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EXTENSION, GOVERNANCE AND CAPABILITY BUILDING ALONG THE VALUE CHAIN: DO PARTNERSHIPS BETWEEN FARMERS AND EXPORTERS LEAD TO LEARNING AND INNOVATION? INSIGHTS FROM KENYA'S CUT-FLOWER INDUSTRY

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ABSTRACT

Partnerships between farmers (particularly smallholders) and exporters for market access, knowledge exchange and technical support are a common feature in Kenya's horticultural industry. This paper uses case-studies of the partnerships between smallholder cut-flower farmers and exporters in Kenya to investigate the role of these partnerships in fostering learning and innovation. The paper argues that while high costs of technology, knowledge intensity of production, limited access to capital and stringent market standards connive to exclude smallholders from lucrative export markets, these partnerships have in-built extension and advisory services that help build the farmers' capacities. The paper examines two case- studies, one involving a contractual

partnership (smallholders/exporters) and the other, a non-contractual partnership (medium-scale farmers/exporters), in order to explore the role of institutional arrangements within these partnerships and how these affect interactions, learning and capacity-building. The paper applies mainly qualitative approaches including in-depth interviews, documentary analysis and participant observations to conclude that whereas the dominant literature portrays a 'lock-in, lock-out' scenario in the majority of such partnerships, the proper institutional set-up and governance arrangements could enhance opportunities for learning and innovation for smallholder farmers.

KEY WORDS: *INNOVATION, INSTITUTIONS, LEARNING, PARTNERSHIPS, SMALLHOLDERS*

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INTRODUCTION AND OBJECTIVES

As part of its policy reforms to strengthen the agricultural sector and turn agriculture into viable commercial ventures, the Government of Kenya has been promoting pluralism in extension and advisory services since the mid-1980s. This policy shift from a largely public sector-led extension model has led to the evolution of a diversity of actors in extension, including private commercial companies in the horticulture and tobacco subsectors, parastatals providing services to producers of specific commodities, NGOs, CBOs, FBOs, civil society organisations (CSOs) and producer associations providing services to their members.

The privatisation and commercialisation of extension and advisory services began in market-oriented enterprises such as dairy, sugar cane, tea, coffee and pyrethrum. To implement the policy of commercialisation of extension and advisory services, the national agricultural sector extension policy (NASEP) implementation framework provides that:

- (i) extension services will be commercialised if the enterprise(s) are market-oriented, commercial in nature and competitive enough to create demand for extension services at full cost recovery
- (ii) extension services delivered to groups of smallholders², producing at subsistence level, will continue to be free. However, partial or full

- cost recovery will be introduced over time (in a phased approach) as their enterprises become commercialised
- (iii) extension services delivered to groups of smallholders or individuals, producing at commercial level, will be provided at a cost agreed upon between the service provider and the client
- (iv) services delivered on demand to individuals producing at subsistence level and not in a group will be provided at a cost to encourage a group approach for cost effectiveness
- (v) the government will be responsible for providing extension services of public goods in nature; they could either be contracted out or delivered by public sector extension personnel.

NASEP also provides that the private sector involvement in extension and advisory service delivery will be encouraged by:

- (i) The withdrawal of the public sector in areas of service provision where the private extension service providers are available and willing to serve the clients and
- (ii) contracting out extension service delivery to the private sector where the public sector cannot perform efficiently or competently.

Institutions – defined as the rules of the game (North, 1990) including the rules, norms, habits and practices – influence the behaviour and interactions amongst actors in society. They largely determine winners and losers by creating

incentives and rewards for certain behaviours, while allocating sanctions and punishment for other sets of behaviour. Beyond defining incentives and sanctions, institutions also determine resource allocation and shape learning and innovation.

The central theme of this paper is the role of the institutional architecture of partnerships between farmers and exporters in the cut-flower industry in Kenya and the influence of such institutions — whether contractual and formal or non-contractual and informal — on the outcomes of these partnerships, in terms of enhancing farmers' innovation and learning capabilities. The paper uses two contrasting case-studies of partnerships involving exporters and small-scale farmers (contractual and formal), and another involving exporters and medium and large-scale farmers (non-contractual and informal).

Section one of this paper defines capabilitybuilding in the context of this study and analyses the use of partnerships as a capability-building strategy. In this section we also describe the cutflower value chain to highlight the importance of these partnerships for export market access.

