



When Services Matter: Rethinking Farmer Cooperation in an Export-Oriented Smallholder Setting

ENGJELL SKRELI 

ORJON XHOXHI 

VLADISLAV VALENTINOV 

DRINI IMAMI 

ANDI STEFANLLARI

**Author affiliations can be found in the back matter of this article*

RESEARCH ARTICLES

 ubiquity press

ABSTRACT

Why does agricultural cooperation remain fragile in post-socialist settings, despite its potential to reduce transaction costs and improve market access? Explanations usually stress institutional voids and the legacy of distrust. This paper advances a different view: farmers cooperate when the services offered are economically salient. Adapting Ostrom's SES framework, we reinterpret "resource importance" for club goods, specifically cooperation services such as marketing, certification, and input procurement. Using survey data from Albanian farmers in a context-specific export-oriented smallholder setting, we develop validated measures of service salience and buyer power. Logistic regression indicate that perceived benefits, compliance costs, and buyer dominance all increase cooperation, while satisfaction with buyers reduces it. Socio-demographics have little effect. The study contributes by extending SES theory to club goods, providing robust constructs for empirical research, and identifying a mechanism through which cooperation emerges as a rational response to market imperfections in similar value-chain contexts.

CORRESPONDING AUTHOR:

Drini Imami

Agricultural University of
Tirana, AL; Corvinus Institute
for Advanced Studies (CIAS),
Corvinus University of Budapest,
HU

dimami@ubt.edu.al

KEYWORDS:

Willingness to cooperate;
importance of cooperation
services; Ostrom SES
Framework; transition country

JEL CODES:

C38; D7; J54; P32; P2

TO CITE THIS ARTICLE:

Skreli, E., Xhoxhi, O., Valentinov, V., Imami, D., & Stefanllari, A. (2026). When Services Matter: Rethinking Farmer Cooperation in an Export-Oriented Smallholder Setting. *International Journal of the Commons*, 20(1), pp. 433–450. DOI: <https://doi.org/10.5334/ijc.1687>

1. INTRODUCTION

Three decades after the collapse of socialist regimes, many transition economies in Eastern Europe and the Western Balkans continue to grapple with the paradox of underdeveloped agricultural cooperation. Despite the evident advantages that collective action offers to smallholders including lowering transaction costs (Amblard et al., 2023; Key et al., 2000), improving access to technologies and information, and securing footholds in high-value markets (Martos-Pedrero et al., 2025; Lee & Van Cayseele, 2024) farmer organisations in post-communist contexts frequently struggle to survive. Whereas cooperatives in more mature market economies are regarded as efficient organisational forms on par with or superior to investor-owned firms (D'Amato et al., 2022), in much of post-communist Europe they remain fragile, fragmented, and often transient (Hagedorn, 2014; Banaszak, 2008; Božić et al., 2019).

The persistence of this fragility has given rise to a dominant explanatory narrative in the literature: that the legacies of collectivisation, coupled with institutional weakness, have generated a structural and cultural deficit for cooperation. Scholars have emphasised farmers' limited personal experience in risk-taking and marketing (Bachev & Tsuji, 2001; Bakucs et al., 2012), the high level of uncertainty in agricultural markets, and the enduring distrust generated by decades of forced collective farming. From this perspective, cooperation falters because the social and institutional conditions that support trust, reciprocity, and voluntary organisation are either absent or underdeveloped (Hao et al., 2024; Bardhan, 1993; Ostrom & Ahn, 2009).

While this line of reasoning has considerable merit, it is arguably incomplete. It risks portraying farmers as path-dependent victims of history, rather than as actors capable of rationally weighing costs and benefits under contemporary market conditions. More importantly, it downplays the structural features of the agri-food economy in transition contexts—namely, the asymmetries of buyer power, the costs of meeting increasingly stringent quality and certification requirements, and the salience of cooperation services in helping farmers secure competitive positions in export-oriented value chains (Valentinov et al., 2024; Reardon et al., 2009; Markelova & Mwangi, 2010).

This paper takes a different stance. It reorients the study of cooperation in transition agriculture from a **social capital deficit perspective** towards an **economic salience perspective**. In doing so, it applies Elinor Ostrom's General Framework for Analyzing the Sustainability of Social-Ecological Systems (SES) (Ostrom, 2009) in an innovative manner: by translating the notion of *resource importance* (typically applied in the study of

common-pool resources) into the domain of **club goods**, specifically, the services provided through cooperation (cf. Grashuis, 2025). In Ostrom's original framing, users are more likely to self-organise when the benefits of managing a resource are sufficiently salient to justify the costs of collective governance. Megyesi and Mike (2016) show that when a collective good, such as a region's reputation, is highly important to users, it can be governed effectively using Ostrom's principles: Hungarian winemakers created self-organised quality control systems precisely because that reputation mattered to them. This supports our view of cooperation services as club goods whose salience motivates collective action, and by analogy we argue that farmers in transition economies will invest in cooperation when services such as collective marketing, group certification, or input procurement are important enough to justify the organisational effort. This raises the central research question of the paper: *under what conditions do farmers in transition economies perceive cooperation services as sufficiently valuable to invest in collective action?*

To address this question, we analyse the case of the medicinal and aromatic plants (MAP) sector in Albania. The MAP sector is an exemplary setting: it is dominated by smallholders, subject to excessive land fragmentation (FAO, 2020), and deeply embedded in global value chains, exporting over 95% of its output primarily to the EU and US (Skreli & Imami, 2019). This export orientation entails high compliance costs with international standards, rendering individualised strategies prohibitively expensive and making collective solutions both attractive and necessary. At the same time, the Albania represents a distinctive post-socialist case in terms of historical and institutional trajectory. Unlike most Central and Eastern European countries, it experienced prolonged political isolation, extreme centralization, and fully enforced collectivization, followed after 1990 by rapid de-collectivization and land redistribution, giving rise to highly fragmented private farming (Gardner & Lerman, 2006; Möllers et al., 2018). These conditions have produced extremely small-scale farm structures, limited development of formal cooperative organisations, and strong dependence on external value chains, particularly in export-oriented sectors such as MAPs (FAO, 2020; Skreli & Imami, 2019). Accordingly, this study does not treat Albania as representative of transition economies, but as a context-specific empirical setting in which broader theoretical mechanisms (especially the role of service salience under conditions of buyer power and compliance costs) can be examined.

Our contribution to the literature is threefold. **First**, we advance the theoretical application of Ostrom's SES framework by operationalising “service importance” in the domain of club goods, thereby offering a novel analytical

bridge between resource economics and cooperative economics in transition settings. **Second**, we respond directly to Ostrom's call for empirical work by developing and validating multi-item measures of cooperation service importance and buyer power, grounded in rigorous psychometric testing. This constitutes an innovation in measurement science, which has hitherto been dominated by crude proxies such as membership status or subjective trust levels. **Third**, we demonstrate that the determinants of farmer cooperation in transition economies are not exhausted by history or social capital, but are critically shaped by value chain dynamics: perceived economic benefits, transaction costs of quality compliance, buyer power, and the degree of dependence on farming.

In so doing, we challenge the prevailing orthodoxy that frames post-communist cooperation primarily as a problem of trust. Instead, we show that farmers make cooperation decisions as rational responses to contemporary market structures (cf. Hansen et al., 2024). Cooperation does not fail simply because of collectivist legacies; it fails when the services offered are not sufficiently valuable to justify investment.

The paper proceeds as follows. Section 2 reviews the relevant literature and develops the theoretical background, introducing our adaptation of Ostrom's SES framework and formulating the research hypotheses. Section 3 presents the data, measurement development, and empirical model. Section 4 reports the results of the econometric analysis. Section 5 discusses the theoretical, empirical, and policy implications of the findings and outlines the main limitations and avenues for further research. Section 6 concludes by reflecting on the broader significance of service salience for understanding farmer cooperation in transition economies.

2. THEORETICAL BACKGROUND AND RESEARCH HYPOTHESIS

2.1. THEORETICAL BACKGROUND

Collective action, cooperative theory, and post-socialist agriculture

The study of collective action in transition economies has been marked by an enduring tension between institutional legacies and market imperatives. On the one hand, scholars emphasise that smallholders in post-socialist settings face particularly high transaction costs, driven by limited experience in risk-taking, poor access to information, and generally uncertain market conditions (Valentinov et al., 2024; Bachev & Tsuji, 2001; Bakucs et al., 2012). On the other, the cooperative form has repeatedly struggled to take

root, despite the clear efficiency gains that economic theory attributes to collective action (Imami et al., 2021; Key et al., 2000; Stockbridge et al., 2003; Kruijssen et al., 2009).

The prevailing explanation for this paradox centres on the historical and institutional legacy of collectivisation. Under socialism, cooperation was not voluntary but imposed, often coercively, by the state. This has left what might be termed a *trust deficit*, manifesting in widespread suspicion of collective forms of organisation after transition. In countries such as Bosnia and Herzegovina, Croatia, Poland, and Serbia, cooperative movements that re-emerged after liberalisation often faced structural fragility and difficulties in sustaining membership (Hagedorn, 2014; Banaszak, 2008; Božić et al., 2019). Gardner and Lerman (2006) underscore this point by showing how the dismantling of socialist collectives left behind fragmented landholdings, weak institutions, and a pervasive reluctance among farmers to engage in new forms of cooperation.

