



Insights into farmer group effectiveness for promoting the adoption of safe food production standards

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Summary

The adoption of safe food production standards and the related certification systems by farmers play a crucial role in safeguarding public health, environmental integrity and meeting regulatory requirements. Production standards consist of a system of activities or functions that must work together to ensure that the best practices represented in the standard are implemented and complied with. Farmer groups have emerged as effective platforms for promoting the adoption of safe food production standards, offering collective support, knowledge sharing, and resources to individual farmers. We present key insights into the effectiveness of farmer groups in fostering the adoption of safe food production standards, drawing upon existing literature and from experiences working with farmer groups on a production standard in Ghana and Kenya. We specifically evaluate factors that contribute to the success of farmer group initiatives, while also identifying potential challenges faced by such groups and proposing strategies to enhance their effectiveness. By offering a comprehensive review, this study brief contributes to a better understanding of how farmer groups can effectively promote the adoption of food safety standards, ultimately improving the

overall safety and quality of agricultural products. The lessons learnt from this study may be customized and used in improving existing initiatives in other countries in future.

Key highlights

- The adoption of food safety standards plays a vital role in safeguarding public health, and environmental integrity, and meeting regulatory requirements.
- Farmer groups provide mutual support, and if organised into commercially viable arrangements can participate in certification schemes and access.
- Collective actions within these groups can lead to economies of scale in quality control and better access to markets, helping farmers comply with the standards.
- To enhance the effectiveness of farmer groups in adopting production standards, it is essential to focus on governance, social interactions, internal regulations, and an internal control system which provides inspection of all farms.
- Government support and policies can create an enabling environment for farmer groups to thrive and ensure safer food production.

Background

Farmer groups are increasingly regarded as key institutional vehicles for fostering agricultural development by offering farmers mutual support through collective action (Place et al., 2004; Sheilla, 2018). Farmers engage in collective action when they come together voluntarily to address common concerns (Namubiru et al., 2022) or organized into functional groups to achieve a certain objective. According to Okumu and Muchapondwa (2017), farmer collective action allows smallholder farmers to meet critical market requirements such as quality, quantity, and timely delivery of produce to consumers. Farmers' organizations emerged in response to farmer-felt needs, such as the sharing of local resources (land, labour, and water) and market pressures (prices and access to markets) (FAO, 2014; Bizikova et al., 2020; Gava et al., 2021). According to Kujur et al. (2019), farmer organizations are democratically formed and legally registered institutions of farmers. They can be categorized as producer associations, unions, cooperatives, federations with decentralized membership (IFAD, 2016) or community-based organizations.

Tuckman's model, encompassing the stages forming, storming, norming, and performing, provides a valuable framework for understanding how these farmer groups evolve. In the forming stage, individuals come together, establish connections, and define their purpose. This is often followed by the storming stage, marked by conflicts and disagreements as group members assert themselves and navigate differences in ideas and goals. As issues are resolved, the group transitions into norming stage, fostering cohesion and establishing norms and expectations. Finally, the group operates at peak efficiency, with clear roles, effective communication, and shared commitment to achieving the objectives.

The use of smallholder farmer groups/ organizations remains central to the agricultural transformation process, policy formulation and decision-making in support of agricultural development (FAO, 2014; Latynskiy et al., 2016), hence significantly contributing to food security and enhanced food safety within agricultural systems. By promoting collective adherence to food safety standards, these groups have potential to contribute to production

of safer and high-quality food. Rahmadanih et al. (2018), noted these organizations are important avenues through which farmers access information to markets, natural resources, training, credit, storage facilities, input supply, advisory services through extension and education services and social security (Wennink et al., 2007; Liu, 2017; Zeweld et al., 2017; Kujur et al., 2019). Disseminating knowledge on production decisions and farming practices, health and safety, environmental stewardship, and sustainability (Mogues and Benin, 2012; Wossen et al., 2017; Gramzow et al., 2018; Bizikova et al., 2020) are also important benefits for farmer organizations. The groups are also crucial for mobilizing farmers around shared goals, particularly those related to faster service delivery, thus increasing economies of scale to lower the cost of information transmission (Njenga et al., 2021) compared to individual farmers. However, the effectiveness of farmer groups in achieving their goals is influenced by various factors including organizational dynamics, internal motivation, knowledge and external access to agricultural advice and market connections (Sheilla, 2018; Agole et al., 2021; Namubiru et al., 2022; Ramdwar et al., 2013). Additionally, the dedication and patronage of co-operative members play a vital role in determining the endurance and success of such organizations (Bijman and Verhees, 2011; Jussila et al., 2012; Paulus, 2012; Agole et al., 2021).

