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Key Drivers and Motivations for Joining and Participating in Agricultural Marketing Cooperatives: The Impact of Farm Size

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Thesis submitted to obtain the degree of

MASTER IN HET MANAGEMENT

Promoter: Prof. Dr. Stefanie Friedel

Academic year 2024-2025

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This thesis investigates the motivations and barriers that shape farmers' participation in agricultural marketing cooperatives, with a focus on how farm size influences these dynamics. While established literature highlights economic, social, and governance-related drivers of participation, less is known about how these are perceived and prioritised by farmers of varying scales. Drawing on the Mutual Incentives Theory and elements of Self-Determination Theory, this study uses qualitative interviews with a diverse group of Flemish fruit and vegetable producers to explore motivational variation. Findings show that smaller farmers often highlight the cooperative's stabilising role and deem their membership as critical, while larger farmers adopt a more strategic stance, valuing efficiency, autonomy, and access to alternative sales channels. Furthermore, the study reveals how collectivistic incentives, such as shared goals, are frequently internalised as individual business advantages. Ambitious, growth-oriented farmers, in particular, reported tensions between their entrepreneurial drive and the cooperative's collective framework. This study contributes to the literature in three ways: by documenting how member motivations are interpreted through the lens of farm scale; by refining theoretical models of participation to account for strategic constraints; and by highlighting how motivation is shaped by context-specific perceptions, not fixed categories. These insights provide a more nuanced understanding of cooperative participation and offer broader relevance for motivation theory in collective organisational forms.

Acknowledgements

We would like to express our sincere gratitude to all the individuals who generously contributed their time and insights to this research. In particular, we are grateful to the member-farmers, independent farmers, cooperative representatives, and managers who participated in the interviews. Their openness, honesty, and willingness to share personal experiences and reflections made this study both possible and meaningful. Without their contributions, we would not have been able to gain such a rich understanding of the complexities surrounding cooperative participation in agriculture.

We would like to sincerely thank Johannes Grillet for his support and valuable input throughout the entire thesis process. His thoughtful suggestions and critical questions helped us refine our ideas and approach. Above all, we are deeply grateful to Prof. Dr. Stefanie Friedel for her exceptional guidance, intellectual generosity, and continuous encouragement. Her sharp insights and constructive feedback challenged us to think more critically at every stage. This thesis would not have reached its current level without her dedicated mentorship.

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1 Introduction

Farmers have historically faced challenges such as unstable markets, high transaction costs, and limited bargaining power, particularly when acting individually (Ortmann & King, 2007). Rather than trying to outperform each other and reducing prices to an absolute minimum, farmers decided to band together to establish prices and sell to the highest bidder (Manchester, 1959). Known as cooperatives, these organisations often gained traction during times of economic hardship, when solidarity and collective action offered a buffer against market volatility (Billiet et al., 2021).

As member-owned and member-controlled organisations, cooperatives are designed to meet shared economic and social needs (Novkovic et al., 2022). Cooperatives aim to provide benefits for their members rather than maximise profits for external investors, operating according to principles of democracy, equity, and solidarity (ICA, 2015). In agriculture, marketing cooperatives allow farmers to collectively market their produce, negotiate better prices, and access broader markets, reducing individual vulnerabilities and transaction costs (Ortmann & King, 2007; Valentinov, 2007).

Today, the relevance of cooperatives continues to grow, not just as a reaction to crises, but as proactive tools for promoting sustainable development and social cohesion. This is reflected in the UN's declaration of 2025 as the International Year of Cooperatives (United Nations, n.d.), recognising their potential for addressing sustainability and social challenges.

However, large cooperatives, particularly in the agricultural sector, face increasing pressure to scale up and compete globally, which creates tension between their core social values and economic objectives (Ajates, 2020). Likewise, for individual farmers, farm expansion often requires external investment and the establishment of foreign facilities, leading to conflicts between farmer-owners and external financiers, potentially weakening trust and governance structures in cooperatives (Siedlok et al., 2024). Still, by providing a stable market channel, cooperatives offer a crucial benefit to farmers, reducing uncertainty and supporting producers in farm expansion (Alho, 2015). In addition, cooperatives allow members to benefit from pooled inputs and shared investments in marketing or equipment, reducing individual costs especially for smaller producers (Birchall & Simmons, 2004b; Candemir et al., 2021). This advantage is equally appreciated by large and small producers, underscoring the enduring relevance of cooperatives in providing economic stability (Alho, 2015).

While cooperatives offer clear economic advantages, including reduced market uncertainties and support for farm expansion (Alho, 2015), maintaining cohesion and motivation among members is increasingly complex (Höhler & Kühl, 2018). Increasing heterogeneity of the member base and diverse member interests can reduce cohesion, impacting the motivation and participation levels within the cooperative (Grashuis & Cook, 2021).

While a growing body of literature acknowledges farm size as a factor influencing cooperative participation, findings remain inconclusive and fragmented. Some suggest that farm size does not significantly affect farmer motivation (Ollila et al., 2012), while others find that medium and large farms display distinct patterns of cooperative engagement compared to smallholders (Klein et al., 1997; Muriqi et al., 2019). Moreover, definitions of

"large-scale" farming vary considerably across studies, complicating cross-study comparisons (Höhler & Kühl, 2018). The lack of conceptual clarity and the inconsistent empirical findings underscore the need for targeted qualitative research that explicitly explores how farmer-members with various farm sizes perceive, benefit from, and engage with cooperatives.

Understanding how cooperatives mobilise and sustain participation, particularly among large-scale farmers is critical for their continued relevance in addressing economic and social challenges (Grashuis & Franken, 2020). Larger farmers' motivations may differ significantly from those of smaller producers, as they may prioritise economic opportunities, such as stable market access, cost-sharing for advanced technologies, or enhanced collective bargaining power (Grashuis & Cook, 2021). However, their participation can also create governance challenges within cooperatives, particularly when aligning the diverse interests and expectations of members of varying farm sizes (Höhler & Kühl, 2018).

Therefore, this thesis investigates the factors influencing farmers' motivation to join and actively participate in agricultural cooperatives, focusing in particular on how farm size shapes these motivations. To address this, the following research question is proposed: "How do farmers perceive the role of cooperatives in meeting their economic and social needs, and what drivers motivate or deter their participation, and in what ways does farm size shape these motivations?"

A qualitative research approach has been adopted, based on semi-structured interviews with a diverse group of farmers. The theoretical sample includes both large- and small-scale farmers, members and non-members of cooperatives, and farmers cultivating a variety of products and operating different types of farms. This design allows for a comprehensive understanding of the range of motivations and barriers across different farm profiles. The interviews were conducted in a context marked by significant internal and external changes affecting the functioning of cooperatives in the Flemish fruit and vegetable sector. The analysis followed a primarily deductive coding logic; starting from in-vivo codes and evolving through 1st and 2nd order categories to overarching 3rd order concepts, as further detailed in Section 3.

In what follows, the existing literature surrounding the topic will be explored. From cooperatives in general, we zoom in on agricultural cooperatives. Further, motivation is explored, starting from general motivation theories to more specific theories used to analyse motivation within cooperatives. Again, we zoom in on the literature surrounding motivation in agricultural cooperatives and explore their relevance. Particular attention is given to differences found due to farm size. Following the literature study, the methodology of the study is discussed in more detail, including a thorough context description, sampling method, data collection and analysis. Subsequently, the collected data are analysed. Findings from the interviews are linked back to the existing literature. Finally, we reflect on our results in terms of relevance and possible applications in the discussion section.

2 Theoretical Framework

In this first chapter, we present a comprehensive review of the existing literature relevant to our research topic. We begin by discussing cooperatives in general, including their definition, core principles, and common characteristics, before narrowing our focus to agricultural cooperatives specifically. Subsequently, we introduce key theoretical frameworks related to motivation, which will serve as a conceptual foundation throughout our analysis. Next, we examine previous empirical studies to understand how these theoretical concepts apply to real-life agricultural cooperatives. Finally, building upon insights from this review, we identify a clear gap in the existing literature and formulate a research question, which this study aims to answer.

2.1 The Cooperative Model: Principles and Purpose

Cooperatives are member-owned and member-controlled organisations that exist to meet the shared economic, social, or cultural needs of their members (Novkovic, 2008). Rather than prioritising profit for external investors, cooperatives aim to generate benefits for their users, who are simultaneously the owners and decision-makers (Mamouni Limnios et al., 2018). The International Cooperative Alliance (ICA) defines a cooperative as “an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.” (ICA, n.d.)

Cooperatives are guided by a set of internationally recognised principles that reflect their core values of self-help, democracy, equality, equity, and solidarity. These seven principles include voluntary and open membership; democratic member control; member economic participation; autonomy and independence; education, training, and information; cooperation among cooperatives; and concern for the community (ICA, 2015). These principles distinguish cooperatives from other business forms and help them navigate the balance between economic performance and social responsibility. Cooperatives operate across a wide range of sectors, including agriculture, insurance, finance, wholesale, and healthcare. While agricultural cooperatives generate the highest turnover globally, each sectoral application reflects distinct operational models and member needs. Accordingly, various forms of cooperatives have emerged, such as producer, consumer, worker, and mutual cooperatives, each tailored to the specific roles and contributions of their members (ICA, 2024)

While cooperatives are founded on democratic and participatory principles, their structural characteristics can also present specific organisational challenges. As cooperatives grow in members and diversify in function, maintaining effective governance and active member engagement becomes increasingly complex. Larger cooperatives, in particular, often face difficulties in sustaining participatory decision-making and aligning member interests (Birchall, 2017). Some of the first hurdles that growing cooperatives face is the transition from direct to indirect democracy and from member-led decision-making to professional management. These shifts have been widely studied due to their impact on cooperative governance and participation (Birchall, 2017; Puusa, 2024). The democratic nature of a cooperative is in danger of diluting when the number of members eligible to participate grows. Mobilising members becomes a more complex task, and the participation of

individuals is less likely to be sustained. As cooperative structures professionalise and key responsibilities are delegated, individual members may perceive less need to actively contribute, increasing the risk of free-riding. These challenges and more can incentivise a cooperative to favour improving member involvement instead of recruiting new members (Birchall & Simmons, 2004a). Given these governance challenges, a thorough examination of member incentives could prove useful to understand how cooperatives can sustain engagement and foster meaningful participation as they grow.

2.2 Agricultural Cooperatives: Functionality and Challenges

Historically, agriculture has been a sector with high cooperative activity (Bijman & Iliopoulos, 2014). Farmers usually form cooperatives when the market fails to provide goods and services at affordable prices and acceptable quality. Cooperatives enable them to collectively negotiate better prices, access economies of scale, and reach markets that would otherwise be unavailable to individual producers (Cobia, 1989). By integrating their supply chains and reducing transaction costs, cooperatives enhance both profitability and market resilience for farmers (Ortmann & King, 2007; Valentinov, 2007).

In agriculture specifically, producer cooperatives are dominant, which come in a variety of subtypes depending on their function. Marketing cooperatives help farmers collectively sell their produce, increasing their bargaining power and access to markets (Ortmann & King, 2007). Supply cooperatives facilitate the joint purchase of inputs such as seeds or fertiliser at lower prices. Other forms include production cooperatives, where farmers share equipment or labour, and credit cooperatives, which provide financial services to members (Ortmann & King, 2007). This study will focus in particular on marketing cooperatives, given their recent history of consolidations and growing member bases (Bijman & Iliopoulos, 2014).

As previously discussed, cooperatives in general face governance and participation challenges as their member base expands. Agricultural cooperatives are no exception; they too must contend with the growing complexity that accompanies increasing membership. As Höhler and Kühl (2018) point out, this complexity often stems from greater heterogeneity among members, which can significantly complicate decision-making and internal governance. In homogeneous cooperatives, members tend to share similar perspectives, making consensus easier to achieve. One of the most significant dimensions of heterogeneity in agricultural cooperatives is farm size, as larger farms often seek different benefits from cooperative participation than smaller farms (Höhler & Kühl, 2018). The farmers' age and the produce they grow, are additional factors that might influence their expectations and motivations to join and continue participation in a cooperative. In the following subsections, we explore these needs and motivations in more detail. Before we delve deeper into the specific motivations of farmer cooperatives, we first explore the literature on motivation in cooperatives in general.

2.3 Motivation in Cooperatives: Micro-level Perspective

Motivation to join and participate in cooperatives has been studied quite extensively in the literature, as exemplified by the work of Birchall and Simmons (2004a, 2004b, 2005, 2017).

Albeit not explicitly stated, general motivation theory has shaped the studies of motivation in cooperatives, most notably the Self-Determination Theory (SDT) (Deci & Ryan, 2012). SDT places autonomous (or intrinsic) against controlled (or extrinsic) motivation, where autonomy includes flexibility, volition, and a sense of choice. Whereas controlled motivation entails the opposite, e.g. punishment, deadlines, competition. An underlying theory of SDT is the Basic Psychological Needs Theory (BPNT), which states that a person has three basic needs that need to be satisfied for their well-being: autonomy, competence and relatedness (Deci & Ryan, 2000). These needs are basic in the sense that every individual of any age or culture requires their fulfilment to thrive psychologically, experience personal growth, and maintain optimal functioning.

SDT and more specifically BPNT are established general theories on human motivation (Vansteenkiste et al., 2020). In the context of mutual and cooperative businesses, Birchall and Simmons (2004b) introduce the Mutual Incentives Theory (MIT) that examines member motivation at the micro-level. i.e. applied to the context of agricultural producers, the farmers' perspectives. Birchall & Simmons (2004b) distinguish in particular between the individualistic and the collectivistic motivations.

As the first part of their theory, the individualistic incentives can either be positive or negative. Positive individualistic motivations include benefits and habits, while negative individualistic motivations include (opportunity) costs and satiation. Benefits refer to the tangible and intangible advantages members perceive from participating in the cooperative, such as better prices, stable market access, or access to shared resources. Habit involves routine behaviour, where participation becomes a natural or default choice over time, often without conscious re-evaluation. Among the negative individualistic motivations, costs refer to the direct burdens associated with cooperative membership, such as financial contributions or time spent attending meetings. Opportunity costs, on the other hand, represent the foregone benefits of alternative choices. This could include lost income, missed professional opportunities, or time that could have been spent on other productive activities. These trade-offs can lead members to question whether cooperative participation remains the optimal strategy for their individual business goals. Satiation captures the idea that motivation can diminish over time, particularly if members feel they have already received the primary benefits or if the perceived value of membership no longer evolves. When novelty or initial enthusiasm wears off, members may become disengaged.

Alongside these individualistic drivers, Birchall & Simmons' (2004b) MIT also identifies collectivistic motivations, which emphasise members' relational and normative ties to the cooperative. These include shared goals, shared values, and a sense of community. Shared goals refer to the common aspirations members work toward collectively, like improving bargaining power or promoting regional development. Shared values represent the alignment between a member's personal beliefs and the cooperative's mission or ethical stance, such as fairness, sustainability, or solidarity. Finally, a sense of community reflects the social and emotional connection to fellow members and the organisation itself, feeling part of something larger than oneself, which reinforces loyalty and commitment.

Taken together, Mutual Incentives Theory (Birchall & Simmons, 2004b), which recognises both individualistic and collectivistic motivations, provides a comprehensive framework for understanding why members join, remain active in, or disengage from cooperatives. We argue that this dual lens is particularly relevant in heterogeneous member environments, such as modern agricultural marketing cooperatives, where motivations may diverge significantly across, for example, farm size, generational background, or strategic priorities.

Birchall and Simmons (2004b) however argue that MIT cannot be used by itself to investigate why (potential) members would participate in a cooperative. To complete the picture, they introduced their 'Participation Chain'. This model uses the metaphor of a chain to link the *motivation* (according to MIT) to *resources* and *mobilisation*. For a full schematic overview of the Participation Chain and the Mutual Incentives Theory, we refer to Appendix 1.

The individual resources required for participation in cooperatives include time, financial means, skills, and confidence (Birchall & Simmons, 2004b). Time refers to members' availability to engage in cooperative activities such as attending meetings or contributing to governance. Financial means include the financial capacity to support the cooperative. Skills involve competencies such as understanding financial reports or communicating effectively in decision-making contexts. Confidence reflects members' belief in their ability to participate meaningfully and assert their voice within the organisation.

The mobilisation level of the participation chain refers to the processes and mechanisms that enable individuals to move from being passive members of a group to becoming actively engaged participants. As this concerns actions taken by the cooperative itself (meso-level), it is not analysed directly in this study, which focuses on individual-level factors.

The chain metaphor operates on two interrelated levels. First, it illustrates that the strength of overall participation is limited by its weakest component. Even if a member is highly motivated and possesses sufficient resources, the absence of viable opportunities for engagement may prevent participation altogether. This principle applies equally to each element in the chain, highlighting their interdependence. Conversely, to optimise participation, each link in the chain must be actively reinforced.

