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Smallholder Value Chains for Food Security

A Scoping Study with Particular Attention to Farmer Groups and Innovation Platforms Based on Landcare Principles

Introduction

The origin of this study lies in the Australian International Food Security Research Centre (AIFSRC) in the Australian Centre for International Agricultural Research (ACIAR). AIFSRC is continually searching for low cost models suitable for application in African conditions and capable of producing enduring contributions to enhanced food security, economic growth and poverty alleviation. This study takes the Australian Landcare model and explores the scope for its wider application to enterprise development and market participation in Africa.

This brief summarises the full report produced from the study, that can be downloaded from the AIFSRC website. The focus of the report is the use of farmer groups and innovation platforms (IPs) to promote smallholder market participation. The natural resource management (NRM) experience with community based Landcare programs in a number of countries is seen as a relatively low cost but potentially effective and durable approach to increased smallholder focus on commercial agriculture, and the attendant positive benefits. Landcare is driven by its membership and thereby empowers participants to address issues of common interest. Their individual human and accumulated social capital bring skills and expertise as well as cohesiveness and trust to the work of the group, and these are qualities essential for enterprise development as well as NRM.

This study concentrates on several East African nations, particularly Kenya, Tanzania and Uganda where Landcare initiatives have been introduced. A questionnaire used in the study to obtain expert input into the establishment and conduct of farmer groups and IPs is focused on Kenya, but the results have wider relevance for African smallholder agriculture.

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Key Points

- » Food security and related malnutrition and poverty remain significant problems for many East African smallholders.
- Poverty traps' persist, denying smallholders the opportunity to break away from an ongoing cycle of malnutrition, low productivity and lack of income.
- » Smallholders face low yields, very limited land availability, poor infrastructure and limited access to inputs and services.
- » A changing social and economic environment is bringing new opportunities: population growth; rapid urbanisation; strong economic growth; and emerging modern food retailing requiring more sophisticated production, distribution and marketing.
- » Smallholders supply 80% of East Africa's food production, but only 10% are commercial producers. The benefits of market participation are likely to be be significant, but so are the costs and risks of market entry.
- » Although a comprehensive agenda for smallholder market participation would be broad and embrace a range of issues, there is significant scope and potential for smallholders to improve their position.
- Through collective action by farmer groups, smallholders can achieve a viable scale of production, pool their risks, combat high transaction costs, enhance their negotiating position and contain expensive price discovery.

- » Landcare, a 'grassroots', community-based initiative, is an exemplar model to guide the establishment and conduct of farmer groups. It relies on the work of its members but seeks public and private partnerships and makes effective use of accumulated social capital.
- » Farmer groups also need to engage others in the value chain to facilitate their production and market access.
- An effective networking mechanism is an innovation platform (IP), comprising value chain partners supplying inputs and downstream value adding functions and supported by public and private organisations providing assistance with facilitation, research and capacity building.
- » Both farmer group and IP concepts enjoyed the support of respondents to a Kenyafocused questionnaire developed for this study. Responses indicated that, while major organisations were seen as playing a highly valued support role, sensitivity is needed with respect to the underlying ownership of IPs and members' preferences concerning IP business and directions.
- » A Kenya-focused, integrated farmer group – IP framework is presented, together with possible next steps regarding implementation. Either a national or regional initiative, it should probably be piloted first on a smaller scale, to evaluate performance and inform a cost-benefit assessment, prior to considering a wider rollout by government and other funding agencies.

3



East African Smallholders, Food Security and Food Markets

In East Africa around 50% of people live in poverty, and some 80% of the poor live in rural areas. The typical smallholder family, operating a farm of less than 2 hectares, experiences regular food deficits in dry years, with insufficient household income to reliably meet health and education needs. Malnutrition and stunting among children younger than 5 years of age is widespread.

