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INSTITUTIONAL REPUTATION AND SMALLHOLDER MARKET ACCESS: THE SOCIAL DYNAMICS OF OIL PALM SEEDLING MARKETING IN INDONESIA

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ABSTRACT

Smallholder access to quality oil palm planting materials is often framed in terms of supply, purchasing capacity, or institutional support, leaving insufficient attention to the social processes through which farmers assess credibility and navigate agricultural markets. This study examines how institutional reputation, trust, social networks, and institutional arrangements shape smallholders' access to quality oil palm seedlings in Indonesia, focusing on the Indonesian Oil Palm Research Institute (PPKS) as a recognized provider of planting materials. Using an interpretive qualitative case study, the research draws on in-depth interviews, observations, and institutional and policy documents involving PPKS, distributors, farmer organizations, extension agents, and smallholders. Data were analyzed through reflexive thematic analysis to trace how institutional credibility is constructed, circulated, and translated into market access. The findings indicate that PPKS's institutional reputation functions as a mechanism for reducing uncertainty in a market where the future performance of planting materials cannot be directly observed at the point of purchase. Yet reputation alone does not ensure equitable access. Its practical value is mediated by information flows, social networks, distribution channels, geographical distance, administrative requirements, and farmers' institutional positioning. The study advances a relational understanding of institutional reputation as a socially embedded market resource and demonstrates that smallholder access is produced through interactions between credibility, trust, networks, and institutional structures.

Keywords: *Agricultural Markets, Institutional Reputation, Oil Palm Seedlings, Smallholder Farmers, Social Networks*

INTRODUCTION

Smallholder access to quality oil palm planting material has become an increasingly consequential issue in Indonesia because the productivity and long-term viability of smallholder plantations depend not only on how farmers manage existing trees but also on the quality of the material with which old plantations are replaced. Oil palm is a long-cycle crop, and the consequences of choosing planting material are therefore experienced over many years rather than at the moment of purchase. This makes the market for planting material fundamentally different from an ordinary consumer market. Farmers often have to make decisions about genetic quality, varietal characteristics, certification, and future productivity without being able

to directly observe the eventual performance of the planting material. The decision is consequently made under considerable uncertainty. This problem is particularly important for independent smallholders, who generally have weaker access to technical assistance, formal institutions, finance, and high-quality agricultural inputs than farmers linked to corporate or organized schemes (Dogeje, 2025; Uwiringiyimana et al., 2026). Research on Indonesian oil palm has repeatedly documented a substantial productivity gap between smallholders and larger or more institutionally supported plantations, with inadequate access to quality inputs and knowledge forming part of the explanation (Kabir et al., 2022). The problem is therefore not simply that quality planting material exists but that farmers must be able to identify, trust, obtain, and use it.

The difficulty becomes more visible in the context of plantation replanting. A substantial proportion of Indonesian smallholder plantations is approaching or has reached the end of its economically productive cycle, making replanting an important condition for maintaining household livelihoods and reducing persistent yield gaps. Yet replanting requires farmers to mobilize financial resources, technical knowledge, institutional support, and reliable inputs at a time when they may simultaneously face temporary losses of plantation income. Akinola et al., (2026) identify uneven access to high-quality seedlings, knowledge, finance, and public replanting support as central constraints on Indonesian smallholders. More recent evidence similarly shows that even when public replanting support is available, eligibility requirements, land documentation, farmer-group membership, and limited access to certified high-quality seedlings can prevent farmers from benefiting equally from such programs. The issue, then, is not adequately captured by the familiar language of supply and demand. A farmer may know that certified planting material is preferable and may even recognize a particular institution as a credible provider, yet still obtain planting material through a different channel because of distance, cost, waiting time, administrative requirements, limited information, or the absence of an accessible distributor. This distinction between knowing which institution is credible and being able to translate that credibility into actual access provides the empirical problem from which this study begins.

Existing research on Indonesian oil palm smallholders provides a substantial foundation for understanding the structural dimensions of this problem. One important strand of literature has focused on the unequal distribution of productive resources and the heterogeneity of smallholder conditions. Bahati Shamamba et al. (2023), for example, demonstrate that independent smallholders are not a homogeneous category and face differentiated barriers to good agricultural practices, certification, and access to institutional support. Their findings are important because they challenge interventions that treat all smallholders as if they occupy the same position within the value chain. More recent research reaches a similar conclusion from a livelihood perspective. Hlatshwayo et al. (2022) show that ex-transmigrant, independent, and plasma smallholders differ in assets, livelihood strategies, social capital, and economic outcomes, indicating that historical and institutional arrangements continue to shape the resources

available to farmers. Studies of certification reinforce this point. Reich and Musshoff (2025) find that Indonesian smallholders generally recognize the potential benefits of certification, but adoption is influenced by training, financial incentives, risk attitudes, and farmers' perceived capacity to manage uncertainty. Likewise, the study of independent smallholders' pre-certification conditions by Lesala et al. (2025) shows that legality requirements, group organization, and external facilitation can determine whether farmers can enter formal certification systems. These studies establish that access to agricultural resources is socially and institutionally differentiated. They also suggest, however, that structural access alone does not fully explain how farmers decide which institutional actors and sources of information they consider credible.

A second body of literature shifts attention from resources to the social organization of agricultural exchange. The economic sociology tradition has long questioned the assumption that economic action takes place among isolated actors who make decisions independently of their social surroundings. Mishra et al. (2025) argues that economic action is embedded in ongoing social relations, while Agholor et al. (2023) emphasizes that social relationships can function as resources by creating obligations, information channels, and expectations that facilitate action. subsequently shows that trust and social connection can shape agricultural markets while also warning that embedded relationships may reproduce unequal access and privilege rather than simply generating cooperation. These insights are particularly relevant to smallholder agriculture, where information about inputs, buyers, prices, technologies, and institutional programs often travels through relationships rather than through formal information systems alone. Research on farmers' market access confirms this relational dimension. Nyagango et al. (2026) , for example, demonstrate that farmers' personal networks are closely associated with market access and financial sustainability, while Akintayo et al., (2022) show that collective action and farmer organizations can influence the capacity of oil palm smallholders to manage replanting and respond to institutional and economic pressures. Recent evidence from Indonesia also indicates that farmer groups provide channels for accessing capital, production facilities, marketing opportunities, market information, and learning, although independent smallholders' participation in such institutions remains limited (Banla et al., 2025).