The three basic needs of BPNT can be recognised in the participation chain. Relatedness can be very clearly linked to the collectivistic incentives in motivations, especially to sense of community. Competence can be related to resources; the member is 'able' to participate. The link between autonomy and Birchall & Simmons' work appears to be less clear. It could be related to mobilisation, where the member (ideally) is offered a variety of opportunities and thus a choice to and how to participate. However, we argue that this basic need could already be partly met by one of the core principles of cooperatives i.e. voluntary and open membership (ICA, 2015).

Using the participation chain model in cooperative practice, Simmons & Birchall (2005), encounter cultural and institutional factors that influence participation, resulting in the fourth link in the chain, *dynamics* of participation. The dynamics link in the participation chain refers to how participants' experiences during participation reinforce or weaken their motivations over time. Positive experiences strengthen commitment and group identity, while negative experiences, such as feeling ignored, can lead to disengagement. However, this thesis will not examine dynamics, as the longer-term evolution of member experiences would require a longitudinal research design, beyond the scope of this study.

In applying this framework, Birchall & Simmons (2004b) conducted an empirical study within a large UK consumer cooperative to examine which types of incentives most effectively predict member participation. Their findings provide meaningful insights into the relative weight of different motivational factors identified in MIT. Most notably, they observed that collectivistic motivations, shared goals, shared values, and a sense of

community, were more influential than individualistic ones in sustaining member engagement. Members reported a strong sense of identification with the cooperative's broader mission and expressed continued willingness to participate even in the absence of tangible individual benefits. Among these collectivistic factors, sense of community emerged as the strongest driver of participation, followed by shared values and shared goals. On the other hand, while individualistic motivations such as personal benefits and habit were also present, they played a comparatively smaller role. Material or financial benefits were reported as relatively unimportant by most respondents, with intrinsic, internal benefits, such as personal satisfaction or feeling empowered, proving more meaningful. Habit, defined as routine participation without active re-evaluation, accounted for a minority of cases but was still recognised as a notable factor, particularly among long-term members. Negative individualistic factors such as costs, opportunity costs, and satiation were found to have limited explanatory power in this setting. Most participants did not consider these obstacles to be significant deterrents to participation. This suggests that once strong collectivistic motivations are in place, they may easily buffer against the impact of such negative considerations.

Although the study was conducted in the context of a consumer cooperative rather than an agricultural one, its findings are still valuable for this research. They underline the importance of not only recognising the presence of multiple motivational layers, but also understanding which dimensions are likely to dominate participation in different cooperative environments. In the context of agricultural cooperatives, where member heterogeneity may be greater and financial stakes more directly tied to farm livelihoods, further investigation is required to determine whether similar patterns hold.

2.4 Motivation of Farmer-members in Agricultural Cooperatives

Many agricultural cooperatives, particularly producer cooperatives, have originated with the primary goal of collective marketing, aiming to secure higher and more stable selling prices for their members (Hendrikse, 2004). However, the motivations of farmers to join and actively participate in cooperatives extend beyond this foundational economic rationale. According to the Mutual Incentives Theory (MIT, see Section 2.3), cooperative engagement is driven by eight distinct incentives, three collectivistic and five individualistic, that together shape member motivation (Birchall & Simmons, 2004b). While these MIT-based incentives provide a structured framework, the literature specifically on agricultural cooperatives appears to rather emphasise financial, social, and ideological motivations.

Financial motivations, in particular, have been extensively explored. Studies by Alho (2015) and Ollila et al. (2012) highlight the close alignment of financial motives with several MIT components, including perceived benefits, costs, opportunity costs, satiation, and elements of shared goals. Social and ideological drivers, though less frequently brought to the foreground, also play a role. For example, social motivations align with a sense of community, while ideological motivations resonate with the MIT concepts of shared values and goals. Nevertheless, these non-financial incentives are often discussed in relation to or in support of financial ones, rather than as standalone motivators.

Empirical findings further nuance these distinctions. Ollila et al (2012) report that slightly more farmers are driven by "business relations" than by "traditional cooperative values". Similarly, Morfi et al. (2015) find that over twice as many so-called "loyal farmers" agree

with the statement that cooperative membership is primarily business-oriented, compared to those who disagree. Interestingly, an even larger proportion of "disloyal farmers" appear to share this perspective, suggesting that loyalty may be more closely associated with social and ideological factors than with purely financial motivations.

In what follows, we synthesise the literature on motivations in agricultural cooperatives, adhering to the elements of Birchall & Simmons' (2004b) MIT. We begin with the individualistic incentives including, benefits, habit, costs, opportunity costs and satiation. After that, we turn to the collective incentives, including sense of community, shared goals, and shared values.

2.4.1 Positive Individualistic Incentives: Benefits

2.4.1.1 Stable Market Access and Risk Reduction

As literature shows, the main benefit of a marketing cooperative is providing farmer-members access to secure and stable markets for their agricultural outputs. Members of cooperatives tend to be risk-averse; they are motivated by (market) opportunism experienced and price volatility (Franken et al., 2022; Sánchez-Navarro et al., 2024).

> *"Risk is a pervasive problem for farmers, and methods to reduce it or mitigate its effects naturally hold interest. Cooperation has not been analysed rigorously in this context, but assurance of markets and stable prices are often listed among the benefits of cooperation." (Sexton, 1986, p.1170)*

Likewise, Alho's (2015) study on Finnish livestock farmers highlights that, regardless of size, members highly value the cooperative's role in providing a reliable buyer, reducing marketing uncertainty, and supporting long-term investments. Similarly, Valentinov (2007) and Ortmann & King (2007) emphasise that cooperatives reduce transaction costs and counteract market power imbalances, especially in sectors dominated by a few large buyers, such as is the case in marketing of agricultural products.

2.4.1.2 Services and Support

Another benefit that serves as an individualistic incentive for cooperative members, is that cooperatives often offer additional services and support, such as bulk-buying discounts, agronomic advice, transportation, processing, and storage facilities (Franken et al., 2022; Ortmann & King, 2007). Cooperatives frequently reinvest surpluses into shared infrastructure such as sorting and packing stations, cooling units, or processing plants. This infrastructure adds value to raw products and enables farmer-members to access higher-value markets (Ajates, 2020; Siedlok et al., 2024). Cooperatives often support member development through training and knowledge exchange. This includes for example workshops, field days, and information-sharing on sustainable practices, certifications, or innovations (Candemir et al., 2021; ICA, 2015; Novkovic, 2008; Siedlok et al., 2024).

2.4.2 Positive Individualistic Incentives: Habit

Many studies discuss habit or long-term membership primarily as a result of motivation, rather than as a motivating factor in itself. In such studies, long-term membership is typically treated on par with participation and satisfaction as an outcome variable (Hernandez-Espallardo et al., 2013). In contrast, the Mutual Incentives Theory, developed by Birchall & Simmons (2004b), habit refers to an incentive of motivation where participation in a cooperative becomes a routine or ingrained behaviour, maintained by social norms and the solidarity built through repeated, familiar interaction over time. Supporting this perspective, Klein et al. (1997) found a positive correlation between age and patronage (i.e., use of cooperative services), likely reflecting the enduring relationships older farmers maintain with cooperatives. This link is made more explicit by Ollila et al. (2012) who reported *"that long-term experiences keep them as members", s*uggesting that habit and experience serve as sustaining forces behind cooperative membership.

2.4.3 Negative Individualistic Incentives: Costs

2.4.3.1 Financial Costs and Capital Contributions

Höhler & Kühl (2018) discuss how costs of participation increase with organisational complexity and member heterogeneity. As cooperatives professionalise and require more capital, farmers, especially smaller or marginal ones, may opt out.

2.4.3.2 Time and Administrative Burdens

Österberg & Nilsson (2009) highlight that weak perceived influence in governance reduces member commitment, particularly when the time investment does not lead to visible impact or responsiveness from leadership. Höhler & Kühl (2018) demonstrate that increased member heterogeneity often leads to lower participation, as different farm types have varying expectations and needs. Governance structures that attempt to accommodate everyone may become inefficient or frustrating.

2.4.4 Negative Individualistic Incentives: Opportunity Costs

2.4.4.1 Foregone Income from Alternative Market Channels

A first significant opportunity cost of cooperative membership is the missed potential for higher income through independent marketing or private contracts (Jensen, 1990). As noted by Franken et al. (2022), farmers with entrepreneurial drive or access to differentiated markets often perceive cooperative pricing schemes as too standardised, failing to reward product quality or innovation. In such cases, for the individual farmer considering membership of a cooperative, implies a trade-off between price stability and profit maximisation.

2.4.4.2 Reduced Flexibility and Responsiveness

A second type of opportunity cost is the perception of reduced flexibility and responsiveness when being a member of a cooperative. Höhler & Kühl (2018) argue that the more heterogeneous and bureaucratic a cooperative becomes, the less responsive it is to the diverse and evolving needs of its members. The authors point out that farmers may therefore find themselves unable to capitalise on new market trends or pivot strategies when necessary, which are opportunities that might be more easily exploited in independent or contract-based arrangements. As Novkovic (2008) highlights, participation in a cooperative in general often entails compromising individual control for the sake of collective decision-making. This can be particularly frustrating for farmers with innovative ideas or growth strategies that do not align with the cooperative's priorities. Ollila et al. (2014) further illustrate that in large, internationalised cooperatives, the strategic direction is frequently set by management and professional boards, reducing grassroots members' influence and exacerbating the feeling of lost autonomy. However, this is not necessarily the case for all larger cooperatives. Siedlok et al. (2024) provide a vivid example in their analysis of Zespri. After long-standing members begin to question their continued participation considering the cooperative's shift toward more commercial and globalised strategies, Zespri introduces several changes to enhance democratic decision-making procedures, thus showing renewed responsiveness to the members' needs.

2.4.5 Negative Individualistic Incentives: Satiation

Following Birchall & Simmons (2004b), satiation often arises when benefits that were once meaningful, are taken for granted. Applied to the agricultural context, such satiation can occur concerning stable market access or technical support, which are taken for granted at a certain point in time. In particular, more commercially oriented or more experienced farmers may feel they have outgrown the cooperative if it no longer adapts to their needs (Ajates, 2020).

> *"By not being part of the struggle and the negotiation of the rules and the culture of the agricultural cooperative, new members feel more like customers than owners if no education programme to keep that knowledge alive is introduced"* (Ajates, 2020, p. 346)

As Siedlok et al. (2024) suggest, even highly successful cooperatives risk becoming "invisible" to members when benefits become normalised. In their case study of Zespri, the authors reveal how the cooperative introduces tools such as a payment system which rewards desirable fruit attributes and provides technical support to reduce inefficiencies to motivate members and reduce satiation. Moreover, governance fatigue also contributes to satiation. Bhuyan (2007), along with Österberg & Nilsson (2009), note that when members feel their participation lacks influence, they may disengage from cooperative governance:

> *"Moreover, the likelihood of cooperative abandonment was higher if members perceived that their input was not valued by the management in making decisions."* (Bhuyan, 2007, p.294)

Similarly, strategic shifts, such as international expansion or management professionalisation, can alienate long-time members who no longer recognise their role in the organisation (Ollila et al., 2014).

2.4.6 Collectivistic Incentives of Farmer-members

Somewhat contrasting with Birchall & Simmons (2004b) conviction, in researching a consumer cooperative, that collectivistic incentives are generally more important to cooperative members, most research on agricultural cooperatives investigating financial versus social motives suggests that the former are more important for joining cooperatives, but social or ideological motives result in continued participation of farmers that participate (Klein et al., 1997; Morfi et al., 2015; Siedlok et al., 2024). Social or ideologic motives are more complex as they may differ more between individual farmers. In what follows, we again synthesise the literature by utilising the three collectivistic incentives identified by Birchall & Simmons, i.e. shared goals, shared values, and sense of community.

2.4.6.1 Shared Goals

Research on agricultural cooperatives frequently highlights the role of shared goals, common objectives that members pursue collectively, as a motivation for farmer participation. When farmers perceive that a cooperative enables them to achieve mutual goals (e.g. improving bargaining power, stabilising prices, or fostering local development) that would be difficult to attain individually, their incentive to join and remain active tends to increase. For example, Birchall & Simmons (2004b) found that cooperative members who

were active participants exhibited a significantly stronger “sense of shared goals” with the organisation than did non-participants.

Empirical studies in agricultural settings similarly suggest that alignment of objectives between a cooperative and its farmers can bolster member commitment. For instance, Bareille et al. (2017) show that when a multipurpose cooperative’s objectives converged with those of its members (such as adopting innovative farming practices valued by members), it creates greater incentives to be involved in the cooperative. This reinforces the idea that farmers are more likely to participate actively if they see the cooperative as working toward the same ends they personally prioritise.

2.4.6.2 Shared Values

Closely related to shared goals is the notion of shared values, the degree to which farmers and their cooperatives hold common values, principles, or ethical standards, as a different collectivistic motivation identified by Birchall & Simmons’ MIT. Shared values reflect an alignment between a member’s personal beliefs and the cooperative’s mission or ethos (for example, commitments to fairness, mutual aid, sustainability, or community solidarity) (Birchall & Simmons, 2004b).

The importance of shared values as a motivator has also been noted in agricultural cooperative literature. Fulton (1999) argue that farmers who believe in the cooperative ideology, essentially internalising cooperative values, are far more likely to remain loyal and committed members. Barraud-Didier et al. (2012) states that this communality can translate into trust, mutual respect, and a feeling of belonging that powerfully motivates participation. For example, members who feel the cooperative shares their ethical commitments, be it to honest business practices, quality standards, or community welfare, tend to develop higher trust in the cooperative’s leadership and objectives, which in turn reinforces their willingness to participate (e.g. attend meetings, vote, or take on roles).

However, the motivating power of shared values can differ across settings and member profiles. Some research indicates that generational or structural changes in agriculture have attenuated the role of traditional cooperative values for certain farmers. For instance, in cases where cooperatives have become large, market-oriented enterprises (sometimes termed “degenerated” cooperatives), members may begin to view the cooperative as a straightforward business partner independent of ideology, rather than as a values-based association, thereby weakening the pull of shared values on their participation (Hansen et al., 2024). Conversely, other studies have found that younger members tend to place higher importance on cooperative ideals and feel a stronger moral obligation to support the cooperative (Li et al., 2011). This could help to explain why cooperatives that nurture their foundational values and clearly communicate their mission often see more engaged and devoted member-farmers in the long run.

2.4.6.3 Sense of Community

In the Mutual Incentives Theory, Birchall & Simmons (2004b) highlight a sense of community, grounded in solidarity, mutual trust, and shared identity, as a key collectivistic motivation driving member participation in cooperatives. Siedlok et al (2024) study how Zespri, a large producer cooperative, can achieve social and economic goals in alignment with its members. Through different initiatives focused either on financial or social incentives, the authors show how a sense of community can be fostered, e.g. through peer-

learning initiatives, field days, and strategy roadshows. In particular, the study finds how an increase in social connections between farmers and the cooperative enables co-creation strategies with members.

Trust is a core component of this sense of community. Österberg & Nilsson (2009) show that trust in the board of directors and satisfaction with democratic participation significantly strengthen members' commitment. Farmers who feel heard and fairly treated in decision-making processes are more likely to stay loyal, even if financial incentives fluctuate (Österberg & Nilsson, 2009). Similarly, Sánchez-Navarro et al. (2024) demonstrate that cooperatives reduce members' exposure to opportunistic behaviour by acting as trusted intermediaries in navigating complex sustainability requirements. This protective role enhances the feeling of collective security and solidarity, and thus a sense of community.

However, Höhler & Kühl (2018) warn that as member heterogeneity increases, due to factors such as farm size, goals, or production type, the sense of community may weaken, leading to lower levels of member commitment. The weakening of shared social bonds can shift cooperative membership toward a more transactional and less relational experience.

In sum, while cooperatives are often evaluated based on their economic performance, a strong sense of community remains a critical, empirically verified pillar of continued member participation and motivation. Failing to nurture this dimension risks not only disengagement but also eventual membership loss.

2.4.7 Individualistic vs. Collectivistic Incentives

When comparing individualistic and collectivistic incentives in the context of agricultural cooperatives, a clear distinction emerges between motivations associated with personal benefits and those rooted in shared identity, values, and goals. Birchall & Simmons (2004b) proposed that both types of incentives are integral to understanding cooperative participation, but their empirical research, conducted in the context of a large consumer cooperative, concludes that collectivistic motivations such as shared values, goals, and especially a sense of community, outweigh individualistic ones like personal benefits or habitual participation. Members often continued to participate even in the absence of direct financial gain, driven instead by identification with the cooperative's mission and the social bonds it fostered.

