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**A BUSINESS SERVICE MARKET ASSESSMENT
FOR THE TREE FRUIT SUB-SECTOR**

2004

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EXECUTIVE SUMMARY

This report summarizes work undertaken for Activities 2 & 3 under the Kenya BDS project. The purpose of this project is to assist the USAID Kenya mission achieve its Strategic Objective (SO7): *increasing rural household incomes*, using a combined business services and subsector approach. Activities 2 and 3 are to: conduct subsector analysis to identify constraints to growth (2) and those business services critical to alleviating those constraints (3). The subsector selected in activity 1 includes mangoes, avocados and passion fruit.

The BDS approach as reflected by the new donor BDS guidelines is based on the hypothesis that sustainable improvement in small enterprise (SE)¹ income can best be achieved through the delivery of a range of business services (BDS) by providers, primarily private sector, operating under market conditions without or with minimal subsidy and market distortion.

The incomes of large numbers of MSE's will increase if and when there is growth in the entire subsector or cluster in which these firms operate. If a cluster or subsector is not growing, it is unlikely that incomes will increase. If we want to facilitate or create the conditions that enable large numbers of small firms to grow, we may also need to facilitate the conditions for growth in the subsectors or clusters that employ them. Subsector and cluster analysis teach us that the fate of all enterprises regardless of size in a subsector or cluster are linked and depend upon the productivity and competitiveness of the subsector or cluster in which they work. Kenya BDS is using a subsector approach to identify subsectors in Kenya that employ large numbers of MSE's and appear to have considerable growth potential.

Linking the BDS approach to a subsector or market assessment approach provides us with information that we can use to facilitate the development of business services critical to increasing MSE incomes—in growing subsectors. The methodology employed in this combined approach is a participatory one, and brings together a wide range of stakeholders in the subsector from MSE producers to representatives of the largest exporters and processors.

This approach provides answers to the following key questions:

- What services are critical to increasing the competitiveness in a subsector/cluster?
- What services are critical to MSE participation and contribution to the competitiveness of a subsector/cluster?
- For those services that are largely private goods, is the private sector already providing them?
- If not, what are the barriers (cost, cultural, institutional, and risk) that discourage private sector investment and how can they be reduced?

The economic fortunes of all these stakeholders are linked to the growth and competitiveness of the subsector. By bringing these stakeholders together as we have under activities 2&3 we have learned which services are critical to increasing MSE participation in a growing subsector. We also learned which services are critical to the growth and competitiveness of the whole subsector in which large numbers of rural MSE's compete.

¹ Small enterprise in this context refers to micro- and small-scale firms because the constraints and challenges to firms micro and small are similar.

The Kenya BDS project selected a number of subsectors for possible interventions. These subsectors were ranked based on a set of criteria identified in the Project workplan. The subsector that received the highest ranking using a set of criteria that gave considerable weight to growth potential and MSE employment was the tree-fruit subsector. For the purposes of this study this includes mangoes, avocados, and passion fruit.

The consulting team led a participatory workshop with a wide range of participants from the tree fruit subsector. These participants identified constraints to the growth and competitiveness of the subsector and a set of services critical to resolving those constraints. From this list the consultant team and Kenya BDS staff identified three priority services. Kenya BDS will facilitate the development and improvement of these services through a series of intervention fund grants. Immediately following the participatory workshop, a Kenyan consultant began activity four, a BDS market assessment of identified services. Input from Activity 4 will be used to design the tenders for the intervention fund grants.

The three priority services selected during this activity contribute to the competitiveness of the subsector and target the small enterprise producers as the principal client market. They are:

- Improved grading and assembly of product from the small enterprise producer
- Improving quality control (extension, and certification)
- Improved input supply.

There were other services identified by workshop participants which participants felt were important to building the competitiveness of the whole subsector but that do not directly target the small enterprise. Given the interconnectedness between the growth and health of MSEs in the subsector and that of the subsector itself, Kenya BDS staff are encouraged to look at potential MSE impact of services which may not directly target the smallholder.

Terms of trade is another factor to take into consideration in the design and particularly in the monitoring and impact assessment of BDS activities that implicitly support direct and indirect linkages between MSEs and larger firms. Not all interfirm linkages benefit the smallholder. The American history of sharecropping provides abundant weaknesses with this approach. In Japan subcontracting between large and small firms created a group of “captive” firms wholly dependant upon larger firms for all inputs and output markets with minimal control of the terms of trade, payment, or markets. Kenya has had mixed success with direct (subcontracting) and indirect (purchasing from) interfirm linkages between large and small firms. Buyers need better enforcement of quality and quantity agreements, smallholder sellers need the freedom and options to enter into contractual arrangements that result in more income, and more choice.