The importance of social relations becomes even clearer when trust is considered. Trust matters because agricultural transactions frequently involve uncertainty that cannot be eliminated through formal information alone. Farmers may not be able to independently verify the quality of a product, predict the future behavior of a supplier, or assess whether institutional promises will actually be fulfilled. In such circumstances, reputation, previous experience, recommendations, and repeated interaction can become practical bases for economic judgment. Ozkan et al. (2022), working within the literature on corporate reputation, demonstrate that relational trust can mediate the relationship between perceived reputation and longer-term relational outcomes. Although their empirical setting is different from agricultural input markets, the theoretical implication is useful: reputation has economic consequences partly because

actors interpret it through relationships of trust. Evidence from agriculture points in the same direction. Makate et al. (2024) found that reputation, information provision, direct social interaction, and the duration of relationships significantly shaped trust in community-supported agriculture. Okello et al. (2026) similarly showed that farmers' trust in preferred trading partners was associated with perceptions of reputation, fairness, reliability, and cooperative behavior. In Indonesian agriculture, research on social capital has likewise shown that trust, farmer-group membership, and networks can facilitate access to inputs, information, finance, and market opportunities (Nyagango et al., 2023).

A related strand of oil palm research demonstrates that institutional relationships are especially important for smallholder inclusion in formal markets and sustainability programs. Certification, for instance, is not simply a technical standard imposed on farms; it requires farmers to navigate organizational, informational, financial, and legal arrangements. Akite et al. (2024) show that the structure of the oil palm value chain itself can constrain smallholder upgrading, while Balcha et al. (2025) demonstrate that certification among independent smallholders is strongly dependent on group organization and external facilitation. Claude et al., (2025) further show that farmers' willingness to adopt certification is shaped by training and economic incentives, suggesting that formal standards become meaningful only when farmers have the institutional capacity to respond to them. Recent evidence from certified palm oil markets is even more revealing: Castillo et al. (2022) found that independent smallholders were substantially underrepresented in certified mill supply compared with contract smallholders, and that participation depended on structural market access, location, and relationships with buyers rather than on certification requirements alone. Taken together, these studies indicate that institutional inclusion is mediated by relationships, organizational position, information, and the practical accessibility of formal channels. They also suggest that the institutional credibility of an actor cannot be separated from the networks through which that credibility reaches farmers.

Yet an important analytical question remains insufficiently developed across these bodies of research. Existing studies explain why smallholders experience unequal access to inputs, finance, certification, information, and institutional support; others demonstrate that social capital, farmer organizations, trust, and market relationships matter for agricultural decisions. Research on reputation, meanwhile, has largely conceptualized it as an organizational or market attribute that influences trust, satisfaction, loyalty, or stakeholder perceptions. What is less clearly understood is how the reputation of a specific institutional provider of agricultural planting material becomes socially meaningful to smallholders and, more importantly, under what conditions that reputation is converted into actual access. In the oil palm context, this distinction matters because planting material represents a high-consequence decision under conditions of incomplete information. The Indonesian Oil Palm Research Institute (PPKS), for example, can possess scientific authority, institutional history, technical expertise, and recognized credibility, but those attributes do not necessarily mean that every smallholder can access its planting material through equally reliable channels. Reputation may travel through

farmer groups, distributors, extension agents, government programs, peer recommendations, or previous experiences, and these channels are themselves unevenly distributed among farmers. The unresolved issue is therefore not whether institutional reputation matters, but how it is socially produced, transmitted, trusted, and converted into market access within an unequal smallholder landscape. This perspective moves beyond the conventional treatment of reputation as an intangible asset of an organization and instead understands it as a relational resource whose practical value depends on the social and institutional networks connecting providers and farmers.

Seen from this angle, the marketing of oil palm planting material is not simply a commercial process between a provider and a buyer. It is a socially organized process in which credibility must be interpreted, information must circulate, and institutional relationships must make a formally available product practically reachable. Such an approach brings together insights that have usually been examined separately: the structural vulnerability of independent smallholders, the embeddedness of economic action, the role of social capital and networks, and the relationship between reputation and trust. The contribution lies in treating institutional reputation not as a static characteristic possessed by a seedling provider but as a resource whose effectiveness is contingent on relational and institutional mediation. In this sense, market access is understood not merely as the capacity to purchase a product, but as the socially mediated capacity to obtain, evaluate, and use legitimate and quality-assured oil palm planting material. This formulation is particularly relevant to the Indonesian smallholder context because access may fail at several points: the product may be unavailable locally, information about legitimate sources may be incomplete, institutional procedures may be difficult to navigate, or farmers may lack the social connections through which credible information and trusted transactions are established. The resulting inequality is therefore not necessarily a simple reflection of purchasing power; it can also emerge from differences in farmers' institutional positioning and network resources.

Against this background, this study examines how institutional reputation shapes trust, information flows, social relationships, and smallholder access to quality oil palm planting material in Indonesia, with particular attention to PPKS as an institutional provider. Rather than evaluating marketing performance primarily through conventional measures of promotion or competitive strategy, the study investigates how farmers, distributors, farmer organizations, extension actors, and other institutional stakeholders construct and negotiate perceptions of credibility and how those perceptions influence actual access and seedling choices. The study specifically seeks to explain how institutional reputation becomes actionable through social and institutional networks, why recognition of institutional credibility does not necessarily translate into equitable access, and how differences in organizational membership, information, distribution channels, and institutional position produce differentiated market experiences among smallholders. By following these relationships, the study aims to show that improving access to quality planting material requires more than increasing supply or disseminating

information; it also requires strengthening the social and institutional pathways through which credibility becomes trusted, reachable, and usable by farmers. This orientation provides a basis for both more sociologically grounded scholarship on agricultural markets and more practically responsive interventions involving farmer organizations, extension systems, distribution networks, verification mechanisms, and smallholder replanting programs.