However, this dynamic appears to shift in the context of agricultural cooperatives. While the MIT still provides a relevant structure, literature focused specifically on farmer-membership reveals a stronger emphasis on individualistic incentives, particularly financial benefits such as stable market access, reduced transaction costs, and access to shared services (Alho, 2015; Franken et al., 2022). For example, research on Croatian agricultural cooperatives finds that farmers' participation is driven overwhelmingly by financial motives, while shared goals, values, and sense of community do not significantly encourage membership (Nedanov & Zutinic, 2018). In that context, the cooperative is seen more as a business tool than a group working toward a higher common mission, and collective goals alone are insufficient to attract or retain members. Empirical studies suggest that while collective ideals may promote long-term participation and deepen engagement, initial decisions to join and remain in a cooperative are more often grounded in economic

rationale, especially in competitive market environments (Morfi et al., 2015; Ollila et al., 2012).

Nevertheless, non-financial incentives should not be underestimated. Social and ideological motivations, mapped to the MIT categories of shared goals, shared values, and sense of community, play a critical role in sustaining long-term participation. For instance, loyal members often cite moral alignment with cooperative principles or the value of belonging to a trusted group as key reasons for their continued involvement (Ajates, 2020; Fulton, 1999). Importantly, these factors become particularly salient when economic conditions fluctuate or when cooperatives face internal challenges such as strategic shifts or professionalisation (Österberg & Nilsson, 2009; Siedlok et al., 2024). In such cases, collectivistic motivations can act as buffers against disengagement, helping to sustain member participation even when financial benefits or operational performance fall short.

What emerges, then, is a nuanced picture: in agricultural cooperatives, individualistic incentives, especially economic benefits, are crucial for attracting and initially engaging members. Yet, collectivistic motivations tend to exert influence over sustained participation, particularly among those who identify closely with the cooperative's values or who benefit from a strong sense of community. Compared to Birchall & Simmons' (2004b) findings in the consumer sector, where collectivistic incentives were dominant, agricultural cooperatives present a contrasting motivational landscape, mostly shaped by pragmatic and somewhat by ideological considerations. The weight of each incentive may further depend on contextual factors such as farm size, market orientation, generational continuity, and the cooperative’s governance model.

Table 1: Overview Mutual Incentives Theory with Examples

Mutual Incentives Theory *(Birchall & Simmons, 2004b)*	***Incentives***	***Literature Summary***
individualistic	**Benefit**	Members of cooperatives are motivated by (**market) opportunism** experienced and **price volatility** (Franken et al., 2022; Sánchez-Navarro et al., 2024). Cooperatives reduce transaction costs and **counteract market power imbalances** (Ortmann & King, 2007; Valentinov, 2007). The **assurance of markets** and **stable prices** are major benefits (Sexton, 1986).
	Habit	Age is a factor of patronage, as older farmers tend to use cooperatives more (Klein et al., 1997).
	Cost	Increased heterogeneity comes with **increasing capital costs** (Höhler & Kühl, 2018).
	Opportunity Cost	The missed potential for **higher income** through independent marketing or private contracts (Jensen, 1990). Participation in a cooperative often entails **compromising individual control** for the sake of collective decision-making (Novkovic, 2008).
	Satiation	**Mentorship and inclusive governance** strengthen **member engagement,** especially for **younger or less experienced** members in agricultural cooperatives, as they help **build trust** in one's ability to contribute effectively (FAO, 2012).
Collectivistic	**Shared Goals**	When a **cooperative's objectives converge with** those of its **members**, it creates greater incentives to be involved in the cooperative (Bareille et al., 2017).
	Shared Values	Farmers who believe in the cooperative ideology are more likely to **remain loyal and committed** members (Fulton, 1999).
	Sense of Community	**Social connections** between farmers and the cooperative enables co-creation strategies with members (Siedlok et al., 2024).

2.5 Individual Resources of Farmer-members in Agricultural Cooperatives

According to research by Birchall & Simmons (2004b), motivating members to stay in a cooperative or non-members to join one depends on a 'participation chain'. As laid out in Section 2.3, participation in a cooperative depends on four interlinked chains: motivation, resources, mobilisation, and dynamics (see also schematic presentation in Appendix 1). In this study, we focus on the micro-level and therefore only consider the individual-level factors that influence the participation of members. This includes personal resources such as time, financial means, skills, and confidence. After having synthesised the literature on agricultural cooperatives through the lens of Birchall & Simmons' theory on motivation, in this section we turn to the second part of their participation chain, i.e. resources (summarised in Section 2.3). This section enforces the basis of the participation chain, showing how resources enable motivations to be translated into actual participation in agricultural cooperatives.

2.5.1 Time

In cooperatives in general, Birchall & Simmons (2004b) state that time is a resource that refers to the availability to engage in cooperative activities, such as attending meetings, participating in decision-making processes, or taking on governance roles. Novkovic (2008) emphasises that time is particularly vital in cooperatives where democratic processes require active member engagement, though it competes with members' already scarce time. In agricultural cooperatives in particular, this challenge is even greater: farmers must balance demanding farm schedules with cooperative activities, especially during busy seasons (FAO, 2012). The Food and Agriculture Organization (FAO) further highlights that younger members, in particular, need time for training, governance, and meetings, urging cooperatives to streamline processes to fit farmers' schedules. Interestingly, farm size also plays a role in time availability: larger farmers often have more labour flexibility, enabling greater participation in cooperative governance (Gray & Kraenzle, 1998), while smaller farmers face tighter time constraints due to limited labour availability (FAO, 2012).

2.5.2 Financial Means

Financial means represent a key resource enabling members to actively participate in cooperatives, such as attending general assemblies, joining working groups, or taking up governance roles (Birchall & Simmons, 2004b). Financial contributions are essential for the cooperative's success, funding shared initiatives such as marketing, equipment, and services that would be unaffordable individually (Novkovic, 2008). While these investments can improve individual operations and create collective benefits, they also pose entry barriers, especially for smaller farmers with limited financial flexibility (Sánchez-Navarro et al., 2024). One concrete financial threshold is the purchase of a share to become a member. In some cooperatives, this initial investment can be substantial and is perceived as a barrier to entry, particularly by small-scale or younger producers who have limited liquidity (Sánchez-Navarro et al., 2024). Larger farms, due to greater financial capacity, tend to invest more actively and benefit more from cooperative participation (Gray & Kraenzle, 1998).

2.5.3 Skills

Skills are a vital individual resource for cooperative participation, encompassing financial literacy, governance understanding, and market knowledge (Birchall & Simmons, 2004b). These skills enable members to contribute effectively to decision-making and strategic planning (Novkovic, 2008). However, smaller-scale farmers mostly tend to face barriers due to limited knowledge (Sánchez-Navarro et al., 2024; Siedlok et al., 2024). Cooperatives can address these gaps by offering education and training to their (potentially board-) members, which not only enhances individual engagement but also mitigates informational asymmetry between farmers and more powerful actors like buyers or suppliers (Sánchez-Navarro et al., 2024). By providing tailored information and capacity-building, cooperatives strengthen members' ability, and thus skills required at board level, to align with market demands and contribute to collective goals (Siedlok et al., 2024).

2.5.4 Confidence

Confidence, the belief in one's ability to contribute effectively, is a crucial individual resource for cooperative participation (Birchall & Simmons, 2004b). It enables farmers to voice opinions, influence decisions, and feel valued within the cooperative. Mentorship programs and inclusive governance structures are important for building confidence, especially among young and less experienced members (FAO, 2012). However, farmers who perceive their influence as low, being particularly small or new members, are less likely to engage actively in governance (Chen, 2019). Confidence-related barriers are especially pronounced when members lack experience or feel uncertain about their ability to contribute, which often overlaps with knowledge gaps (Sánchez-Navarro et al., 2024).

Table 2: Overview Individual Resources with Explanation & Examples

Resources According to Participation Chain *(Birchall & Simmons, 2004b)*	***Meaning***	***Application to Agricultural Cooperatives: Examples***
Time	Availability to participate in cooperative activities.	Farmers need to **allocate time for governance, training, and meetings** (FAO, 2012). **Larger farms** generally have more **labour flexibility** and delegation options, which makes it easier for the farmer to **engage** in **cooperative governance** roles (Gray & Kraenzle, 1998). By contrast, **smaller farms** often face **greater time constraints** due to limited labour availability, which can **hinder** the farmer's ability to **participate in meetings** or **stand for election** (FAO, 2012).
Financial Means	Financial investment in	Membership contributions **fund collective initiatives** such as marketing and equipment (Novkovic, 2008). However, the financial

	cooperative initiatives.	commitment required to join or invest can be a **barrier**, especially for **small-scale farmers** with limited flexibility (Sánchez-Navarro et al., 2024). Cooperatives **reduce financial burdens, making investments worthwhile**, by giving access to **shared resources** which would otherwise be deemed **unaffordable individually** (Sánchez-Navarro et al., 2024). **Large farms invest more** actively due to **financial flexibility** (Gray & Kraenzle, 1998).
Skills	Knowledge required for effective participation.	For some farmers, mostly small-scale, **lacking these skills** can form a **barrier** to taking part in **decision-making processes** (Sánchez-Navarro et al., 2024). Cooperatives bridge knowledge gaps through **education** (Sánchez-Navarro et al., 2024), although not all members feel **confident** engaging in **governance processes** (Siedlok et al., 2024).
Confidence	Self-assurance in contributing to the cooperative.	**Mentorship and inclusive governance** strengthen **member engagement,** especially for **younger or less experienced** members in agricultural cooperatives, as they help **build trust** in one's ability to contribute effectively (FAO, 2012). Particularly **new** or **small farmers**, who perceive t**heir influence on decision-making** as low, are **less likely** to **participate** in cooperative **governance** (Chen, 2019).

2.6 Meso-level Remarks: Mobilisation

It is important to note that while the present study focuses on the micro-level, namely on individual motivations and resources, the meso-level of mobilisation remains a crucial contextual backdrop. According to Birchall & Simmons (2004b), mobilisation refers to the organisational mechanisms that translate member motivation into actual participation: creating opportunities, recruiting members, educating them, and aligning organisational goals with member interests. Although we do not explicitly analyse these mechanisms, their influence on individual behaviour cannot be ignored. For example, education programs and governance training can enhance members' skills and confidence (Novkovic, 2008; Sánchez-Navarro et al., 2024), while communication tools and local events help reduce informational asymmetry and foster inclusion (Siedlok et al., 2024). Similarly, economic opportunities, such as shared marketing infrastructure or reward systems for quality production, can incentivise active engagement, especially for smaller-scale members with fewer market alternatives (Candemir et al., 2021). Conversely, a lack of such mechanisms may hinder even well-motivated members from participating fully.

Our decision to focus on the micro-level stems from the aim to better understand within-member heterogeneity, particularly how differences in farm size relate to individual drivers of participation. Including meso-level variables would have significantly broadened the study's scope and diverted attention from our central research objective. Nonetheless, we acknowledge that organisational factors such as recruitment strategies, training provision, or alignment efforts likely shape the environment in which individual participation occurs. In line with Birchall & Simmons' (2004b) participation chain, mobilisation can be seen as enabling or constraining the expression of motivation and resources. Our emphasis on the micro-level should therefore not be interpreted as ignoring the organisational context, but as a deliberate analytical focus.

2.7 Dynamics of Participation

As outlined in Section 2.3, Simmons & Birchall (2005) later expanded the participation chain with a fourth link: dynamics. This concept refers to how members' experiences during participation shape their future engagement, either reinforcing or weakening their motivation over time. Although dynamics provide important theoretical context, they fall outside the empirical scope of this thesis. Since this component focuses on change across time, it cannot be adequately captured within a cross-sectional research design based on one-off interviews (explained in more detail in Section 3). Dynamics operate at the intersection of the meso- and micro-levels: while shaped by organisational structures and culture, they reflect individual members' evolving experiences of participation.

The relevance of dynamics becomes particularly apparent in large or structurally complex cooperatives, where organisational design and culture can shape how members experience participation over time (Simmons & Birchall, 2005). Structural distance, such as limited access to decision-making or lack of responsiveness, may cause members to feel undervalued or disconnected, undermining their motivation (Gray & Kraenzle, 1998; Sánchez-Navarro et al., 2024). Conversely, inclusive practices like transparent communication, regular feedback mechanisms, and participatory governance structures have been shown to reinforce members' sense of belonging and commitment (Chen, 2019; Novkovic, 2008). These organisational factors (meso-level) play a central role in shaping how members interpret and respond to their participation experiences, which can either strengthen or weaken their ongoing involvement in the cooperative (micro-level). While not addressed empirically in this study, dynamics offer a complementary lens for understanding how participation may evolve in different organisational settings and highlight a promising avenue for future research.

2.8 Additional Explanatory Factors Explaining Different Motivations: Farmer and Farm Characteristics

Besides the aforementioned individualistic and collectivistic incentives based on Birchall & Simmons' MIT, our literature review revealed additional factors that can explain different motivations. Specifically, a heterogeneous membership is linked to the degeneration of cooperatives, different satisfaction due to a diversity in attitudes and objective (Grashuis & Cook, 2021; Iliopoulos & Valentinov, 2017). We can divide heterogeneity of members further into farmer and farm characteristics. Although farmer characteristics are not the

central focus of this paper, they remain an important factor in explaining divergent motivations and thus warrant discussion. Age, level of education, experience in board representation, and individual risk attitudes have all been shown to influence how members perceive the value and role of cooperatives (Höhler & Kühl, 2018). For example, Österberg & Nilsson (2009) find that younger members and those with less experience in governance often report lower satisfaction and weaker commitment. Similarly, Bhuyan (2007) identifies education and managerial capacity as significant predictors of cooperative participation. Risk-averse farmers may be more inclined to value stable market access and price guarantees, while more risk-tolerant or entrepreneurial members may seek greater autonomy and flexibility (Franken et al., 2022). A specific challenge that arises in such heterogeneous settings is the horizon problem, where members without a long-term outlook, such as those nearing retirement or lacking a successor, are less inclined to support investments that yield returns beyond their personal time horizon (Grashuis & Cook, 2021; Novkovic, 2008). These individual-level factors interact with structural farm characteristics to shape overall cooperative motivation and behaviour.

Farm characteristics such as technology use, location, farm size, and product type are often studied in relation to farmers' motivation, loyalty, and participation in cooperatives (Bhuyan, 2007; Grashuis & Cook, 2021; Muriqi et al., 2019; Österberg & Nilsson, 2009). However, these characteristics are not as easy to compare across studies. Farmers producing specific products often belong to different cooperatives or subsections within a larger cooperative, yet the internal differences between these groups are not always determined by the product itself (Muriqi et al., 2019). However, a specific farm characteristic that is of crucial importance in our study, is the size of the farm of different members of marketing cooperatives. In the following, we delve deeper into this characteristic.

2.8.1 Farm Size

Definitions of "farm size" vary widely; some use acreage, others use revenue, workforce, or output, without a universal threshold separating small from large farms. As Grashuis & Franken (2020) note, many studies rely on farm size categories defined relative to the characteristics of their own sample population, rather than applying a broader or objective standard. This makes cross-study comparisons difficult. Similarly, motivation linked to location or technology use is often interpreted within the context of the study's specific region or sector (Bhuyan, 2007), which further limits comparison. In short, while farm characteristics matter, the way they are defined and applied varies, and most literature draws conclusions based on its own interviewees rather than on widely accepted criteria.

The relationship between farm size and farmers' motivation to participate in agricultural cooperatives remains empirically ambiguous, with studies reporting mixed results across different countries and sectors. Ollila et al. (2012) find no statistically significant relationship between farm size and cooperative motivation. Their results identify two motivational clusters, those guided by traditional cooperative values and those with a business-oriented rationale, but there is no link to farm size or farmer age. Similarly, Morfi et al. (2015) observe that cooperative loyalty was primarily driven by ideological alignment and trust, rather than structural variables such as farm size or age. By contrast, other studies suggest that farm size does influence participation patterns, though not necessarily in a linear way. Klein et al. (1997) states that medium-sized farms rely on cooperatives primarily for grain marketing, while larger farms use agricultural cooperatives more intensively for fuel purchases. Similarly, Muriqi et al. (2019) report that medium-sized farms are more likely to

participate in cooperatives than either small or large farms. This may reflect a balance wherein medium farms have sufficient scale to benefit from cooperative services while still lacking the market independence of large-scale operations. Alho (2015) provides further nuance by showing sectoral differences: in pig farming, small-scale producers value cooperative control and influence more than larger producers, whereas the opposite is true in the dairy sector. These findings suggest that the perceived benefits of participation, such as control, market access, or service provision, may vary not only by farm size but also by the specific needs of different production sectors.