What we did

This study brief aims to highlight the key factors influencing farmer group effectiveness and evaluate their influence on promotion and adoption of food production standards. Results are based on review of relevant scientific literature on group effectiveness within the agri-food system. The literature was assessed against a criterion, including whether the articles assessed the effectiveness of farmer groups and provided evidence of research to improve their effectiveness. The inclusion criteria followed the conventional population, interventions, comparator and outcome study design (PICOS) structure. To ensure authenticity, the review included all publications accessed on an acceptable standard. Searches were refined by the year of publication.

The realization of key performance indicators for farmer group effectiveness contributes to the engagement of farmer groups by CABI PlantwisePlus programme in Ghana and Kenya in the adoption of production standards. A case study of farmer engagement on production standards in Ghana and Kenya is given, highlighting the process, lessons learned and potential for scaling the approach to other countries.

Findings

Factors influencing farmer group effectiveness

Common goal and member benefits

The effectiveness of farmer groups hinges on the ability to establish and pursue common goals. These shared objectives serve as a unifying force, bringing individual farmers under a collective purpose. Group cohesion, which encompasses the group's tendency to work towards a shared goal, a sense of belonging, and commitment to membership, plays a pivotal role in achieving this unity (Carron and Brawley, 2000; Beal et al., 2003; Agole et al., 2021; Taruvinga et al., 2021). Group cohesion is easily nurtured when members share comparable

values, ambitions, and beliefs, and when trust exists among them. This cohesion is instrumental in various aspects such as group decision-making, goal attainment, identity, and overall member satisfaction (Wassie et al., 2019). Several factors influence the level of group cohesion, including previous group experiences, the current stage of the group, group size, the time members spend together, and the similarities they share (Gikunda and Lawver, 2019; Evans and Dion, 2012; Paulus, 2012).

The pursuit of common goals fosters a sense of purpose and determination among group members promoting collaboration and allowing them to overcome challenges that might seem insurmountable for individual farmers. Besides, common goals serve as a guiding light, ensuring that farmer groups remain committed to their primary mission. Additionally, trust is crucial to the group's willingness to remain in a cooperative, and their commitment to the group. The group actively participate in the cooperative's various operations in order to ensure its success (Barraud et al., 2012; Taruvinga et al., 2021). Similarly, Agole et al. (2021) discovered that group rewards, individual member's objectives, and the structure of tasks within the groups could also impact group cohesion. If there is perceived cognitive dissonance between members' self-concept and the group's failure to adequately reward them based on their initial expectations upon joining, this can lead to reduced collective efficacy.

Growing the capital of a farmer group and increasing profits are essential strategies to enhancing the effectiveness and sustainability of farmer groups. According to Hanggana et al. (2022), effective farmer groups should have a business entity and members should deposit capital, attend meetings, and obey decisions in line with the group's constitution. Members' requirement to deposit capital boosts their sense of belonging to the group, as well as their business capital and benefit from profit sharing. Farmer groups that manage business units according to certain business entity concepts have a clearer arrangement of members' rights and obligations (Hanggana et al., 2022). Such groups, according to Yu and Huang (2020) have succeeded in realizing the goal of farmer empowerment by improving technical efficiency. Additionally, Molina et al. (2021), noted that increasing member operational profit is one strategy to improve member participation. As a result, it is vital to determine the qualities of farmer groups that can boost member earnings in order to encourage member engagement.