Section two discusses the research methods, the case selection criteria and presents data on

2 'Smallholder' is defined in terms of the economic size or scale of enterprise, not the physical size of the land on which an enterprise is carried out.



the two cases, highlighting how the partnerships are initiated, the types of institutional framework and the mechanisms for training and technical and advisory services offered to farmers as part of the partnerships.

Section three discusses the case-study findings in light of opportunities for interactions, the extent of monitoring and co-ordination required and investments in technical support and advisory services. This section leads to a short concluding section that summarises the findings in light of the role of institutional set-up on the provision of extension and advisory services within the contrasting partnerships.

Why focus on capabilities for learning and innovation?

This paper draws its definition of capabilities from the works of Leonard–Barton (1992) on 'core capabilities' in which capabilities are defined as the 'knowledge set that differentiates and confers competitive advantage' (p. 113). Leonard–Barton identifies four dimensions of 'core capabilities' as: (i) skills and knowledge base; (ii) technical systems; (iii) management systems and (iv) values and norms. The first dimension, 'skills and knowledge base' refers to: 'the difficult-to-imitate know-how, talents and experiences', which are embodied in employees/individuals. The second dimension refers to the fact that this knowledge is sometimes embedded in technical systems. This is in keeping

with Mackenzie and Wajcman's (1985) assertion that technologies are more than physical artefacts but an embodiment of knowledge. The third dimension refers to management systems (systems of monitoring and co-ordination that guide knowledge creation and control) while the fourth dimension – values and norms – describes the role of institutions in determining how knowledge is generated, shared and controlled.

Building farmers' capabilities allows them to sense and seize new opportunities that help them achieve competitive advantage and respond to a constantly changing environment. There are close links between capabilities (the skills set that allows farmers to sense and seize new opportunities) and innovation (the application of new knowledge for social and economic benefits). Innovation is about whether new knowledge when gained is utilised to enhance competitiveness. We emphasise how partnerships with private sector actors (exporters) influence farmers' capabilities to respond to challenges and changes. This focus on capabilities emphasises the importance of knowledge and innovation in addressing the needs of smallholder farmers.

We argue that interactions, knowledge creation and sharing and linkages are key to generating new innovations and building innovation capabilities. This argument is partly supported by the systems of innovation (SI) literature where the ability to continuously innovate is seen as central to

long-term competitiveness (Mytelka, 2000). Particularly important are the inter-firm relations involving sustained interactions between producers and users of innovation. These inter-firm linkages often constitute ongoing co-operative relationships that involve exchange of other kinds of knowledge that shape learning and technology creation (Lundvall, 1985; Freeman, 1987; Dosi *et al.*,1988; Lundvall, 1992; Nelson, 1993; Edquist, 1997; OECD, 1997).

Are partnerships with private sector (exporters) likely to lead to building farmer capabilities?

The Kenyan Government is promoting partnerships between smallholder farmers and agribusiness through contracts (RoK, (2004)³ as part of its long-term objectives aimed at promoting marketing, agro-processing and trade. These partnerships are conceived as mutual arrangements in which small-scale farmers enjoy assured markets for their products, receive extension and advisory services, access inputs and credits, while the contractors (agribusiness) benefit from assured supply of commodities of higher quality.

The term 'partnerships', as used in this paper, refers to co-operative relationships between

3 The Strategy for Revitalization of Agriculture (SRA), p. 106

different actors. With respect to farmers and exporters, which are viewed as business entities (firms), partnerships refer to non-equity based arrangements, that is, each farm/firm remains as a separate entity even though they agree to cooperate on certain issues. In the broader literature, such partnerships have been acknowledged as an effective mechanism for learning, knowledge sharing, technology transfer, market access and the development of technological and innovative capability (CSD, 1998; Chataway and Wield, 2000; Hall et al.; 2001; Chataway et al., 2005; Smith, 2005).

However other analysts, notably Robinson et al. (2000) have warned that partnerships could often disguise differential power relations and that the language of partnerships could be a smoke-screen for other forms of relationships. The power asymmetries raise issues that have led scholars to question the potential of partnerships to contribute to the building of small-scale farmers' capabilities. For example, Christopher and Juttner (2000) have argued that as a result of the asymmetries, 'a majority of companies will find themselves in a chain which is dominated by the so-called "chain captain" and are therefore unable to proactively define the terms of the relationship from such a weaker position'. Further, Johnsen and Ford (2008) while considering the concept of asymmetry in customer-supplier relationships have noted that often 'smaller suppliers may have little option but to follow the stipulated relationship norms of a larger

customer if they wish to maintain the relationship' and often the smaller suppliers become specialised into narrow confines of the relationships and may become 'hostage' to a particular customer. In many instances, the smaller supplier may have to give up its individual goals for the benefit of maintaining the relationship with a single large customer.