Taken together, these studies show that while farm size is not a universally predictive variable for cooperative motivation or continued participation, it can shape how and why farmers choose to participate. Its influence appears to be mediated by contextual factors such as commodity type, cooperative structure, and national agricultural policy (Alho, 2015; Bhuyan, 2007; Klein et al., 1997; Morfi et al., 2015; Muriqi et al., 2019 ; Ollila et al., 2012).

2.9 Literature Gap and Research Objective

Concludingly, existing literature primarily examines the influence of farm size on cooperative participation, but findings remain fragmented and inconsistent. Some studies suggest that farm size has little to no effect on farmers' motivations to join cooperatives (Ollila et al., 2012), while others report clear differences in participation patterns between small, medium-sized, and large farms (Klein et al., 1997; Muriqi et al.,2019) . In addition, studies vary considerably in how they define "farm size," using diverse metrics such as land area, workforce, or revenue (Höhler & Kühl, 2018). This lack of conceptual clarity complicates comparisons across studies.

Moreover, while economic, social, and governance factors have been identified as general drivers of cooperative participation, little is known about how these incentives and barriers specifically manifest across farms of different sizes. A deeper, targeted understanding of farmers' individual motivations, both for joining and continued participation in cooperatives, is needed. Therefore, this thesis will examine the resources and motivation links of the Participation Chain, as these operate at the individual member level (micro-level). While mobilisation is an essential factor at the organisational level (meso-level), the focus will remain on how individual cooperative members experience and engage with participation.

2.9.1 Research Objective

This research aims to explore how farmers perceive the role of cooperatives in addressing their economic and social needs, and to identify the key drivers and barriers influencing their participation. Special attention is given to how farm size shapes these motivations, allowing for a more nuanced understanding of member heterogeneity within cooperatives.

2.9.2 Research Question

"How do farmers perceive the role of cooperatives in meeting their economic and social needs, what drivers motivate or deter their participation, and in what ways does farm size shape these motivations?"

3 Methodology

To investigate farmer participation in marketing cooperatives within the Flemish fruit and vegetable sector, with attention to motivations, perceptions, and contextual influences, this study adopts a qualitative research design (Flick et al., 2004).

3.1 Sectoral Background and Cooperative Landscape

In Flanders, the number of farms steadily decreased by an average of 1% every year (Platteau & Van Bogaert, 2024). At the same time, these farms generally increased in size. In the past few years, the Belgian agricultural sector has seen a clear trend toward farm consolidation, with fewer but larger farms (VILT, 2024). This development is particularly visible in intensive sectors such as greenhouse horticulture. The resulting differences in farm size, production scale, and strategic orientation have contributed to increased internal diversity within cooperatives. Earlier analyses have shown that such heterogeneity can pose challenges to internal cohesion and democratic functioning (Lambrechts, 2013). The Flemish government has acknowledged these structural changes and emphasised the need to ensure long-term viability in a context of ageing and consolidation (VILT, 2024).

While a significant number of producer cooperatives exist, there is a lack of statistics for both Flanders and Belgium (Friedel, 2024). Still, the cooperative business model plays a significant yet often underappreciated role in Belgium's economic landscape. Although cooperatives represented only 1% of all active businesses, they contributed around 3% to Belgium's GDP and involved between 1.5 to 2 million members (Staessens et al., 2021).

In recent years, policy changes, including the introduction of the Belgian Code of Companies and Associations (CCA) in 2019, reshaped the cooperative sector by providing a clearer legal framework and aligning cooperative principles with international standards (Collin & Comans, 2019). However, this transition also resulted in a decline in the number of registered cooperatives, as organisations either consolidated or shifted to different legal structures (Steassens et al., 2021).

In addition to structural developments, the way agricultural products are marketed remains a core feature of Flemish agricultural marketing cooperatives. Two main systems are used: the auction clock and contract-based selling. Most cooperatives apply a mix of both (Van Bogaert & Roels, 2018). The auction clock offers real-time, transparent price formation where all buyers have equal access. It remains widely used, often digitally, for perishable goods requiring quick sale and price fairness (Van Bogaert & Roels, 2018). Alongside this, contract sales within the cooperative have increased, particularly with large buyers such as supermarket chains seeking fixed agreements on quantity, quality, and price. While contracts offer predictability, they reduce market flexibility (Buysse et al., 2017). Cooperatives typically use the clock for general batches and contracts for tailored or strategic supply (Van Bogaert & Roels, 2018).

3.2 Research Population and Sampling Strategy

This study focused on farmers active in several major Flemish marketing cooperatives within the fruit and vegetable sector, covering a variety of produce types such as tomatoes, strawberries, and pears. While cooperatives represent the dominant marketing channel in the region, especially for crops like tomatoes and strawberries, a few farmers remain independent, selling through private traders or export companies. To ensure a comprehensive understanding of farmer motivations and cooperative dynamics, a total of 15 interviews were conducted not only with farmers (both members and non-members) but also with cooperative managers and representatives from farmers' associations.

3.2.1 Studied Agricultural Cooperatives

The study covered three major Flemish agricultural marketing cooperatives, comprising approximately 250, 1000, and 1,250 members respectively, all active in fruit and vegetable production. To protect participant anonymity, no explicit link was made between individual farmers, cooperative managers, or association representatives and a specific cooperative.

3.2.2 Profile of Respondents

The initial respondents were selected through theoretical sampling (Patton, 2015), as they were known to meet specific criteria relevant to the research objectives, i.e. local tomato farmers of various sizes and people working closely with agricultural cooperatives. Subsequent participants were recruited using snowball sampling, where initial respondents referred peers or contacts who potentially met the study's inclusion criteria (Parker et al., 2020). Due to difficulties in accessing a sufficient number of eligible participants, the sampling criteria were moderately relaxed by opening up to more types of produce and expanding our search area, and outreach was extended via cold emails and calls to eligible candidates.

Several differentiations were set in place: membership status (cooperative members or non-member), farm size (small and large), and main product type (tomatoes, strawberries, pears). The final sample consisted of 15 participants, including nine current members of a cooperative, two former members, and four key informants (comprising two cooperative managers and two representatives from farmers' associations). For a more detailed overview of the respondent categories, see Table 3. To ensure anonymity of respondents while adhering to clear and consistent referencing of respondents throughout the analysis, a systematic identification approach was developed. Each respondent received a unique code that reflected five key characteristics: farm size, membership status, main produce type, cooperative affiliation, and an individual number to prevent duplication.

Codes were constructed by combining abbreviated elements in the following order: farm size, membership status, main produce type, and cooperative. Specifically, 'L' and 'S' indicated large and small farms, 'm' and 'nm' referred to members and non-members respectively, and 'Tom', 'Str', and 'Prs' denoted tomato, strawberry, and pear producers. Cooperative affiliations were anonymised by assigning letters (A, B, or C). To ensure that each code was unique, even in cases where multiple respondents shared the same cooperative affiliation and characteristics, a numerical suffix was added to differentiate between individuals. For example, the code LmTomA2 referred to the second large tomato

farmer who was a current member of Cooperative A, while SnmPrsB1 referred to a small non-member pear farmer from the region of Cooperative B.

Key informants who were not active as farmers, such as cooperative managers or representatives of farmers' associations, were identified using the labels MGR (manager) or REP (representative), followed by the case letter of their cooperative if applicable. One representative, who was associated with a farmers' union rather than a specific cooperative, was referred to simply as REP. For these respondents, farm size and produce type were not applicable, thus have not been specified. This system ensured that all respondents could be systematically referred to in the analysis while maintaining their full anonymity.

Table 3: Detailed Profile of Respondents

Correspondent ID	***Role*** *(MGR or REP)*	***Farm Size*** *(L or S)*	***Membership Status*** *(m or nm)*	***Main Produce*** *(Tom, Str or Prs)*	***Cooperative*** *(A, B or C)*	***Correspondent number*** *(1, 2…)*
REP	REP					
REPB	REP				B	
MGRA	MGR				A	
MGRC	MGR				C	
SmTomA		S	m	Tom	A	
LmTomA1		L	m	Tom	A	1
LmTomA2		L	m	Tom	A	2
LmTomA3		L	m	Tom	A	3
LmTomC1		L	m	Tom	C	1
LmTomC2		L	m	Tom	C	2
SmStrC		S	m	Str	C	
SmPrsA1		S	m	Prs	A	
SmPrsA2		S	m	Prs	A	
SnmTom		S	nm	Tom		
SnmPrs[1]		S	nm	Prs		

[1] This interview was reconstructed from memory a few hours after its completion, following a technical malfunction that rendered the original recording unusable.

3.2.3 Categorisation by Farm Size and Product Type

Adhering to the focus of our study, respondents were categorised based on farm size. To determine what constitutes a 'large' or 'small' farm, we relied on thresholds (in hectares) based on the average indications of the interviewed farmers. As key actors in the sector, they possess an accurate and context-specific understanding of scale within their respective production types.

Because farm outputs, yield per hectare and operational structures differ significantly across produce types, we also take the main crop or product into account when classifying farm size. Farms growing different types of produce were therefore categorised separately to avoid sector-specific bias in the size classification. The threshold for strawberries is the average of strawberry farms in Flanders, based on a report from the *Departement Landbouw en Visserij,* as only one respondent in our sample specialised in this crop (De Samber, 2019). Table 4 below summarises the size thresholds identified for each main product type. Below this threshold, we consider the farm size as small, above the threshold as large.

Table 4: Threshold from Small to Large Farms per Product Type

Main Produce	***Threshold Small to Large** (Hectares)*
Tomatoes	2,5
Strawberries[2]	4
Pears	45

[2] Due to insufficient data on strawberry growers, it was not possible to establish a reliable threshold for farm size in this category based on our own data. The strawberry farmer perceived itself as a small farmer. Their interpretation of small was confirmed by the threshold in a report of *Departement Landbouw en Visserij* (De Samber, 2019).

3.3 Data Collection

This study used a qualitative research approach to gain deeper insight into the factors that influence motivation and participation in agricultural cooperatives. Semi-structured in-depth interviews were chosen because they allowed key topics to be addressed consistently while leaving room to explore relevant themes in more detail (Savin-Baden & Major, 2013).

A total of 15 interviews were conducted, with further respondent details available in Subsection 3.2.2. Data collection took place in Belgium between mid-February and mid-April 2025. Interviews were conducted either face-to-face or online, depending on the respondent's preference, and each lasted between 30 and 60 minutes. All interviews, except one, due to a technical error, were temporarily recorded to facilitate accurate transcription, after explicit consent was obtained. To ensure participant privacy as well as organisational identification based on membership size of the three cooperatives under study, all data was fully anonymised (Roose & Meuleman, 2014).

An interview guide with key topics was utilised (see Appendix 3) that served as a flexible framework for the interviews. This guide included the following themes: personal background information about the respondent, basic information on farm size and product (only applicable for active farmers), personal and/or generally perceived motivations for membership and participation, satisfaction with cooperative services, perceptions of differences between larger and smaller farmers in the cooperative, and perceptions of changes in services over time (in relation to farm size). The background information helped to start the interview and provided relevant attributes for the analysis. The question on membership motivation was open-ended, followed by probing questions based on the types of incentives described in the Mutual Incentives Theory (Birchall & Simmons, 2004b). The other topics helped to gather insights and perceptions that respondents might not have mentioned spontaneously.

3.4 Data Analysis

The collected data was analysed using a qualitative approach, following largely a deductive approach, combined with elements of inductive processes, which could be overall seen as an abductive reasoning (Timmermans & Tavory, 2022). This means that several key theoretical concepts from the literature review served as a foundation for analysis, particularly theories on self-determination (Deci & Ryan, 2012), member participation in cooperatives, and the Participation Chain model (Birchall & Simmons, 2004b). However, the coding process was rather data-driven, allowing themes and patterns to emerge from the data itself, rather than being imposed by a strict predefined coding framework.

After transcribing the interviews, the data was coded using a stepwise thematic analysis approach to identify underlying patterns and trends (Clarke & Braun, 2017). The coding process consisted of three phases: First, the data was subjected to an initial round of open coding. To ensure familiarity with the material and preserve nuanced meanings, this round began with in vivo coding, in which words or phrases that appeared meaningful were highlighted directly from the interview transcripts. These in vivo codes were then interpreted through descriptive codes, sometimes supplemented with contextual clarification. When a similar point was made multiple times by the same or another respondent, the same descriptive code was applied. This phase was guided by an inductive approach, allowing

the data to speak for itself. In the second phase, the descriptive codes were compared and grouped based on similarity, a process known as axial coding. Here, an abductive approach was adopted to identify patterns and construct broader categories. In the final phase, selective coding was carried out. The categories developed during axial coding were further abstracted into overarching core categories, which were typically linked to theoretical concepts (such as the Mutual Incentives Theory of Birchall & Simmons (2004b), identified in the literature review (Böhm, 2004; Hak, 2007; Roose & Meuleman, 2014; Savin-Baden & Major, 2013). A simplified version of the resulting coding tree was included in Appendix 2 to provide a structured overview of how the interview data were organised and interpreted.

To structure and interpret the coded data, thematic analysis was utilised (Clarke & Braun, 2017). Thematic analysis was chosen because it allows for a flexible yet rigorous identification of patterns and deeper meanings across a dataset (Clarke & Braun, 2017). It enables researchers to move beyond counting words or phrases and instead to uncover underlying ideas and experiences within the interviews. Given that our research sought to capture farmers' motivations, perceptions, and experiences, which were complex phenomena that were not easily reduced to simple categories, this method provided the necessary balance between inductive openness and theoretical interpretation. Moreover, thematic analysis fit well with an abductive reasoning approach, allowing iterative comparison between emerging themes and theoretical concepts throughout the analysis process (Fugard & Potts, 2019).

4 Analysis and Results

4.1 Broader Contextual Factors

This analysis was based on interviews conducted with a diverse group of eleven farmers active in fruit and vegetable production and four key informants on agricultural cooperatives, across Flanders. The cooperatives referenced in these interviews were marketing cooperatives active in fruit and vegetable production, which represented the dominant form of agricultural cooperation in the Flemish context.

A central insight that emerged from the interviews was that agricultural cooperatives, while still considered a vital part of the food chain, seem to operate in an increasingly complex environment. These sectors appeared to be undergoing significant internal and external transformation. Throughout the interviews, farmers consistently pointed to rising diversity among members, evolving expectations regarding services, and intensifying demands related to market performance and sustainability. This observation resonates with a growing body of literature highlighting how increasing heterogeneity among cooperative members, whether in terms of farm size, goals, or expectations, poses significant challenges for collective governance, service provision, and cohesion (Grashuis & Cook, 2021; Höhler & Kühl, 2018; Siedlok et al., 2024). Moreover, most respondents pointed out challenges in terms of demographic changes (i.e. ageing of farmers).

4.1.1 Demographics

Demographic shifts were a recurring theme throughout the interviews. Many farmers appeared to be approaching retirement age, and the absence of a clear successor introduced long-term uncertainty for cooperatives, as noted by a cooperative manager (MGRC). This demographic trend was frequently connected to decisions around investment and business continuity. Although some cooperatives had taken steps to involve younger farmers in governance roles, significant barriers remained; Most notably time constraints and administrative burdens, as pointed out by a large farmer who also served as a board member (LmTomA3).

These observations reinforced the findings from the literature study, which highlighted the role of individual-level resources such as time availability, confidence, and perceived competence, in shaping participation in cooperative governance. Younger farmers, in particular, were found to participate less actively, often due to a combination of limited experience, restricted time, and a weaker perceived influence within decision-making structures (Birchall & Simmons, 2004b; FAO, 2012; Novkovic, 2008). This pattern aligned closely with the typology developed by Höhler & Kühl (2018), who identified personal attributes as key factors influencing member engagement levels.

4.1.2 General Evolution in Size of Farms

As highlighted in the literature study (Section 2), our empirical findings confirmed that one of the most prominent developments in the agricultural sector is the ongoing consolidation of farm structures. Numerous interviewees emphasised that, within the next decade, only

the largest producers are expected to remain viable, which is an evolution that reflects the broader trend of scale enlargement and market centralisation described by Höhler & Kühl (2018).

While larger farmers increasingly operate autonomously, supported by their superior access to logistics, certification systems, and export channels, smaller producers appear ever more dependent on the cooperative to bridge these operational gaps. This divergence in access to farm resources echoes earlier findings in the literature (Alho, 2015; Gray & Kraenzle, 1998). Importantly, the size asymmetry does not merely influence production strategies; it also raises concerns about representation, perceived relevance, and the durability of solidarity mechanisms within cooperatives. These implications of farm size divergence, particularly in terms of member representation and cooperative cohesion, are further discussed in Sections 4.2.2.1 (Sense of Community), 4.2.2.3 (Shared Values), and 4.3.1.3 (Governance and Participation: Voice, Influence, and Farm Size).