Group dynamics, governance and internal organization

An efficient farmer group strongly depends on its internal structure and group dynamics. A clear leadership structure and roles for each member are part of this. According to Levi (2015), group dynamics refers to the interpersonal processes that take place within the group, the rules that control its evolution, and its relationships with other people, other groups, and institutions. These interactions not only define how group members engage with one another, but also the group's intrinsic nature, its activities, how it reacts to its surroundings, and its accomplishments. Nollet et al. (2017) claim that group dynamics can be influenced by both internal and external forces. Meeting frequency, gender distribution, and the constitution are all important factors to consider when thinking about group dynamics (Harry, 2012). Mixed-gender farmer organizations have demonstrated some progressivism: however, despite having men and women in leadership positions, men often predominate in decision-making (Harry, 2012). Women typically hold less important roles in agricultural cooperatives, such that of a secretary, which exacerbates the gender gap.

Additionally, group size can significantly impact group performance (Oesch and Dunbar, 2018). Larger groups consistently outperform smaller groups in problem-solving tasks, particularly when fact-finding is required (Laughlin et al., 2006; Liker and Bókonyi, 2009; Robbins and Judge, 2013; Oesch and Dunbar, 2018). However, when tasks are clear and straightforward, smaller groups tend to be more efficient and faster (Robbins and Judge, 2013). As the group membership increases, individual contributions may be perceived as less impactful, potentially leading members to free ride on the efforts of others. Conversely, Esteban and Ray (2001) found that larger groups have a likelihood of success, achieving greater levels of collective provision compared to small groups. Despite these advantages, larger groups may face challenges such as lower trust levels among members, reduced member inclusion in group activities, and weaker shared awareness.

Clarity of roles within a farmer group ensures that each member understands their responsibilities, fostering a sense of ownership and commitment. According to Ragasa and Golan (2014), assigning defined roles based on members' strengths, expertise and interests prevents duplication of efforts and minimizes conflicts arising from overlapping responsibilities. Furthermore, having clear roles fosters a sense of shared purpose and unity, creating a collaborative environment that encourages knowledge sharing, enhancing task efficiency, and goal achievement.

The presence of a robust leadership structure is fundamental to the success of a farmer group. It establishes a clear hierarchy of authority, streamlining and enhancing decision making processes. According to Masimba (2015), group structure and leadership positively influence farmers' group performance. The group leader plays an important role in managing organizational capacity (Rahmawati et al., 2021). Effective leadership can significantly influence the group's conduct and its ability to achieve goals leading to higher productivity (Achdiyat, 2018; Rahmawati et al., 2021). A well-defined leadership structure allows for delegation of tasks, preventing a single individual from becoming overburdened with responsibilities. Empowering various members to take on leadership roles enables the group to leverage diverse skills and perspectives, resulting in better problem solving and decision-making capabilities.

Additionally, governance within farmer groups is fundamental to their effectiveness. Clear governance structures, transparent decision-making processes and representation ensures accountability and trust among members. Farmer groups also engage in advocacy and representation, advocating for favourable policies and resource allocation at local, regional, and national levels. By participating in governance processes, farmer groups amplify the voices of smallholder farmers, advocate for their rights and enhance their credibility as valuable partners for financial institutions, donors, and government agencies.

Market linkages

The effectiveness of farmer groups relies heavily on their ability to establish strong market linkages, facilitating equitable market access for their members. According to Verhofstadt and Maertens (2014), farmer groups serve as dynamic platforms that enhance market access through the aggregation of produce, stringent quality control measures (Narrod et al, 2009) and the dissemination of crucial market information, ensuring that the products meet industry standards and consumer preferences. By consolidating their harvest, farmer groups become appealing to buyers, streamlining distribution and logistics. Empowering members with timely

market information equips farmers to make informed decisions, strategically timing sales for maximum profit.