The remainder of this report is divided into 5 sections. Section 1 summarizes the activities in this report and the methodology used to carry out Workplan Activities 2 and 3. Section 2 summarizes Activity 2: *description of the tree-fruit subsector*, provides a map of the subsector and describes the critical functions and participants in the market. Section 3 summarizes Activity 3 from the annual workplan, describes those constraints that stakeholders in the subsector felt were critical to growth and proposes a list of business services to alleviate them.

Section 4 summarizes lessons learned, conclusions, and recommendations from these, and for future, activities under Kenya BDS.

Section 5 provides a conceptual framework for the development and delivery of services to rural, poor households. This framework which draws upon examples from Kenya and the region illustrate that:

1. Sustainable increase in large numbers of MSE income can only occur in subsectors and clusters that are growing, productive and competitive.
2. Increasing business service access by rural MSE's requires reducing the real and perceived barriers to business service delivery. These barriers include risk, culture and cost.
3. SE business services tend to be most effective when the services can be implemented by the MSE client and result in relatively quick increase in revenue and income for the MSE operator. BDS resulting in increased incomes for large numbers of the poor requires effective targeting of clients and tailoring of services. Section 5 suggests a framework for mapping the factor conditions of rural households to better tailor services. Rural household factor conditions include proximity to infrastructure, access to financial and other services, and the capacity, experience, technical and management skills of the enterprise operator.

1.0 Introduction

1.1 Background

Kenya BDS and Kenya USAID SO7

Kenya BDS proposes to achieve the USAID Kenya mission's SO7 Increased Rural Household Incomes, through a subsector based market development approach. The mandate of Kenya BDS is directly responsive to *Intermediate Result 7.3*—increased access to business support services for MSE's. Declining agricultural production and a lack of competitiveness among MSE's contribute to increased poverty among rural Kenyan households. Improving the competitiveness of MSE's will enable them to contribute to the competitiveness of the industries and clusters in which they provide goods and services. But if the subsector in which MSE's participate is not itself productive and competitive, no firms will be able to sustain growth—not even MSE's. The challenge for Kenya BDS therefore is to facilitate increased access to business services for MSE's in productive and growing subsectors.

Markets however are dynamic, competitive and increasingly global. Even firms that are exclusively or predominantly domestic compete in a global marketplace. This is illustrated with the case of fruits in Kenya. The overwhelming majority of Kenya's mangoes are domestically consumed, yet Kenya imports almost all of the mango juice in concentrate from South Africa and Brazil. If a subsector or cluster in Kenya is growing now, there is no assurance that that market will remain competitive in the future. A subsector that is growing today and employs thousands of poor households will only provide sustainable opportunities for improved incomes if it remains competitive in the future.

Linking improved MSE access to business services to increasing rural household incomes creates a challenge. Services provided must be in subsectors that are growing now. Sustainable increases in rural household incomes require that the subsector continues to grow in productivity and competitiveness. Responding to this challenge requires a response to the following questions:

- What clusters or subsectors have considerable growth potential now and employ large numbers of MSE's?
- What services are key to MSE contribution to and benefiting from the growth of the subsector?

But because markets are dynamic and growth now does not ensure growth later, a third question is important if improved service access will result in improved incomes into the future.

- What services are critical for the subsector/cluster continue to grow in production, productivity, and competitiveness?

Kenya BDS is using a subsector-BDS approach to address these questions². The Deloitte (DTT) Kenya BDS 2002-2003 work plan, is composed of seven activities. These are

². For a more detailed description of this approach see the Kenya BDS workplan and the Donor Guidelines for SME development: Business Development Services for Small Enterprises: Guiding Principles for Donor Intervention, 2001 Edition. World Bank Group SME Department, MSN F2K-207.

- Activity 1: Identify and Conduct Subsector Selection
- Activity 2: Conduct Subsector Analysis to Identify Constraints to Growth and Service Gaps
- Activity 3: Identify and Define Appropriate BDS to Address Constraints
- Activity 4: Conduct BDS Market Assessment of Identified Services
- Activity 5: Design BDS Market Interventions
- Activity 6: Tender and Award Market Facilitation Interventions
- Activity 7 Apply Market Oriented Performance Measurement

Activities 2-7 follow and are based on the subsector selected in Activity 1. For quality assurance purposes the Kenya BDS team is staggering activities during the first year. During the execution of Activity 1 three subsectors were identified that met project and mission criteria. One subsector, the tree-fruit subsector started up in January and February 2003. This report covers Activities 2&3 for the tree-fruit subsector. Assistance in the second subsector will begin in June of 2003.