Several farmers and representatives observed that although the number of active producers has declined, total cooperative turnover has continued to rise (LmTomC2, MGRC, REPB). According to a small member farmer, this points to a concentration of production among fewer, larger farms (SmPrsA1). The ability of small producers to meet increasing investment demands, especially in response to evolving regulations and market expectations, was described by a cooperative manager as a growing structural challenge, exacerbating the divide in resilience and future outlooks across farm sizes (MGRC).

4.1.3 Auction Clock vs. Contract Systems

As discussed in Section 3.1, the auction clock's significance as a historical pillar of Belgian agricultural cooperatives continues to be significant, which was reaffirmed by the interviews. Multiple cooperative-affiliated respondents highlighted how the clock system was designed to ensure transparent and fair pricing for perishable goods, and how it played a foundational role in the development of marketing cooperatives in Flanders. By allowing producers to pool their supply and sell via a neutral bidding mechanism, the auction clock eliminated the need for individual negotiation and helped equalise power between farmers and buyers (MGRC; SmPrsA1).

However, market structures and pricing mechanisms have shifted in recent years. While smaller producers continue to appreciate the auction clock for its transparency and the assurance of equal pricing through a collective market mechanism (SmPrsA1), the system is increasingly seen as outdated, as noted by the same respondent. One small member-farmer remarked on the declining use of the clock, pointing out that only a small share of produce is still marketed through this channel (SmPrsA1). At the same time, centralised retail buyers and their influence are growing significantly (LmTomA3). These actors were perceived to exert considerable pressure on prices and product standards (SmPrsA1), with one small farmer expressing concern over the loss of bargaining power as retailers increasingly push for direct delivery contracts and circumvent the cooperative's sales infrastructure (SmTomA).

While some member-farmers still value the clock for its role in maintaining price visibility and fairness (SmTomA, LmTomA1, LmTomA3), another member-respondent viewed it as rigid and poorly adapted to today's fast-moving market dynamics (SmPrsA1). These diverging perceptions reflect the broader debate on commercialisation and the

concentration of market power, as also discussed in the literature (Candemir et al., 2021). A cooperative manager described the auction clock as a psychological mechanism that actively shapes buyer behaviour by injecting urgency and discipline into purchasing decisions:

> *"Buyers constantly weigh decisions: should I buy now, [or] wait for another variety, [or] hold off a bit longer. The clock forces these choices at the moment [during the auction]." (MGRC)*

Despite its historical and symbolic value, many interviewees reported that large retailers increasingly bypass the clock, seeking more control over pricing, logistics, and certification processes (SmTomA). For some, this erosion of the auction model undermines the cooperative's market strength and its core values of fairness and solidarity (SmTomA; SmPrsA1). Others argued that direct negotiations and pre-arranged deals have become a pragmatic necessity to remain competitive in a rapidly evolving market environment (SmPrsA1; MGRC). These developments resonate with the findings of Sánchez-Navarro et al. (2024), who identify growing tensions between transparency and efficiency, and emphasise the increasing demands placed on producers with regard to traceability, volume, and delivery precision.

4.2 Micro-level Motivations as Key Drivers for Participation

When investigating a producer's motivation, specific questions were asked to find their personal reasons for (not) participating in an agricultural cooperative, including sources of both satisfaction and dissatisfaction. If the respondent was not a producer themselves, questions were altered to find trends they noticed from their experience and frequent professional contacts with active farmers.

4.2.1 Individualistic Incentives

4.2.1.1 Benefits

One of the questions yielding the most data was about respondents' experience of the most important benefits of membership. Benefits were defined as factors that have a direct positive impact on the individual producer or their business.

A consistent finding among both members and representatives was the importance of market access and price stability. As marketing is the core function of most agricultural cooperatives, this benefit was repeatedly emphasised. The producers experienced this in several practical ways. The most direct way is by the price received for their product. Representatives of the different cooperatives explained that they strive to get the best possible price out of the market while acknowledging that it is not always in their control. They explain that they operate on the European/global market, which makes the prices heavily dependent on a lot of uncontrollable factors.

> *"Our goal as a cooperative is to gather produce and try to give everyone the best price on the market."* (SmTomA)

> *"First of all: the price. […] but they tend to forget the cooperative works on the global market, or at least the European."* (REP)

Farmers did not necessarily perceive the prices they receive through the cooperative as the highest on the market, but they valued them for being stable and "fair," especially in volatile sectors. As a smaller producer explicitly stated:

> *"I won't say that I get peak prices. That's not it. But I do get a good average price."* (SmPrsA1)

For them, the best possible price seemed less important, but they did emphasise the benefit of consistent fair prices, contrasting it with the unpredictability of individual market dealings. This reflects previous findings by (Alho, 2015), who noted that Finnish livestock producers, regardless of farm size, valued stable, predictable income over potentially higher but fluctuating returns.

Larger producers, while equally appreciative of the cooperative's commercial role, tended to discuss pricing within a broader risk management strategy. This aligned with research by Franken et al. (2022), who found that cooperative members often demonstrate higher levels of risk aversion than non-members. Cooperatives provided a buffer against market shocks, including price drops or the failure of a buyer. These findings were further supported by Sánchez-Navarro et al. (2024), who showed that cooperatives reduced exposure to opportunistic behaviour and enhanced trust in market interactions.

Another significant financial benefit mentioned by all producers was the guaranteed and timely payment. Cooperatives not only ensured payment but did so on a fixed schedule, often within two weeks, which contrasted with the legal maximum of 30 days in independent sales (Donckier, n.d.). This predictability improved cash flow facilitated investment planning, and reduced dependence on external credit. It also significantly decreased financial uncertainty, contributing directly to a more stable and less stressful business environment. As noted by Valentinov (2007), cooperatives mitigate transaction costs and improve financial coordination for their members, an advantage that was recognised in nearly every interview (MGRA; MGRC; LmTomA2; REPB; REP;SmPrsA1; SmTomA; LmTomA3; LmTomC2).

The commercialisation of produce, including negotiations with clients, branding, and marketing, was another benefit that appealed to producers. Several respondents indicated that they either lack the interest, time, or financial capacity to conduct these tasks independently. Producers appreciated these commercialisation efforts of the cooperative, stating that it gave them room to focus on production (MGRA; LmTomA2; REPB; REP; SmTomA). Even larger producers, who might have been capable of developing independent sales channels, acknowledged the efficiency and reliability of the cooperative model.

> *"Yeah, why would we hire a bunch of people, while we could perfectly do this together with the cooperative."* (LmTomC2)
> *"Producers can see the power of selling under their [the cooperative's] brand."* (LmTomC2)
> *"We [individual members] could never do the sale as well as the cooperative."* (REP)

This reinforced the findings by Ortmann & King (2007), namely that cooperatives relieved farmers of substantial commercial burdens. Beyond expressing appreciation for the cooperative's effectiveness in managing commercial activities, the large-scale producer also emphasised that exiting the cooperative would fundamentally alter their role, transforming them from a collaborator into a direct competitor of their former peers.

> *"If we would cut ties [with the cooperative] tomorrow, we realise that other [non-member] producers could stand up and fill our spot. At that point, we are competitors which does not help us at all."* (LmTomC2)

In addition to core commercial activities, the three cooperatives under study frequently managed administrative and technical tasks. These included quality certifications, sorting, labelling, and logistics, tasks widely described as too specialised or labour-intensive to be handled individually (LmTomC1; REPB; SmTomA; MGRA1). According to Ajates (2020), such shared services lowers entry barriers and reduces duplication of efforts, particularly for smaller or resource-constrained members. Notably, even non-members recognised the efficiency advantages of administrative assistance from a cooperative (SnmTom).

However, differences in emphasis between large and small producers were apparent. Smaller farmers tended to describe cooperative benefits as essential, while larger farmers were more selective, emphasising the importance of flexibility and strategic fit with their individual goals. This difference resonated with findings by Alho (2015), who notes that smaller producers tend to value service-related benefits more highly, whereas larger producers are often less satisfied with cooperative services unless they align closely with business expansion goals.

Finally, representatives and producers alike summarised cooperative membership as a way of "reducing the producer's burden" (REP; LmTomC1; REPB). Interestingly, this also extended to reducing the client's burden, with members showing strong support for cooperative efforts to accommodate buyer preferences, even when these efforts did not directly increase producer income. This indicates that some farmers view the cooperative's long-term client relationships as part of their own business strategy, valuing stability over short-term profit maximisation (Siedlok et al., 2024).

All these different factors were considered benefits from the producers' point of view because they allowed them to sell their product at a higher price, more efficiently, in higher volumes, with less risk etc. These benefits were all seen as financial incentives for the producer to participate. This is consistent with the findings in the literature on how producers are heavily motivated by individualistic benefits. Although more social and ideological incentives followed in most of our respondents' answers, it seemed that indeed, first and foremost, producers had a business to run (Ollila et al., 2012).

Following these primarily financial incentives, an important, more basic need was identified throughout our interviews: autonomy. All three cooperatives under study had their own list of rules and expectations of their members, who are expected to follow these rules and meet these expectations. A certain amount of conformity was necessary to participate and benefit from a cooperative. The loss of autonomy is further discussed under our subheading 'opportunity costs' (Section 4.2.1.4). In response to this potential constraint on autonomy, a parallel need for flexibility emerged. Representatives in particular underlined that cooperatives needed to be flexible for producers with specific needs that didn't immediately fall within the responsibilities of the cooperative.

> *"The worst thing you can do as a cooperative, when you are confronted with these kinds of producers, is jump into a defensive position and try to keep them on board by issuing all kinds of restrictions."* (MGRC)

From the producer's perspective, this flexibility partly satisfied their need for autonomy. This also seemed to be a newer trend. In the past, the cooperative was sometimes identified as too rigid in their rules (MGRC, REPB).

Taken together, these findings appear to support the MIT claim that benefits are a key individualistic incentive driving participation. However, respondents highlighted the importance of tailoring cooperative services to the needs of different farm sizes. Larger farms might be more motivated by transactional efficiency and risk-sharing, while smaller farms tended to view the cooperative as a critical business partner without which their operations might not be viable. The cooperative thus became a site where different business models converged, each evaluating the same benefit through a different strategic lens.

4.2.1.2 Habit

Habit might serve as a motivating factor for producer participation, as some farmers in our sample indeed continued their membership primarily out of routine or longstanding practice. Some respondents took over the farms from their parents, or even their grandparents, who had always been members. As mentioned by one producer: *"It is, of course, somewhat of self-evidence."* (LmTomA3). Referring to not only their family being members before them, but also that the cooperative was just the most prevalent sales method of the time. This aligned with Birchall & Simmons (2004b) findings, which describes habit as a form of positive individualistic motivation where participation becomes routinised and less actively questioned.

However, it was important to emphasise that across our sample of farmer-members, such habitual participation was often underpinned by perceived benefits. As many producers explained, the cooperative's worth was not solely based on tradition; if the benefits were to decline significantly, habit alone would likely have been insufficient to sustain membership. This nuance mirrored the findings of Ollila et al. (2012), who argue that long-term participation was often reinforced by a combination of historical familiarity and continued economic relevance.

The generational transition, the point at which a farm is passed from one generation to the next, was, on the other hand, frequently cited as a moment of re-evaluation. Several producers and representatives noted that it is during this early career phase that farmers assessed whether to continue cooperative membership (MGRA; SmPrsA1; SmTomC1; REP). Some farmers reported reconsidering their cooperative membership at the start of their careers or upon inheriting a farm, after which they remained affiliated with the same organisation throughout their professional lives. However, one large-scale producer described switching cooperatives during their careers, leveraging their scale and market power to negotiate favourable conditions upon entry (LmTomC2). While such flexibility was more common among large producers, stable and long-term collaboration remained the norm, as mutually beneficial relationships were rarely abandoned without cause.

4.2.1.3 Costs

The cost of cooperative membership, as a negative incentive, primarily consisted of direct financial contributions such as membership fees or service-related charges. However, less tangible costs, such as the time and effort required for active participation, were important and should not be overlooked.

The commission fees, based on services used and turnover, were the most visible and frequently cited cost. The mandatory fee, typically a percentage of turnover, was often mentioned in relation to the benefits or services offered by the cooperative. An example is the costs of quality control, where quality control was mentioned as a benefit by a smaller member:

> *"They come by once to check the quality. There are several field people. So that's an advantage. The downside, of course, is that it comes at a cost for the cooperative. That's normally between 2 and 3%" (SmPrsA1)*

Or, in general, by a larger member who mentioned the costs after a long list of benefits:

> *"So yes, actually all those things do bring an advantage. The downside is that you have to pay for it. On the other hand, well, nothing in life comes free." (LmTomA1)*

These cost-benefit analyses were considered fair by the members. For a former member, however, this was one of the reasons to leave and to not rejoin a cooperative (SnmPrs).

For the cooperatives themselves, the advantages were clear: the low transaction costs were due to the efficiency of the cooperative, namely an efficiency due to economies of scale, which a farmer could hardly reach on his own.

There were two ways in which time was seen as a cost: the time put directly into the cooperative and the time inefficiency of the cooperative, due to the large and unwieldy nature of the cooperative. A former member of a cooperative (SnmPrs), emphasised the time spent delivering their product to the cooperative. For them, it was a cost that larger members weren't eager to pay, allowing some to deliver directly to the retailer, though the finances were still done by the cooperative. The slowness of the cooperative was mentioned by the larger producers and the producers who are not part of a cooperative.

Most members needed to deliver their produce to the cooperative themselves. A former member cited that the new trader picked up the product himself, thus relieving the grower more than the cooperative did (SnmPrs). In other cooperatives, such as those in the dairy sector, this approach was common practice. However, its long-term sustainability, particularly regarding smaller producers, remained uncertain (REP). If it proved unviable, this might have conflicted with some of the cooperative's core values.

The time costs rose with participation, still many chairpersons of the board have been doing this for several years. One chairperson of the board questioned if this was due to satisfaction or the lack of motivation of other members to participate actively:

> *"Yes, I hope that the last one still comes into play or something [satisfaction of members], but that certainly has to do with it as well. I do feel that, and so on, people also see the work pressure that comes*

with it [being chairperson], or something, that they're not eager for it either." (LmtomC1)

This extra time cost (board participation) is however not mandatory, so it could be related to a difference in resources since a larger amount of available time allow them to participate more i.e. join the board. In this case, the resource link in the participation chain gets strengthened, strengthening individual participation. If they deem this time cost to be excessive, they can opt out without leaving the cooperation i.e. lowering their participation because of the time cost.

4.2.1.4 Opportunity Costs

In line with the literature (Jensen, 1990), and also in our sample, membership of a cooperative entailed certain opportunity costs. Members were typically bound by internal regulations, such as the obligation to market a minimum of 75% to 100% of their produce through the cooperative. Selling even a small portion independently, e.g., to a third party offering a better price, appeared to be prohibited, except for a small proportion that it is sold on-farm, directly to the consumer. In addition, strategic sales decisions were made collectively, which could have limited individual flexibility. These structural constraints might have resulted in foregone opportunities, such as higher market prices, increased growth flexibility, or more efficient time use (Departement Landbouw en Visserij, 2023).

While many farmers reported that cooperatives enabled them to achieve competitive and stable prices, this perception was not universal. For some, the benefits of coordinated marketing and security did not outweigh the associated constraints. A former cooperative member emphasised that although they often received fair prices, the inability to respond independently to market signals ultimately led them to exit the cooperative structure (SnmTom). Concerns have also been raised about the governance of certain producer organisations. As noted by a small-scale grower of pome fruit (a special kind of pear), in organisations initiated by retailers or wholesalers, the alignment of interests might have been compromised: *"With them, the leadership lies with a wholesaler who actually has different interests, because they want to take as much margin as possible on the product."* (SmPrsA2). In this context, traditional cooperatives, governed by producers themselves, were viewed as more transparent, though not always as agile in securing the best prices during periods of high market demand, *"Sometimes prices collapse, and we know we won't break even. But that's just the reality of the moment."* (SmTomA)

For some producers, choosing a (Belgian) cooperative was closely tied to participating in the clock auction system. For others, however, the clock auction had become increasingly less attractive over time (see also Section 4.1.3 for a general overview). Comparing the perceptions of the clock auction system to farm size of our respondents, some interesting insights were revealed. Larger producers often had the autonomy to determine how they sell their products, with the cooperative providing support. Smaller producers, by contrast, tended to follow the majority approach, even when this might have entailed opportunity costs. This dominant model is typically shaped by some sort of product advisory groups, which are a common way for larger agricultural cooperatives to not have to mobilise their entire member base for every decision. They consist of members that are selected as representatives for a larger group of members, typically clustered according to type of produce. They often allocate a substantial proportion of the marketed volume to the clock auction, with a smaller share reserved for contract-based sales. Within this framework,

smaller producers may lack the production volume required to participate in contract arrangements: “We don’t take part in that, because the volumes are too low.” (SmStrC).