Market negotiation is another skill sharpened by farmer groups, often employing experts to secure better prices and terms for their members (Fischer and Qaim, 2012; Ahmed and Mesfin, 2017). Their collective strength bolsters bargaining power, ensuring fair compensation for produce and addressing critical transaction aspects like payment terms and transportation (Rao and Qaim, 2011; Verhofstadt and Maertens, 2015). Value addition is important for these groups, allowing them to invest in processing and packaging ventures that boost product value and command high market prices. By fostering diversification in products and markets, farmer groups reduce dependence on single commodities, strengthening their income base and resilience against market fluctuations and external shocks.

The capacity to forge solid market ties has been associated with farmer groups' success in encouraging the implementation of food safety production standards. By facilitating market access, farmer groups create market incentives for their members to adhere to food production standards, recognizing that adherence enhances their competitiveness and secures market access. The linkage to markets provides insights into consumer demands and regulatory requirements, enabling farmer groups to implement the necessary quality control measures and certifications, thus fostering safer food production practices. Through this synergy of market-oriented strategies and food safety advocacy, farmer groups not only empower their members with improved market access and profitability but also contribute to the safer and quality of agricultural products in the broader marketplace.

Linkage to support services and business development services

The effectiveness of farmer groups is highly dependent on their internal structures as well as the technical support of governmental and non-governmental organizations. Enhancing the formal governance and management capabilities of farmer groups, along with boosting their collaboration with external entities like service providers, and donors appear to yield positive outcomes (Ragasa and Golan, 2014). However, in some cases, members have come together in response to government programmes in order to obtain the associated benefits, and member participation slows down once the benefit has been obtained (Nuryanti and Swastika, 2011). Conversely, adverse external occurrences such as conflicts tend to impede the performance of farmer groups. The extent to which farmer groups interact with external entities is contingent upon several factors, including their vulnerability to environmental risks, the creation of partnerships during their establishment, their affiliation with umbrella or high-level organizations and their scale (Ragasa and Golan, 2014; Verhofstadt and Maertens, 2014).

Access to finance and extension services is critical to the success of farmer groups. Many small-scale farmers face barriers when trying to secure loans from banking institutions due to a lack of collateral and financial history (Zeng et al., 2015). As noted by Verhofstadt and Maertens, 2014, farmer groups can bridge this gap by acting as intermediaries connecting their members with microfinance institutions, government grants, and specialized agricultural credit facilities. By facilitating access to finance, farmer groups empower their members to make necessary investments and improve their overall farming operations (Shiferaw et al., 2014; Zeng et al., 2015). In addition, access to extension services is essential in providing up-to-date information on various aspects of farming such as sustainable farming practices, pest and disease control and soil management. Farmer groups, when effectively organized, can

serve as conduits for these extension services, ensuring that their members have continuous access to expert advice and training (Wossen et al., 2017; Gramzow et al., 2018; Bizikova et al., 2020). The extension service provision can further be enhanced through lead farmers who serve the organized groups of farmers hence bridging the extension service provision gap. Besides, support services can help farmer groups in navigating the complexities of marketing their products, which include market research, value addition and establishing market linkages (Bikkina et al., 2018). These services enable farmers to fetch better prices for their produce, reduce post-harvest losses, ultimately increasing their income.

Role of farmer groups in promoting environmental sustainability and social empowerment

Farmer groups play pivotal role in promoting sustainable agriculture and rural development. Their effectiveness goes beyond enhancing agricultural productivity to encompass critical environmental and social aspects. Farmer groups contribute to environmental sustainability through the adoption of eco-friendly farming practices (Jayasiri et al., 2023). These groups often promote organic farming, reduced chemical pesticide use, and the implementation of agroforestry techniques. By pooling resources together, farmer groups can invest in environmentally friendly technologies such as drip irrigation, organic composting, and precision farming, which reduce water consumption, soil erosion and chemical runoff (Francesconi and Heerink 2011; Abebaw and Haile, 2013). Furthermore, they encourage sustainable land management, crop rotation and biodiversity preservation. Through these practices, farmer groups play a crucial role in safeguarding ecosystems, mitigating climate change, and protecting natural resources.