1.2 Methodology

Activity 2: Conduct Subsector Analysis to Identify Constraints to Growth and Service Gaps

The Kenya BDS project makes use of a modified subsector-business service approach developed by Action for Enterprise (AFE). This approach draws on subsector analysis work initiated during the USAID GEMINI project (1991-1995). Subsector analysis was originally used to illustrate the dynamic relationships between all participants in the value chains that make up a subsector and to identify interventions that can reach large numbers of MSE's. Subsector analysis alone has some limitations. It is useful to understand constraints that firms face but has been weak in identifying services that would address them.

The subsector-business services approach has changed this. Local consultants conduct the analysis with active participation by stakeholders working in or providing services to the subsector. The analysis provides stakeholders a perspective of all the transactions and relationships that comprise the subsector and not just the transactions that make up their link in the value chain. Combining subsector analysis with the business services analysis based on constraints identified by the stakeholders themselves, gives them information the information that they need, to identify services that they need, and/or can provide to enhance the productivity and competitiveness of the subsector. The combined Subsector Business service approach was used to identify and prioritize services during Activity 3 for the tree-fruit subsector.

In January 2003, the BDS team completed Activity 1: Identify and Conduct Subsector Selection based using an approach that balanced the objectives of Kenya BDS with specific criteria for increasing household incomes. This approach established criteria and weights to compare a number of subsectors. The tree-fruit subsector (mangoes, avocados and passion fruit) received the highest score. In February and March of 2003 a three-person consultant team began work on tasks specific to the analysis of the tree-fruit subsector.

These tasks were to:

1. *Develop and finalize tools and questionnaires for subsector assessment;*
2. *Refine blue-print subsector map and;*
3. *Conduct Subsector analysis*

Subsector analysis begins with a review of what already is known from secondary data sources. Two comprehensive subsector analyses were of considerable help in this process. The first was the *Sector Study of the horticultural Export Sector in Kenya* commissioned by USAID and completed by FKAB consulting in 2001. The second was a study of the horticulture and pyrethrum subsectors commissioned by Kenya BDS in 2002. The information in these studies was comprehensive and detailed. Based on an initial review of secondary information sources the Kenya BDS team determined that a full subsector analysis would be redundant and an unnecessary waste of project resources. Based on this determination, the tasks for activity 2 were refined to:

1. *Develop the tools and question guides to test and validate constraints identified by participants in the earlier subsector studies;*
2. *Conduct intensive field interviews and focus group discussions with a representative group of stakeholders and based on these interviews;*
3. *Refine the subsector map and identified constraints based on updated information.*

The consultant team made all efforts to ensure that interviews and focus groups included representatives of all function and participant groups in the subsector. To achieve this the team used the preliminary subsector map and source documents to identify principal participants and functions in the subsector. At least one representative from each participant group was included in the interviews or focus groups. The consultant team sent one member to the coastal region where there is significant mango production. Additional interviews were conducted in the central highlands of producers, brokers, processors and input suppliers for mango, avocado and passion fruit. The results of Activity 1 were used to identify and prioritize among a, business services key to increasing the productivity and competitiveness of MSE's participating in the tree-fruit subsector, as well as of the subsector itself.

Early on in the research process, the consultant team had to decide whether to treat mangoes, avocados, and passion fruit as a single subsector for the purposes of analysis or as three. The team determined to base their decision on the degree of intersection in the three fruits among participants, functions in the subsector, and constraints faced by the different participants. Based on initial interviews the team determined that there was a high degree of overlap between the three fruits. Areas of significant deviation are described in the next section but the consultant team felt that the overlap was adequate to treat all three fruits as one subsector with one map and a single process of constraint and service identification (see also the Power Point presentation in Annex 3).