Large growers had the power to make their own contracts that gave them more payment security and fewer opportunity costs. For a large member, the price volatility was the biggest problem of the cooperative, together with the uncertainty about what would have happened with the product. To tackle this uncertainty, they pushed to make their own contracts:

> *"There’s too much product, and they’re going to dump it, and you don’t have any contracts. […] Yes, you want to be able to build certainty into your business. And that was, or that’s something we could only do by starting to make contracts." (LmTomC2)*

Regardless of the sales method chosen, there was always the possibility that a different contract or system might have yielded a better price. Among larger producers, some primarily operated through contracts, while others remained active participants in the clock auction. While the clock auction remained the generally preferred system, there was a notable tendency for producers to shift toward contracts as the number of members in a given cooperative decline.

Time in general has been discussed under ‘costs’ (see Section 4.2.1.3), the time inefficiency of the cooperative could be linked to opportunity costs. Several interviewees mentioned the frustration about the inefficiency, which appeared to be especially prevalent among more ambitious farmers with high-quality product.

> *“He said: I’m being so held back in my development here. I can do better than the auction, so I’ll do it myself. […] The auction is holding us back. We can either stay with the auction for another 20 years, frustrated and just endure it, or we step out and do it ourselves.” (REP)*

According to several respondents (REP, LmTomC1, LmTomC2), cooperatives have struggled to give these more ambitious farmers a place. (Franken et al., 2022) noted the same frustrations of more entrepreneurial-minded farmers in cooperatives.

4.2.1.5 Satiation

We found that satiation is difficult to capture through interviews, as members are often unaware that they have become accustomed to certain services and no longer actively recognise their value. Nonetheless, the concept was indirectly revealed in several interviews. When asked about their motivations for participation and the services or support provided by the cooperative, farmers often gave incomplete responses. However, when prompted about specific services, respondents began to understand what we were referring to and elaborated on what those services had meant to them. For instance, a strawberry farmer described in detail how the cooperative had provided them with their first computer, something they would not have mentioned unprompted, as they had not initially thought to discuss digital support (SmStrC).

4.2.2 Collectivistic Incentives

4.2.2.1 Sense Of Community

Throughout the interviews, a *sense of community* was generally not mentioned as a primary incentive for cooperative membership. Rather, it emerged as a secondary benefit, appreciated by the members, yet gradually diminishing as farm size increases. Interviewees referred to contact moments such as product deliveries, open farm events, or participation in contact groups as socially enriching experiences. These were appreciated when mentioned, but never explicitly framed as motivators for participation. One large-scale producer noted a decline in social interaction as the business expanded:

> *"I have to admit, unfortunately, that's happening less and less, and our world is becoming somewhat narrower because of it." (LmTom1)*

This quote exemplifies that, although such social aspects are not explicitly cited as motivations for participation, their value is nonetheless recognised. Their gradual disappearance, suggests that a complete loss of these social elements could undermine members' sense of connection to the cooperative and each other, potentially weakening participation.

Cooperative structures generally promoted collaboration within product advisory groups, though the level and form of engagement differed across cooperatives. A cooperative representative (REPB) noted a decline in participation among larger-scale farmers, a view that was confirmed by a large-scale producer (LmTom1).

> *"Further within the cooperative, he maintains personal contact with the buyer. But it still happens within the cooperative framework, the control remains in the hands of the cooperative." (REPB)*

The underrepresentation of large-scale farmers in the board of directors or product groups might have been explained by their more frequent direct interactions with the cooperative, which potentially reduced their reliance on formal governance structures for influence and participation:

> *"Within [two major producers], for example, we are also seeing increased collaboration between the cooperative's staff and the staff of those clusters (companies)." (LmTom3)*

> *"With large-scale growers, for example, we use a centralised form of relationship management, similar to how a bank assigns you a single point of contact." (MGR1)*

The limited presence of large-scale farmers in cooperative governance structures presented an interesting contrast to the findings of Gray & Kraenzle (1998), who argued that larger farms, due to their greater flexibility in terms of time and financial resources, tended to be more actively involved in governance and the social dimensions of cooperation. When managerial responsibilities were delegated, the farm owner was expected to have the time and autonomy to maintain engagement with fellow members and the cooperative itself. However, our findings suggest that larger farmers often leverage their

scale to establish more direct and efficient communication channels with the cooperative, allowing their voices to be heard without relying on formal governance structures.

4.2.2.2 Shared Goals

In the Mutual Incentives Theory, shared goals represent a collectivistic motivation: members participated because they see value in contributing to a common purpose that benefitted the group as a whole (Birchall & Simmons, 2004b). Applied to the agricultural sector, assumingly these include goals such as strengthening the position of farmers in the food system or promoting regional agricultural sustainability.

Both large and small farmers acknowledged that certain cooperative outcomes, such as increased collective market share or shared branding, were only attainable through collaboration. Several respondents, for example, highlighted the synergistic effect of working together:

> *"If we can take the interest of others with us, let us work together! [This way] the cooperative is stronger, or we have more power."* (LmTomC2)

Although such statements referred to mutual outcomes, they were predominantly framed in terms of personal gain, indicating that while goals were shared, the motivation to participate remained primarily self-interested and thus individualistic in Birchall & Simmons' 2004b) understanding. This distinction was important. As the literature points out, shared goals in producer cooperatives often centre around economic efficiency rather than ideological alignment (Ollila et al., 2012). While these goals, such as access to better markets or stable income, were widely supported, they did not necessarily reflect the deeper, value-based cohesion described in the MIT model. As Birchall & Simmons (2004b) argued, true collectivistic motivation was based on shared values and a collective identity, not merely converging business interests. Some producers recognised the strategic risk their exit could pose to the cooperative. One large member reflected:

> *"I think they [smaller producers] realise that if larger producers will look for something else than a cooperative. The cooperative will experience some difficulties."* (LmTomA1)

Large-scale members might have acted in support of shared goals, yet their continued participation was often in terms of individual strategic interest. This also reflected the findings of Ollila et al. (2012), who distinguished between members motivated by traditional cooperative values and those treating membership as a strategic business relationship. Larger farmers, in particular, often fell into the latter category.

Nonetheless, shared operational goals, such as improving negotiation power, coordinating logistics, or expanding produce variety, were not irrelevant. Larger producers in particular expressed appreciation for the cooperative's integrative function. One large member noted:

> *"If the client needs 10 different kinds of vegetables, he can buy all of them at the cooperative., This is a big benefit for them."* (LmTomA1)

That said, collective alignment appeared to be fragile. According to multiple often larger farmers, if the cooperative limits its members in a way that the opportunity costs would outweigh the perceived benefit of this shared goal, producers would look for other

opportunities (LmTomC1, LmTomC2, MGRC). At this point of the interviews, the need for a flexible cooperative form was revealed. While they tried to be flexible, there would always be some limitations depending on the alignment of the goals of the cooperative and the producers.

> *"Somebody with a strong entrepreneurial mindset will eventually challenge this limit."* (LmTomC1)

This quote described a similar phenomenon found by Franken et al. (2022); Whereby producers with strong entrepreneurial mindsets often perceived cooperatives as restrictive. As Höhler & Kühl (2018) caution, increased heterogeneity in farm size and goals could have strained the cooperative's internal cohesion, making shared goals more difficult to define or pursue collectively.

Based on this, it can be inferred that if the individual goals and ambitions of a producer were not shared among their peers, the producer could feel limited by the cooperation. The producer could feel a lack of autonomy, causing them to second guess the usefulness of their participation and, depending on their resources, could cause them to pursue their ventures separately.

Across all interviews, participants consistently emphasised that the cooperative's core tasks remain the primary reason for its existence, a purpose that has remained largely unchanged over the years. When larger cooperative-members start to negotiate contracts with buyers outside the cooperative to lower the opportunity costs, the core task, marketing together through the clock system, disappears. This was a point of contention between the cooperative and members, but something that was resolved by working together for a different strategy. Yet, no small member mentioned this as a contention point (LmTomC1, LmTomC2, MGRC).

In conclusion, although shared goals were widely acknowledged, they appeared to function more as a coordination mechanism than as a deeply internalised collectivistic incentive. Members remained primarily motivated by the alignment of these goals with their personal business interests. This suggested that while shared goals exist, they were not always perceived as intrinsically valuable, but rather as useful when they facilitated individual advantage.

4.2.2.3 Shared Values

Shared values such as solidarity, sustainability, transparency, and fairness were frequently mentioned when farmers described their connection to the cooperative. In line with the Mutual Incentives Theory (Birchall & Simmons, 2004b), these values contributed to a sense of community and shared purpose. Solidarity stood out in many interviews. One representative described the cooperative as *"a safety net if something happens to me"* (REP).

At the same time, frustration was expressed about recurring underperformance and lack of effort by others as *"It's always the same people"* (REP). This tension suggested that while solidarity is valued, it may not always be equally practised or reciprocated, leading some to question whether the system truly worked for everyone.

Sustainability was also featured as a commonly shared value. One representative highlighted how the cooperative supports sustainable practices since *"We use fewer crop protection products, we recycle, we collect water"* (REP). Yet, a cooperative manager expressed concern that not every farm can meet these rising expectations, especially concerning investment capacity and technical resources (MGRC).

Transparency was often praised as essential for trust. Several farmers valued the open flow of information:

> *"There are no second agendas, we all see where the money goes." (SmTomA)*

Still, trust could have been fragile. When imported products carried the cooperative label, one large farmer raised a concern as to *"Where is the transparency in where that product ends up?"* (LmTomC2).

Finally, they pointed to a broader loyalty explicitly to the cooperative values (ICA, 2015):

> *"We have always stayed a little loyal to the cooperative values." (LmTomC2)*

However, across the interviews, it became clear that these values are not always practised for purely idealistic reasons. In many cases, they also served a strategic function: helping farmers secure stability, recognition, or influence. While values offered a foundation for cooperation, they can also be instrumentalised by individual interests, especially when resources or positions were at stake.

It was also noteworthy that idealistic notions of shared goals and cooperative values and principles (ICA, 2015), such as solidarity, commitment to the (farming) community, or democratic engagement, were often emphasised by managers and cooperative representatives, but were less frequently echoed by producers themselves. Representatives frequently spoke of the cooperative in its ideal terms. In contrast, most producers framed their participation in more instrumental terms, focusing on price stability, logistical efficiency, or access to markets. This gap suggested a divergence between the ideological framing of cooperatives in managerial discourse and the practical motivations of members, echoing observations in the literature that producer cooperatives often struggled to maintain value-based cohesion as they grew and diversified (Ajates, 2020; Grashuis & Cook, 2021). As Birchall & Simmons (2004b) cautioned, genuine collectivistic motivation required more than formal alignment; it depended on shared values being actively experienced and reinforced by members themselves.

4.3 Resources & Attributes

4.3.1 Farm Attributes

4.3.1.1 Farm Size

When directly asked about farm size and its link to motivation, the first reaction of the interviewee was mostly dismissing a possible connection. However, through probing questions, we could collect more nuances. For example, the perceived use of certain services appeared to be perceived differently by farmers of different sizes. Large-scale farmers often possess the infrastructure, expertise, and market access to operate independently. For them, cooperatives are valuable strategic partners, but not a necessity. Their motivation to participate tended to hinge on whether the cooperative could offer additional (sometimes even international) market power, financial efficiencies, or policy-related advantages, such as access to GMO funds (SmPrsA1, SmPrsA2, LmTomC2).

4.3.1.2 Commercialisation

The interviews confirmed that commercialisation and marketing remain core reasons why smaller farmers stayed within cooperatives. While larger producers increasingly developed the capacity to commercialise part or all their output independently, thanks to their scale, infrastructure, and networks, smaller producers remained structurally dependent on cooperative services. This aligned with findings from Alho (2015, p. 12) i.e. that*"[l]arge producers are likely to have more market options than smaller producers"*. Also, a manager of a cooperative confirmed:

> *"[Large farmer] handles a significant part of their own commercialisation." (MGRC)*

Across our sample, this form of parallel commercialisation usually continued under the cooperative's financial framework, but the member had the operational control. This allowed large farms to maintain price negotiation power and secure contracts directly with retailers, therefore relying less on the clock auction system.

> *"We wanted to be in direct contact with the retail sector. [...] That did somewhat clash with the cooperative's philosophy. [...] But within the cooperative, we were always given the opportunity to pursue that." (LmTomC)*

Such producers often valued the customised support from the cooperative, the flexibility to pick services, like IT, which suited them. In contrast, smaller producers explicitly relied on the cooperative for commercialisation due to resource limitations.

> *"If, as a small grower, you have to take on commercialisation yourself, that's time you can't invest in your cultivation." (SmTomA)*

This view is echoed by cooperative leaders. A manager of a cooperative observed that while service access was available to all, the intensity of usage differs. Larger cooperatives required more time, but the return helped the cooperative and smaller members. Small-

scale producers often framed the cooperative as a commercial enabler, not just a service provider. The cooperative gave them access to buyers, marketing platforms, and traceability standards they could not have achieved independently.

> *"Without a producer cooperative, a grower would, for example, never be able to achieve that on their own." (SmPrsA)*

This structural reliance also affected how small producers perceived the cooperative: less as a business partner, more as a pillar of survival in a market that increasingly favoured scale and specialisation.

> *"There is, of course, a trend toward scaling up, especially in agriculture and horticulture, and that's simply necessary. Competition, especially at the European level, is increasing. Regulations are also becoming more and more stringent [...] And it's just easier to cope with that if you can operate at sufficient scale. It's a necessary trend going forward." (LmTomA3)*

In sum, large farmers tended to use the cooperative selectively and strategically, focusing on services that complement their in-house commercialisation, and favouring contract sales above the clock auction system. Small farmers, however, relied on it for core market access and administrative support, making them more sensitive to changes in cooperative structure and governance.

4.3.1.3 Governance and Participation: Voice, Influence, and Farm Size

Alongside commercialisation, a second domain where the difference between large and small producers became pronounced was in governance participation and the distribution of voice within the cooperative structure. Our data showed a paradoxical finding: larger producers often possessed greater informal influence, but were less visible in formal decision-making structures, such as the board or product groups.

One chairperson of the board (REPB) highlighted that large producers rarely participated in the board of directors, citing time constraints and a perceived distance between their business and the cooperative's organisational workings:

> *"[These members say] [w]e don't have the time. [...] And it might be too far removed from our own farm." (REPB)*

> *"We don't dare to take the risk of standing in elections." (REPB)*

Instead of engaging structurally, many large producers maintained direct lines of communication with cooperative management. As they noted:

> *"Or they say, well, we have enough personal contacts within cooperative B, so we don't need to bother with all the rest anymore." (REPB)*

This selective engagement model, while efficient for the producer, risked undermining the cooperative's democratic ethos if not counterbalanced. The smaller producers, in contrast, often lacked the same access and relied more on formal structures for representation, yet some expressed frustration about heterogenous voices:

> *"Many of those very small growers [...] still have the same say as a very large one. But their interests are completely different." (SmPrsA)*

Another president acknowledged that larger producers demanded tailored collaboration, including direct coordination between their staff and cooperative employees:

> *"Within [two large members], for example, we also aim for more collaboration between the cooperative's staff and the staff of those clusters." (LmTomC)*

These evolving dynamics illustrated a shifting logic of participation: while the cooperative aimed to treat members equally in line with one of the cooperative core values (ICA, 2015), the practical needs and influence pathways diverged significantly by size.

A final governance-related concern raised in the interviews was the growing influence of external investors. These investors weren't situated within cooperatives themselves, since those have to remain legally restricted to active farmer-members under EU competition rules, but at the level of individual farms (Directorate-General for Competition (DG COMP), 2016). Several respondents observed that outside capital, often from private investors or non-farming entrepreneurs, was becoming more common, particularly in large-scale or succession-challenged businesses.

This development raised questions about alignment with cooperative values and principles (ICA, 2015). Some farmers expressed concern that investor-backed growers might prioritise efficiency and returns over participation and could exert indirect pressure on the cooperative (LmTomA3; REPB); for instance, by bypassing the auction system or demanding tailored services. One small farmer stated:

> *"I would rather keep it in the hands of the farmers themselves." (SmPrsA1)*

Still, others saw external investor capital as a potential solution for farms, especially when no family successor was available for the farm (LmTomC1; LmTomC2). Larger farmers stated that farmers nearing retirement viewed such arrangements as pragmatic, as long as core cooperative values were respected (LmTomA1; LmTomA2). This tension between inclusivity and strategic flexibility reflects broader concerns in the literature about ownership diversification and governance integrity (Höhler & Kühl, 2018).