This line of reasoning has crystallised into what may be termed the **"institutional void thesis"**: that the weakness of cooperation in post-communist agriculture is primarily a function of missing or mistrusted institutions, and of the long shadow of collectivisation (cf. Mike et al., 2024). It resonates with the broader literature on institutions and collective action, which stresses the role of social capital, norms, and reciprocity as critical conditions for successful cooperation (Bardhan, 1993; White & Runge, 1994; Ostrom & Ahn, 2009). In this perspective, transition economies lag behind precisely because their social fabric was distorted under socialism, and because trust and norms conducive to cooperation require time to regenerate (Imami et al., 2021).

Yet the widely established economic literature on agricultural cooperatives suggests that this explanation is only partial. Foundational work on farmer cooperation has long argued that collective action is often a rational response to imperfect markets rather than merely a function of social predispositions (Valentinov, 2007). Decades ago, Staatz (1987) showed that farmers have strong incentives to organise collectively when they face asset specificity, uncertainty, thin or imperfect markets, market-access risks, quality-control problems, and unequal bargaining relations with downstream actors. From this perspective, cooperatives and related producer organisations emerge not only because farmers trust one another, but because collective organisation can reduce transaction costs, preserve market options, and create countervailing power vis-à-vis concentrated buyers (ibid).

Since 1990s, scholarship on agricultural cooperatives increasingly moved beyond viewing the cooperative simply as a price-enhancing firm and instead examined it as a governance structure shaped by property rights, member

heterogeneity, coalition dynamics, and contractual relations (Cook et al., 2004), while increasingly distinguishing between the conditions that justify collective action in the first place and the organisational challenges that arise once collective action is established (Iliopoulos & Cook, 2023). Cook's (2018) life-cycle formulation makes this distinction explicit by separating the phase of "economic justification" from subsequent questions of organisational design, growth, heterogeneity, and adaptation. In the present study, our theoretical concern is primarily with this earlier stage: why farmers perceive cooperation as worthwhile under particular market conditions, rather than with the longer-term performance or survival of cooperatives once formed.

In the context of transition economies, evidence for this earlier stage of "economic justification" (Cook, 2018) can be found in the empirical work in the Balkans and Eastern Europe, which indicates that farmers' willingness to cooperate cannot be explained solely through reference to historical distrust or institutional breakdown. For instance, Möllers et al. (2018), examining Romania, find that intention to join producer groups is better explained through cognitive models of expected benefits than by legacy effects. Similarly, Kovačić et al. (2001) in Croatia and Skreli et al. (2011) in Albania identify farmer attributes and leadership structures, rather than social memory, as proximate determinants of cooperation. Banaszak (2008), studying Polish producer groups, highlights the importance of organisational success factors, including market orientation, rather than trust alone. Moreover, Imami et al. (2021) show that in Albania, downstream agribusiness agents (who would typically resist farmers' countervailing power) have promoted, supported, and even initiated cooperatives and farmer groups as a means to implement food safety standards in the context of weak public enforcement.

What emerges from this body of work is that post-socialist contexts are not monolithic: while the *trust deficit* narrative captures important dimensions, it risks overstating historical inertia and underplaying the continuing rationality of farmers in navigating contemporary market conditions. Albanian studies illustrate this vividly. Skreli et al. (2011) and Kola et al. (2014) show that horticultural producers' willingness to cooperate is constrained not only by weak social capital but also by practical challenges such as leadership deficits and power imbalances in the value chain. These findings suggest that the determinants of collective action in post-communist agriculture lie at the intersection of history and economics, rather than being reducible to legacies of collectivisation alone. Accordingly, in this paper, Albania is treated not as representative of all transition economies, but as a specific post-socialist smallholder setting in which broader theoretical mechanisms can be examined.

Utilizing Ostrom's SES Framework

To analyse farmers' rationality in contemporary market conditions, we draw on Elinor Ostrom's work on collective action. Challenging the "tragedy of the commons" thesis, Ostrom showed that under suitable institutional conditions, users of common-pool resources (CPRs) can devise self-governing arrangements for sustainable management (Ostrom, 2003; 2009). Her *General Framework for Analyzing the Sustainability of Social-Ecological Systems* (SES) synthesises decades of research into a nested, multi-tier diagnostic tool. At its core are six first-tier variables—social, economic and political settings, resource systems, resource units, governance systems, users, and related ecosystems—each further elaborated into second-tier variables shaping action situations and outcomes (Ostrom, 2009; McGinnis & Ostrom, 2014).

In this context, one of the most influential insights of the SES framework is the role of **resource salience**. Ostrom argued that users are most likely to invest in costly self-organisation when the resource in question is vital to their livelihoods—that is, when it is sufficiently important or salient (Ostrom, 2009). The salience of a resource reduces the likelihood of exit, increases the perceived benefits of cooperation, and justifies the transaction costs required to establish collective rules and norms (Wade, 1994; Agrawal, 2003). This emphasis on resource importance has been foundational in the CPR literature, shaping empirical studies across diverse settings such as irrigation systems, forests, and fisheries (Yoder et al., 2022; Meinzen-Dick et al., 2002; Kurosaki, 2005). Yet applications of the SES framework have largely remained confined to **common-pool goods**, characterised by rivalry and non-excludability. Far less attention has been devoted to its potential relevance for **club goods**—those that are excludable but non-rival, such as the services provided by producer organisations, including joint input procurement, collective marketing, certification, or machinery sharing (Markelova & Mwangi, 2010). These services are accessible to members but not to outsiders, and one member's use does not necessarily diminish availability to others. While such services are not CPRs in the strict sense, the institutional dilemma they pose—how to mobilise and sustain collective action—bears striking similarity to the problems Ostrom originally analysed.

Our use of the SES framework constitutes a selective, mechanism-focused adaptation rather than a formal extension of the framework as a whole. Specifically, we draw on one core SES insight—that users are more likely to invest in collective action when what is collectively governed is sufficiently important to their livelihoods—and extend it to the case of cooperation services, conceptualised as club goods. We do not attempt a full remapping of all SES tiers, nor do we equate these services with common-pool

resources; instead, the framework is applied heuristically to clarify how perceived service importance shapes farmers' willingness to cooperate.

To operationalise this adaptation in the empirical context, farmers are treated as users (U), while producer organisations represent the governance system (GS). The broader setting (S) reflects an export-oriented smallholder environment shaped by stringent standards and asymmetric buyer relations, with buyers acting as key external actors. The resource system (RS) is reinterpreted as the cooperative service provision system, and resource units (RU) as the individual services accessed. The central action situation concerns farmers' decisions to participate in and use these services, with service salience (analogous to resource importance) acting as the key driver of cooperation.

This selective adaptation fits well with cooperative theory. If classic cooperative scholarship explains why farmers seek collective arrangements under market failure (Staatz, 1987; Valentinov, 2007), the SES perspective helps specify one mechanism through which such incentives become behaviourally meaningful: farmers are more likely to bear the organisational costs of cooperation (Iliopoulos and Cook, 2023) when the services on offer are perceived as sufficiently important. In this sense, the SES lens complements, rather than replaces, cooperative theory.

Evidence from Ghanaian cooperatives supports this extension: Grashuis and Dary (2021) show that cooperative viability hinges on robust internal rules and the importance of cooperative services for members' livelihoods, consistent with treating these services as salient club goods (cf. Grashuis, 2025). In this reconceptualisation, *service importance* refers to the degree to which farmers perceive cooperation services as beneficial to their livelihoods. Such benefits often arise from countering structural imperfections and high transaction costs that characterise agricultural markets, particularly in transition economies (Imami et al., 2021; Williamson, 1979; 1985; Ménard, 2007; Abate, 2018). Smallholders frequently face information asymmetries, uncertain and shifting quality standards, and opportunistic behaviour from intermediaries (Kola et al., 2014; Abate, 2018). Moreover, agricultural markets in these contexts—much like elsewhere—tend to display **asymmetries of bargaining power**, where numerous small suppliers interact with a limited number of buyers (Staatz, 1987; Sexton, 1990; Hansmann, 1996; Valentinov & Iliopoulos, 2013). In such situations, buyers may exert substantial control not only over pricing, but also over the terms of quality, delivery, and payment.

These characteristics of agricultural markets systematically disadvantage smallholders in the Albanian

MAP sector and similar export-oriented smallholder settings. Farmers typically sell directly to exporters or to collectors/consolidators, who act as intermediaries between processors and farmers. As highlighted earlier in the paper, horizontal cooperation remains limited across the agri-food sector, including the MAPs value chain, where formal cooperatives are largely absent. Historically, farmers have relied on spot market transactions or informal verbal agreements with buyers; however, in recent years there has been a growing trend toward closer relations and written agreements between farmers and buyers, partly driven by increasing requirements for standards compliance and traceability (Skreli & Imami, 2019).

One critical strategy for meeting safety and quality standards and reducing information asymmetries is certification, such as GlobalGAP. However, certification schemes impose high compliance costs, which are especially burdensome for farmers operating fragmented plots (FAO, 2020). Collective certification through producer groups lowers these costs by distributing them across members (Narrod et al., 2009; Markelova & Mwangi, 2010; Fischer & Qaim, 2012). At the same time, producer collaboration strengthens **countervailing power**, enabling farmers to mitigate buyer dominance and negotiate more favourable terms (Valentinov, 2007; Fischer & Qaim, 2014; Xhoxhi et al., 2014; 2018).

By integrating buyer power and transaction costs into Ostrom's SES framework, we show how the structural conditions of agricultural markets shape the salience of cooperation services. This salience reflects what Ostrom termed resource importance: farmers' perception of cooperation benefits—such as reduced transaction costs, stronger bargaining power, and improved compliance with quality standards—as critical to their livelihoods. Cooperation thus emerges not merely from trust or norms, but as a strategic response to market imperfections in value chains (cf. Hansen et al., 2024).