Activity 3: Identify and Define Appropriate BDS to Address Constraints to Growth and Service Gaps The consultant team drafted a list of constraints faced by stakeholders in the tree-fruit subsector from field interviews and focus groups with subsector participants. Following the collection of field data, the consultant team and Kenya BDS staff organized a full day workshop for stakeholders representing key production areas and all functions for mango, avocado and passion fruit in Kenya. Workshop participants included MSE producers, medium sized farmers, processors, exporters, representatives of relevant government ministries and the largest fruit subsector association, F-Peak. Unfortunately no brokers attended the workshop, though some were invited and did participate in the earlier interviews. For a list of workshop participants and program see annexes 3 and 5. During the course of the workshop participants were asked to:

1. *Identify and validate key constraints to productivity, growth and competitiveness in the subsector.*

2. *Rank those constraints that had the largest impact on the productivity and competitiveness of the subsector.*
3. *Identify business services that would address priority constraints, have the greatest impact on rural household incomes, and on the largest number of rural households.*

Participant stakeholders were then asked to further prioritize those services in terms of the following criteria:

1. *Services that could be provided wholly or in large part by private sector providers*
2. *Those that have the highest potential to stimulate growth in product markets*
3. *Those that will have the greatest impact on subsector performance and'*
4. *Target small enterprises.*

Workshop participants drafted a list of 8 priority services. While the bulk of these do target the MSE, some do not. Participant insistence on looking at the subsector and its competitiveness in a holistic manner is a robust indication of their interest and willingness to collaborate and work as a cluster of firms in the future. Workshop participants from all levels in the subsector expressed a lot of appreciation for the workshop's inclusion of a wide sample of participants.

Following the workshop, the consultant team and the Kenya BDS staff further developed criteria to rank the 8 priority services in order to identify three services to be assessed and tendered in Activities 4-6. Services that directly target MSE's were identified by the Kenya BDS team as one of the criteria for the initial priority. Additional services that strengthen the subsector's performance but do not directly target MSE's can be considered in the future. These three services are discussed in section 3.