RESEARCH METHOD

This study employed a qualitative interpretive case study to examine how institutional reputation, trust, social networks, and institutional arrangements shape smallholders' access to quality oil palm planting material in Indonesia. A qualitative approach was considered appropriate because the central concern was not to measure the statistical effect of reputation on purchasing decisions, but to understand how farmers and other actors interpret institutional credibility, how trust is formed, and how these perceptions are translated into practical decisions under conditions of uncertainty. Access to planting material is inherently relational: farmers may recognize an institution as credible while still encountering difficulties in obtaining its products because of distribution arrangements, information gaps, administrative procedures, financial constraints, or geographical distance. Such processes are difficult to capture through predetermined variables alone and require attention to actors' experiences, interpretations, and relationships (W & N, 2018). The study therefore treated the oil palm seedling market as a socially embedded institutional field rather than as a conventional buyer–seller relationship.

The research was centered on the Indonesian Oil Palm Research Institute (PPKS) as the institutional case because its position as a recognized research and planting-material provider makes it particularly relevant for examining how institutional credibility enters smallholder markets. The field setting was extended to actors and smallholder communities connected to the distribution and use of PPKS planting material so that the analysis could follow the movement of institutional reputation beyond the organization itself. This design was important because reputation cannot be adequately understood by examining the institution in isolation; it must be traced through the social relationships by which information, recommendations, trust, and products reach farmers. The informants comprised 15 participants purposively selected according to their position within this access network: four PPKS institutional actors involved in planting-material management, technical services, certification, or marketing; three authorized distributors; two extension or government actors involved in smallholder plantation development and replanting; and six smallholders, including farmers who had obtained PPKS planting material and farmers who had relied on alternative sources. This variation was intentional because the study sought to capture contrasting experiences rather than statistical representativeness. Informants were selected because they possessed direct experience or institutional knowledge relevant to the processes through which reputation, information, and access were negotiated.

Data were collected primarily through semi-structured in-depth interviews, supplemented by observation and document analysis. Interviews explored how participants first encountered PPKS, what made the institution appear credible, whose recommendations they trusted, how information about planting material circulated, and whether institutional recognition actually facilitated access. Particular attention was given to episodes in which farmers intended to obtain quality planting material but encountered practical barriers, because such experiences could reveal the difference between institutional reputation and actual accessibility. Observation was used to examine interactions surrounding distribution, communication, and farmer engagement where access was possible, while documents such as institutional information, certification materials, purchasing procedures, replanting policies, and relevant regulatory documents were examined to contextualize participants' accounts. Combining these sources allowed the research to move beyond isolated statements and examine the institutional conditions within which those statements were produced.

Data analysis followed reflexive thematic analysis, involving familiarization with the data, systematic coding, development and refinement of themes, and interpretation of relationships among themes. Initial attention was given to institutional credibility, trust formation, information mediation, networked access, institutional barriers, and smallholder agency, while remaining open to themes emerging from participants' accounts. Triangulation was conducted across three dimensions: source triangulation by comparing accounts from institutional actors, intermediaries, and smallholders; method triangulation by comparing interview evidence with observations and documents; and interpretive triangulation by examining whether similar mechanisms appeared across different positions in the market network. Rather than treating triangulation as a means of producing a single unquestionable version of reality, it was used to identify convergence, contradiction, and context-specific differences, thereby strengthening the credibility and analytical depth of the interpretation (Morakile et al., 2022; Mussa et al., 2026).

RESULTS AND DISCUSSION

Institutional Reputation as a Source of Credibility in an Uncertain Seedling Market

The strategic position of PPKS identified through the SWOT analysis provides an important starting point for understanding a deeper social process underlying the marketing of oil palm planting materials. The positive internal and external scores (2.74 and 2.67) place PPKS in Quadrant I, indicating an aggressive growth position. Yet, from a sociological perspective, the significance of this position lies less in the numerical classification itself than in the institutional resource represented by PPKS's reputation. The research findings indicate that PPKS is recognized not simply as a commercial supplier, but as a research institution whose long-standing involvement in oil palm research contributes to perceptions of product credibility. This distinction matters because planting material is an experience good: its consequential quality cannot be fully verified at the moment of purchase, while its effects become visible only after cultivation and

over a much longer production cycle. Under such conditions, institutional reputation provides a socially recognizable signal that helps actors make decisions under incomplete information.

The reputation of PPKS is constructed through several interconnected sources of recognition rather than through formal institutional status alone. Information about the institution and its planting materials circulates through distributors, farmer groups, extension services, government-supported replanting programs, and farmers' previous experiences. These channels are important because credibility is rarely encountered by smallholders in an abstract form. It is encountered through people, organizations, and relationships that make institutional claims intelligible and trustworthy. A recommendation from an extension agent, for example, may transform institutional reputation into a practical basis for purchasing decisions, while previous experiences among farmers can reinforce or qualify the credibility attached to the PPKS name. Reputation therefore operates relationally: its meaning is produced through social networks that connect the institution with prospective users.

This finding is consistent with the broader literature on reputation and trust in markets, which emphasizes that reputation becomes particularly consequential when buyers face difficulties in directly assessing quality before exchange. Rather than eliminating uncertainty, reputation provides a cognitive and social mechanism for managing it. In the case of oil palm planting materials, this function is especially significant because the consequences of poor-quality planting material extend well beyond the initial transaction. A decision made at the purchasing stage may influence plantation productivity, income prospects, and the economic viability of a smallholder household for many years. Farmers consequently have reasons to rely on signals that reduce the informational burden of evaluating alternative sources. PPKS's status as a research institution, its association with improved planting materials, and its established distribution relationships can collectively function as such signals.

The SWOT findings reinforce this interpretation. The identification of institutional reputation and product quality as major strengths, together with opportunities arising from the national smallholder replanting program and BPDPKS support, suggests that PPKS's competitive position is partly rooted in its ability to convert institutional credibility into market recognition. However, reputation should not be interpreted as an automatic guarantee of access. The same findings identify distribution waiting times, administrative processes, dependence on particular market segments, the emergence of new official producers, and the circulation of illegal planting materials as factors that can interrupt the movement from credibility to actual access. This distinction is analytically important. A farmer may regard PPKS as highly credible while still experiencing difficulty obtaining its planting materials because of geographical distance, distribution arrangements, administrative requirements, or limited access to reliable information.

Accordingly, the findings point to a more precise relationship between reputation and market access: institutional reputation reduces uncertainty, but it does not independently resolve the structural conditions through which smallholders enter and navigate the market.