4.3.2 Farmer Attributes

When asked about the influence of farm size, respondents seemed rather indifferent. Throughout the interviews, however, a subtle but consistent tension emerged between younger and older cooperative members. This was not necessarily one of open disagreement, but rather one of differing experiences, values, and approaches to participation. Older growers were often described as more loyal to the cooperative system,

with a longer institutional memory and stronger attachment to shared principles. One small farmer and board member of cooperative A noted:

> *"They [older farmers] know the harder times. That's why they stick with the cooperative." (SmPrsA2)*

In contrast, the same respondent mentioned that younger members sometimes question the added value of being part of a cooperative since *"they've only seen the good times, so they don't always see the need"* (SmPrsA2). This generational shift echoed findings of Bijman & Iliopoulos (2014), who suggested that younger members often have a more individualised view on collaboration and may expect more flexibility. This contrast was also linked to business succession. A small farmer stated that younger successors are more inclined to invest and expand:

> *"If there is business succession, that farm moves forward. They don't mind if the coop invests too." (SmPrsA1)*

Older members were described as more cautious, sometimes wanting to reclaim their shares or avoid cooperative costs. There was also a suggestion that younger growers participate less in governance or meetings, not out of disinterest, but due to time pressures or different priorities. A manager of a cooperative stated that *"the risk is that younger members simply don't have the time to engage"* (*MGRA*). This supports findings from Österberg & Nilsson (2009), who note that younger and less experienced members are often less satisfied with cooperative governance and participate less, unless specific efforts are made to accommodate their needs and time constraints. Despite this, our data also suggested that younger and older members do share certain values, such as fairness and solidarity, even if expressed differently. Maintaining these shared values while recognising generational differences may be key for cooperatives aiming to remain relevant across age groups.

4.4 Concluding Reflections

4.4.1 Intersection of Shared Goals and Benefits

A notable insight from the analysis was the frequent overlap between individualistic and collectivistic incentives, particularly in how farmers framed benefits that stem from shared goals. Like increasing collective bargaining power as a response to ever-growing commercial clients, interviewees often described this in highly individualistic terms, emphasising how it benefitted their own farm. This suggested that the mutual nature of certain cooperative functions blurred the boundary between personal gain and group interest. Rather than identifying marketing as a shared mission, farmers tended to frame it as an operational advantage that relieved them of administrative burdens or improved price stability for their own output. This interpretive framing highlighted a critical dynamic: collectivistic mechanisms could be internalised primarily as individual benefits, raising questions about whether shared goals genuinely fostered a sense of collective identity or were simply valued for their instrumental utility. Such framing challenged the Mutual Incentives Theory's clean separation between individualistic and collectivistic motivations, suggesting that in practice, member engagement might be driven by complex and

interchanging motivations, derived both from the ideal structure of cooperation and the actor's self-interest. Recognising this ambiguity is important for both cooperative theory and governance, as it implies that reinforcing collective goals may also require making their individual benefits more transparent and equitable across member profiles.

4.4.2 Leaving Means Competing: Avoiding Market Fragmentation

Although mentioned only once in one particular interview, an intriguing perspective by a large farmer offered a potentially important reinterpretation of farmers' motivations. They implied that participation in the cooperative might not stem from either individualistic or collectivistic incentives, but rather from the strategic necessity of avoiding market fragmentation (LmTomC2). In this view, remaining within the cooperative was less a matter of explicit motivation and more a recognition of the structural advantage of collective market coordination. Even for large producers with the capacity to operate independently, exiting the cooperative would entail competing directly with former peers, undermining both their own market position, while the strength of the collective will likely stay the same with new member(s) filling the gap. This suggested that, in some cases, cooperation is not actively chosen for its benefits or values, but passively maintained as the most rational and least disruptive option. While this reasoning was not broadly echoed across other interviews, it introduced a valuable dimension to the analysis: that structural market logic itself can compel cooperation, regardless of motivational framing. This insight challenges the assumption that participation must be rooted in either ideological commitment or calculable benefit, and instead highlighted the possibility of structurally compelled cooperation, particularly relevant in sectors with limited buyer diversity or tight market dynamics.

This interpretation may represent an instance of the broader dynamic observed in our study, namely that farmers often describe outcomes rooted in shared goals primarily in terms of personal benefit (Section 4.4.1). Just as increased collective market share was frequently framed as an individual operational advantage, so too is the avoidance of fragmentation valued not necessarily for protecting collective cohesion, but for safeguarding one's own position. This case underscores how structurally collectivistic mechanisms can be internalised through an individualistic lens, further complicating the clean divide proposed by the Mutual Incentives Theory (Birchall & Simmons, 2004b).

4.4.3 Specialised Services: Keeping Large Farmers Aboard

As larger farmers increasingly manage operations independently, they came to perceive the cooperative less as a service provider that reduces their burden and more as a strategic partner.

> *"We are so open to that structure together, to say: okay, we believe that's where things are heading, so we need to develop that together, and that way we'll improve again."* (LmTomC2)

This shift resulted in tailored services and co-investments that, while costly for the cooperative, were often directed toward the needs of a few. These investments were typically framed by cooperatives and large farmers as long-term innovations that would eventually benefit all members. However, this framing brought to light the *horizon problem* (see Section 2.8) discussed in cooperative literature (Grashuis & Cook, 2021; Novkovic, 2008): farmers without a successor or long-term outlook, those who prioritised

short-term returns, are unlikely to benefit from such innovations. While many smaller farmers recognised the importance of larger farmers within the cooperative framework, this support tended to falter when it came to matters of export, import, and foreign investment.

> *"Then he takes the step: 'I'm going to plant in (a foreign country).' [...] That's already a grey area. But for me, a red line has been crossed. [...] A (non-Belgian) takes charge. The venture capital is (other foreign country), (name of investor). To invest in (a foreign country). Then we have to dare to ask questions." (SmTomA)*

While this viewpoint was not a returning point of contestation, it showed a potentially novel divergence in motivation.

4.4.4 Entrepreneurial Farmers: Ambitions versus Frustrations

Another important pattern observed in the data was the tension between entrepreneurial ambition and cooperative structure, particularly among larger producers. Cooperatives, by design, required a consistent set of rules and coordination mechanisms to ensure fairness, stability, and efficiency across a diverse membership base. However, this structural consistency could come into conflict with the innovative drive of certain ambitious farmers seeking to expand or differentiate their operations. Several interviewees hinted at moments where their entrepreneurial initiatives, such as experimenting with new sales channels or investing in novel crop varieties, ran up against the limits of what the cooperative could accommodate. This friction was especially pronounced among large-scale producers, who often possessed the resources and ambition to explore innovations and growth strategies beyond the cooperative's existing framework. In such cases, a cooperative must either adapt its governance and service offerings to retain these members, or risk to alienate them by enforcing the cooperative rules. This dynamic raised critical questions about the flexibility and responsiveness of cooperatives in a sector increasingly shaped by innovation and market fragmentation. It also challenged the assumption that cooperatives can easily align with entrepreneurial mindsets, suggesting that without mechanisms for negotiation and customisation, cooperatives might inadvertently discourage the very dynamism they need to remain competitive. From a theoretical perspective, this phenomenon complicated the notion of 'shared goals' in Mutual Incentives Theory, as ambitious members may no longer see the cooperative's goals as compatible with their own, particularly when their innovations are perceived as disruptive rather than collectively beneficial.

5 Discussion

5.1 Theoretical Contribution

Although farm size has been widely studied in relation to cooperative participation, findings remain inconsistent, and definitions differ considerably across studies, ranging from land area to workforce or turnover (Höhler & Kühl, 2018). Some studies suggest no clear relationship (Ollila et al., 2012), while others observe distinct participation patterns across farm sizes (Klein et al., 1997; Muriqi et al., 2019). Moreover, while economic, social, and governance-related factors are well-established as general drivers of participation, there is limited understanding of how these motivations are perceived, weighed, and acted upon by farmers operating at different scales.

Our study addresses this by offering a micro-level, comparative perspective that explicitly examines how producers of varying scales perceive and navigate the incentives associated with cooperative membership. Applying the Mutual Incentives Theory and integrating elements of Self-Determination Theory, we show how different dimensions of motivation gain or lose salience depending on farm size. Smaller-scale producers more often emphasise shared goals and the stabilising function of the cooperative, while larger producers tend to describe their membership in instrumental terms, evaluating the cooperative based on its ability to provide market access, price stability, and logistical services.

Beyond confirming the relevance of MIT in agricultural contexts, our findings also nuance the theory. While MIT already conceptualises participation as dynamic, our data reveal that the salience of motivational categories is not only situational, but also filtered through operational scale and strategic context. As discussed in Section 4.4.2, one large-scale producer framed participation not as a motivated choice, but as a pragmatic necessity to avoid market fragmentation (LmTomC2). This suggests that some forms of participation may be sustained by external coordination pressures, which is an insight that may have broader relevance for motivation theory in other organisational settings.

Taken together, this thesis makes three key contributions: Firstly, it fills a qualitative gap by documenting how farmer-members themselves articulate motivation in relation to farm size; It also enriches existing theoretical models of cooperative participation by introducing scale as a motivational filter; And finally, the study suggests that participation can also result from structural market logic rather than personal motivation, an insight that broadens the scope of motivation theory to organisations shaped by external constraints (Section 4.4.2).

5.2 Limitations

Several limitations must be acknowledged, the first one being methodological: our study relies exclusively on qualitative interviews, which offer much depth but remains embedded in a very specific regional and sectoral context: Flemish fruit and vegetable production mainly organised by marketing cooperatives. While our theoretical sampling ensured variation in farm size, product type, and membership status, the study's scope was

restricted. While we successfully reached our original target of 15 respondents, the recruitment process was not without challenges. Initially, our selection criteria may have been overly restrictive, limiting the pool of eligible participants. Moreover, due to the timing of our research, coinciding with the onset of the growing season, many farmers faced time constraints and were unable to participate. This seasonal overlap likely reduced our access to certain voices within the sector, particularly those who might have held more critical perspectives or had limited availability for in-depth interviews. Additionally, one interview was reconstructed post hoc due to technical issues, which may have affected the accuracy of recall. Finally, we must acknowledge a potential selection bias: the sample includes relatively more proponents of the cooperative model than critics or former members. While we aimed for variation in membership status, this imbalance may have skewed the findings toward a more favourable interpretation of cooperative functioning.

A second methodological limitation concerns the restricted sample of large-scale farmers who possess the critical size and capacity to operate independently from the cooperative. Only a few farmers are capable of assuming the cooperative's functions and delivering directly to, for example, supermarket chains. It may be coincidental that those large farmers included in the sample still express appreciation for the cooperative model. Notably, no non-member producers with sufficient scale to supply directly to retailers were interviewed. This limits the ability to fully explore alternative strategies among large, independent producers. Moreover, if the ongoing process of agricultural consolidation persists, cooperatives are likely to include an increasing number of large-scale members, potentially intensifying internal tensions or sparking renewed debates about cooperative governance and direction. The presence of private equity investors in large agricultural enterprises is still too recent to examine their impact in a meaningful way. At present, these investors are not actively involved in the strategic direction of the firms in which they hold shares, and their role remains limited to financial participation. As such, there is little basis for assessing their influence, despite the fact that their underlying objectives may diverge significantly from those of farmers or cooperatives.

A final methodological limitation relates to potential researcher bias. At the outset of this thesis, we had limited prior knowledge of cooperatives and were primarily familiar with local agricultural cooperatives from our own regions. While this unfamiliarity allowed us to approach the subject with a relatively open perspective, our collaboration with the Centre of Expertise for Cooperative Entrepreneurship (KCO) and the extensive engagement with cooperative stakeholders may have inadvertently introduced a positive bias in our interpretation. The process of learning about cooperatives could have shaped a more favourable view of their functioning and impact, potentially influencing how we interpreted certain responses or framed our analysis. While we aimed to remain critical and reflexive throughout, this background should be taken into account when evaluating our findings.

5.3 Implications for Further Research

Future studies could expand on our findings by conducting longitudinal research that follows producers over time to better understand how motivations might shift. Also, the influence of external investors (in farms) and the consolidation of producers can be mapped out by repeating and stretching this research over a longer time. Besides, quantitative follow-up studies could test whether our patterns identified in the concluding section of the

analysis (see Section 4.4) are applicable to larger populations of farmers, different products, and different cultural and legal contexts.

Additionally, further research could focus on internal governance mechanisms within agricultural cooperatives to examine how organisational structures and participatory processes influence the motivations of heterogeneous member bases. Furthermore, a comparative case study between regions or countries could help identify whether our findings are rooted in Flemish cooperative history or reflect broader structural dynamics in cooperative business models.

5.4 Practical and Societal Relevance

5.4.1 Diverse Membership and Cooperative Governance

The growing diversity among cooperative members, particularly between large-scale and small-scale producers, poses ongoing governance challenges. Larger farms tend to approach cooperatives strategically, prioritising efficiency, flexibility, and negotiation leverage, while smaller farms typically depend on the cooperative for price stability, secure sales, and risk-sharing. If not addressed, these differing expectations can erode cohesion and reduce member engagement.

To manage this internal diversity, cooperative boards should adopt differentiated service models, like offering tailored support structures, pricing mechanisms, or participation options depending on member profiles. For example, flexible contract models or opt-in schemes for specific services (e.g. logistics, certification, or branding) could accommodate larger members without alienating smaller ones. Additionally, multichannel communication strategies and targeted member consultations can ensure that all voices are heard, not just those with higher volumes or influence. On a micro-level, members themselves could take initiative by participating more actively in governance processes, attending general assemblies, or running for board positions to represent diverse views. This participatory engagement can help close the gap between the cooperative's strategic direction and its grassroots membership.

More broadly, successful internal integration of member diversity can serve as a model for inclusive governance in other collaborative or democratic structures. As global markets become more interconnected and local systems more diverse, the ability of organisations, including cooperatives, to fairly integrate differing interests and perspectives is paramount. Successful management of internal diversity can thus offer lessons for broader societal governance, demonstrating the importance of inclusive, adaptive decision-making structures for organisational resilience.

5.4.2 Generational Transition and Cooperative Renewal

Generational turnover within cooperatives presents another crucial challenge. Younger farmers frequently reconsider their cooperative affiliations, influenced by alternative marketing opportunities, technological innovations, and changing attitudes towards traditional cooperative models.

To bridge this gap, cooperative leadership should invest in onboarding programs, peer-mentorship schemes, and succession planning initiatives that make the cooperative more accessible to new entrants. Digital tools (e.g. online platforms for feedback, voting, and transparency) can also lower the participation threshold and appeal to younger members. On the member level, outgoing or senior farmers could proactively engage younger family members in cooperative meetings and decisions, fostering a culture of shared ownership and continuity.

This challenge reflects a wider societal issue: the difficulty of ensuring generational continuity in sectors vital to society's functioning, such as agriculture. Without active renewal strategies, cooperatives and other rural institutions risk becoming obsolete.

5.4.3 Environmental Responsibility and Sustainability

Finally, cooperatives hold significant potential in driving collective environmental action among farmers. Members increasingly face pressures to adopt sustainable practices, reduce environmental impacts, and comply with stringent standards While our study did not find environmental action to be a strong motivation for participation, either at the micro- or meso-level, there is a growing pressure from government bodies and consumers to comply with environmental standards. Cooperatives could however be uniquely positioned to facilitate this transition and even accelerate environmental efforts by surpassing government-imposed requirements.

Cooperatives can guide members by the offering collective resources, training, certification programs, and marketing advantages for sustainably-produced goods. Individual members, in turn, can contribute by actively participating in pilot projects, sharing their experience with peers, and advocating for ecological measures during member assemblies. By adopting proactive sustainability measures, cooperatives not only ensure their own economic viability but also contribute to larger societal goals of environmental resilience, biodiversity protection, and climate change mitigation. The cooperative model thus represents an important collective mechanism within broader sustainability efforts, demonstrating how coordinated action in agriculture can yield significant environmental benefits, improving regional and global ecological outcomes.