2.0 Description of the tree fruit Subsector

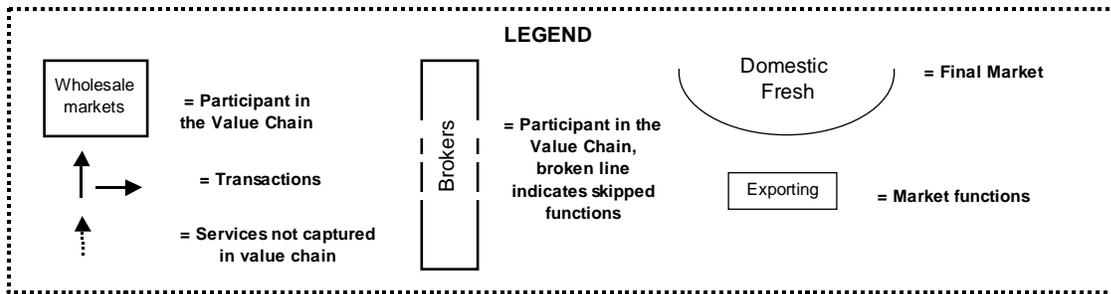
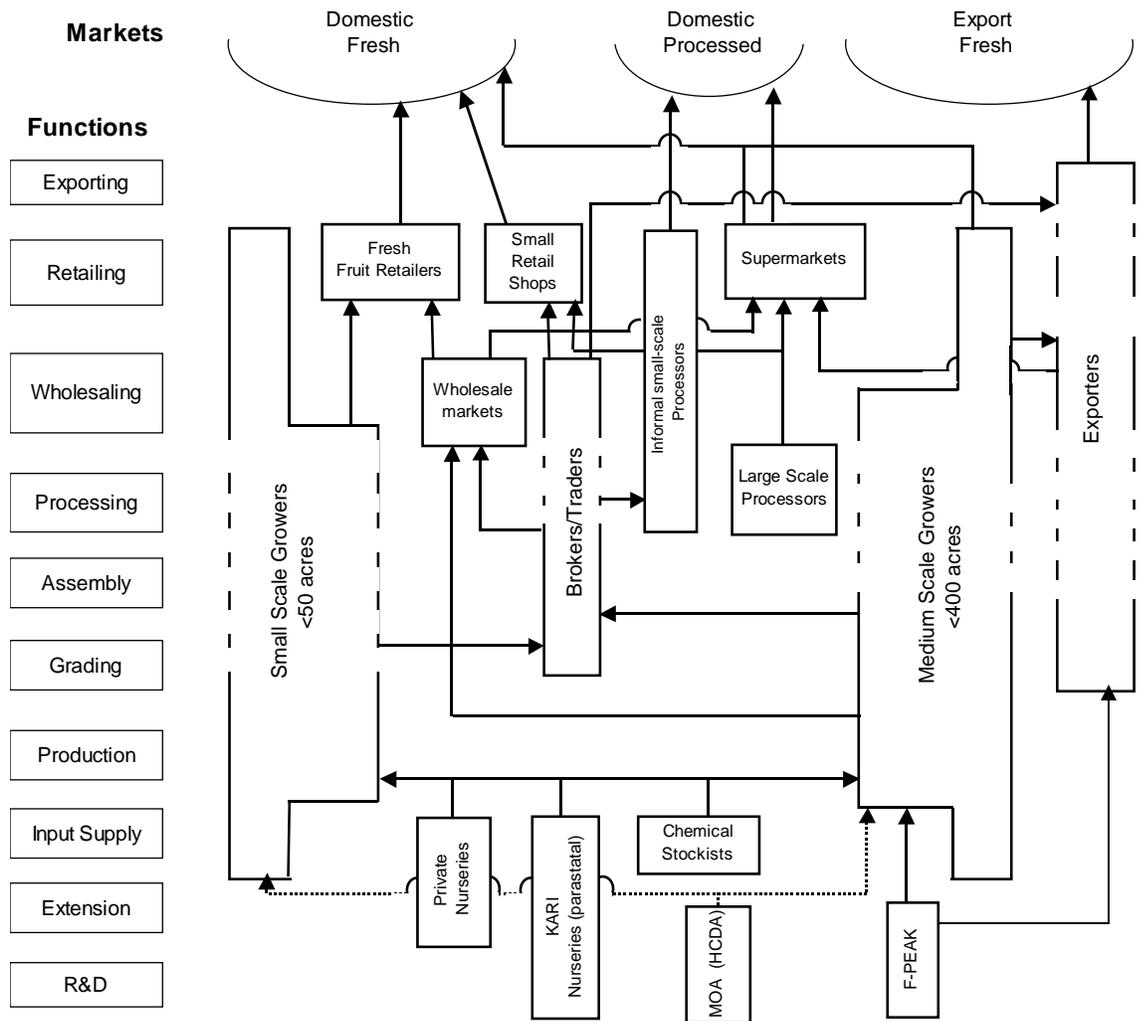
Figure 2.1 depicts the principal relationships in the tree-fruit subsector in Kenya. Like all maps it has its own conventions and seeks to provide enough detail to clarify without providing so much detail that it complicates analysis. The relationships depicted in Figure 2.1 illustrate the main relationships determined by transactions in the tree-fruit value chain. Many other firms, organizations and institutions provide services to, or influence the competitiveness of this subsector. These are not depicted in the figure. The subsector map in figure 2.1 illustrates the dominant transactions in a value chain. Information depicted in figure 2.1 was collected during a set of field interviews by the Kenya BDS research team. The research team also made extensive use of data collected by Mr. Stanley Karuga (Karuga, Kenya BDS 2002). It was not part of the scope of work of this study to collect information on volume of product or value of transactions but much of this information can be found in the Karuga, horticulture subsector study (Kenya BDS 2002). For a detailed description of the value chain for mango, avocado and passion fruit see Karuga's subsector report compiled for the Kenya BDS project and the USAID Kenya commissioned horticulture subsector report,

Figure 2.1 illustrates the principal functions and participants involved in the tree fruit value chain. Solid arrows indicate transactions, broken arrows indicate services not captured in the value chain. The vertical height of each participant is determined by the functions (listed on the vertical axis) performed by the participant. Skipped functions are indicated with a broken line. To illustrate, the exporters (participant box at the far right of the map) perform grading, wholesaling, and exporting but do not generally perform assembly, processing or retailing. These latter three functions are skipped by exporters and represented by the dashed line on the exporter box.

Subsector analysis often refers to value chain channels or just channels. In the tree fruit subsector in Kenya there are essentially two channels. The first is dominated by small-scale producers and is characterized by lower level of technologies, input use and commercial orientation of the producer. Medium scale growers dominate the second channel. These growers are commercial farmers, most of whom sell at least part of their product into the export market. Given the domination in number of firms and production volume of the small-scale growers, the sector is unlikely to increase its competitive advantage without significant MSE participation. As this begins to occur the blurry lines between the two channels will fade further.