Given these contrasting observations in the literature, the policy of promoting partnerships with private sector actors as a means of providing extension and advisory services to farmers may in fact lead to further exclusion and marginalisation of smallholder farmers who enter into these partnerships from a much weaker position.

The Kenya cut-flower value chain

Mapping out product value chains provides a diagrammatic presentation of the range and sequence of activities required to make a product or a service, from its conception, production, distribution and marketing to its final markets (Schmitz, 2005). Often, these activities happen at different geographical levels, including the local, national, regional and global levels. A survey by Tips and AusAid (2005) on global cut-flower value chains has identified four main channels through which cut-flower farmers reach international markets including: (i) selling directly to the auctions, (ii) through an 'agent' who sells to the auction, (iii) via an import wholesaler and (iv) directly to the supermarkets/retail stores.

In the EU (where the majority of Kenyan flowers are exported) most of the flower sales are handled by auctions in the Netherlands. The exporters have agents based in the Netherlands who receive their flowers upon arrival at the airports and prepare them for the auctions. This ensures that flowers that do not conform to the quality requirements do not get to the auction. The agents help in feeding back information on consumer trends, demands and such other information that may be relevant to the farmers and exporters. Wholesalers or retailers based in the importing countries constitute direct sales into the end-markets.

In Kenya, the marketing channels for farmers differ depending on their size, the type of flowers grown (summer/tropical flowers versus greenhouse flowers) and the capital and infrastructural facilities available to them. Figure 1 shows the various routes used by farmers and exporters in Kenya. The bold arrows show the chains considered by the case-studies in this paper. The broken bold arrows represent the partnerships between small-scale farmers and exporters, while the bold continuous arrows show partnerships between medium and large-scale farmers and exporters.

Small-scale farmers typically grow summer flowers on farms averaging 0.125 ha and sell these flowers in the domestic market (Nairobi wholesale market, roadside stalls, offices, weddings, funerals etc.). They lack the requisite infrastructure and



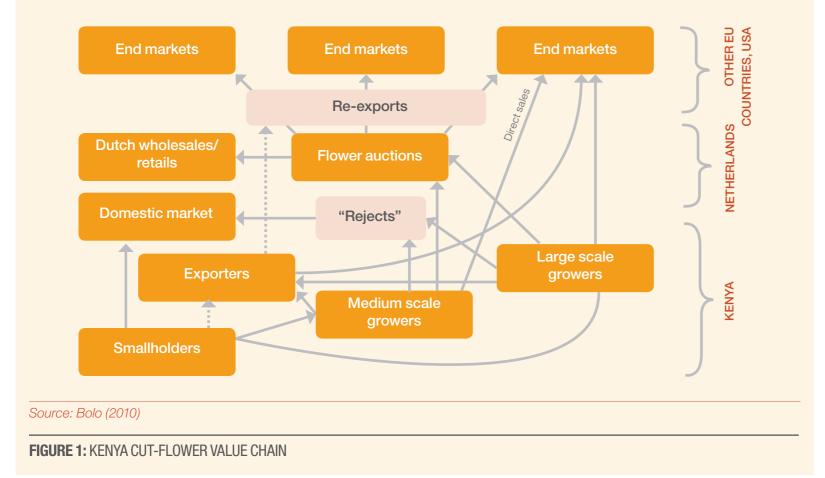
capital to sell their flowers directly into the export markets. They also face the challenge of high quality and regulatory standards demanded by the export markets. In response to these challenges, small-scale farmers export their flowers through intermediaries including exporters (private companies with whom they have contracts), while some of their produce is purchased by medium and large-scale farmers who use them as fillers in their bouquets for export.