Reputation becomes consequential when it is carried through social and institutional networks that make credibility visible, accessible, and actionable. This suggests that the market value of PPKS's reputation is not located solely within the institution itself. It is reproduced through interactions among the research institution, distributors, farmer organizations, extension agents, government programs, and smallholders. In this sense, reputation operates as a socially embedded market resource. The PPKS case therefore demonstrates that institutional credibility can make an uncertain agricultural transaction more cognitively manageable for smallholders, while the actual realization of that credibility remains dependent on the social and institutional arrangements connecting them to quality planting materials.

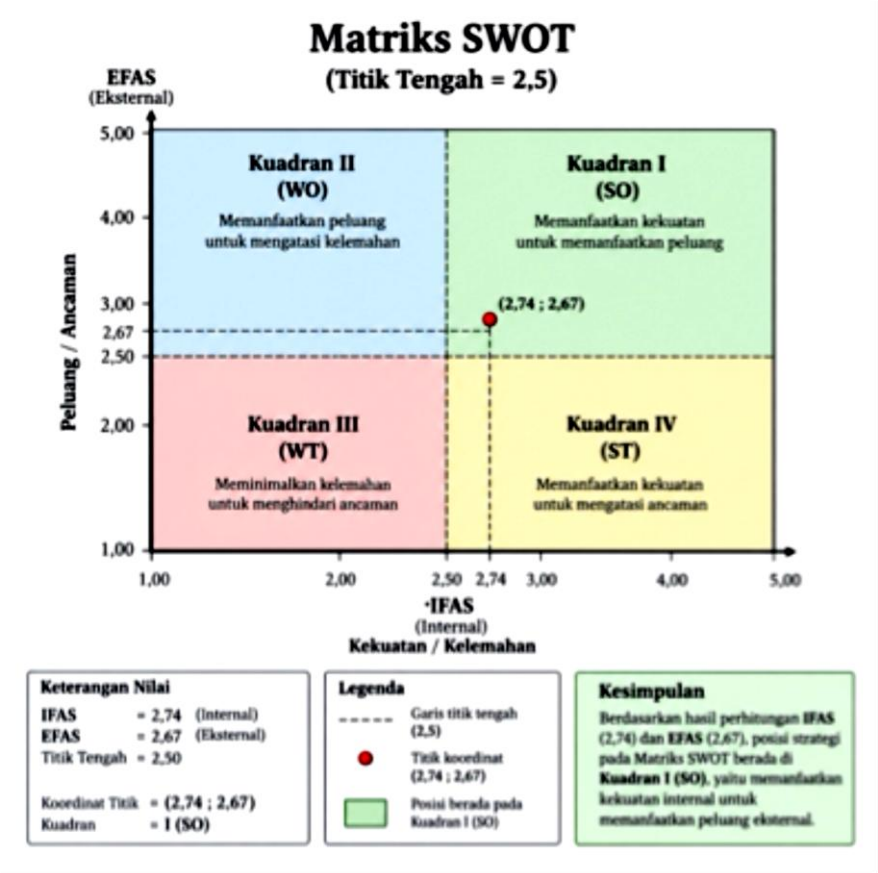

Figure 1. Matriks SWOT
Source: Activity Results, 2026

From Institutional Credibility to Farmer Trust: How Reputation Becomes Socially Meaningful

The recognition of PPKS as a credible research institution does not, by itself, constitute farmer trust. The findings suggest a more relational process in which institutional reputation becomes meaningful through the social channels by which farmers encounter, interpret, and validate information about planting materials. This distinction is important because reputation and trust perform different functions. Reputation represents a socially accumulated assessment

of an institution's credibility, whereas trust involves a decision to accept vulnerability in situations where outcomes cannot be fully guaranteed. In the oil palm planting material market, farmers must therefore do more than recognize the PPKS name; they must decide whether that institutional reputation is sufficiently credible to justify a consequential purchasing decision.

The qualitative evidence indicates that such trust is not necessarily established through direct interaction between individual farmers and PPKS. Farmers may encounter the institution indirectly through extension officers, farmer-group leaders, distributors, government programs, or other farmers who have previously used or obtained PPKS planting materials. These intermediaries do not simply transmit information. They interpret institutional credibility within relationships that farmers already understand. A recommendation from an extension officer, for instance, may carry a different form of persuasive value from an advertisement because it is embedded in an existing relationship of professional assistance. Similarly, the experience of another farmer can function as a locally intelligible reference point through which an otherwise distant research institution becomes socially familiar. Reputation therefore travels through interpersonal relationships before it becomes a basis for individual judgment.

This process is consistent with Creppy et al., (2024) and Malatsi et al. (2025) argument that economic action is embedded in ongoing social relations rather than occurring between socially isolated actors. Agricultural markets provide a particularly relevant setting for this argument because exchange frequently depends on repeated interactions, informal information, and intermediary relationships. Research on agricultural trade networks likewise shows that trust and reciprocity can stabilize relationships between producers and market actors, while network structures shape how information and opportunities circulate. In this sense, the credibility of PPKS is not simply transferred from an institution to a farmer as a piece of objective information. It is socially interpreted through relationships that determine whose recommendation is considered reliable, which experience is regarded as relevant, and which institutional claims are accepted as credible.

The experience-good character of planting materials makes this process particularly consequential. Farmers cannot fully observe the genetic or productive performance of planting material at the moment of purchase. Evidence from agricultural input markets demonstrates that quality is often difficult to assess before purchase, creating informational asymmetries between sellers and buyers and making trust an important component of exchange. Research on experience goods similarly shows that when product quality is not directly observable before purchase, reputation can become an important mechanism through which buyers interpret otherwise uncertain quality. In the PPKS case, therefore, trust should not be interpreted as an emotional response or as a simple consequence of institutional prestige. It is a practical response to uncertainty, formed through available evidence and social validation.

An important implication is the possibility of conditional trust. Farmers may trust PPKS as a source of quality planting material while remaining cautious about the actors and procedures surrounding the transaction. Confidence in the institution does not necessarily eliminate

concerns about distributors, product authenticity, waiting periods, administrative procedures, or the reliability of information received during the purchasing process. This distinction prevents the analysis from collapsing institutional credibility into generalized trust. A farmer can simultaneously hold the view that PPKS produces credible planting material and remain uncertain about whether the product offered through a particular channel is genuinely sourced from PPKS. Trust, in this sense, is segmented across institutional and interpersonal relationships.