2.1 Markets. Three markets were identified for tree fruits in Kenya. The largest of these is the domestic fresh market consuming 80% of all avocado production, over 98% of domestic mango production and 96% of the domestic passion fruit (Karuga, Kenya BDS 2002). The second largest market for tree fruits is the export market. The smallest but rapidly growing market is the domestic market for processed fruits. The bulk of processed fruits is sold as juice. While there is a small amount of juice sold on the domestic market that comes from Kenyan fruits, the vast majority of juice sold in Kenya is packaged in Kenya from concentrate imported largely from South Africa and Brazil.

Figure 2,1 The Tree-Fruit Subsector in Kenya



2.2 Market Functions The following are the principal functions identified in the tree fruit subsector. Each function represents a link in the value chain. A single participant, indicating a degree of vertical integration, often performs a number of functions.

Research and Development from disease resistant varieties, market preference and production-post harvest handling is a critical but underdeveloped function in this subsector. The R&D function is often thought of as a public good and is dominated by the Ministry of Agriculture in many countries. More and more exporters, producer associations, and seed and chemical companies are playing a leading role in this function.

Extension Services include all farm-gate support and technical assistance from production planning to post-harvest handling. MoARD, HCDA, FPEAK and private firms deliver these services in Kenya.

Input Supply includes chemical inputs (fertilizers and pesticides) and nursery stock.

Production refers to the cultivation of either mangoes, avocados, and passion-fruit or some combination of the three.

Grading and sorting is a post-harvest process where the product is separated based on quality attributes determined by market demand. The fruit grading function is weak in Kenya and grading at the smallholder farm-gate is irregular. Lack of adequate grading standards is perceived as a cause of loss to the small holder as brokers who buy their product grade at the selling not the buying point but only pay for what they sell. The importance of standards and grading will continue to increase and will largely be driven by export demand.

Assembly is a service to reduce transaction costs performed by intermediaries in the market, largely brokers who purchase from multiple small holders deliver the assembled product to their buyers. There is little product assembly at the exporter level although there it appears that assembly at this level could significantly reduce transaction costs.

Processing The bulk of domestic processing is as juice for Mango and Passion Fruit. There is also a small amount of seasonal avocado oil extraction. The principal market for processed juice are hotels and restaurants. Some of this product may be mixed with imported concentrate. There are close to 20 industrial processors of fruit juice. The list of small-scale informal processors is much larger.

Wholesaling is the service of breaking up an assembled product into units small enough to be sold by individual retailers. Several participants in the Kenya tree-fruit subsector perform this function.

Retailing breaks down a product further into consumer and household sized units. There are a range of retailers in Kenya from open-air market vendors to large supermarkets.

Exporting The principal exporters for mango sell the bulk of the product to the Gulf Coast Countries (GCC). There are a few very large international exporters in Kenya including Del Monte. The majority of exporters are smaller than those in the cut flower and vegetable subsectors and sell to consignment buyers.

2.3 Participants As indicated above, the Kenya tree fruit subsector is not as developed as the cut-flower or vegetable subsectors. There are very few large firms or farms in this subsector.

Small Scale Producers This group is composed of approximately 100,000 farm households the vast majority of which farm on less than one acre (MOARD). These small-scale farmers account for about 75% of total tree-fruit production in Kenya. Based on interviews of constraints faced by small farmers and for the purpose of this study we chose to group all producers with 50 or fewer acres into this category. The overwhelming weight of production by small scale producers in this rapidly growing market is the strongest argument for building the competitiveness of this sector as a strategy to increase rural household incomes.

Medium Scale Growers are those growers producing on less than 400 acres of land. While there is a small number of very large farms that dominate the pineapple and banana subsectors, the small and medium producers dominate the avocado, mango, and passion fruit crops. The principal production difference between the medium and small scale producers is in the use of inputs and professional management. The result is an enormous yield and quality difference. Medium scale growers make use of some combination of irrigation equipment, fertilizers (chemical and organic) and sprays. The use inputs gives the producer more control over production timing and yields appear to be 75% higher than production without input use.

Brokers/traders provide a critical assembly and rudimentary grading service. Brokers generally do not take ownership of the commodity and traders do. With many other commodities in Kenya this distinction is clear. The issue seems less clear with tree fruits and the role is combined for the purposes of this analysis. Broker traders are the major buyer of small holder surplus. Often they will come to the small holders' farm and pick themselves. In some cases they do not take possession and only pay for what they sell or claim to sell. There is a widespread belief that broker/traders exploit the smallholder farmer. While there was some evidence of seasonal rent-taking, brokers claimed that during glut seasons they lost money. Because brokers and traders have contact with so many small scale farmers they are an attractive point at which to deliver business services. Some brokers and traders will be forced out of business as the issue of standards, grading and product traceability (EU regulations) become accepted by the industry—unless they adapt and offer a wider range of TA and post-harvest handling services for their clients. Brokers and traders sell to processors, exporters, wholesalers, retailers and institutional consumers.