In this perspective, cooperation becomes relevant when specific services address concrete constraints: collective marketing in contexts of weak bargaining power, group certification where compliance costs are prohibitive, and joint input procurement where access to reliable inputs is uncertain (Valentinov et al., 2024; Imami et al., 2021). Accordingly, rather than proposing a general theory of cooperation across transition economies, we develop a context-bounded argument: in the Albanian MAP sector, willingness to cooperate increases when cooperation services are perceived as economically salient under conditions of buyer power, demanding standards, and costly market participation. The next subsection develops hypotheses from this argument.

2.2. RESEARCH HYPOTHESES

Building on the preceding discussion, we derive our hypotheses from two complementary theoretical perspectives. First, classic cooperative theory explains why farmers pursue collective action under conditions of market failure, transaction costs, uncertainty, and asymmetric bargaining power (Staatz, 1987; Sexton, 1990; Hansmann, 1996). Second, our selective adaptation of Ostrom's (2009) framework highlights a specific mechanism through which such incentives become behaviourally salient: farmers are more likely to invest in cooperation when the services provided through cooperation are perceived as sufficiently important to their livelihoods. On this basis, we distinguish between (1) cooperation service salience, which constitutes the core theoretical focus of the paper, and (2) socio-economic attributes, which may condition cooperation but are expected to play a secondary role.

2.2.1. Cooperation Service Salience

Economic Salience of Cooperation Services

The salience of cooperation services has long been linked to collective action outcomes (Ostrom, 2009; Agrawal, 2003; Wade, 1994). In classic cooperative theory, farmers are expected to organise when collective arrangements offer benefits that are unavailable, weaker, or more costly to obtain individually (Staatz, 1987). In this sense, perceived economic benefits provide the most direct indicator of whether cooperation is economically justified from the farmer's perspective. Empirical evidence from agricultural producer groups shows that farmers are more likely to join when they perceive tangible economic benefits such as better prices, access to credit, or reduced risks (Fischer & Qaim, 2014; Möllers et al., 2018). In a post-socialist setting similar to ours, Skreli et al. (2024) likewise find that perceived cooperative benefits are a key predictor of farmers' willingness to cooperate. While economic incentives are central, social benefits may sometimes override them (Morrow et al., 2017).

H1: *The higher perceived economic benefits, the higher the willingness to cooperate.*

A second dimension of service salience concerns the transaction costs of market participation. Staatz (1987) argues that uncertainty, market-access risks, and coordination problems often make individual market exchange less efficient and increase the appeal of collective organisation. In contemporary agri-food chains, these pressures frequently arise through stringent standards, certification demands, and the organisational burdens associated with supplying modern value chains. Where such requirements are costly to meet individually,

cooperation services become more salient because they enable farmers to share compliance costs and reduce the burden of coordination. Especially for smallholders, meeting strict product and process standards often imposes heavy transaction costs. For example, certification such as GlobalGAP is often prohibitive for smallholders when pursued individually (Narrod et al., 2009; Markelova & Mwangi, 2010; Fischer & Qaim, 2012).

H2: *The higher transaction costs associated with stringent quality requirements and modernization of long supply chains, the higher the willingness to cooperate.*

Buyer Power as Institutional Driver

A third dimension of cooperation service salience concerns buyer power. Classic cooperative theory has long emphasised that farmers are more likely to engage in collective action when they face concentrated downstream actors and unequal bargaining relations. Under such conditions, producer organisations can function as countervailing institutions, helping farmers protect margins, preserve market access, improve information, and negotiate more favourable terms (Staatz, 1987; Sexton, 1990). In our setting, buyer power is expected to increase willingness to cooperate because it raises the value of cooperation services as instruments of joint bargaining and coordination. In addition, market structures are often oligopsonistic, with buyers exerting power over prices, quality, and delivery conditions (Sexton, 1990; Hansmann, 1996; Valentinov & Iliopoulos, 2013). This asymmetry makes cooperation a countervailing strategy (Fischer & Qaim, 2014; Banaszak, 2008; Kola et al., 2014). Because buyer power can be exercised through different domains of the exchange relationship, we distinguish between margins, product quality requirements, and delivery conditions.

H3: *The higher the buyer's power over farmers' margins, the higher the willingness to cooperate.*

H4: *The higher the buyer's power over farmers' product quality (standards), the higher the willingness to cooperate.*

H5: *The higher the buyer's power over farmers' delivery activities, the higher the willingness to cooperate.*

By contrast, when bilateral relationships with buyers are perceived as satisfactory, the perceived need for cooperation may decline. If farmers believe that the main buyer already offers acceptable prices, reliable information, fair quality control, or smooth coordination,

the incremental value of collective organisation may appear lower. We therefore expect buyer satisfaction to reduce willingness to cooperate. At the same time, this expectation is context-dependent rather than universal. In Albania, some buyers have supported group certification and quality upgrading, so satisfaction with a buyer may in some cases coexist with incentives to cooperate. Thus, H6 expresses a baseline expectation, while recognising that in some value-chain settings cooperation may function simultaneously as a countervailing institution and as a vehicle for joint problem-solving around food safety and certification (Imami et al., 2021).

H6: *The higher the farmers' satisfaction with the main buyer, the lower the willingness to cooperate.*

2.2.2. Socio-Economic Attributes

In addition to cooperation service salience, socio-economic attributes may shape farmers' willingness to cooperate. However, compared with H1–H6, these factors are treated here as secondary and conditioning variables rather than as the main theoretical contribution of the paper. This is consistent with both cooperative theory (Staatz, 1987) and recent empirical work suggesting that structural incentives often matter more than personal characteristics in explaining collective action (Möllers et al., 2018; Skreli et al., 2011). Socio-economic conditions may also shape cooperation, though evidence is mixed. Dependence on farming (alternative employment) tend to reduce farming salience and weaken cooperative incentives (Bardhan, 1993; Adhikari & Lovett, 2006; Beyene, 2012), though some studies find no effect (Skreli et al., 2011; Kola et al., 2014).

H7: *Higher dependence on farming as the main income source increases willingness to cooperate.*

Human capital, reflected in education and farming experience, can increase the ability to recognize cooperation benefits (Schultz, 1982; Goldin, 2016). Many studies confirm a positive effect (Banaszak, 2008; Bernard & Spielman, 2009; Abate, 2018), though others report contradictory or self-selection effects (Skreli et al., 2011; Fischer & Qaim, 2012).

H8: *The higher the education level, the higher the willingness to cooperate.*

H9: *The higher the experience in cultivating MAPs, the higher the willingness to cooperate.*

Findings on age are inconsistent, with positive (Fischer & Qaim, 2012), negative (Karli et al., 2006), and

insignificant (White & Runge, 1994) results. In post-communist contexts, memories of forced collectivisation foster mistrust: Hagedorn (2014) highlights the need to overcome this legacy through trust-building, Imami et al. (2021) show that “bad memories” weaken commitment in Albania, and Wolz et al. (2020) find Romanian farmers resist cooperatives due to low trust.

H10: *Older farmers are expected to exhibit a lower willingness to cooperate.*

Finally, evidence suggests a non-linear “mid-size effect,” where very small and very large farms have weaker incentives, while mid-sized farms are more likely to join (Bernard & Spielman, 2009; Nugussie, 2010; Fischer & Qaim, 2012).

H11: *The relationship between area planted with MAPs and willingness to cooperate is hypothesized to be quadratic.*

3. METHODS AND PROCEDURES

3.1. DATA

The questionnaire was developed based on an extensive literature review, expert consultations, and in-depth interviews with value chain actors, and was pre-tested prior to fieldwork. It included questions designed to capture the core hypotheses of the study, alongside a comprehensive set of variables on farm characteristics and household socio-demographic information.

The unit of analysis is the individual farmer. Data were collected through a cross-sectional, researcher-administered survey conducted in February–March 2016 in Malesi e Madhe (Shkodra region, North Albania), the main MAPs cultivation and exporting region in the country (Skreli & Imami, 2019). All respondents were directly involved in MAP cultivation and/or wild collection and sales.

Previous estimates indicate that there are approximately 4,000 farmers engaged in the cultivation of MAPs in Albania, most of which cultivate sage, with around two-thirds concentrated in Malesi e Madhe (ibid). The sample of 168 farmers was drawn using a stratified multistage sampling approach at the village level, followed by random route selection of households, in the absence of a complete sampling frame. While the sample cannot be considered statistically representative of all MAP farmers in Albania, it captures the core characteristics of the main production area.

For the econometric analysis, the final estimation sample was determined by diagnostic screening and

complete-case availability for the variables included in the logistic regression. The original survey database contains 168 observations. Based on standard influence diagnostics, case-wise outlier and influence diagnostics flagged seven observations as influential. The reported specification excludes these diagnostic cases. After this step, 161 observations remained. The logistic regression was then estimated on observations with complete information for all variables included in the willingness-to-cooperate model, resulting in 137 usable observations (see Appendix Table A4 for a detailed description of the data retention and estimation sample). As a transparency check, the Appendix reports a sensitivity specification retaining the seven diagnostic cases, estimated on all 144 complete observations. To assess whether the final estimation sample differed materially from the original survey sample, we compared key respondent and farm characteristics across the two samples. Differences across key variables (age, family size, experience, farm area, income, education, and willingness to cooperate) were small and did not materially alter the profile of respondents (see Appendix Table A5 for detailed comparisons between the original and estimation samples).