On the social front, farmer groups foster cohesion, gender equality and empowerment within communities. Moreover, they invest in capacity building programmes, providing training on financial literacy, and entrepreneurship skills. By so doing, farmer groups elevate the socio-economic status of their members, reduce poverty, and enhance food security (Verhofstadt and Maertens, 2015). Additionally, they promote inclusive development by facilitating access to education, healthcare, and social services for rural communities. As farmer groups continue to evolve and expand their influence, their effectiveness in addressing environmental and social concerns highlights their significance in driving ethical practices, reducing negative environmental effects, and long-term economic viability of farm enterprises.

Farmer groups and food production standards

Globalization, rising incomes, increasing health concerns and environmental impacts of farming practices and rapidly growing agricultural exports have all contributed to a greater focus on food safety (Naziri et al., 2014; Jing and Yanfang, 2018). Many studies also emphasize customers' need for high-quality food as well as their growing concern about food safety (Gizaw, 2019; Mwambi et al., 2020). According to Mwambi et al. (2020) strengthening links between farmers, cooperatives, distributors, processors, and retailers, and monitoring food safety based on supply chains are critical pathways to achieving food safety. Many developing countries are becoming more aware of the difficulties in achieving both public and private sanitary and phytosanitary (SPS) standards in export markets as they attempt to increase agricultural exports (World Bank 2005; Gizaw, 2019). In contrast to developed nations, developing countries have significantly weaker government institutions and are still

establishing voluntary quality assurance programmes. While some exporting firms from developing nations are adapting to the international standards in order to access more lucrative markets (Roy and Thorat, 2008; Mwambi et al., 2020), there is still a great deal of concern about food safety in the less stringent domestic market (Naziri et al., 2014).

Smallholder farmers confront greater challenges in dealing with the increasing predominance of safety standards on both international and domestic markets (Gizaw, 2019). According to Mwambi et al., (2020), higher compliance expenses in high-value market chains are a burden that threatens smallholder farmers. Additionally, smallholder farmers face challenges such as: (i) low incentives to invest in food safety along the food value chain, (ii) value chain actors prefer to work with larger farms to reduce transaction costs associated with communication and downstream monitoring activity; and (iii) smallholders typically have a limited history of getting involved in safety management and lack the necessary reputation (Naziri et al., 2014). As a result, farmer groups are viewed as crucial by policymakers and development practitioners in influencing food safety (Naziri et al., 2014; Jing and Yanfang, 2018). However, farmer groups' effectiveness in the domain of food safety is still a developing issue in the literature. Much focus has been to demonstrate how collective action may help smallholder farmers gain safe access to demanding markets (Wang et al., 2012; Gizaw, 2019).

Organising smallholder farmers into commercially viable arrangements can enable them to participate in certification schemes by achieving economies of scale and reducing the cost of quality control. According to Naziri et al., (2014) collective action can help farmers get access to markets by strengthening their bargaining power with traders, facilitating access to marketing resources, and facilitating cooperative quality control, certification, and labelling. A case study from Kenya and India demonstrates the critical importance of collective action and the importance of public-private partnerships in retaining smallholders in the export market supply chain by achieving food safety standards (Narrod et al, 2009). However, collective action is challenging, particularly because of potential bureaucratic costs, mismanagement, and free-riding behaviour on the part of members (Olson and DeFrain 2000). Collective action will work better if group governance is explicit in terms of entry requirements, rules, decision-making processes, incentives, and sanctions (Wang et al., 2012; Jing and Yanfang, 2018, Durocher-Granger et al., 2023).