Informal small scale processors account for over 2/3 of the fresh juice production in the major metropolitan areas of Kenya serving restaurants, hotels and stores and consist of over 1,000 predominantly MSE firms.

Commercial Processors There are about 20 formal commercial processors of mango, avocado and passion fruit in Kenya. Very little avocado is processed though at least one firm is extracting avocado oil on a seasonal basis. Most of the commercial juice processors import juice concentrate primarily from South Africa and Brazil that is packaged and sold in the Kenyan markets. There is

also a small amount of passion fruit juice exported to the Netherlands. There is virtually no drying of mango in Kenya by small or larger commercial processors.

Wholesale Markets are located in most of the urban and per-urban centers in Kenya. These markets buy primarily from brokers and traders. Some growers also sell direct into the wholesale market. Some of the wholesale markets visited had no or inadequate cold facilities to ensure the delivery of a quality product with a reasonable shelf life to the retail markets.

Retail Markets These are comprised of a very large number of green-grocers and outdoor market fruit and vegetable vendors, small retail shops selling a diverse product line, and a small number of large modern supermarkets. The urban green-grocers and some of the supermarkets cater to a more affluent Kenyan and expatriate clientele who demand a quality of product equal to what they could find in Western country markets. Demand expressed by the high-end clients of these markets if exploited is one of the forces that can contribute to building the competitiveness of the tree fruit subsector. This growing domestic demand is an important and market stabilizing force for those producers and exporters targeting the high-end market for at least part of their product.

Exporters The majority of exporters of mango, avocado and passion fruit are small to medium scale firms. There are approximately 300 fresh fruit exporters in Kenya. The relatively small size of the Kenyan tree fruit exporters creates transaction costs inefficiencies and as a result most of these exporters both buy from and sell to brokers—often on consignment. Avocado exports dominate, accounting for about half of Kenya's share of fresh fruit export value. Rapidly increasing export quality controls will inevitably force many small-scale exporters to either associate under a single marketing entity or go out of business. There is potential for F-PEAK, a fruit industry association to play a role here similar to that played by Hortico, an exporters and growers association in Zimbabwe.

Nurseries There are approximately 400 private small scale fruit tree nurseries in Kenya. Most of these do not practice any selective breeding and there is some concern that some nurseries use seed stock from rejected fruit, thus breeding in lower quality traits into new seedlings. This is also the case for the many small-scale farmers who produce their own seedlings. The Kenya Agricultural Research Institute (KARI) does conduct some research and maintains and distributes seedlings to both small and medium scale-growers. Commercial growers interviewed communicated concern about a lack of a strong genetic research program feeding into the nurseries. Clearly strong focused R&D into varieties and disease resistance is critical if Kenya is to become competitive in the longer run in tree fruit exports.

Chemical input suppliers The market for agricultural inputs is relatively open, and numerous chemical stockists can be found throughout the country. Small-scale farmers complained that there is very little information on appropriate use or of the yield impact of chemical inputs. The stockists are regulated by the Kenyan Plant Health Inspection Service.

MOARD/HCDA The Ministry of Agriculture and Rural Development and the Horticulture Crop Development Agency provide extension services and a range of business services to stakeholders in the horticulture sector. These include advising outgrower groups on production-post harvest handling; ensuring adherence to MRL and other quality standards; registration and training of nurseries; and licensing of exporters and; operation of cold chain facilities. HCDA also publishes a

trade journal. It was the opinion of a number of participants that private providers could offer many of the services currently provided by the MOARD and HCDA.

F-Peak and Producer and Marketing associations F-Peak provides extension, representation, advocacy, marketing, services and promotes quality standards. Compared to similar associations in Zimbabwe, South Africa, and Zambia, associations representing the needs and concerns for producers and exporters in Kenya are fairly weak. Private producers continue to hold on to skepticism that F-Peak still reflects its public sector origins. There is also a mango producers association. This association is also weak but like F-Peak, has potential to play a stronger role in facilitating collaboration in the subsector. The critical importance of coordination and cooperation among stakeholders to maintain and build productivity and competitiveness of the subsector argues for a strong association or network of stakeholders. No associations at this juncture are able to meet this critical coordination need.