Table 1 summarises the sample characteristics and provides relevant context for cooperation decisions. The data indicate a strong reliance on agriculture: 64% of respondents are self-employed in farming (35.8% non-farm employment), and sage accounts for 47.7% of household income. This high dependence suggests that agricultural performance is central to livelihoods, potentially increasing the relevance of collective arrangements where they improve market access or reduce risk. Production is characterised by smallholder structures, with an average farm size of 3.96 ha (2.26 ha under sage) and output of 4.62 tons (Table 1). Such scale may limit individual bargaining power and increase coordination and compliance costs, conditions under which collective solutions may become more relevant. Farmers are relatively experienced (25.8 years in agriculture; 7.1 years in sage), indicating accumulated knowledge that may shape their evaluation of cooperation benefits and costs. The demographic profile shows an average age of 50.3 years and diverse education levels (11.4% primary, 53.9% secondary, 34.7% university), suggesting potential heterogeneity in decision-making capacity. Finally, average household income (ALL 805,238) and family size (4.67 members) indicate moderate resource endowments that may condition participation in collective action. Overall, Table 1 describes a context of economic dependence, smallholder production, and market constraints, consistent with the mechanisms explored in the analysis.

VARIABLE	MEAN	ST.DEV
Farmers' age (years)	50.32	10.09
Family size	4.67	1.49
Involvement in Agricultural activity (years)	25.82	11.18
Involvement in sage production (years)	7.10	4.20
Area Cultivated with MAPs (ha)	3.96	7.61
Area cultivated with sage (ha)	2.26	4.34
Quantity produced of sage (ton)	4.62	8.31
Household annual income (ALL)	805,238	739,022
Share of income from sage cultivation to total income	47.73%	28.49%
Education		
- Primary (up to 9 years)	11.43%	
- High school (up to 12 years)	53.91%	
- University (up to 17 years)	34.72%	
Employment of HH (self-employed in agriculture)	64.2%	
Share of respondents involved in sage cultivation	92.90%	
Share of respondents' involvement in wild sage collection	13.13%	

Table 1 Sample descriptive statistics.

Note: ALL – Albanian lek (1 Euro = 97 ALL as per 19/09/2021); HH is household head.

Table 1 reports descriptive statistics for the original survey sample.

3.2. MEASUREMENT DEVELOPMENT

To test the hypotheses, we developed measures for the variables of interest, as detailed below. The main outcome variable is **farmers' willingness to cooperate** measured using a direct survey question (K5.A): "Are you willing to cooperate with other farmers (e.g., for joint input provision, joint sales, or shared use of agricultural machinery)?" Responses were coded as a binary variable (1 = willing, 0 = not willing); its distribution across the original, estimation, and alternative samples is reported in Appendix Table A6.

The **economic importance of cooperation services** was captured through three constructs: (i) perceived economic benefits, (ii) transaction costs for meeting buyer requirements, and (iii) satisfaction with the main buyer, alongside three dimensions of **buyer power** (margin, quality, and delivery). Perceived benefits were measured with two Likert-scale statements on collective input purchase and joint marketing (Appendix, Table A1). Transaction costs were captured with six items assessing difficulties and uncertainties in meeting quality requirements (Appendix,

Table A1). satisfaction with the main buyer was measured with four items on quality control, payment, information exchange, and price (Appendix, Table A1). An exploratory factor analysis (EFA) using principal component extraction yielded three factors—F1: perceived cooperation benefits, F2: transaction costs, and F3: satisfaction with the main buyer—explaining 65% of the variance. Bartlett's test ($\chi^2 = 778$; $df = 66$; $p < .000$) and KMO (0.777) confirmed sampling adequacy. All factors showed good reliability (Cronbach's $\alpha > 0.70$; [Nunnally, 1981](#)) exceeding conventional thresholds and loadings > 0.40 ([Stevens, 2002](#)). Composite scores were generated using the regression method.

Buyer power was measured following El-Ansary & Stern (1972), Hunt & Nevin (1974), Etgar (1978), Lusch & Brown (1982), Collins (2002, 2007), and Xhoxhi et al. (2014). Farmers rated intermediaries' influence on eight activities (e.g., price, payment terms, harvesting, delivery) on a 5-point Likert scale. Influence scores were multiplied by activity importance to reflect both the magnitude and relevance of influence (also rated 1–5) to capture the directional element of power. EFA of these items (Appendix, Table A2) identified three dimensions: F1: Power Over Margin (POM), F2: Power Over Quality (POQ), and F3: Power Over Delivery (POD), explaining 80.9% of the variance. Bartlett's test ($\chi^2 = 776.6$; $df = 28$; $p < .001$) and KMO (0.825) confirmed validity ([Field, 2009](#)). Discriminant validity was established by comparing inter-construct correlations with Cronbach's α (Appendix, Table A3), all coefficients being lower than their respective α ([Gaski, 1986](#); [Katsikeas et al., 2000](#); [Collins, 2002](#)).

Control variables included dependence on farming, education, farming experience, age of the household head, and enterprise size. Dependence on farming was

measured using employment status, distinguishing farmers whose main employment is agricultural from those with non-agricultural employment. Education was treated as a factor variable in the regression model with four observed categories: basic education, agricultural high school, other high school, and university, with basic education used as the reference category. Farming experience was measured as years cultivating the main product, and enterprise size was measured as the area planted with MAPs. To test for a possible non-linear farm-size effect, both MAP area and its squared term were included in the model. due to limited variation.

3.3. EMPIRICAL MODEL

The empirical model ([Figure 1](#)) was estimated using maximum likelihood. Education entered the model as a factor variable, with basic education as the reference category. The farm-size squared term is the raw square of MAP area. Given the high explanatory power of the model, we conducted multicollinearity diagnostics, alternative farm-size specifications, robust standard-error checks, and a sensitivity specification retaining all complete cases. The dependent variable was coded as 1 when the farmer was willing to cooperate and 0 otherwise.

Considering the dichotomous nature of the dependent variable, logistic regression is employed to assess the study hypotheses. The model has the following form:

$$\ln\left(\frac{P_i}{1-P_i}\right) = a + b_j \sum_{j=1}^{11} x_{ij} + e \quad (1)$$

Where P_i is the probability that farmer i is willing to cooperate; a , a constant; x_{ij} are independent variables, and b_j the vectors of parameters to be estimated.

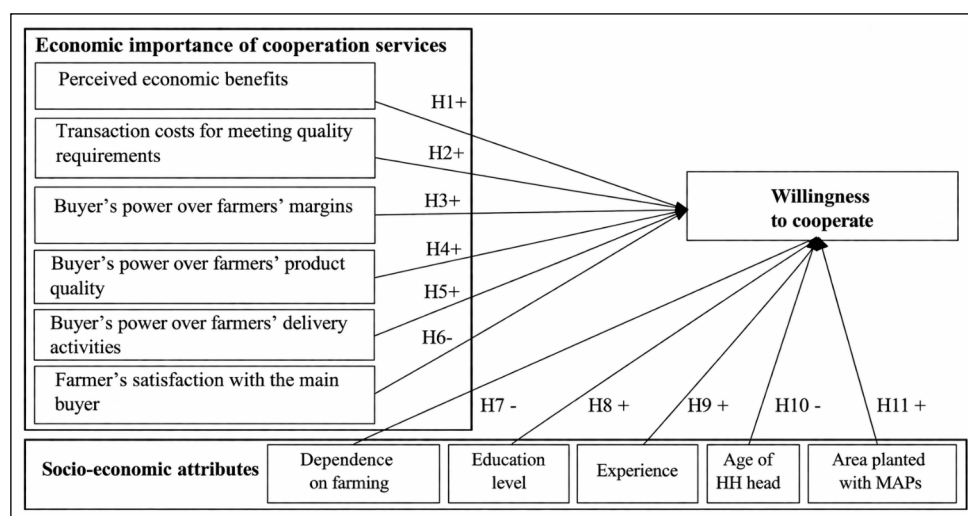


Figure 1 Empirical model.

Source: Authors' analysis.

4. RESULTS

The econometric analysis provides strong support for the central proposition of this study: that the **economic salience of cooperation services** is a major determinant of farmers' willingness to cooperate in a transition economy context. Logistic regression estimates (Table 2) demonstrate that nearly all measures of service importance—perceived economic benefits, transaction costs of compliance, and buyer power—exert strong and statistically significant effects on cooperation. By contrast, most socio-demographic attributes prove insignificant, underscoring that cooperation is driven less by personal characteristics and more by structural conditions within value chains.

4.1. COOPERATION SERVICE SALIENCE

Economic Salience of Cooperation Services

The results provide strong support for Hypothesis 1: perceived economic benefits from cooperation significantly increase willingness to cooperate ($B = 6.639$; $p < 0.01$).

VARIABLE	B	S.E.	p
Constant	7.154	5.991	0.232
Perceived economic benefits	6.639***	2.210	0.003
Transaction costs for meeting quality requirements	3.332**	1.327	0.012
Power over farmers' margin-related activities	6.144**	2.650	0.020
Power over farmers' product-quality activities	5.278***	2.007	0.009
Power over farmers' product-delivery activities	5.869**	2.318	0.011
Satisfaction with the main buyer	-2.536*	1.407	0.072
Dependence on farming	2.546	1.560	0.103
EDUC: Basic vs agricultural high school	1.800	1.894	0.342
EDUC: Basic vs other high school	-0.697	1.859	0.708
EDUC: Basic vs University	9.465	45.932	0.837
Experience	-0.548	0.419	0.191
Age of household head	-0.036	0.096	0.706
Area planted with MAPs	0.471	0.390	0.228
Area planted with MAPs squared	-0.012	0.008	0.127

Table 2 Results of logistic regression.

