Challenges for smallholder market access: a review of literature on institutional arrangements in collective marketing

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Challenges for smallholder market access: a review of literature on institutional arrangements in collective marketing

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Abstract

Purpose of the review: This review presents recent research on collective action in agricultural markets, focusing on the institutional settings that increase market access for smallholder farmers. It focuses attention on challenging research areas that try to understand and resolve the inherent contradictions that exist between members in the group and between the group and others.

Findings: Collective action in agricultural markets is facilitated by institutional arrangements that effectively resolve the inherent tensions within groups as well as between farmers and other economic agents. Research explores the logic of collective marketing and the impact of trust and reputation on the mediation of opportunistic action in groups. Special attention is given to institutional arrangements on the interface between vertical and horizontal coordination in food chains, especially related to strategies of producer organisations to by-pass middlemen, to meet quality requirements in modern markets and to effectively use postharvest technologies. Research points to the importance of formal and informal rules and regulations in enabling farmers' organisations to bulk and process agricultural products.

Directions for future research: Informed decision making by value chain actors on replicating or upscaling institutional arrangements to improve the performance of their value chain needs information on its social embeddedness and its relation with the legal environment. More comparative research is needed on "workable models" and "best practices" for facilitating collaborative marketing in developing countries.

Keywords: farmers' organisations; markets; cooperatives, bulking; opportunistic behaviour; enabling policies

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Introduction

Stimulated by the writings of North [1] and Williamson [2], market imperfections and the importance of institutions have become a central notion in most economic literature on agricultural development and smallholder market access. Informal and formal rules governing market transactions between competing actors with imperfect knowledge of market conditions have replaced the notion of the "invisible hand in perfect markets". These rules make up the institutional framework [1] or institutional matrix [3] in which market transactions take place. North argues that the institutional matrix, comprised of institutions ("rules of the game") and organisations ("players of the game"), is context and time specific. The institutional matrix itself is inherently dynamic: it functions as the incentive structure in which organisations strive to change institutions to better suit their interests. Different structures have developed in different areas and periods and, as such, result in divergent patterns of economic development. In developing countries, with low and uneven economic development, this points towards challenges to improve these rules and regulations [1, 4–9].

The new focus on institutions has resulted in policy initiatives to make “markets work for the poor” and in adjustment policies in the enabling environment for smallholder farmers [10–13]. This has led to a rethinking about the role of the state in facilitating market access for smallholder farmers. The role of marketing boards has become a point for much debate [14, 15]. Instead of direct public interference in markets as a buyer or seller, the role of the state has evolved to provide rules for the creation of effective institutions to regulate and facilitate markets [4]. Rashid *et al.* [16] took stock of current activities of parastatals in grain markets in Asia and point to high cost and the tendency for these to become vehicles for special interest groups. However, several other studies propose that agricultural stagnation, especially in Africa, is partly a result of the dismantling of state-led organisations (such as parastatals) in an era of liberalisation and privatisation, and its failure to replace them with institutions and public policies that can facilitate smallholder access to market [17–21]. Smallholder farmers face difficulties in liberalised markets and need to generate new ways of cooperation and collective action to fill the institutional gap created by a retreating state [6].

With a waning state, many see farmers’ organisations as key actors in marketing smallholders’ produce and in lobbying for effective market institutions and government policies [5, 17, 22]. Farmers’ organisations have become actors in and objects of policies for institutional innovations: policies are supposed to stimulate the emergence of dynamic farmers’ organisations that link small scattered farmers and retailers in the value chain [23–25]. The preparatory phase of the World Development Report (2008) has generated increased attention towards the role of rural producer organisations [26, 27]. A range of publications on producer organisations geared to an audience of development practitioners have been published with lessons learnt and approaches for effectively strengthening smallholders’ access to markets [28–33].

Postharvest research has traditionally focused on factors related to production, handling and storage that influence the quality or quantity of the product in the downstream market. Many factors that define product quality are in the realm of individual household production, but a whole range of postharvest technologies have been developed to fit collective marketing arrangements including: procedures for quality assurance, delaying quality deterioration during storage or improving processing technologies. However, these technologies do not work independent of the social context: they are used in a specific division of labour between chain actors, with specific rules for contracting and control of these tasks, and in a context of (perceived) risks, costs and benefits.

Postharvest technologies will only work when embedded in an appropriate institutional arrangement. Economic feasibility is important, but it is not the only determining factor for successful adoption. Informal and formal rules influence the possibilities of finding workable arrangements around these technologies, so farmers may decide to make use of or to refrain from using these technologies. Many postharvest technologies and collective processing facilities have been abandoned because the institutional arrangement proved not to be resilient enough to cope with tensions in local cultures [34], changing donor support [35, 36] or the lack of trust within the group [37].