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Appendices

Appendix 1: Participation Chain Model

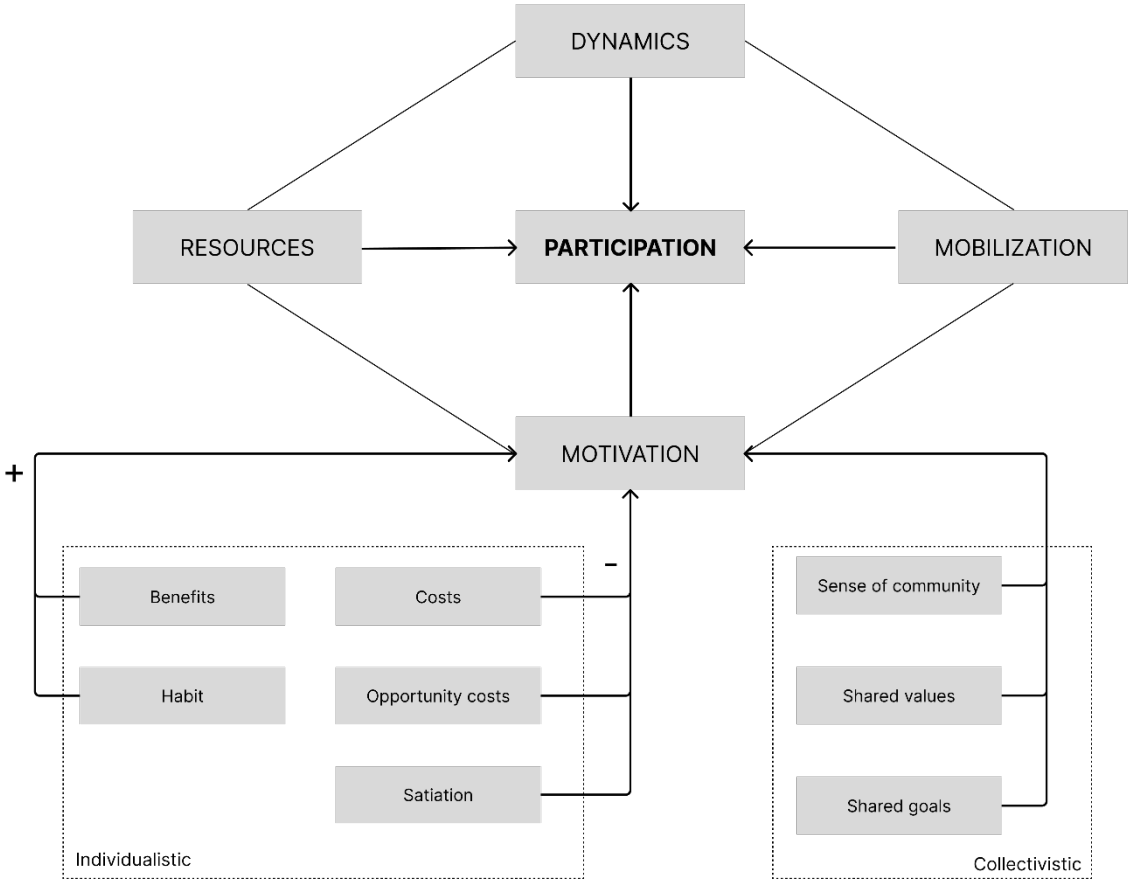

Figure 1: The Participation Chain model combined with the Mutual Incentives Theory from Birchall & Simmons (2004)

Appendix 2: Simplified Coding Tree

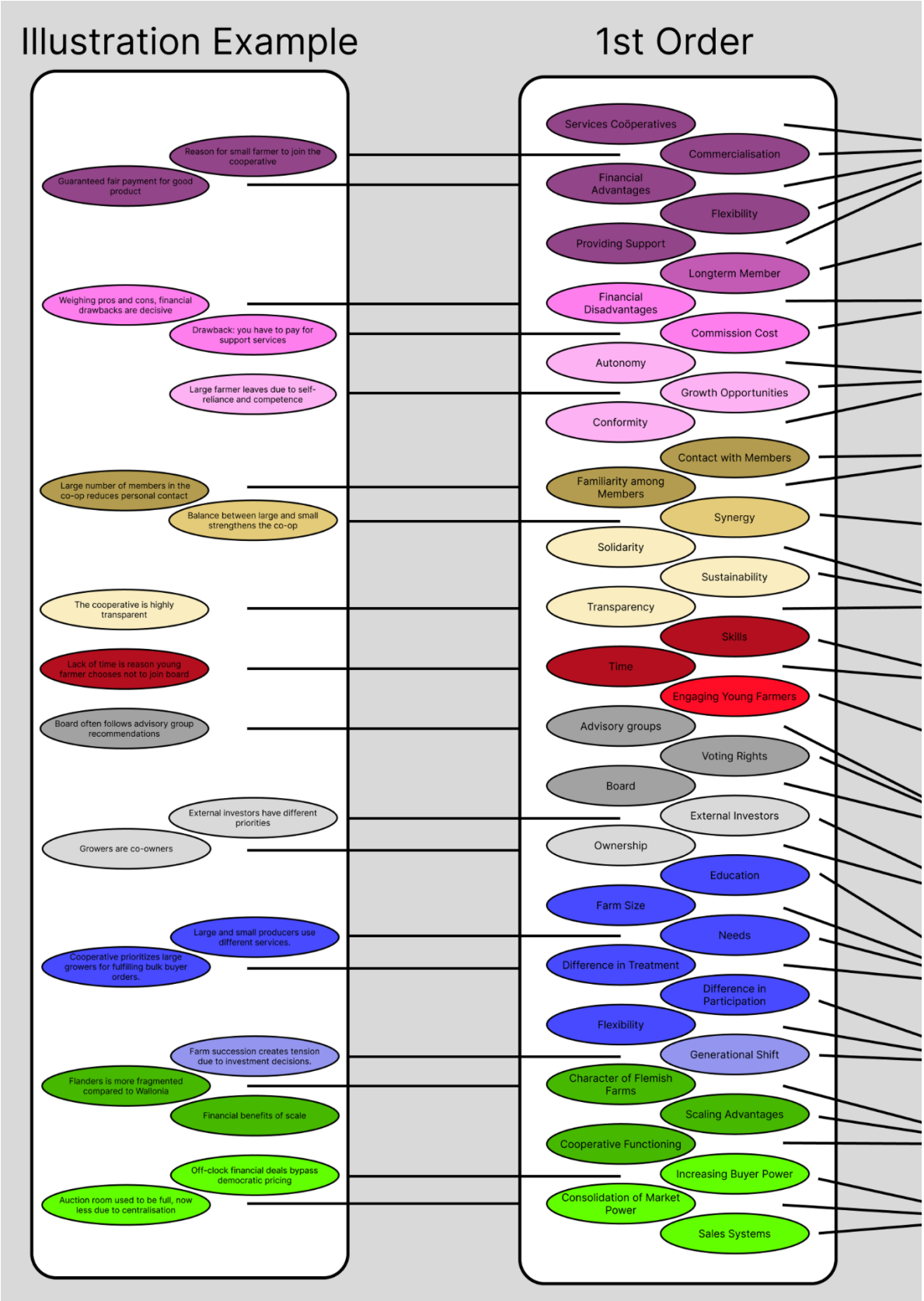

Figure 2: Simplified Coding Tree, Part 1

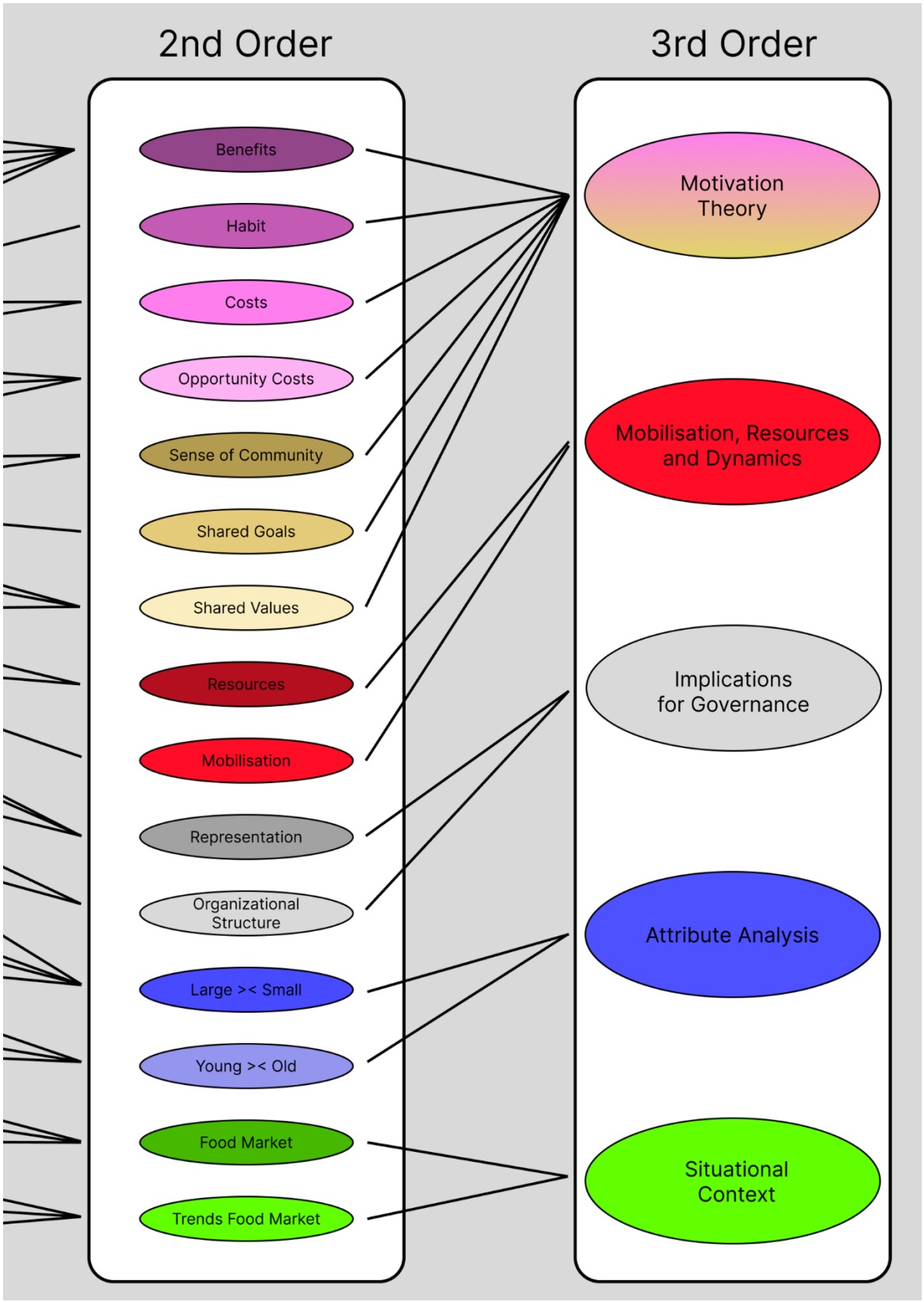

Figure 3: Simplified Coding Tree, Part 2

Appendix 3: Interview Guide

Table 5: Interview Guide for Farmers

Thematic Focus	Interview Question
Professional background	Could you describe how long you have been active as a producer, and what led you into this line of work?
Cooperative affiliation	Are you currently affiliated with an agricultural cooperative?
Incentives/ deterrents for cooperative affiliation	In your view, what are the primary advantages of cooperative membership for producers? What disadvantages or risks do you associate with cooperative membership?
Satisfaction with cooperative services	How would you assess the quality and relevance of the services typically offered by cooperatives?
Impact of scale differences among producers	Have you observed any tensions or dissatisfaction among producers within cooperatives related to differences in farm size (e.g., between large and small-scale farmers)? Do you believe that other types of heterogeneity among producers can lead to tensions or divisions within a cooperative?
External investors	How do you perceive the role of external investors within or around cooperatives? Do you think their involvement alters power dynamics or patterns of collaboration in the sector?
Changing cooperative services	Have you noticed any changes over time in how cooperative services are used or perceived by producers?

Table 6: Interview Guide for Managers & Representatives

Thematic Focus	Interview Question
Professional background	Could you describe how long you have been active as a manager/ representative (in cooperative X), and what led you into this line of work?
Incentives/ deterrents for cooperative affiliation	In your view, what are the primary advantages of cooperative membership for producers? What disadvantages or risks do you associate with cooperative membership?
Satisfaction with cooperative services	How would you assess the quality and relevance of the services typically offered by cooperatives?
Impact of scale differences among producers	Have you observed any tensions or dissatisfaction among producers within cooperatives related to differences in farm size (e.g., between large and small-scale farmers)? Do you believe that other types of heterogeneity among producers can lead to tensions or divisions within a cooperative?
External investors	How do you perceive the role of external investors within or around cooperatives? Do you think their involvement alters power dynamics or patterns of collaboration in the sector?
Changing cooperative services	Have you noticed any changes over time in how cooperative services are used or perceived by producers?

Appendix 4: Resulting Relations Mutual Incentives Theory

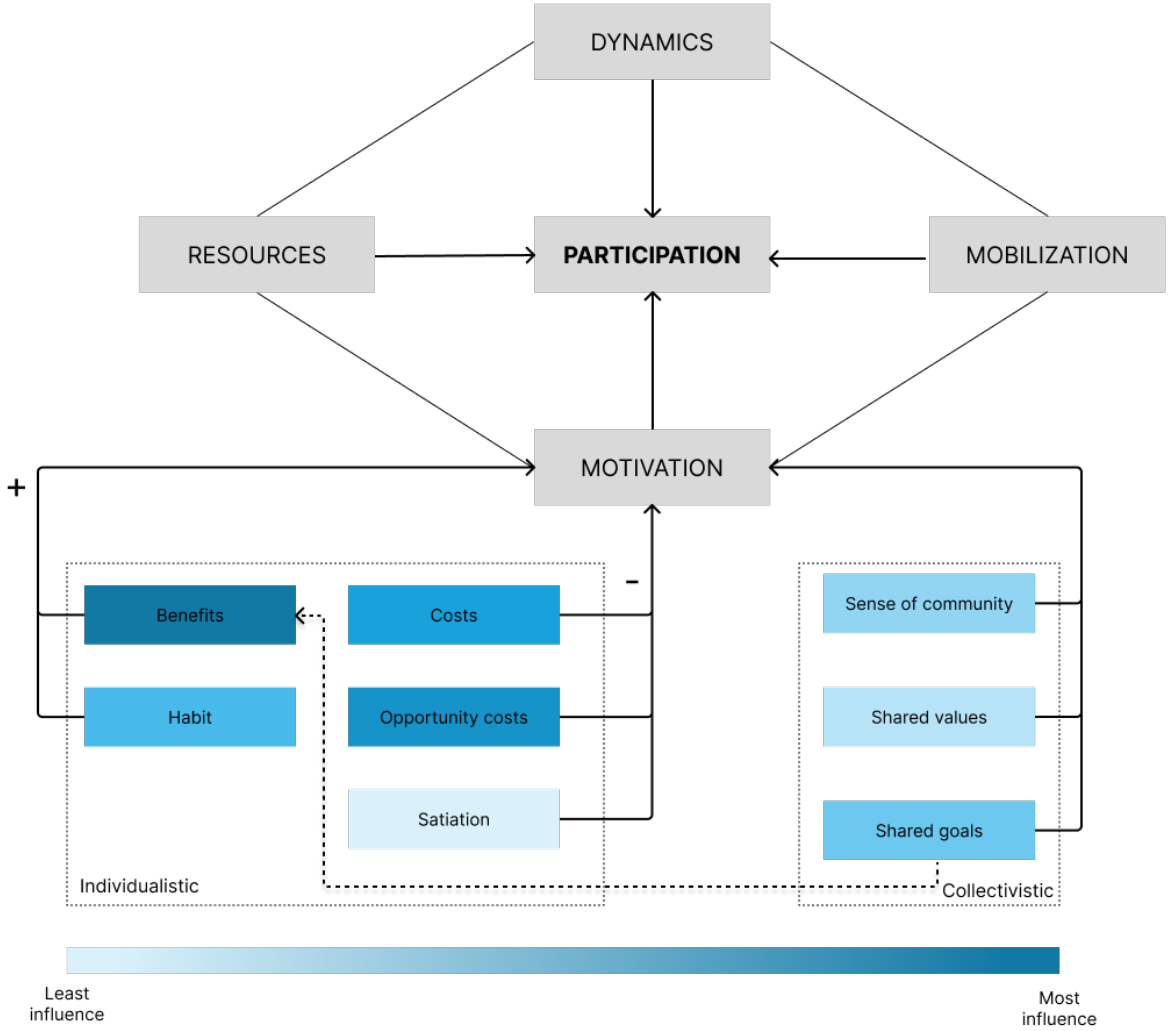

Figure 4: The Resulting Participation Chain model combined with the Mutual Incentives Theory from Birchall & Simmons (2004)

Appendix 5: Challenges in Cooperatives

Figure 5: Challenges in Cooperatives, Integrating New Developments into the Cooperative Model

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