Note: Dependent variable: willingness to cooperate (1 = willing to cooperate; 0 = not willing). $N = 137$ complete observations after diagnostic screening and complete-case availability for the variables included in the model. Education reference category: basic education. Standard errors are reported in the S.E. column. * $p < .10$; ** $p < .05$; *** $p < .01$. -2 Log likelihood = 27.39; Cox & Snell $R^2 = .565$; Nagelkerke $R^2 = .878$; Model Chi-square = 114.04 ($df = 14$).

Farmers who recognise clear advantages from joint input procurement and collective marketing are far more inclined to invest in the complex institutional arrangements of cooperation. Importantly, the findings suggest that in a post-socialist context—often portrayed as crippled by distrust—farmers nonetheless respond rationally to perceived economic gains.

The results for Hypothesis 2 are also notable. Transaction costs associated with meeting buyers' stringent quality requirements positively and significantly influence cooperation ($B = 3.332$; $p < 0.05$). In line with transaction cost economics (Williamson, 1985; Ménard, 2007), farmers facing higher burdens of compliance are more likely to seek collective solutions. This finding affirms the growing literature on smallholder integration into high-value markets (Markelova & Mwangi, 2010; Fischer & Qaim, 2012), while also extending it to the setting of a transition economy.

Buyer Power as Institutional Driver

Hypotheses 3 to 5, concerning buyer power, are also strongly supported. Buyer control over margins ($B = 6.144$; $p < 0.05$), product quality standards ($B = 5.278$; $p < 0.01$), and delivery requirements ($B = 5.869$; $p < 0.05$) each exert a positive and significant effect on cooperation. These results highlight the role of asymmetric power relations in motivating farmers to seek alternative institutional arrangements. In contexts where intermediaries exercise dominant control over price, quality, and delivery, farmers are pushed towards cooperation as a means of regaining agency. This aligns with Staatz's (1987) argument that cooperatives function as countervailing institutions in imperfect markets, and with subsequent work on buyer power in agricultural value chains (Sexton, 1990; Hansmann, 1996; Valentinov & Iliopoulos, 2013; Xhoxhi et al., 2014).

Interestingly, Hypothesis 6—predicting a negative effect of satisfaction with the main buyer—is also supported, albeit at the 10 per cent level ($B = -2.536$; $p < 0.1$). This result suggests that when farmers are satisfied with their buyers, the perceived need for cooperation declines. Rather than indicating an absence of cooperative capacity, low willingness in this case reflects a rational judgement that existing market relations already meet farmers' needs. This finding offers a critical nuance to the literature, highlighting that cooperation is not simply absent due to distrust, but sometimes unnecessary when bilateral relations function effectively (cf. Reardon et al., 2009; Wiggins et al., 2010).

4.2. SOCIO-ECONOMIC ATTRIBUTES

The evidence on socio-demographic variables is more mixed. Hypothesis 7, concerning dependence on farming, receives limited support. Farmers whose main employment is agricultural are more willing to cooperate than farmers with outside agricultural employment ($B = 2.546$; $p = .103$).

This is consistent with Bardhan's (1993) proposition that exit opportunities weaken incentives to invest in collective institutions, and with evidence from Ethiopia (Adhikari & Lovett, 2006; Beyene, 2012).

By contrast, education (H8), farming experience (H9), and age (H10) do not display statistically significant effects at conventional levels. The coefficient signs, however, provide suggestive insights. Higher education is positively associated with cooperation when comparing basic education to agricultural high school or university, but negatively when comparing to general high school. This non-linear pattern echoes Fischer & Qaim's (2014) finding of "self-selection" among better-educated farmers, some of whom opt out of cooperation altogether. Similarly, the negative association between age and willingness, though insignificant, may reflect the lingering scepticism of older generations shaped by experiences of forced collectivisation during socialism (Hagedorn, 2014; Wolz et al., 2020).

Hypothesis 11, proposing a quadratic relationship between farm size and cooperation, is not statistically supported. Yet visual inspection (Figure 2) reveals an important pattern: cooperation is most likely among farmers cultivating around two hectares, after which willingness declines. This finding echoes Fischer & Qaim (2014) and Bernard & Spielman (2009), who identify a "mid-size effect" in collective participation. Very small farmers lack the resources to commit, while very large farmers can have lower transaction costs and higher bargaining power; it is the intermediate farmers for whom cooperation offers the greatest marginal benefits.

4.3. ROBUSTNESS CHECKS

Given the high explanatory power (high pseudo- R^2 value) of the logistic regression model, we conducted additional diagnostic and robustness checks. First, multicollinearity diagnostics indicate that the substantive explanatory variables do not indicate severe multicollinearity (see Appendix Table A8 for full GVIF diagnostics). The adjusted GVIF values for perceived cooperation benefits, transaction costs, buyer-power dimensions, buyer satisfaction, dependence on farming, education, experience, and age are low to moderate. The only high values concern the linear and squared farm-size terms, which is expected when a quadratic specification includes a variable and its square. Re-estimating the model with centered farm-size variables produced identical likelihood and pseudo- R^2 statistics, suggesting that the results are not driven by the scaling of farm size.

Second, we estimated alternative specifications excluding the squared farm-size term and excluding both farm-size terms. The main theoretical associations remain substantively stable: perceived economic benefits, transaction costs of meeting quality requirements, and

buyer-power variables remain positively associated with willingness to cooperate, while satisfaction with the main buyer remains negative. Model fit remains high across these specifications, with Nagelkerke R^2 values of .867 and .864, compared with .878 in the main model (full model fit statistics and alternative specifications are reported in Appendix Table A7).

Third, we examined sensitivity to the seven diagnostic observations. Retaining these cases reduces model fit substantially, with Nagelkerke R^2 declining from .878 in the main model to .572 in the all-complete-cases model. The signs of the key theoretical variables remain broadly consistent, but several effects become less precisely estimated. We therefore interpret the magnitude of the pseudo- R^2 and coefficient estimates with caution, as evidence of strong in-sample associations rather than definitive predictive performance.

5. DISCUSSION

5.1. THEORETICAL IMPLICATIONS

The results of this study carry important implications for understanding collective action in export-oriented, post-socialist smallholder settings such as the Albanian MAP sector. At their core, the findings suggest that farmers' decisions to cooperate cannot be explained solely by reference to legacies of collectivisation or deficits of social capital. Rather, they are better understood as rational responses to the economic salience of cooperation services and to the structural conditions of agri-food value chains.

First, the findings strengthen a classic proposition in cooperative theory: farmers are more likely to engage in collective action when cooperation helps them address market imperfections that are difficult to manage individually. In this sense, our results align with Staatz's (1987) argument that collective organisation becomes attractive where farmers face transaction costs, market-access risks, quality-control problems, and asymmetrical relations with downstream actors. The Albanian evidence suggests that cooperation is not only a response to historical legacies, but also a practical institutional response to contemporary market pressures. This helps refine the dominant "institutional void" narrative in post-socialist agriculture. Distrust and weak institutions remain relevant, but they do not exhaust the explanation for cooperation. When farmers perceive cooperation as useful for solving concrete economic problems, collective action can emerge despite difficult institutional legacies.

Second, the study contributes to debates on how Ostrom's SES framework may inform the analysis of collective action beyond common-pool resources. The contribution, however, should be understood as a selective

adaptation inspired by the logic of the SES framework, rather than as a formal extension of the framework as a whole. More specifically, the findings support the analytical value of adapting one central SES insight—the importance or salience of what is collectively governed—to the case of cooperation services conceived as club goods. Our findings respond to Grashuis's (2025) call to adapt Ostrom's institutional analysis to the hybrid character of agricultural cooperatives by explicitly incorporating both the salience of cooperation services and the external value-chain conditions—especially buyer power—that shape farmers' incentives to organise. In our case, what matters is not a rival natural resource, but the degree to which farmers perceive services such as collective marketing, group certification, and joint input procurement as sufficiently important to justify the costs of organisation.

This point is best illustrated through concrete examples. Group certification becomes theoretically important when individual compliance with standards such as GlobalGAP is too costly or complex for fragmented smallholders to undertake alone (Reardon et al., 2009). Collective marketing becomes salient when farmers face a limited number of powerful buyers and therefore value cooperation as a means of strengthening their bargaining position (Valentinov, 2007). Joint input procurement becomes salient when inputs are costly, uncertain in quality, or difficult to access through individual transactions (Imami et al., 2021). In each case, willingness to cooperate rises not because cooperation is valued abstractly, but because specific services are perceived as economically consequential. The theoretical implication is therefore that service salience can serve as a conceptual bridge between cooperative theory and an SES-inspired understanding of self-organisation.

Third, the findings highlight the centrality of market structure and buyer power in shaping collective action. While Ostrom-inspired analyses are often mobilised to emphasise norms, trust, and social capital, our results suggest that asymmetrical exchange relations can be equally important in motivating self-organisation. The positive effects of buyer power over margins, product quality, and delivery activities are consistent with the classic view of cooperatives as countervailing institutions in imperfect markets (Staatz, 1987; Sexton, 1990). Yet the Albanian case also refines this argument. As Imami et al. (2021) show, powerful buyers may simultaneously create the pressures that make cooperation attractive and support collective arrangements around certification and food safety where public enforcement is weak. In this sense, cooperation may function not only as a defensive response to buyer dominance, but also as a hybrid governance device through which farmers and downstream actors jointly manage quality-related coordination problems.

Fourth, the weak and inconsistent role of most socio-demographic variables suggests that collective action in this setting is driven less by farmer attributes than by structural incentives embedded in markets. Age, education, and experience may shape participation at the margins, but they appear less decisive than the perceived value of cooperation services and the pressures generated by buyer power and compliance costs. The theoretical implication is a shift in emphasis: from viewing cooperation primarily as an outcome of behavioural predispositions or inherited attitudes, toward viewing it as a context-specific institutional response to value-chain conditions.