Most medium and large-scale farmers grow greenhouse flowers (mostly roses) using sophisticated greenhouses requiring large capital investments and managerial and technical expertise. The farms run into several thousands of hectares with complete cold chain, transportation and refrigeration infrastructure. The farmers export their flowers through the auctions as well as through direct sales to the end markets. They also constitute an export channel for small-scale farmers. The

proportions of auction versus direct sales differ from company to company. Flowers that have not met quality standards at the port of exit are diverted into the domestic market as 'rejects'. The flowers sold through the auction market in the Netherlands either end up with the Dutch wholesales/retailers or get re-exported into the end markets in other EU countries, or to the USA.

MATERIALS, METHODS AND DATA SOURCES

The case-studies presented here were selected to provide contrasting scenarios on the type of exporters (selling through auctions vs. direct sales), the size of the farmers engaged in the partnerships i.e. smallholders (weak capabilities) vs. medium and large-scale (strong capabilities) and the type of institutional framework i.e. contractual (formal contracts) vs. non-contractual (purchase agreements). The first case-study represents exporters in category 1 (selling mainly through auctions in the Netherlands; engaged with smallholder farmers and having formal contracts), while the second case represents exporters who mainly target direct sales through wholesalers and retailers in the importing countries; who have partnerships with medium and large-scale farmers which are informal and non-contractual (guided mainly by purchase agreements). The partnerships in both cases have been in operation for the last ten years. By selecting the cases from existing partnerships, it gave the case-studies a





contemporary focus which is important in understanding how decisions are made and implemented (Thomas, 1998).

In both cases, the exporters were the primary interviewees and their partners (farmers) were interviewed to counter or check/verify any claims made by the exporters. Copies of contracts were provided by the farmers/exporters and the clauses analysed focusing on provisions for production, value addition and marketing. The in-depth interviews were conducted face-to-face using a checklist and were audio-recorded with permission from the interviewees. Hand-written notes were taken to augment the recordings and were exclusively used in cases where the interviewees declined to be recorded. The recordings were transcribed and analysed.

RESULTS AND DISCUSSION

Case-study A: contractual partnership between small-scale farmers and exporters

Company history

Exporter A was established in 1995 as a grower and exporter of summer flowers. The company began as a family business with initial financing from family savings and a bank loan. One of the directors had prior experience with flowers, having worked in the flower industry and in the agrochemical industry. In 1998, following a request from a group of smallholder farmers to assist in marketing their flowers, the company ventured into

an out grower system and began contracts with smallholder farmers for the supply of cut flowers. The company stopped farming and concentrated on the out grower system as the main source of their flowers.

It has grown over the last seven years, from 150 contracted smallholder farmers in the year 2000, to 2000 contracted farmers in 2007. Over the same period, the number of flower varieties, the number of agronomists and total volume of exports have increased (Table 1). However, the company has not accessed any new markets over the same period. It supplies mostly to the auctions and has entered into a contract with one of the auctions to supply 100% to this particular auction. This commitment has limited its ability to diversify into other markets.

Partnership and contract negotiation

When choosing the farmers, the company considers several factors including the availability

of water for irrigation, the altitude and the soil types. Besides these conditions, farmers must be willing to commit at least 0.125 ha to producing flower varieties that are selected by the company. Secondly, the farmers must form groups and register their groups with the Ministry of Social Services. Once registered, they are required to submit a copy of the registration certificate to the exporter before they can be contracted. Lodging the certificate of registration with the company serves several purposes: (i) it's a confirmation that the groups have formalised their existence; (ii) it serves as a form of consent; (iii) the company needs to submit documentary evidence of how it is sourcing its flowers to the regulatory authority (HCDA). Once the regulatory authority is convinced, it issues the company with an export license in accordance with the legal notice No. 231 of 1995.

	Variable	2000	2001	2002	2003	2004	2005	2006	2007
1	Number of smallholders	150	500	800	1200	1300	1500	1800	2000
2	Types/varieties of flowers	3	3	4	5	5	6	6	6
3	Number of agronomists/field staff	0	0	0	4	5	6	8	10
4	Number of new markets accessed	0	0	0	0	0	0	0	0
5	Total volume of flowers exported (million stems)	2m	3m	4m	6m	7m	7m	8m	8m

Source: company interviews



Other than issuing licenses, HCDA is a cosignatory to the contracts between exporters and farmers as witnesses to the agreement. A copy of the signed contract is lodged with HCDA. In case of disagreements, the Authority arbitrates between the parties to ensure any conflicts are resolved. In extreme cases, where the exporter is at fault, the Authority revokes the licenses and blacklists the exporters. This intervening and regulatory role of HCDA protects both parties (farmers and exporters) and ensures that unregistered agents do not purchase flowers from farmers who have been contracted by licensed exporters and that exporters do not encroach and buy from farmers that have been contracted by other exporters. The Ministry of Agriculture is also a co-signatory and can also play the arbitration role. The contracts generally last for one year, after which they are either renewed or terminated. The company advises farmers on sources of good planting material and inputs and occasionally, sources and delivers to contracted farmers.