Smallholders account for three-quarters of food production in Kenya, Tanzania and Uganda, with much of the labour supplied by rural women. All three countries have been net food importers for the past 30–40 years and, with population forecast to increase dramatically by 2050, this may increase further if domestic supply is unable to respond to increased demand. East African maize and cereal yields lag seriously behind those achieved elsewhere, including many other African nations. East Africa has relied on increasing the area used for agriculture to expand its food production, but this is no longer possible due to scarcity of land. Agricultural GDP per worker has shown little growth in the past 25 years, with key factors including limited access to and expense of inputs, slow and limited uptake of technology, a low standard of infrastructure, and difficulty in accessing finance and approved loans.

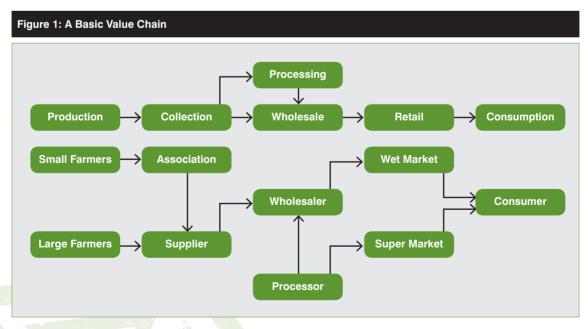
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Smallholder Economic Welfare and the Value Chain

Recently, some positive developments have given rise to emerging opportunities: Sub-Saharan Africa (SSA) will become the world's second-most populous region after South Asia; urbanisation is occurring at a rapid rate; Africa contains several of the fastest growing economies in the world; and modern food retailing using sophisticated production, distribution and marketing approaches is emerging.

The developments in Africa offer smallholders a new chance to break away from the 'poverty trap' that has historically dogged so many and condemned them to poor food security, health, education and related outcomes. However, only about 10 per cent are currently regarded as commercial producers, with the remainder either locked into subsistence or lacking the assets to increase their participation in risky markets. Most would need to undertake significant adjustment to take advantage of changing market demands and the associated opportunities. Transition to a more commercial focus would require engagement with the highly dynamic value chain (Figure 1) that connects agricultural producers to final consumers via incremental value adding steps such as product aggregation, storage, processing, distribution, wholesaling and retailing; and includes market and government requirements for food safety expressed through standards, certification and the regulatory regime.

In many cases much of what would help smallholders participate successfully in the value chain is beyond their reach, as responsibility for key decisions often lies with government—as is the case with the provision of infrastructure, macroeconomic management, competition policy, land tenure, product safety and contractual law and trade restrictions. However, smallholders can better position themselves through the use of farmer groups—either informally as part of a farmer's association; as part of a contractual farming arrangement involving a processor or retailer; or as a formal entity with a constitution and subject to legislation, such as a cooperative.



Source: Adapted from Vermeulen et al. (2008)

Farmer Group and Smallholder Capacity Development

High transaction costs, property right uncertainties, poor availability of market information and costly price discovery make it difficult for markets to function efficiently and generate competitive outcomes for individual farmers in the value chain. But farmer groups, using collective action and pooling risks, can secure better outcomes in input and output markets and strengthen their negotiating position in the chain.

Some services perhaps made available more effectively in a group context include rural loans (for both men and women), bundled finance products with insurance, input procurement, training and information and communications technology to overcome remoteness and isolation from markets.

The format, future role and contribution of farmer groups are best left as flexible, to respond to particular circumstances, but group leadership, cohesion and other factors (Box 1) are prerequisites for success. Some farmer groups will be based on existing social or faith-based groups. Group members will benefit from acquiring skills, possibly from other value-chain participants (e.g. processors or retailers) or through public–private partnerships with donors and/or government agencies.