This review is based on two major lines of research on farmers’ organisations and market access. The first line of research explores the logic of collective action and the impact of trust, reputation and mind sets for opportunistic action in groups. Special focus is on the interface between vertical and horizontal coordination in agrifood chains, especially related to changing quality requirements. A second line of research analyses the relation between these institutional arrangements with the changing policy environment. Workable arrangements can only be replicated when the institutional environment is sufficiently conductive. Therefore, several researchers analyse the constraints in the enabling environment for farmers’ organisations to bulk and process agricultural products and stress the political process needed to generate institutional innovations.

Collective action and smallholder market access

Groups that collectively strive to attain benefits for their members face a major challenge: passive group members tend to benefit from the efforts of active group members. The efforts of active members can be diverse: it may be an investment in kind, but may also consist of time spent on issues related to the group or even his/her individual social status, which may be compromised by working to the benefit of the group. This problem of collective action was put on the research agenda by Olson [38]. It has also gained predominance in studies on cooperation and most notably in research on groups that pool income as a group and distribute this to members in equal parts [37, 39, 40]. Several scholars have taken the free-rider problem as a decision making challenge and searched for ways in which this phenomenon can be mediated. Trust and learning have developed as key issues that can prevent opportunistic action in groups. Ortmann and King, reviewing the South African cooperative legislation [41], stress the need for a “life cycle perspective” to cooperatives as they will have to respond with organisational changes in response to the free-rider challenge and need a legal framework to do so. Game theory has developed as a subdiscipline in economics and business science to mathematically model strategic behaviour within collective action [42].

Farmers’ organisations are a specific type of collective action. They generate income by the provision of some sort of commercial service to their constituents. Postharvest activities: bulking, processing and packaging are necessary for market access and need coordinated action. These services can be the main economic objective of the group, but often, access to rural development support [26, 43] and the protection of land property rights [44] are more fundamental in understanding the resilience of groups.

To balance the efforts of active members with the benefits for all members, the group needs to generate its "own income" to pay for the expenses made by active members or hired professional staff. Income from service provisioning to members is used to bear the cost associated with collective action and the remainder is distributed to members, partly by increasing the price of agricultural produce sourced from them, and partly by profit distribution. This twofold way of distributing economic benefits makes the producer organisation different from a conventional firm. Profit maximisation, as the guiding strategy for private firms, is mixed with the objectives of maximising turn-over and improving input price levels to members: economic benefits of the member-owner is generally higher through transactions with the cooperative than by the profit generated by the cooperative. Business strategies and partnering behaviour is not totally geared to profitability. The role of elected board members in decision making in a cooperative generates dynamics that in the normal investor owned firm do not occur [45]: they need to align different "inside" members interest, while the firm typically has "outside" capital investors as the prime decision-making group.

The most common activity of collective action by farmers in agriculture is the bulking of produce for collective marketing or processing [29, 46]. A group of farmers supply their limited quantities of crop harvested to generate sufficient quantities of the product as needed by prospective buyers and define a common price-for-quality system. The crucial function of traders and middlemen in value chains is increasingly being recognised [47, 48]. Typically, within rural societies, the traditional private bulking agent is the village-based farmer-trader that works as an agent for an urban based merchant or processor. Farmers' organisations tend to look for ways to provide these bulking services to their members, substituting these intermediaries. In doing so, the member will have lower transaction costs, as costs to find a buyer and complete the market transactions are reduced by eliminating the costs of the intermediaries. However, they will increase the costs associated with collective efforts to perform the same services. A resulting net benefit will provide an important incentive for member loyalty to the collective marketing group. Without external donor support, this net benefit must be derived from efficiencies in economic transactions compared to the trader, like economies of scale in logistics, market information or postharvest handling. In this bulking process, several issues are crucial: weight of the product, quality of the product, transport logistics and the costs of capital immobilisation.

Vertical integration

The business strategy of vertical integration, by-passing intermediary traders and processors, is being questioned: the complexity of trade, the risks involved, the working capital requied and the need for flexibly to adapt the product portfolio to market demand are the main reasons for the failure of many producer organisations to become successful in marketing, especially in perishable products [49]. Therefore spot markets are still the dominant market outlet for smallholders. Vorley *et al.* [25] conclude that improving traditional markets may offer better prospects for increasing smallholder market access than linking them directly with supermarkets. Because formal institutions often do not provide financial services in rural areas, traditional traders respond to the preharvest cash needs of farmers [49]. The issue of working capital and cash payments to members therefore needs to be resolved by the group willing to engage in collective marketing [50], or the producer organisation needs to generate a price-differential large enough for members to make them wait for deferred payment. Development cooperation (= access to working capital) and fair-trade (= access to premium niche markets) are therefore crucial and logically related to the emergence of many of the new producer organisations in developing countries that effectively provide market access to smallholder farmers [28], inclusive to poorer strata of the population [51]. Discussions about the lack of sustainability as a result of low self-financing capacity and the lack of political autonomy due to donor dependency reflect the more challenging sides of this reality [52].