Farmers' training, extension and advisory services

The company offers training and extension services through: (a) policy meetings; (b) agronomic visits and weekly collection schedules.

Policy meetings

The policy meetings focus mainly on marketing

issues and are held twice a year for each group or as requested by the farmers and the company directors. During these meetings, the directors: (i) 'teach' the farmers how the auction functions, (ii) address any issues raised by the farmers and (iii) jointly plan forward with the farmers. The company uses these meetings to talk about the market and explain to the farmers any price fluctuations during the contract period and discuss any projections for the future. Prior to signing any new contracts with farmers, the company must hold these policy meetings with them. Pricing is a key issue during the policy meetings and the company explains how the prices offered are calculated.

Agronomic visits

The company (through its agronomists) holds regular trainings sessions for farmers on production issues. As at February 2010, the company had 11 agronomists in different areas working with about 2000 contracted farmers. The agronomists visit the farmers on a daily basis (according to a prepared schedule) in different areas. Each farmer is visited at least twice each month. During the visits, the agronomist trains farmers on various aspects of production. For example, for every flower variety, the company has developed a production manual detailing how the production should be done including application of chemicals and fertilisers. The agronomists ensure that the farmers are adhering to this programme.

The company, together with farmers, then identifies areas where the farmers need further training and these are then organised.

For specialist training requirements the company sources trainers locally. For example, for organic farming, the company usually invites experts from Kenya Institute of Organic Farming (KIOF) and for other specialities from the public research institutes (such as KARI) or universities. Involvement of public research institutes and university departments in these partnerships has been mediated and supported mainly by NGOs. The company also conducts an internet search and gets information from other growers or from local and overseas input suppliers.

Weekly collection visits

The training during the weekly collection visits focuses mainly on post-harvest handling and value addition. After harvesting, all farmers take flowers to a central collection point. This central collection point normally doubles up as a central grading shed. When farmers bring the flowers to the central grading/collection point, they are assisted by the company's agronomists to conduct preliminary grading (removing diseased flowers, arranging by head size, stem length, stage of opening etc.) to ensure uniformity. The flowers are bought and collected only after grading. This is important because farmers must be given purchase vouchers/invoices upon collection. The company's



agronomists are also required to supervise the destruction of any rejected flowers to ensure farmers do not sell them (whether in the local market or to other exporters). This is intended to curb any form of cheating by farmers. After grading, the flowers are collected and transported to the company's pack house where further quality checks and value addition are conducted.

Case-study B: non-contractual partnership between medium/large-scale farmers and exporters

Company history

Exporter B is the largest consolidator of fresh cut flowers from Kenya. It is a family owned business employing 11 people and had gross sales of US\$2 million in 2005. The company was started in 1999. It provides consolidation services to large importers. The buyers/clients contact the company to help in 'building the bulk' and organising

TABLE 2: KEY EXPORTS MARKETS FOR EXPORTER B (2005–2007)

shipment. The company then uses its local contacts/network in Kenya to source, consolidate and ship the flowers to the buyers according to the buyers' specifications. This relieves the buyers of the challenges of buying from different farms and passing on the role of assorting and consolidating products to the exporter. The company deals through direct sales as opposed to auctions⁴. The company's key markets include USA (main market); Sweden, Australia and Germany (Table 2).

Partnership structure

In 2008, the company was sourcing mainly from 8–10 large farms covering about 500 hectares of production. In terms of geographical spread, it covers many districts including: Thika, Naivasha, Kericho, Kiambu, Machakos, Eldama Ravine and Nairobi. The company deals mainly in roses and some summer flowers that were used as fillers in bouquets of roses.

The company does not have any contracts with its suppliers and the partnership is largely based on trust that has been established over time. However, it has purchase agreements with its suppliers indicating that they will buy certain varieties of flowers over a period of time. Such agreements are demanded as a requirement by the government and various regulatory agencies such as Kenya Plant Health Inspectorate Service (KEPHIS) which issues phyto-sanitary certificates. HCDA also requires all exporters to declare the source of their flowers before they are issued with export licenses. Unlike contracts, these are short-term purchase agreements.