The external validity of these findings should be understood in terms of mechanism rather than direct generalisation. While the empirical results are specific to the Albanian MAP sector, the underlying mechanism—namely, that cooperation is driven by the perceived salience of services under conditions of transaction costs, buyer power, and market integration—may extend to other export-oriented smallholder systems facing similar structural constraints. Accordingly, the findings are not intended to represent transition economies broadly, but to offer theoretically transferable insights applicable to contexts with comparable value-chain characteristics. This is consistent with a diagnostic approach (Ostrom, 2007), where findings are transferable across cases sharing similar configurations of key variables.

Finally, the results should be interpreted within clear theoretical boundaries. This study does not support broad claims about transition economies as a whole, nor does it establish a general theory of cooperative development in post-socialist agriculture. Rather, it identifies a plausible mechanism in one specific context: willingness to cooperate increases when cooperation services are economically salient under conditions of fragmented production, demanding standards, and asymmetrical buyer relations. More broadly comparative claims require evidence from other sectors, regions, and institutional histories. Relatedly, the study speaks primarily to what Cook (2018) terms the stage of economic justification for collective action, not to the longer-term questions of cooperative governance, member heterogeneity, adaptation, or longevity that later become central once organisations are formed.

5.2. EMPIRICAL CONTRIBUTION

This study contributes to the literature on collective action in agriculture by modestly advancing both measurement and methodological approaches in the context of transition economies. It develops and validates multi-item constructs to capture cooperation service salience, moving beyond earlier reliance on simple indicators such as membership status or general trust (Skreli et al., 2011; Kola et al., 2014; Möllers et al., 2018). These constructs, supported by

strong reliability and discriminant validity, provide a more nuanced assessment of how farmers perceive economic benefits, quality compliance costs, and buyer influence. Building on prior work in marketing channels (El-Ansary & Stern, 1972; Collins, 2002; Xhoxhi et al., 2014), the study also introduces a weighted measure of buyer power that distinguishes between pricing, quality, and delivery domains. Empirical application in Albania's medicinal and aromatic plants sector—a transition-economy case marked by fragmentation and export dependence (FAO, 2020; Skreli & Imami, 2019)—shows how such measures illuminate cooperation dynamics in global value chains.

Findings further suggest a nonlinear relationship between farm size and cooperation, echoing results from sub-Saharan Africa (Fischer & Qaim, 2014; Bernard & Spielman, 2009), and highlight that mid-sized farms are most likely to engage. Methodologically, the combination of carefully developed constructs with quantitative modelling yields high explanatory power (Nagelkerke $R^2 = 0.878$), underlining the value of this approach. Overall, the study makes modest but concrete contributions: it refines empirical tools for studying cooperation, illustrates their application in a paradigmatic transition-economy sector, and generates insights that are transferable to other contexts marked by fragmentation and integration into global markets.

5.3. POLICY RELEVANCE

The findings of this study carry policy implications primarily for export-oriented smallholder systems characterised by fragmented production, demanding quality standards, and asymmetrical buyer relations, such as the Albanian medicinal and aromatic plants (MAP) sector. Rather than offering general prescriptions for all transition economies, the results suggest context-specific insights into how collective action may be fostered under particular market conditions.

First, the results indicate that cooperation is more likely to emerge when it delivers economically salient services. In this context, services such as collective input procurement, joint marketing, and especially group certification appear particularly relevant. Policy interventions in similar settings may therefore be more potentially effective when they prioritise functional service delivery linked to concrete economic benefits, rather than generic promotion of cooperative forms.

Second, the findings highlight that buyer power plays a dual role, acting both as a constraint and as a potential driver of cooperation. Where farmers face strong asymmetries in price-setting, quality standards, or delivery conditions, cooperation may function as a countervailing mechanism. However, the results also show that when

farmers are satisfied with their buyers, the perceived need for cooperation declines. This suggests that policy approaches may need to be sensitive to the heterogeneity of value-chain relationships, supporting collective action particularly in contexts where market imbalances are pronounced, while recognising that cooperation may play a more complementary role where bilateral relations function effectively.

Third, the evidence on transaction costs suggests that compliance with quality standards is a key driver of cooperation. In settings where certification requirements (e.g., GlobalGAP) impose high individual costs, collective arrangements can reduce barriers to market participation. Policy support in such contexts may therefore focus on facilitating collective compliance mechanisms, including shared certification schemes or joint investments in quality assurance systems.

Fourth, the negative association between dependence on farming and cooperation indicates that the relative importance of agriculture as a livelihood influences incentives to cooperate. In contexts where farming is a secondary activity, collective action may be less attractive. This suggests that policies aimed at promoting cooperation may be more effective when embedded within broader strategies that enhance the economic viability of farming, rather than as standalone interventions.

Fifth, the limited role of socio-demographic variables suggests that cooperation in this setting is driven more by structural conditions than by farmer characteristics. This implies that policy interventions should not rely heavily on targeting specific demographic groups but instead focus on creating enabling conditions within value chains that make cooperation economically meaningful.

Finally, these findings suggest that in similar contexts, cooperation should not be treated as an end in itself, but as a functional institutional response to specific market conditions. Policies that enhance the economic salience of cooperation—by reducing transaction costs, improving market access, or addressing power asymmetries—may be more likely to foster sustainable collective action than those focused primarily on organisational form or social capital alone.

5.4. LIMITATIONS AND FURTHER RESEARCH

This study has **a number of contextual and methodological constraints** that should be acknowledged. The analysis is based on cross-sectional data from 168 farmers in a single, export-oriented MAP sector in northern Albania, which limits causal inference and restricts generalisability to other regions, commodities, and more gender-balanced or domestically oriented farming systems. In addition, key constructs such as perceived economic benefits, transaction

costs, buyer power, and willingness to cooperate rely on self-reported Likert-scale responses that capture stated intentions rather than observed cooperative behaviour. The model diagnostics also call for caution in interpreting the very high pseudo-R². The reported specification excludes seven observations flagged as influential/problematic by casewise outlier and influence diagnostics; retaining these observations lowers model fit and weakens some coefficient precision. The results should therefore be interpreted accordingly as strong in-sample associations in a modest applied survey rather than as out-of-sample predictive estimates. Future research should test the stability of these relationships using larger samples and external validation.

Future research would benefit from longitudinal or multi-country studies, behavioural indicators such as membership and performance data, and stronger causal identification strategies using administrative or market-based records.

Notwithstanding these constraints, the study provides compelling theoretical and empirical support for the central claim that cooperation in transition agriculture is shaped primarily by the economic salience of services and structural value-chain conditions, and it demonstrates the analytical value of extending Ostrom's SES framework from common-pool resources to club goods.

6. CONCLUSION

The experience of post-socialist agriculture is often narrated as a story of absence: absent trust, absent institutions, absent cooperation. This study has sought to tell a different story—one in which farmers are not passive inheritors of history but active economic agents, weighing costs and benefits in markets that are at once imperfect and globalised.

By extending Ostrom's SES framework to the domain of cooperation services, and by operationalising the notion of *service salience*, we have shown that collective action in transition economies is neither doomed by history nor reducible to social capital. It is, instead, a pragmatic response to structural pressures: the burdens of certification, the asymmetries of buyer power, and the promise of tangible economic gains.

The empirical evidence from Albania's MAP sector demonstrates that cooperation emerges when, and only when, services are sufficiently valuable to justify the effort of institution-building. This insight both challenges the institutional void thesis and enriches the comparative study of collective action. It invites us to see cooperatives not as fragile relics of socialist memory but as adaptive strategies forged at the intersection of local constraints and global markets.

If there is a lesson for agricultural economics more broadly, it is that the vitality of cooperation cannot be legislated into existence, nor conjured by exhortations to trust. It must be built upon services that most matter.

ADDITIONAL FILE

The additional file for this article can be found as follows:

- **Appendix.** Tables A1 to A8 and Figure 2. DOI: <https://doi.org/10.5334/ijc.1687.s1>

COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR AFFILIATIONS

Engjell Skreli  orcid.org/0000-0002-7556-763X
Agricultural University of Tirana, AL

Orjon Xhoxhi  orcid.org/0000-0002-1844-3200
Agricultural University of Tirana, AL

Vladislav Valentinov  orcid.org/0000-0002-4247-0364
Leibniz Institute of Agricultural Development in Transition Economies (IAMO), DE; Department of Law and Economics, Martin Luther University, Halle (Saale), DE; Next Society Institute, Kazimieras Simonavičius University, Vilnius, LT

Drini Imami  orcid.org/0000-0002-4716-792X
Agricultural University of Tirana, AL; Corvinus Institute for Advanced Studies (CIAS), Corvinus University of Budapest, HU

Andi Stefanllari
Development Solutions Associates, AL

REFERENCES

- Abate, G. T.** (2018). Drivers of agricultural co-operative formation and farmers' membership and patronage decisions in Ethiopia. *Journal of Co-Operative Organization and Management*, 6(2), 53–63. <https://doi.org/10.1016/j.jcom.2018.06.002>
- Adhikari, B., & Lovett, J. C.** (2006). Institutions and collective action: Does heterogeneity matter in community-based resource management? *Journal of Development Studies*, 42(3), 426–445. <https://doi.org/10.1080/00220380600576201>
- Agrawal, A.** (2003). Sustainable Governance of Common-Pool Resources: Context, Methods, and Politics. *Annual Review of Anthropology*, 32(1), 243–262. <https://doi.org/10.1146/annurev.anthro.32.061002.093112>
- Amblard, L., Guiffant, N., & Bussière, C.** (2023). The Drivers of Farmers' Participation in Collaborative Water Management. *International Journal of the Commons*, 17(1), 411–430. <https://doi.org/10.5334/ijc.1279>