Postharvest technologies

Postharvest technologies can function as a catalyst for specific modalities of organisational group members. Successful examples of postharvest technologies effectively adopted by organised farmers include the West-African cereal banks [53], the Central American grain silo supply chain, and the cooling tanks in dairy production modules [54]. All include hard technologies adapted by smallholder farmers that are embedded in successful context specific "soft technology" institutional arrangements. These arrangements are context specific, but share a common feature that group pressure is mobilised effectively to discipline would-be-opportunistic individuals (eg, delivering low quality products or default on loans for working capital). The creation of "trust" between chain actors is intimately related to the presence of credible ways of containing untrustworthy behaviour [55], through "lean but effective" internal rules and regulations.

Quality requirements

Quality requirements, often intimately related to farmers' practices in production, are increasingly important [56]. These requirements have to be communicated and enforced. Especially related to agrifood chains is a wide range of studies that analyse the role of trust, reputation and regularity in transactions in supplier-client relations [23, 57]. Capacity enhancing investments of a buyer to inform or train the supplying farmers in specific treatment and handling procedures is only feasible where this farmer sells to that buyer after harvest. This possible dead-lock, due to the absence of credible commitments, is typically resolved by the institutional arrangement of contract farming, which combines service delivery with in-advance binding sales agreements [58, 59]. These services can be provided by the procuring firm or by other service providers using the contract as a guarantee for service payment [60]. Unequal power relations are inherent in most contract farming arrangements between agribusiness and smallholders. Alternative arrangements for service provision, linked to marketing smallholder produce that are less dependent on one specific powerful buyer are being explored, but tend to be marginal in developing countries. Bijman [61] explains the functioning of auction systems as a model of collective marketing. Coulter and Onumah [62] describe the use of the regulated Warehouse Receipt Systems, as a promising institutional arrangement to generate cash for trade and to improve stability in prices, while maintaining non-exclusivity between trading partners.

Legal framework

Formal rules, laws and regulations shape the marketing system in which farmers operate [56]. However, informal rules are considered to be far more important in creating the conditions under which transactions take place [1, 43, 47]. Mechanisms to secure compliance with contracts by farmers in developing countries are rooted in legal pluralism: interwoven formal and informal rules that are generally enforced without the direct involvement of courts and judges, but by a subtle process of combining, formal and informal institutions to put pressure on the potential offender [47, 63, 64]. To be successful, the rules and institutions must be embedded in the local culture and relate to the characteristics of the agricultural sector [65]. Policies to improve the institutional environment are socially embedded and will have to build on country specific historical trajectories [1]. "Modern" fiscal and administrative regulations in a context of widespread informal trade may provide incentives for farmer organisations to choose modes of operation that may end up excluding them from contracts and financial services[66].

Trade policies and regulations affecting access to markets will differ between the type of commodities and between countries, and result from a history with specific configurations of interest groups that influence decision making [16, 67]. In most countries there are policies and regulations (economic, fiscal, agricultural, rural, etc) that could be better adapted to the particularities of smallholder farmers and their economic organisations, eg, competition policy, taxation policy and risk mitigation mechanisms [68]. As many of the policies that relate to the institutional environment for farmers to access agricultural markets are generic, they fail to consider the specific features of smallholder farming and their forms of economic organisation. Advocacy efforts to change these institutions to the benefit of smallholders' often face strong opposition from vested interests in the economy and related bureaucracies.

Conclusion

This article gives an overview of current research on collective marketing by smallholder farmers. It focuses attention to challenging research areas that try to understand and resolve the inherent contradictions that exist between members in the group and between the group and others. Institutional economics with its attention on the constraints of actors operating in real markets can provide a useful framework for describing and analysing marketing strategies and institutional arrangements that link smallholders to markets more upstream in the chain. Postharvest research will benefit from descriptions of effective institutional arrangements around processing and storage technologies that are socially embedded and that depend from the specific historical evolution of the legal environment in each developing country. The concept of transaction costs and the analysis of the institutional matrix that underpins these costs, will add to the comparability of case studies and helps to explore the "generalisation domain", the extent to which workable institutional arrangements in collective marketing may be replicated [69] under different socio-economic and political conditions.

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