In these non-contractual partnerships, the purchase agreements only confirm that the farmers have allowed the exporter to market their products in the exporters' markets (and in most cases these markets that do not conflict with markets where suppliers are selling at the moment). The signatories to these purchase agreements are the directors of the two companies but these documents are lodged with the relevant government agencies such as KEPHIS and HCDA.

Conflict resolution

The conflicts are minimal in this partnership but there are challenges occasionally. For example,

4 See the value chain diagram in Figure 1

Table 2: Key exports n	Table 2: Key exports markets for exporter B (2005–2007)				
Sweden	32.00%				
Australia	14 00%				

 Sweden
 32.00%

 Australia
 14.00%

 Germany
 5.00%

 USA
 40.00%
 This translates to about US\$ 1 million

 Others*
 9.00%

 100.00%

^{*} Other markets include: Italy, Japan and Reunion. Source: company interviews



because of price fluctuations, the company must negotiate with growers on a continuous basis or when it needs more products than the farmers can supply, especially when the farmers also need to spread their produce to many of their clients. There's no involvement of the regulatory authorities or the Ministry of Agriculture in mediating/ arbitrating in the case of disputes.

Training, value addition and advisory services

There are no training, extension or advisory services offered in this kind of partnership. This is partly because the exporter does not add any value to the flowers and partly because the medium/large-scale farmers have developed the requisite capabilities and do not require any technical/advisory support from the exporter. The value addition (grading and packaging) is done at the farm level and the farmer delivers the finished product directly to agents at the airport for shipping. The exporter has no infrastructural facilities (i.e., transportation, cold chain, packhouse or refrigeration facilities).

To guarantee the quality, the farmers deliver the flowers in their own branded boxes and all the packaging bears the logos and address/ contacts of the farmer. This is important for traceability issues and helps to exonerate the exporter if flowers are intercepted at the ports over quality issues.

Working with smallholders

The company occasionally buys summer flowers from smallholders to be used as fillers. In order to process and transport flowers to the airport, smallholders rely on government facilities, for example, HCDA provides transportation (cold chain) and depots with packing facilities at a cost for growers in various regions.

According to Humphrey and Schmitz (2001) and Kaplinsky and Morris (2001), enhancing the capabilities of weak suppliers is viewed as an integral role of lead firms. They provide training or technologies/inputs relevant to production, and monitor and co-ordinate the activities of suppliers. The extent of involvement of lead firms in performing these functions depends on existing capabilities in the supply base. When these are weak, lead actors are more involved in building these capabilities to ensure supplies meet the quality requirements and are delivered on time.

In order to compare the case-studies on opportunities for building farmers' capabilities, this section employs a common framework focused on three issues:

- (i) Interactions the frequency of contact between farmers, exporters and other actors
- (ii) Monitoring and co-ordination the extent of supervision required to produce high quality flowers and
- (iii) Investments whether there is explicit investment by the exporters in assisting the

farmers to meet the standards/quality/specifications.

The interplay between interactions, monitoring and co-ordination and the level of investments may contribute to, or undermine, capability-building by affecting opportunities for learning and innovation. While interactions provide a platform for acquiring and exchanging knowledge, institutions create the framework for these interactions and conditions for investment (financial, technical and managerial assistance). Building farmers' capabilities requires continuous interactions, a favourable institutional framework that supports knowledge exchange and a deliberate strategy for assistance.

Contractual partnerships

Faced with weak capabilities in their supply base, exporters are obligated to invest in building the capabilities of smallholders if they are to obtain high quality flowers. The internalisation of this capability-building function shapes the level of interactions required, the level of monitoring and co-ordination and the extent of investment in capability-building.

Interactions

As noted in the case of contractual partnerships, prior to getting contracted, farmers are required to form groups and register with the Ministry of Social Services. This provides a framework for farmers to interact with each other, learn together and for the company and other actors (including the NGOs,



HCDA, MoA, universities and public research institutes and input suppliers) to organise training events. During the one-year contract period, there are multiple interactions.

Monitoring and co-ordination

Because of the weak capabilities, engagement with small-scale farmers requires strict monitoring and co-ordination from the exporters. This monitoring function is formalised using legally enforceable contracts between farmers and exporters.

