institutional inefficiencies that deviate from the assumptions of costless exchange under neoclassical market theory. Instead, the observed marketing structure aligns with the perspective of transaction cost economics, where imperfect institutions and information asymmetry shape economic outcomes. As a result, salt farmers become structurally dependent on intermediaries who control access to markets, information, and contractual relationships.

Overall, this study contributes to the literature on transaction cost economics by providing empirical evidence from an underexplored agricultural sector. It highlights how informal institutional mechanisms and market regulations can perpetuate inefficiencies and dependency among small-scale producers. Addressing these institutional barriers is essential to reducing transaction costs, improving market efficiency, and enhancing the economic sustainability and autonomy of salt farmers in Indonesia.

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