The social character of trust becomes even clearer when farmers compare PPKS with alternative sources of planting material. Such comparisons are unlikely to be based exclusively on technical product specifications. They may also involve recommendations from peers, previous experiences, accessibility of distributors, perceived authenticity, price, administrative convenience, and the anticipated consequences of choosing an unfamiliar supplier. Studies of agricultural economies have shown that networks, interpersonal relationships, and repeated transactions influence how farmers evaluate market actors and participate in particular markets. The relevant question, therefore, is not simply why farmers trust PPKS, but through which relationships and experiences PPKS becomes trustworthy to them.

This finding extends the interpretation of PPKS's institutional reputation beyond the conventional marketing notion of brand credibility. Reputation operates as a relational resource whose effectiveness depends on the social infrastructure through which it is communicated and verified. The institution may possess substantial symbolic credibility, but that credibility acquires practical force only when farmers can connect it to trusted intermediaries, credible information, and recognizable experiences. Consequently, farmer trust should be understood as a relational achievement rather than an individual psychological disposition. In the PPKS case, reputation becomes socially meaningful when it is repeatedly interpreted, recommended, experienced, and validated within the networks connecting the research institution to farmers. The analytical sequence is therefore better expressed as institutional reputation -> social interpretation -> relational validation -> conditional trust, rather than the simpler assumption that reputation automatically produces trust. This distinction is central to understanding how institutional credibility becomes consequential in smallholder agricultural markets.

Networks as the Social Infrastructure of Seedling Information and Access

The findings suggest that access to oil palm planting materials cannot be adequately understood by looking only at the availability of products or the formal distribution system. Farmers first need to know where planting materials can be obtained, whether a particular source is legitimate, how much it costs, what procedures must be followed, and whether the expected quality justifies the risks involved. These forms of knowledge do not circulate evenly across the smallholder population. They move through social and institutional networks that connect farmers with other farmers, extension officers, distributors, farmer organizations, government agencies, plantation companies, cooperatives, and research institutions. Networks therefore constitute more than a social context surrounding the seedling market; they function as an infrastructure through which information and institutional credibility become practically

accessible.

The PPKS case illustrates this process particularly clearly. The institutional reputation of PPKS may exist at the national level, but a farmer's ability to act upon that reputation depends on whether the farmer is connected to channels through which relevant information circulates. Information concerning seedling availability, prices, purchasing procedures, official distribution channels, and product authenticity can reach farmers through extension officers, farmer groups, distributors, government programs, or other farmers with prior experience. In this setting, the social network does not merely transmit information from one actor to another. It filters information and gives it meaning. Farmers are more likely to consider information actionable when it comes from actors whose experience or institutional position they recognize as credible. This makes information circulation inseparable from processes of social validation.

Such a pattern resonates with Creppy et al. (2024) and Milner et al. (2022) argument that economic opportunities are embedded within social relations. Economic actors do not encounter markets as isolated individuals possessing equal information and equal capacity to act. Their opportunities are partly shaped by the relationships through which information, resources, and recommendations become available. In agricultural markets, this embeddedness is particularly consequential because smallholders frequently operate with limited access to formal market information and must rely on interpersonal relationships to reduce uncertainty. Social networks can consequently operate as channels through which otherwise inaccessible market knowledge becomes locally usable. The implication is that two farmers facing the same formal market may experience substantially different forms of access because their network positions are different.

The distinction between bonding, bridging, and linking networks helps clarify this variation. Bonding networks connect farmers with relatives, neighbours, fellow farmers, and members of local farmer groups. These relationships are important for sharing practical experiences, including judgments about planting material quality, supplier reliability, prices, and previous purchasing outcomes. Because such information is grounded in everyday interaction, bonding ties can provide a form of experiential knowledge that formal institutional communication may not easily reproduce. A farmer who has observed another farmer's plantation performance or purchasing experience may regard that experience as more immediately relevant than generalized claims about product quality.

Bridging networks connect farmers beyond their immediate social circles to distributors, cooperatives, other farmer organizations, plantation enterprises, and broader market actors. These ties can expand the range of information and opportunities available to farmers. They are particularly important when planting materials are not directly available within the local community. A distributor, for example, can connect the farmer to a formal source of planting materials while simultaneously providing information about availability, price, ordering procedures, and delivery. Bridging relationships therefore extend the geographical and informational reach of smallholders beyond their immediate social environment.

Linking networks operate vertically by connecting farmers with actors holding institutional authority or resources, including extension officers, local government agencies, replanting programs, and PPKS itself. These relationships are especially significant because access to quality planting materials may involve administrative procedures and eligibility requirements associated with government-supported replanting initiatives. Linking ties can therefore transform formal institutional opportunities into practical possibilities for farmers. At the same time, the absence or weakness of such connections may leave farmers unable to navigate procedures even when the relevant program or planting material formally exists.

These three forms of networks should not be treated as separate and mutually exclusive structures. In practice, access may emerge from their intersection. A farmer may first hear about PPKS through another farmer, verify the information through an extension officer, and eventually obtain the planting material through an authorized distributor. The sequence demonstrates that reputation travels through multiple relational layers before becoming a concrete market opportunity. Institutional credibility is therefore not simply communicated downward from PPKS to farmers. It is interpreted, tested, and reinforced as information moves across horizontal and vertical relationships.

This perspective also exposes an important dimension of inequality. If access depends partly on network position, then farmers who are poorly connected to extension services, farmer organizations, official distributors, or government programs may face greater informational and institutional barriers than farmers who occupy more advantageous positions. The problem is consequently not only an information deficit but an unequal capacity to access the networks through which information becomes credible and actionable. Smallholder market access is thus partly produced through social relations: farmers do not enter the planting-material market with identical informational resources, and their ability to obtain quality inputs depends in part on where they are positioned within the institutional and interpersonal networks surrounding the market.

The findings therefore support a relational formulation of market access: institutional reputation becomes economically consequential only when it can circulate through networks, receive social validation, and reach farmers in a form that can be acted upon. This shifts the analytical focus from the conventional question of whether PPKS has an effective distribution network to a more sociologically consequential question: who is connected to that network, through whom, and with what consequences for access? The PPKS case demonstrates that networks function as social infrastructure linking institutional credibility to everyday agricultural decision-making. Market access is consequently not merely a condition of product availability; it is partly a function of farmers' position within the social and institutional structures through which information, trust, and opportunities circulate.