Investments in technical assistance and input supply

Access to inputs and technical knowledge is a major hindrance to innovation amongst small-scale farmers. In these partnerships, farmers are organised into small groups and the exporters' strategy is intentionally geared towards investment in farmers' production capability through financing and investment in provision of inputs and knowledge. Farmers are linked to local banks and their contracts with the exporter are used as a guarantee/collateral to obtain loans. Where necessary, the exporter provides additional supporting letters to enable the farmers to access group loans. Because of the investment made by the exporter, the cost of switching suppliers is very high and is seen as a last option.

Non-contractual partnerships

These types of partnerships are common between the exporters and medium/large-scale farmers. Both have the relevant market knowledge and interact directly with actors in the end market, business infrastructure and technical and managerial skills. Since the suppliers already have the capabilities, the exporters have no obligations to invest in building the same. However, exporters occasionally source flowers from smallholder farmers. Even in such cases, they do not offer any assistance to the smallholders, who must rely on government facilities and infrastructure to transport their flowers to the airport for shipping. This scenario also determines the interactions. monitoring and co-ordination and investments made in the partnerships.

Interactions

The interactions are regarded as discrete events, distinct from other (previous or future) transactions. Purchase orders normally extend only for a few months and there is minimal interaction between the exporter and the farmers.

Monitoring and co-ordination

There are no formal contracts and agreements are put in writing only as evidence for the regulatory authorities (HCDA and KEPHIS). Since the relationship is based on mutual benefits and characterised by trust, reputation and confidence,

any conflicts are resolved through negotiation and compromise. There is virtually no involvement of the regulatory authorities in dispute resolution.

Investments in technical assistance and input supply

Since there is no explicit investment by the exporter in supporting the farmers, supply sources are frequently changed and the cost of doing so is relatively low.

CONCLUSIONS, RECOMMENDATIONS AND IMPLICATIONS

Having compared the two case-studies, we assess formal (contracts) or informal institutions (non-contractual) and their results in providing extension and advisory services and enhancing farmers' innovation capabilities.

In contractual partnerships, farmers gain knowledge on production, safe and effective use of recommended chemicals and codes of practice. They learn new varieties, new technologies for production and in some cases were able to adapt these technologies. These partnerships offer smallholder farmers new market opportunities and support in ensuring that their farms are certified to meet new market standards. However, the contracts allocate the bulk of value addition responsibilities to the exporter and the farmers participate only in the preliminary grading of flowers. After grading, the exporter collects all the



fresh flowers for further value addition. Because of these provisions, farmers appear to be 'locked out' of the value-addition process.

In non-contractual partnerships, the exporter adds no value to the flowers and the responsibility for value addition rests entirely with the farmers who supply flowers as 'finished products' ready for shipment. The exporter relies on the farmers' expertise, experience and track record. As a result, farmers do not learn anything new from the exporters in terms of value addition. The exporters provide the farmers with the opportunity to access new markets (markets other than their traditional markets) since they usually target markets that the farmers had been unable to access (because of low demand or stringent requirements).

A general feature of contractual partnerships is that whereas the exporters are obligated to provide training, technical support and advisory services on production aspects, value addition responsibilities lie with the exporters and farmers are largely excluded, except in preliminary grading. Because learning and capability building are incremental (Cohen and Levinthal, 1990), lessons learned at each step build up towards success in the subsequent steps. This paper considers that in the longer term, the knowledge gained from these contractual partnerships will form the 'receptor sites' for more advanced knowledge on production of high quality flowers. The experiences farmers gain in negotiating contracts, in record-keeping

and ensuring traceability will be useful in future, longer term engagements. The track record that has been established with the banks in terms of loan repayments is important in establishing the creditworthiness of farmers and reverses the negative attitudes of financial institutions about doing business with farmers.

However, as Cohen and Levinthal (1990) have observed, new knowledge builds on existing knowledge, and when farmers appear to be locked out of value addition activities, they fail to develop 'receptor sites' for value addition knowledge. As a result their chances of building up these capabilities are limited and they risk being locked in production – a situation that may further undermine their chances of moving up the value chain and engaging in value addition and direct export market access. This has implications for public policy, which embraces privatisation of extension and advisory services for smallholder farmers, especially as it relates to building their capability to move up the value chain.

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