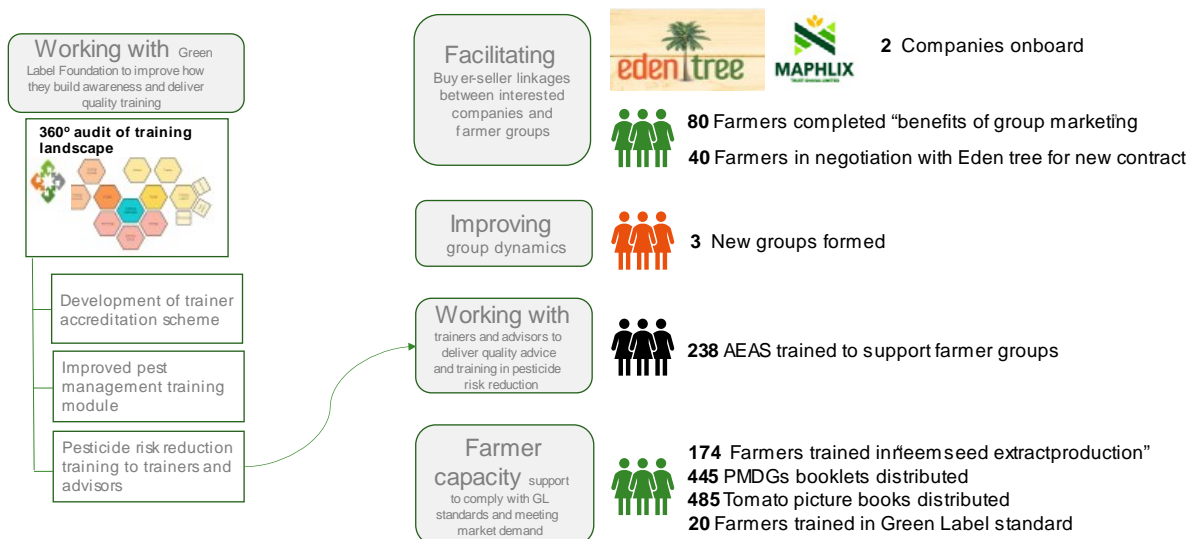
Working with farmer groups to promote the adoption of Ghana Green Label Standard

The Ghana Green Label Standard is a national certification scheme aimed at promoting safe food production, postharvest handling and distribution using good and environmentally sustainable agricultural practices. The scheme is modelled to certify farms and firms that comply with the requisite production and distribution systems that ensure safety and environmental sustainability are not compromised until produce reaches the consumer. It is implemented by the Green Label Ghana Foundation, an autonomous organization formed as a Public-Private Partnership between private sector stakeholders in the horticulture industry and the Horticulture Development Unit of the Crops Services Directorate of the Ministry of Food and Agriculture (MoFA), with the active participation of the Ministry of Trade and Industry, the Food and Drugs Authority (FDA), the Plant Protection and Regulatory Services Department of MoFA, (PPRSD) and the Ghana Standards Authority (GSA). While the Green Label secretariat had trained some farmers/farmer groups and aggregators/buyers in the vegetable sector in the standard, including certification, wide uptake of the standard has been

limited by various factors. Our initial gap analysis and literature review showed the adoption of standards is driven by market incentives. Green Label had initially focused on getting farmer groups trained and certified, but the groups were not properly linked with markets or buyers for them to realize the benefits of following the standard. Also, there was a general lack of awareness about the standard by farmers and farmer intermediaries such as agricultural extension workers. The lack of technical knowledge to implement some of the requirements for the standard, such as effective pest diagnosis, and access to low-risk plant protection products to enable safe food production were also identified gaps. CABI PlantwisePlus programme partnered with Green Label to address some of these gaps.

- 1) The programme worked with the Green Label Foundation to improve how they build awareness and deliver quality training.
- 2) They facilitated buyer-seller linkages between interested companies and farmer groups, enabling certified farmer groups to work closely with their market partners. This enabled a win-win situation where buyers can fulfil the quantity and quality they require, while the farmers get a premium price for their produce. Two companies have already been onboarded through these processes – Eden Tree Ghana and Michel Camp Water User Association, working with 20 and 40 certified farmers respectively. New groups trained under Green Label will be directly linked to buyers thereby connecting supply and demand.
- 3) PlantwisePlus worked with trainers and advisors to deliver quality advice and training in pesticide risk reduction. A total of 238 agricultural extension agents (AEAs) have been trained in eight regions of Ghana. The intention was for the AEAs to have knowledge of the standard, to support those farmer groups that are interested in participating. The training course covered 10 modules, pest diagnosis, use of low-risk pesticides, and safe pesticide usage using CABI's Plantwise Management Decision Guides (PMDGs). In order to align with the standard, a review of 286 PMDGs was done, and the material was disseminated for wider use by extension workers and farmers.
- 4) They improved group dynamic through trainings.