The Institutional Mediation of Reputation: Distributors, Farmer Organizations, and Extension Actors

Institutional reputation does not become actionable for smallholders simply because an institution is widely recognized as credible. Between institutional recognition and an actual purchasing decision lies an organizational infrastructure composed of distributors, farmer organizations, extension actors, government agencies, and formal procedures. The findings indicate that these intermediaries perform a crucial mediating function in the oil palm planting material market. They translate an institutional reputation that may otherwise remain distant from farmers into information, procedures, recommendations, and transactions that can be acted upon. This suggests an important distinction between institutional credibility and institutional accessibility: PPKS may be perceived as a credible source of planting materials, while access to that institution and its products remains dependent on the organizational pathways connecting farmers to it.

Distributors occupy a particularly important position because they transform institutional credibility into an observable market encounter. For farmers, the distributor is often the actor through whom information about availability, price, ordering procedures, delivery, and product authenticity becomes concrete. The distributor therefore does more than perform a logistical function. The interaction itself can reinforce or weaken the reputation attached to PPKS. A reliable distribution process can confirm the credibility associated with the institution, whereas delays, unclear procedures, or uncertainty about product origin may create a disjuncture between institutional reputation and farmers' actual experience. Reputation is consequently reproduced through organizational performance rather than simply inherited from the institution's historical standing.

Farmer organizations perform a somewhat different mediating role. Farmer groups can aggregate demand, facilitate communication, and help members navigate formal purchasing or replanting procedures. Their significance lies in their collective capacity to convert individually fragmented farmers into an organized constituency that can interact with distributors, extension services, and government programs. This is consistent with research showing that social capital in agribusiness can function as a resource for strengthening supply-chain relationships and organizational capacity among smallholders (Julius Mbedule & N. Mungwabi, 2023). The farmer group is therefore not merely a social gathering but can become an institutional interface through which farmers gain access to resources and market opportunities that may be difficult to obtain individually.

Extension actors occupy another critical position because they mediate between technical knowledge and farmers' practical decisions. Their role is particularly significant when information concerning seedling quality, replanting procedures, official sources, or eligibility requirements is difficult for farmers to interpret independently. Evidence from agricultural research demonstrates that the identity and social position of the person communicating agricultural information can influence how that information is received and acted upon.

Indonesian research likewise emphasizes that mutual trust between extension officers and farmers is important for effective information exchange and innovation adoption. In the context of PPKS, therefore, the extension officer can function as an information broker whose credibility helps translate institutional claims into locally intelligible advice.

Government agencies add a further layer of institutional mediation. Programs such as smallholder replanting create formal opportunities for farmers to obtain support, but participation may require administrative compliance, documentation, coordination, and interaction with multiple institutional actors. The existence of a government-supported program does not automatically mean that all farmers can access it equally. Institutional pathways have to be navigated. Consequently, government agencies influence the extent to which the reputation of PPKS can be converted into an accessible source of planting material. Where institutional coordination is effective, government programs can strengthen the connection between farmers and official suppliers. Where procedures are fragmented or difficult to navigate, formal support may remain institutionally available but practically distant.

This mediation also explains why reputation can be strengthened or weakened outside the direct control of PPKS. A farmer's experience with a distributor, extension officer, farmer organization, or government office can become part of the broader interpretation of what PPKS represents. The institution is therefore judged not only through its own communication but through the institutional pathway surrounding its products. This is particularly important in markets characterized by informational asymmetry, where farmers cannot independently verify planting-material quality at the moment of purchase. In such circumstances, organizational intermediaries become part of the credibility infrastructure through which quality claims are interpreted and validated.

The central implication is that credible institution does not necessarily mean accessible institution. Institutional reputation can reduce uncertainty, but it requires organizational intermediaries to become actionable. The analytical sequence developed in the preceding sections can therefore be extended: institutional reputation -> social validation -> institutional mediation -> practical accessibility. This formulation moves the analysis beyond conventional marketing explanations by showing that market access is partly produced through institutional arrangements. The competitive strength of PPKS consequently depends not only on the quality and reputation of its planting materials, but also on the capacity of the institutional actors surrounding the product to make that credibility reachable, understandable, and usable by smallholders. The issue is therefore not simply whether PPKS has a strong reputation, but whether the institutional architecture surrounding that reputation enables farmers to convert confidence into access.

When Reputation Does Not Translate into Access: Geography, Administration, and Institutional Position

The credibility of an agricultural institution does not automatically translate into equal access to its products. In the case of PPKS, institutional reputation may reduce farmers'

uncertainty about the quality and legitimacy of oil palm planting materials, but the ability to act upon that trust is shaped by the institutional and social conditions surrounding the market. This distinction is important because access to planting materials is not simply a matter of whether farmers know and trust a reputable provider. It is also a question of whether they can physically reach the distribution channel, satisfy administrative requirements, obtain reliable information, mobilize sufficient financial resources, and occupy a social position that enables them to navigate the institutional architecture of the market. Research on Indonesian oil palm smallholders similarly shows that access to high-quality seedlings, finance, knowledge, and public replanting support is uneven, particularly among independent smallholders.

Geography constitutes one of the most immediate mechanisms through which institutional credibility can become socially differentiated. A farmer located close to an authorized distributor or an institutionally connected production centre encounters a different market environment from a farmer living in a remote plantation area. Distance creates additional costs through transportation, communication, delivery, and time, while limited distributor coverage can make a formally available product practically inaccessible. In this sense, market availability should not be equated with physical existence. A planting material may be available within the national distribution system while remaining difficult to obtain for farmers whose location places them outside the effective reach of that system. The issue is therefore not merely spatial inequality but the unequal capacity to convert institutional availability into practical access.

Administrative arrangements create another layer of differentiation. Requirements related to land legality, farmer-group membership, program eligibility, documentation, and replanting procedures may serve legitimate governance functions, particularly in efforts to ensure that public support reaches eligible farmers. Yet such requirements also demand administrative capacity that is unevenly distributed among smallholders. The literature on Indonesian oil palm replanting shows that land documentation and organizational membership can become significant barriers for farmers seeking public support, while some independent smallholders remain weakly connected to formal farmer organizations and institutional networks. Thus, an administrative procedure that appears neutral at the institutional level may generate differentiated consequences at the farmer level.