A critically important element of the strategy to build the capacity of smallholders and their farmer groups is the attention given to rural women, who are responsible for generating a significant part of agricultural production but are often not able to undertake relevant training due to inferior access to assets and technology. Some key findings from a World Bank (2012) report on rural Kenya indicated that significantly more men than women: owned land individually; owned all types of livestock except chickens; sold crops and decided on the use of revenue from the sale of most crops and livestock, except chickens; sought extension advice; held leadership functions in groups; earned more income, both on- and off-farm; had a savings account; and had applied for and received credit. One option for improved training for rural women is to use farmer field schools (FFSs), and there is significant potential to use the existing FFS network in SSA.

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Box 1: Relevant Factors for a Successful Farmer Group

- » Homogeneity of people in the group in terms of socioeconomic status and cultural values
- » Size of the farmer group matches the organisational abilities of its members and the type and scale of activities undertaken
- » Services provided by the group reflect member demands and can be delivered by the group
- » Commercial activities undertaken make good business and commercial sense
- » Self-reliance and autonomy in that the group is neither dominated by nor overly dependent on outsiders
- » Financial capacity to support its own activities and not be heavily dependent on subsidies

- » Skills and education at an appropriate level among the group's membership
- Active participation by members in decision-making and use/provision of services
- Good organisational structure, management, and accountability
- » Operational legislation that promotes good governance and avoids excessive regulation
- » Focus on undertaking a limited number of activities effectively rather than a large number of activities less effectively

Source: Adapted from Stockbridge et al. (2003)



Innovation Platforms

A further initiative that assists smallholder farmer groups and others in the value chain to address constraints and opportunities is the innovation platform (IP). An IP comprises a dynamic membership drawn from the public, private and non-government sectors with interests in the success of the value chain and preparedness to work together to achieve individual and through-chain goals. IPs can assist by focusing direction, assessing options to address issues, and implementing solutions to improve performance. Of particular importance is collaborative research and development (R&D). In the life of an IP, public sector and NGO participants often take significant responsibility early on before other members, including farmer groups, play a more significant role as the activities become more 'hands on'. The mechanisms at play in successful IPs include improved collaboration amongst value chain partners; skills and technology enhancement; improved community attitudes: improved access to and use of technologies; and moreextensive networks.

Some Lessons from Landcare

One model that may guide East African smallholder efforts to participate in value chains is Landcare. With origins in Australia, Landcare has been taken up in South Africa (in 1997) and more recently Uganda (2003), Kenya (2005) and Tanzania (2008). It adopts a 'grassroots' approach based on the efforts of a voluntary movement of local people empowered to plan and implement their own programs for sustainable land management, with the support of government and the business community. In part, Landcare groups have been successful because of the skills and expertise of their members, as well as accumulated social capital, enabling problem identification and solutions across farm boundaries. Skilled facilitators have proven to be key.

The successful development of Landcare in Uganda is particularly relevant, as it looks to be the only East African nation using IPs to advance the work of Landcare groups. IPs have helped with the training of facilitators, resolution of issues and exchange of information, and have been the host organisation for researchers to collaborate with farmers for mutual benefit.

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Kenyan Case Study Questionnaire

A questionnaire was developed to further test the proposed use of farmer groups and IPs, with input provided by 43 respondents drawn from government and international agencies, research organisations, industry and NGOs in Kenya and elsewhere.

There was solid support from respondents for both the farmer group and IP concepts. The top ranked benefits attributed to farmer groups included strengthening of negotiating positions, lower input and marketing costs and attracting buyer interest. The quality of group leadership, gender, governance arrangements, tangible and early outcomes, the availability of facilitators, honesty and trust amongst the group membership were seen as important factors contributing to the successful establishment of farmer groups. Strategies for delivery of training among farmer groups needed to be sensitive to local community preferences and cultural practices, especially gender related issues. The benefits to be gained from IPs includes access to agricultural extension advice and training, local infrastructure, market and product choice advice, procurement of inputs and market information. The identification of private and public sector participants, apart from farmer groups and value chain partners, would depend on the selection of IP activities (e.g. capacity building of farmer groups, overcoming logistical hurdles, food safety concerns and trade barriers).