Ghana Pilot (design)



KNOWLEDGE FOR LIFE



Working with farmer groups to promote the adoption of Kenya's KS: 1758 - horticultural code of practice

KS1758 is a Kenyan horticultural code of practice that was introduced in 2016. Part 2 of the code covers fruits, vegetables, herbs, and spices. The code is anchored on four pillars; food safety, environmental sustainability, worker health and safety, and plant health. This code applies to procurement of inputs, production, and placement of horticultural produce in the market. The code applies to growers, propagators, breeders, consolidators, traders, shippers, and cargo handlers. An initial gap analysis clearly indicated various reasons for the low uptake of the standard among smallholder farmers since its inception. Key among them being the low number of trainers of the code, lack of awareness among the general public, and lack of training materials to support the trainers. CABI, through the PlantwisePlus programme, partnered with the KS 1758 standard implementation committee to support the adoption of the standard around the identified intervention areas.

CABI through the Plantwise Plus supported the training of 12 national trainers, who are expected to reach more farmers at national levels. Through partnerships with other organizations and organized groups the programme has trained lead farmers and service providers who are expected to bridge the extension gap and disseminate good agricultural practices around the standard to farmers they serve under the organized groups. CABI, in partnership with the Microenterprise Support Programme Trust (MESPT), has supported the training of 12 lead farmers and 35 business service providers (BSPs) who are serving 2000 farmers in Taita Taveta county. The BSPs are clustered into organized groups of farmers called estates, with a defined number of farmers under them. The main role of the BSPs is to train and follow up with farmers to ensure adoption of the different technologies, and train farmers in planting and general agronomic practices. The 12 lead farmers have established demonstration farms which are used to train other farmers on different technologies. CABI has further partnered with MESPT to offer training to 32 service providers in Makueni county with

the aim of bridging the gap in extension service delivery. The trainings cover key aspects of the KS 1758 standard including IPM strategies, general pest management, and safe use of pesticides. The 32 service providers are linked to KEITT Exporters Ltd and are serving mango fruit farmers who are supplying the exporters. To further empower the lead farmers/service providers, CABI in partnership with the KS 1758 standard implementation committee, is in the process of developing materials that can be used by the lead farmers and service providers as they serve farmers in their groups. CABI has partnered with other institutions to develop PMDGs on tomatoes, bananas, sweet potatoes, and peas. The materials and the PMDGs have been translated into Swahili, that can be understood by the service providers and the farmers they serve, to enhance service provision.

The way forward

The utilization of farmer groups has shown great potential for promoting agricultural development and transforming the livelihoods of smallholder producers. Through collective action, farmers can enhance market access, achieve economies of scale, and reduce costs associated with quality control. Although the role of farmer groups in the domain of food safety is still a developing issue in literature, our case study, utilizing the key identified factors of group effectiveness, shows that farmer groups are critical for achieving safer food production, especially for the domestic market. Farmer groups can be an effective solution to persuade farmers to comply with production standards, by leveraging their collective strength and resources, and enabling appropriate linkages to markets. Adherence to standards implies the adoption of costlier but less damaging production methods, and extra costs for certification. According to this rationale, farmers would need to be paid a higher tariff in compensation. Fostering buyer-seller relationships and strengthening such relationships create market incentives for farmers to adopt and comply with food safety standards, while working in a group lowers transaction costs associated with certification. On the demand side, raising consumer awareness about the importance of food safety standards can enhance demand for safer food, further motivating farmer groups to deliver quality products. However, addressing the key challenges faced by farmer groups such as governance, social dynamics, internal controls, and quality management systems is essential for their effectiveness. There is also a need for supportive policies and an enabling environment for farmer groups to adhere to food safety standards effectively.

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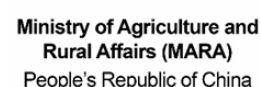
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