- Bachev, H., & Tsuji, M.** (2001). Structures for organization of transactions in Bulgarian agriculture. *Journal of the Faculty of Agriculture of Kyushu University*, 46, 123–151. <https://doi.org/10.5109/24429>
- Bakucs, Z., Ferto, I., & Szabó, G. G.** (2012). Benefits of a marketing co-operative in transition agriculture: Mórakert purchasing and service co-operative. *Society and Economy*, 34, 453–468. <http://agris.fao.org/agris-search/search.do?recordID=GB2015403237>
- Banaszak, I.** (2008). Determinants of successful cooperation in agricultural markets: Evidence from producer groups in Poland. In *Contributions to Management Science* (pp. 27–46). https://doi.org/10.1007/978-3-7908-2058-4_3
- Bardhan, P.** (1993). Analytics of the institutions of informal cooperation in rural development. *World Development*, 21(4), 633–639. [https://doi.org/10.1016/0305-750X\(93\)90115-P](https://doi.org/10.1016/0305-750X(93)90115-P)
- Bernard, T., & Spielman, D. J.** (2009). Reaching the rural poor through rural producer organizations? A study of agricultural marketing co-operatives in Ethiopia. *Food Policy*, 34(1), 60–69. <https://doi.org/10.1016/j.foodpol.2008.08.001>
- Beyene, Y. B.** (2012). *Collective action in irrigation system management: A case study on the management of two irrigation schemes in Tigray, Ethiopia* (Master's thesis). Wageningen University.
- Božić, J., Bočić, J., Šprajc, I., & Sribljinić, A.** (2019). Croatian Co-Operatives' Story of Revival: Overcoming External Obstacles. *Journal of Co-Operative Organization and Management*, 7(2). <https://www.researchgate.net/publication/336851483>
- Collins, A.** (2002). The determinants of retailers' margin related bargaining power: Evidence from the Irish food manufacturing industry. *International Review of Retail, Distribution and Consumer Research*, 12(2), 165–189. <https://doi.org/10.1080/09593960210127718>
- Collins, A. M.** (2007). Retail control of manufacturers' product-related activities: Evidence from the Irish food manufacturing sector. *Journal of Food Products Marketing*, 13(2), 1–17. https://doi.org/10.1300/J038v13n02_01
- Cook, M. L.** (2018). A life cycle explanation of cooperative longevity. *Sustainability*, 10(5), 1586. <https://doi.org/10.3390/su10051586>
- Cook, M. L., Chaddad, F. R., & Iliopoulos, C.** (2004). Advances in cooperative theory since 1990: A review of agricultural economics literature. In J. Nilsson & G. van Dijk (Eds.), *Strategies and structures in the agro-food industries* (or USDA Research Report 190, depending on version).
- D'Amato, A., Festa, G., Dhir, A., & Rossi, M.** (2022). Cooperatives' performance relative to investor-owned firms: a non-distorted approach for the wine sector. *British Food Journal*, 124(13), 35–52. <https://doi.org/10.1108/BFJ-03-2021-0275>
- El-Ansary, A. I., & Stern, L. W.** (1972). Power Measurement in the Distribution Channel. *Journal of Marketing Research*, 9(1), 47–52. <https://doi.org/10.1177/002224377200900110>
- Etgar, M.** (1978). Selection of an Effective Channel Control Mix. *Journal of Marketing*, 42(3), 53–58. <https://doi.org/10.1177/002224297804200311>
- FAO.** (2020). *Smallholders and Family Farms in Albania*. FAO Country Study Report. Available at: <http://www.fao.org/3/ca7450en/CA7450EN.pdf>
- Field, A.** (2009). *Discovering Statistics Using SPSS (and sex and drugs and rock "n" roll)* (3rd ed.). SAGE Publications.
- Fischer, E., & Qaim, M.** (2012). Linking Smallholders to Markets: Determinants and Impacts of Farmer Collective Action in Kenya. *World Development*, 40, 1255–1268. <https://doi.org/10.1016/j.worlddev.2011.11.018>
- Fischer, E., & Qaim, M.** (2014). Smallholder farmers and collective action: What determines the intensity of participation? *Journal of Agricultural Economics*, 65(3), 683–702. <https://doi.org/10.1111/1477-9552.12060>
- Gardner, B., & Lerman, Z.** (2006). Agricultural Cooperative Enterprise in the Transition from Socialist Collective Farming. *Journal of Rural Cooperation*, 11, 1–18.
- Gaski, J. F.** (1986). Interrelations among a Channel Entity's Power Sources: Impact of the Exercise of Reward and Coercion on Expert, Referent, and Legitimate Power Sources. *Journal of Marketing Research*, 23(1), 62–77. <https://doi.org/10.1177/002224378602300107>
- Goldin, C.** (2016). Human capital. In C. Diebolt & M. Hauptert (Eds.), *Handbook of Cliometrics*. Springer-Verlag, Berlin, Heidelberg, pp. 55–86. https://doi.org/10.1007/978-3-642-40406-1_23
- Grashuis, J.** (2025). Robust Collective Action by Farm Producers: Analyzing Co-Operatives as Common Property Institutions. *International Journal of the Commons*, 19(1), 51–66. <https://doi.org/10.5334/ijc.1372>
- Grashuis, J., & Dary, S. K.** (2021). Design Principles of Common Property Institutions: The Case of Farmer Cooperatives in the Upper West Region of Ghana. *International Journal of the Commons*, 15(1), 50–62. <https://doi.org/10.5334/ijc.1056>
- Hagedorn, K.** (2014). Post-socialist cooperatives in Central and Eastern Europe. *Annals of Public and Cooperative Economics*, 85(4), 555–577. <https://doi.org/10.1111/apce.12051>
- Hansen, R., Hess, S., Nilsson, J., & Ollila, P.** (2024). The commitment of farmers to traditional and hybrid cooperatives: Empirical evidence over a six-year period. *Annals of Public and Cooperative Economics*, 95(4), 949–970. <https://doi.org/10.1111/apce.12469>
- Hansmann, H.** (1996). *The ownership of Enterprise*. The Belknap Press of Harvard University Press.

- Hao, J., Bijman, J., Heijman, W., & Gao, M.** (2024). The effect of trust and social pressure on member commitment in agricultural cooperatives—Evidence from China. *Annals of Public and Cooperative Economics*, 95(3), 919–944. <https://doi.org/10.1111/apce.12467>
- Hunt, S. D., & Nevin, J. R.** (1974). Power in a Channel of Distribution: Sources and Consequences. *Journal of Marketing Research*, 11(2), 186–193. <https://doi.org/10.1177/002224377401100210>
- Iliopoulos, C., & Cook, M. L.** (2023). Agricultural cooperatives: New insights on ownership, governance, and performance. *Annals of Public and Cooperative Economics*, 94(2), 217–233. <https://doi.org/10.1111/apce.12378>
- Imami, D., Skreli, E., & Valentinov, V.** (2021). Food safety and value chain coordination in the context of a transition economy: the role of agricultural co-operatives. *International Journal of the Commons*, 15(1), 21–34. <https://doi.org/10.5334/ijc.1039>
- Karlı, B., Bilgiç, A., & Çelik, Y.** (2006). Factors affecting farmers' decision to enter agricultural co-operatives using random utility model in the Southeastern Anatolian region of Turkey. *Journal of Agriculture and Rural Development in the Tropics and Subtropics*, 107(2), 115–127. <http://www.jarts.info/index.php/jarts/article/view/126>
- Katsikeas, C. S., Goode, M. M. H., & Katsikea, E.** (2000). Sources of Power in International Marketing Channels. *Journal of Marketing Management*, 16(1–3), 185–202. <https://doi.org/10.1362/026725700785100389>
- Key, N., Sadoulet, E., & De de Janvry, A.** (2000). Transactions costs and agricultural household supply response. *American Journal of Agricultural Economics*, 82(2), 245–259. <https://doi.org/10.1111/0002-9092.00022>
- Kola, R., Skreli, E., Osmani, M., & Tanku, A.** (2014). Farmers' characteristics as determinants of collective action: The case of Greenhouse Producers in Albania. *New Medit*, 13(2), 20–27. <https://www.researchgate.net/publication/284837672>
- Kovačić, D., Juračak, J., & Žutinić, U.** (2001). Willingness of farmers to cooperate: Field Study Results in the Zagreb Rural Area. *Drustvena Istrazivanja*, 10(6), 1119–1129.
- Kruijsen, F., Keizer, M., & Giuliani, A.** (2009). Collective action for small-scale producers of agricultural biodiversity products. *Food Policy*, 34(1), 46–52. <https://doi.org/10.1016/j.foodpol.2008.10.008>
- Kurosaki, T.** (2005). Determinants of collective action under devolution initiatives: The case of Citizen Community Boards in Pakistan. *Pakistan Development Review*, 44(3), 253–269. <https://doi.org/10.30541/v44i3pp.253-269>
- Lee, H., & Van Cayseele, P.** (2024). Market power, markup volatility and the role of cooperatives in the food value chain: Evidence from Italy. *European Review of Agricultural Economics*, 51(3), 844–894. <https://doi.org/10.1093/erae/jbac001>
- Lusch, R. F., & Brown, J. R.** (1982). A Modified Model of Power in the Marketing Channel. *Journal of Marketing Research*, 19(3), 312–323. <https://doi.org/10.1177/002224378201900304>
- Markelova, H., & Mwangi, E.** (2010). Collective action for smallholder market access: Evidence and implications for Africa. *Review of Policy Research*, 27(5), 621–640. <https://doi.org/10.1111/j.1541-1338.2010.00462.x>
- Martos-Pedrero, A., Cortés-García, F. J., Abad-Segura, E., & Belmonte-Urena, L. J.** (2025). Internationalization, innovation, and resilience: Financial performance of agricultural cooperatives in southeastern Spain's rural economy. *Journal of Rural Studies*, 117, 103682. <https://doi.org/10.1016/j.jrurstud.2025.103682>
- McGinnis, M. D., & Ostrom, E.** (2014). Social-ecological system framework: Initial changes and continuing challenges. *Ecology and Society*, 19(2), 30. <https://doi.org/10.5751/ES-06387-190230>
- Megyesi, B., & Mike, K.** (2016). Organising collective reputation: An Ostromian perspective. *International Journal of the Commons*, 10(2), 1082–1099. <https://doi.org/10.18352/ijc.657>
- Meinzen-Dick, R., Raju, K. V., & Gulati, A.** (2002). What affects organization and collective action for managing resources? Evidence from canal irrigation systems in India. *World Development*, 30(4), 649–666. [https://doi.org/10.1016/S0305-750X\(01\)00130-9](https://doi.org/10.1016/S0305-750X(01)00130-9)
- Ménard, C.** (2007). Co-operatives: Hierarchies or hybrids? In *Vertical Markets and Cooperative Hierarchies: The Role of Co-operatives in the Agri-Food Industry* (pp. 1–17). Springer Netherlands. https://doi.org/10.1007/1-4020-5543-0_1
- Mike, K., Boza, I., & Molnár, G. T.** (2024). How do business associations support contract enforcement? Evidence from Hungary. *Annals of Public and Cooperative Economics*, 95(4), 1021–1060. <https://doi.org/10.1111/apce.12479>
- Möllers, J., Traikova, D., Bîrhală, B. A. M., & Wolz, A.** (2018). Why (not) cooperate? A cognitive model of farmers' intention to join producer groups in Romania. *Post-Communist Economies*. <https://doi.org/10.1080/14631377.2017.1361697>
- Morrow, J. L., Joyce, R. P., McMahon, W. J., DeMaia, A. M., McVicker, S. C., Parsons, A. E., & Wilcox, K.** (2017). Cooperation among Ugandan farmers: Cultivating social capital. *International Food and Agribusiness Management Review*, 20(5), 673–688. <https://doi.org/10.22434/IFAMR2014.0181>
- Narrod, C., Roy, D., Okello, J., Avendaño, B., Rich, K., & Thorat, A.** (2009). Public-private partnerships and collective action in high value fruit and vegetable supply chains. *Food Policy*, 34(1), 8–15. <https://doi.org/10.1016/j.foodpol.2008.10.005>