This differentiation becomes more visible when market access is examined through farmers' social and institutional positions. Farmers who participate actively in farmer groups, maintain relationships with extension personnel, communicate with distributors, or become involved in government-supported replanting initiatives may possess greater access to information and institutional assistance than farmers operating outside these networks. Farmer organizations can facilitate collective action and improve access to markets and services, but their effectiveness depends on the quality of internal organization, institutional relationships, and the resources available to members. Consequently, membership itself should not be treated as an automatic guarantee of access. What matters is the position farmers occupy within the

network and the extent to which their relationships provide meaningful informational, administrative, or material resources.

Economic capacity further conditions this process. Even when farmers recognize PPKS as a credible provider and have sufficient information to make an informed choice, purchasing quality planting materials still requires financial resources, particularly during replanting periods when households face substantial investment costs and temporary reductions in productive income. Previous research identifies financing as one of the central constraints shaping smallholders' replanting decisions, alongside knowledge and access to quality inputs. This means that trust cannot be treated as an independent determinant of purchasing behaviour. A farmer may trust the institution and prefer its planting materials while remaining unable to purchase them because the economic conditions necessary to act on that preference are absent.

These conditions point toward a broader sociological interpretation of market access. Reputation reduces uncertainty, but institutional structures determine whether uncertainty reduction can be converted into access. The relevant analytical question therefore shifts from whether farmers trust PPKS to where farmers are positioned within the institutional and social architecture through which PPKS products circulate. This perspective is consistent with the sociology of economic embeddedness, which understands market action as situated within networks of social relations and institutional arrangements rather than occurring independently of them. In the PPKS case, reputation is consequently better understood as a relational resource whose value depends on the networks, organizations, procedures, and material conditions through which farmers encounter the institution.

The implication is that unequal access should not be interpreted simply as a failure of farmers to obtain information or make appropriate choices. It may instead reflect differentiated capacities to navigate the market itself. Independent smallholders, farmers with weak organizational connections, those living far from distribution points, or those facing unresolved administrative and financial constraints may occupy a structurally different position from farmers who are institutionally connected. The same institutional reputation can therefore generate different outcomes across farmers. This is where the analysis moves beyond a trust-based explanation toward questions of power and inequality: the market does not merely distribute planting materials; it also distributes opportunities to access the institutional resources attached to those materials.

For PPKS, this finding challenges the conventional interpretation of institutional reputation as an organizational strength in itself. A strong reputation becomes socially consequential only when institutional arrangements allow farmers across different geographical, economic, and organizational positions to access the products and information associated with that reputation. The central issue is therefore not simply how PPKS can strengthen its reputation, but how that reputation can be made institutionally reachable. From this perspective, improving distribution coverage, simplifying appropriate administrative pathways, strengthening farmer organizations, and widening information channels are not merely marketing strategies. They are

mechanisms through which institutional credibility can be translated into more inclusive forms of market access.

Unequal Access and the Social Positioning of Smallholders

Access to agricultural inputs is not distributed evenly simply because farmers are embedded in social networks. The relevant issue is not whether a farmer has social connections, but what kinds of connections are available, what resources circulate through them, and where the farmer is positioned within the network. In the context of oil palm planting materials, relationships with farmer groups, extension agents, distributors, plantation companies, or government institutions can provide valuable information and facilitate transactions. Yet these networks are themselves socially differentiated. Some farmers occupy central positions that allow them to receive information earlier, mobilize collective resources, and establish direct contact with institutional actors, while others remain at the margins and have fewer opportunities to benefit from the same institutional infrastructure.

This ambivalence challenges an overly optimistic interpretation of social embeddedness. Creppy et al. (2024) formulation of embeddedness emphasizes that economic action is situated within social relations, but embeddedness does not imply equality among actors. Social networks can facilitate trust, information exchange, and cooperation while simultaneously establishing boundaries around who is considered a legitimate or trusted participant. In agricultural markets, this means that a network can operate simultaneously as a resource and as a gatekeeping mechanism. Farmers who are well connected may gain access to information about the availability, price, authenticity, and purchasing procedures of PPKS planting materials before less-connected farmers become aware of these opportunities. Their advantage therefore derives not only from economic capacity but also from their position within the circulation of information and institutional relationships.

The distinction between connected and less-connected farmers becomes particularly important for independent smallholders. Farmers who have limited organizational affiliation or weak relationships with extension and government actors may have to rely more heavily on neighbours, informal traders, or alternative sources of planting materials. Such relationships can provide practical solutions where formal distribution channels are distant or administratively difficult to navigate. However, informal access may also increase farmers' exposure to uncertainty concerning genetic quality, authenticity, and long-term planting performance. The choice of an alternative supplier should therefore not be interpreted automatically as a matter of preference or inadequate knowledge. It can represent a rational response to an institutional market that is difficult to reach.

Social relations also produce a more subtle form of dependency. Trust established through a distributor, farmer-group leader, extension agent, or fellow farmer can reduce the uncertainty associated with purchasing planting materials, but it may simultaneously concentrate decision-making power in particular intermediaries. Farmers may rely on actors who control information about suppliers, prices, availability, or administrative procedures. In such

circumstances, trust is not simply an individual attitude toward PPKS; it becomes relationally mediated and potentially dependent on actors occupying intermediary positions. Research on agricultural information networks similarly demonstrates that the identity and social position of information providers influence how farmers receive and act upon technological information.

The implication is that institutional reputation can produce inclusion and exclusion at the same time. PPKS's reputation as a credible provider may broaden farmers' willingness to choose its planting materials, but the benefits of that reputation are likely to be greater for farmers who possess the social and institutional connections necessary to access the organization and its distribution channels. Reputation therefore does not eliminate structural inequality; it operates through an already differentiated social field. This observation extends the conventional understanding of institutional reputation by treating it not as a uniformly accessible asset but as a resource whose value is conditioned by farmers' network positions and institutional capacities.

Seen from this perspective, the central question is no longer whether social networks improve market access, but whose access do they improve, through which relationships, and under what institutional conditions? Social embeddedness is enabling but not inherently egalitarian. Its consequences depend on the distribution of relational resources and on the rules governing entry into the networks through which agricultural opportunities circulate. For smallholder oil palm farmers, unequal access to quality planting materials is therefore partly a problem of unequal social positioning. Addressing this inequality requires more than expanding information or strengthening trust; it requires institutional arrangements capable of reaching farmers who remain outside the dominant networks through which credibility, information, and transactions are organized.