As well as IPs with a county/district or subcounty/subdistrict focus, which could access existing centres of research and administration, a national focus to deal with broader issues affecting the value chain was also popular amongst respondents. The contribution that R&D organisations could make in the early phases of an IP was seen as particularly important, as was the training of rural women. However, there was a range of community opinions about the need to tailor local solutions to prevailing circumstances.

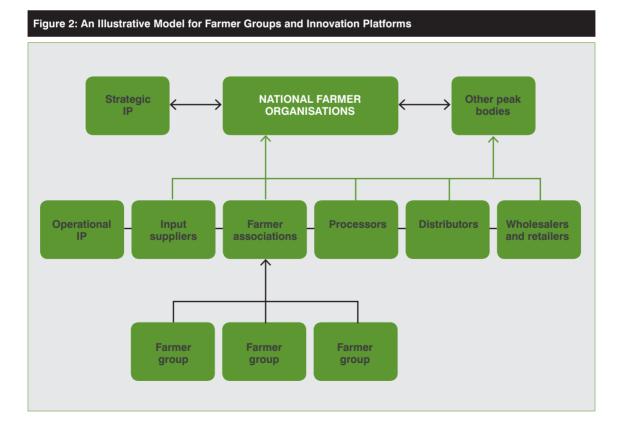
A consistent message was not to lose sight of group and individual ownership, inclusiveness and empowerment for the effective performance and success of farmer groups and IPs. Technical, financial and logistical factors, as well the inclusion of innovation were also identified to be central to viability of the groups, and personal and social skills such as leadership, participation, tolerance for mistakes, trust and preparedness to share would be key ingredients for success.

Implementing a Farmer Group – Innovation Platform Framework in Kenya

Using this approach to group development and member participation and interaction, a model framework focusing on Kenya shows how farmer groups and IPs can come together to address their mutual interests (Figure 2).

Farmer groups, the fundamental unit of the framework, have an underlying purpose of enterprise development with a view to market participation and increased household incomes. Smallholder interest in the value chain lies in partnerships with suppliers of inputs and services and downstream storage, processing, distribution and retailing activities adding value on the forward journey to the market. Associations of farmer groups, can acquire the scale that attracts interest from their partners. Facilitators or brokers help progress the work of farmer groups and IPs. Services provided by research and government agencies, NGOs, and peak industry and farmer organisations would be demand driven by the needs of the IP.

While operational IPs are concerned mainly with facilitating regular business from product development to point of sale, strategic IPs focus on higher level issues affecting the entire chain or multiple chains (e.g. related, for example, to production, distribution, infrastructure, food safety, trade or biosecurity regulation). Operational IPs may also include other public and private agencies and organisations whose role is in support, coordination and R&D.



Findings and Recommendations

The Landcare approach is a sound basis for the establishment and conduct of farmer groups and IPs. The manner in which Landcare has been introduced in South Africa and East African nations is particularly relevant as it has shown how human and social capital can be developed and applied in a smallholder context.

Most, if not all, of the elements outlined in Figure 2 exist today in Kenya, but are not part of an integrated approach as presented here. This framework would also have broader applicability beyond Kenya and could be adapted in other East African nations and possibly other smallholder environments. Government and other relevant decisionmakers would need to decide whether to adopt or further develop the framework. Both options would require extensive stakeholder consultation in regard to the extent of smallholder coverage, the number of farmer groups and IPs, and the related costs and benefits expected to be generated over time. Any public sector involvement would need to be sensitive to potential ownership and empowerment related concerns held by smallholders and other beneficiaries.

ACIAR and AIFSRC may use the scoping study to identify future work seen as potentially worthwhile for inclusion on the research agenda. Feedback from partner organisations, governments and broader stakeholders could assist in this regard; hence, wide dissemination of the findings of the study is recommended.



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Citation

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Full Report

The full report can be downloaded from http://aciar.gov.au/aifsc/projects/ landcarebased-approach-food-security.

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