- Nugussie, W. Z.** (2010). Why some rural people become members of agricultural co-operatives while others do not. *Journal of Development and Agricultural Economics*, 2(4), 138–144. <http://www.academicjournals.org/JDAE>
- Nunnally, J. C.** (1981). *Psychometric Theory*. New Delhi: McGraw-Hill.
- Ostrom, E.** (2003). How types of goods and property rights jointly affect collective action. *Journal of Theoretical Politics*, 15(3), 239–270. <https://doi.org/10.1177/0951692803015003002>
- Ostrom, E.** (2007). A diagnostic approach for going beyond panaceas. *Proceedings of the National Academy of Sciences of the United States of America*, 104(39), 15181–15187. <https://doi.org/10.1073/pnas.0702288104>
- Ostrom, E.** (2009). A general framework for analyzing sustainability of social-ecological systems. *Science*, 325(5939): 419–422. <https://doi.org/10.1126/science.1172133>
- Ostrom, E., & Ahn, T. K.** (2009). The meaning of social capital and its link to collective action. In G. T. Svendsen & G. L. H. Svendsen (Eds.), *Handbook of Social Capital: The Troika of Sociology, Political Science and Economics* (pp. 17–35). Edward Elgar. <https://doi.org/10.4337/9781848447486.00008>
- Reardon, T., Barrett, C. B., Berdegue, J. A., & Swinnen, J. F. M.** (2009). Agrifood Industry Transformation and Small Farmers in Developing Countries. *World Development*, 37(11), 1717–1727. <https://doi.org/10.1016/j.worlddev.2008.08.023>
- Schultz, T. W.** (1982). *Investing in people: The economics of population quality*. University of California Press. <https://doi.org/10.1525/9780520318540>
- Sexton, R. J.** (1990). Imperfect Competition in Agricultural Markets and the Role of Co-operatives: A Spatial Analysis. *American Journal of Agricultural Economics*, 72(3), 709–720. <https://doi.org/10.2307/1243041>
- Skreli, E., & Imami, D.** (2019). *Medicinal and Aromatic Plants Sector Study – Technical Report prepared for EBRD AASF Project*.
- Skreli, E., Kola, R., & Osmani, M.** (2011). Factors determining collective action in Albanian agriculture: case of apple producers in Albania. *Albanian Journal of Agricultural Sciences*, 10(3), 35–41.
- Skreli, E., Xhoxhi, O., Imami, D., & Rama, K.** (2024). What explains collective action: The impact of social capital, incentive structures and economic benefits. *Journal of International Development*, 36(3), 1622–1646. <https://doi.org/10.1002/jid.3873>
- Staatz, J. M.** (1987). Farmers' incentives to take collective action via co-operatives: A transaction cost approach. In *Cooperative theory: New approaches, agricultural co-operative service, service report*. USDA.
- Stevens, J. P.** (2002). *Applied multivariate statistics for the social sciences* (4th ed.). Erlbaum. <https://doi.org/10.4324/9781410604491>
- Stockbridge, M., Dorward, A., & Kydd, J.** (2003). *Farmer organizations for market access: Learning from success*. www.wye.imperial.ac.uk/AgEcon/ADU/research/projects/farmorg
- Valentinov, V.** (2007). Why are co-operatives important in agriculture? An organizational economics perspective. *Journal of Institutional Economics*, 3(1), 55–69. <https://doi.org/10.1017/S1744137406000555>
- Valentinov, V., & Iliopoulos, C.** (2013). Economic Theories of Nonprofits and Agricultural Cooperatives Compared: New Perspectives for Nonprofit Scholars. *Nonprofit and Voluntary Sector Quarterly*, 42(1), 109–126. <https://doi.org/10.1177/0899764012436399>
- Valentinov, V., Imami, D., & Xhoxhi, O.** (2024). Contract farming in transitional economies: A stakeholder theory perspective. *International Food and Agribusiness Management Review*, 27(4), 633–649. <https://doi.org/10.22434/ifamr1099>
- Wade, R.** (1994). *Village Republics: Economic Conditions for Collective Action in South India*. ICS Press.
- White, T. A., & Runge, C. F.** (1994). Common property and collective action: lessons from co-operative watershed management in Haiti. *Economic Development & Cultural Change*, 43(1), 1–41. <https://doi.org/10.1086/452134>
- Wiggins, S., Kirsten, J., & Llambí, L.** (2010). The Future of Small Farms. *World Development*, 38(10), 1341–1348. <https://doi.org/10.1016/j.worlddev.2009.06.013>
- Williamson, O. E.** (1979). Transaction-Cost Economics: The Governance of Contractual Relations. *The Journal of Law and Economics*, 22(2), 233–261. <https://doi.org/10.1086/466942>
- Williamson, O. E.** (1985). Asset Specificity and Economic Organization. *International Journal of Industrial Organization*, 3, 365–378. [https://doi.org/10.1016/0167-7187\(85\)90030-X](https://doi.org/10.1016/0167-7187(85)90030-X)
- Wolz, A., Möllers, J., & Micu, M. M.** (2020). Options for agricultural service cooperatives in a postsocialist economy: Evidence from Romania. *Outlook on agriculture*, 49(1), 57–65. <https://doi.org/10.1177/0030727019861973>
- Xhoxhi, O., Pedersen, S. M., & Lind, K. M.** (2018). How does the intermediaries' power affect farmers-intermediaries' trading relationship performance? *World Development Perspectives*, 10–12, 44–50. <https://doi.org/10.1016/j.wdp.2018.09.004>
- Xhoxhi, O., Pedersen, S. M., Lind, K. M., & Yazar, A.** (2014). The determinants of intermediaries' power over farmers' margin-related activities: Evidence from Adana, Turkey. *World Development*, 64, 815–827. <https://doi.org/10.1016/j.worlddev.2014.07.012>
- Yoder, L., Wagner, C. H., Sullivan-Wiley, K., & Smith, G.** (2022). The promise of collective action for large-scale commons dilemmas: reflections on common-pool-resource theory. *International Journal of the Commons*, 16(1), 47–63. <https://doi.org/10.5334/ijc.1163>

TO CITE THIS ARTICLE:

Skreli, E., Xhoxhi, O., Valentinov, V., Imami, D., & Stefanllari, A. (2026). When Services Matter: Rethinking Farmer Cooperation in an Export-Oriented Smallholder Setting. *International Journal of the Commons*, 20(1), pp. 433–450. DOI: <https://doi.org/10.5334/ijc.1687>

Submitted: 27 November 2025 **Accepted:** 24 May 2026 **Published:** 03 September 2026

COPYRIGHT:

© 2026 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC-BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. See <https://creativecommons.org/licenses/by/4.0/>.

International Journal of the Commons is a peer-reviewed open access journal published by Ubiquity Press.