Reputation, Trust, and Market Access as a Relational Process

The preceding findings suggest that institutional reputation, trust, and market access should not be treated as separate dimensions of oil palm planting-material marketing. Their relationship is better understood as a relational process in which institutional credibility is continuously interpreted, validated, circulated, and converted into practical opportunities for smallholders. PPKS's reputation provides an initial basis for reducing uncertainty because farmers cannot fully observe the future quality of planting materials at the moment of purchase. Yet reputation does not operate directly on farmers' decisions. Its influence becomes meaningful only when credibility can move through social networks, institutional intermediaries, information channels, and distribution arrangements that connect the institution to farmers. This interpretation is consistent with research showing that smallholder trade is embedded in relationships of trust, reciprocity, and interdependence rather than operating through purely impersonal market mechanisms.

The analytical sequence emerging from this study can therefore be understood as institutional reputation generating perceived credibility, which creates the possibility of trust formation and social validation. Trust subsequently facilitates farmers' willingness to rely on information and recommendations concerning planting-material quality, authenticity,

availability, and purchasing procedures. However, information does not circulate evenly. It moves through farmer organizations, distributors, extension actors, government programs, interpersonal relations, and other institutional connections. The social location of farmers within these networks consequently affects whether institutional credibility becomes actionable knowledge. Research on institution-based trust likewise demonstrates that certification, traceability, supervision, and feedback mechanisms can strengthen trust because they provide institutional assurances that compensate for information asymmetry.

The process does not end with information accessibility. Information must still be converted into practical access, and this is where structural conditions become decisive. Geographic distance, distribution coverage, administrative requirements, institutional membership, economic capacity, and farmers' network positions can facilitate or constrain the final transition from knowledge to transaction. A farmer may therefore recognize PPKS as a credible institution, trust the quality of its planting materials, and possess adequate information, yet remain unable to purchase them because the relevant distribution channel is distant, the administrative pathway is difficult to navigate, or the financial cost is beyond household capacity. The resulting inequality is not necessarily a consequence of differences in trust. It can emerge because farmers possess unequal capacities to transform trust and information into economic action.

This relational interpretation also clarifies why social embeddedness should not be romanticized. Networks can reduce transaction costs and connect smallholders with markets, but they can also concentrate information and opportunities among actors who occupy strategically advantageous positions. Studies of socially embedded agricultural trade demonstrate that smallholders may become interdependent with connected intermediaries, while institutional and contextual conditions shape how those relationships function. Social embeddedness is therefore enabling but not inherently egalitarian. In the PPKS case, reputation may widen the field of credible choices without necessarily eliminating the structural differences that determine who can act upon those choices.

The theoretical contribution of this study lies precisely in this distinction. Institutional reputation should not be conceptualized merely as an organizational attribute or competitive advantage. It is more productively understood as a relational market resource whose value depends on the networks and institutional arrangements through which credibility becomes accessible to farmers. Market access, in turn, is not simply the endpoint of an individual purchasing decision but a socially produced outcome shaped by the interaction between institutional credibility, trust, information, intermediary relationships, and structural conditions. This perspective extends the sociology of embeddedness into the agricultural input market by showing that the question is not only whether an institution is trusted, but how that trust travels, through whom it travels, and whose position enables or constrains its conversion into access. Such an approach shifts the analysis from the reputation of PPKS alone toward the wider social architecture through which agricultural markets become accessible or exclusionary.

CONCLUSION

This study concludes that institutional reputation shapes smallholder access to oil palm planting materials not as a direct market advantage, but as a relational resource whose effects depend on how credibility is interpreted, circulated, and mediated through social and institutional relationships. PPKS's established reputation provides farmers with an important basis for reducing uncertainty concerning the quality and legitimacy of planting materials, yet trust in the institution does not automatically become practical access. Its conversion into actual purchasing opportunities is conditioned by information networks, distributors, farmer organizations, extension relationships, government programs, geographical proximity, administrative requirements, economic capacity, and farmers' positions within these institutional networks. The findings therefore suggest that unequal access cannot be explained solely by differences in farmer preferences, knowledge, or purchasing capacity; it is also produced by unequal opportunities to connect with the institutional arrangements through which credible planting materials are made available. The study contributes to the sociology of agricultural markets by conceptualizing institutional reputation as a relational market resource, rather than merely an organizational attribute, and by showing that social embeddedness can simultaneously enable access and reproduce boundaries between more-connected and less-connected smallholders. In this sense, strengthening institutional reputation alone is insufficient to produce more inclusive agricultural markets; the credibility attached to an institution must be accompanied by distributional and institutional arrangements that allow farmers occupying different social, geographical, and organizational positions to convert that credibility into meaningful access.

ETHICAL STATEMENT AND DISCLOSURE

Authors are required to state that the study was conducted in accordance with ethical principles, including informed consent, protection of informants' confidentiality, and respect for local cultural values. If the research involved vulnerable groups, please specify the protective measures taken to ensure their safety and equal participation. The statement should also disclose any sources of funding or declare that no external funding was received, along with a declaration of no conflict of interest. Authors must confirm that all data were collected through valid methods and have been verified for accuracy. If artificial intelligence (AI) tools were used, clarify that their use was limited to technical assistance such as language editing, without influencing the scientific content. Conclude with a sentence stating that the authors take full responsibility for the content and conclusions of the article.

Authors may refer to the following example to formulate their statement:

"This study was conducted in accordance with established ethical principles, including informed consent, protection of informants' confidentiality, and respect for local cultural values. Special consideration was given to participants from vulnerable groups to ensure their safety,

comfort, and equal rights to participate. No external funding was received, and the authors declare no conflict of interest. All data and information presented were collected through valid research methods and have been verified to ensure their accuracy and reliability. The use of artificial intelligence (AI) was limited to technical assistance for writing and language editing, without influencing the scientific substance of the work. The authors express their gratitude to the informants for their valuable insights, and to the anonymous reviewers for their constructive feedback on an earlier version of this manuscript. The authors take full responsibility for the content and conclusions of this article."

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