3.0 From Constraints to Services: A participatory Approach to Service Identification

This section describes the implementation of Activity 3: *Identify and Define Appropriate BDS to Address Constraints to Growth and Service Gaps* of the Kenya BDS annual action plan. There were three sources of information on constraints to growth in the subsector. These were:

- Secondary sources collected from two earlier horticulture subsector reports (USAID 2001, Kenya BDS 2001),
- Field interviews and focus groups with stakeholders representing all participant groups in the subsector, and;
- A participatory stakeholder workshop where participants validated and modified existing constraints prioritized them and identified a set of predominantly private sector business services that would address the most critical of these.

The remainder of this section summarizes constraints identified from the three sources listed above, indicates which constraints were considered highest priority based on criteria developed by the consultants and the Kenya BDS team. From a short list of priority constraints participants at the participatory stakeholder workshop identified a set of business services that could effectively address the identified constraints. From this list of business services the consultants and Kenya BDS staff drafted a set of proposed interventions.

3.1 Identification of Constraints in the Tree-fruit Subsector

On 24 February, 2003, Kenya BDS project staff and the consultant team held a one day workshop of key stakeholders involved in the production, transformation, marketing, export and support of mangoes, avocados and passion fruit. The purpose of this workshop was to implicate stakeholders in the identification of constraints to growth in the subsector and the proposition of services to alleviate those constraints. A secondary objective of the workshop was to begin building cohesiveness and early coordination among participants in this subsector. Increased cohesiveness and coordination among participants is a critical step in building higher levels of competitiveness and productivity within the subsector.

Implicating stakeholders, who earn their livelihoods from the subsector in the identification of constraints and services that address them, is an important part of the subsector-business services methodology used in the Kenya BDS project. The consultant team kept questions and discussions on a very practical level and avoided the use of BDS jargon where possible. During the stakeholder workshop participants were asked the question, “What is keeping your and other firms from earning more income from mangoes, avocados and passion fruit?”

The consultants worked with the participants to ensure broad consensus on the answers to this question. Submitted constraints were then grouped into categories. Following the identification and classification of constraints stakeholders were asked, “Of all constraints to increased incomes, which are the most important and need to be fixed first?” The categories and constraints follow. Constraints which participants classified as “most important” are indicated with arrows below.

3.1.1 Information, organization, and management constraints constitute the majority of all constraints identified by stakeholder participants. Dominance of constraints in this category suggest that the level of organization and coordination within this subsector is weak. Weak coordination and organization among participants in a cluster or subsector is the most common and perhaps the most important constraint to increasing competitiveness of the subsector. Facilitating a higher degree of cooperation among participants will be one of the life of project challenges for Kenya BDS staff and participants in the subsector.

Constraints:

- **Lack of trust** between small holders and brokers; between brokers and exporters; between exporters and the consignment buyers to whom they sell.
- **Weak R&D agenda** A number of factors were mentioned. Most of the R&D conducted in this subsector is not coordinated and not linked to demand. Particular needs for R&D were identified in production and post harvest technologies
- **Lack of small holder management skills** There was a general consensus that most small holders particularly of mangoes and avocados, which require less management than passion-fruit do not view their operations as a business, lack management skills, and do not use inputs. While small holders control most of the production in Kenya the lack of application of business practices results in poor quality product, high slippage rates and marketing inefficiencies.
- **Low level of cold chain utilization** The government of Kenya has invested in a series of cold chain facilities. Government estimates that current facilities can hold 7% of current production, but that utilization of these facilities is extremely low. A number of private sector commercial growers indicated a lack of trust in the management efficiency of these government units and suggested that they be leased to private firms. This lack of trust was also expressed in general terms as a lack of partnership between MOA HCDA and the private sector
- **Lack of market information** This constraint exists at two levels. The first is among small holders who are unaware of markets, quantity and quality requirements, and price. As a result small holders feel victims to the broker/traders who are believed to have superior access to market information. Exporters, most of who are relatively small and sell primarily to consignment buyers felt that they are at a disadvantage and have little understanding of the markets into which they sell (EU and GCC). As a result they often do not get paid for what they ship with consignment buyers often complaining about poor product quality or declining market prices.
- **Lack of information about MRL's, EU, and other export market requirements** This constraint is more specific than the market information constraint above. Lack of information on product quality and the dynamic requirements of high value markets is perceived as the major threat to expanded, or even continued access to EU markets by Kenyan exporters. This information gap occurs mostly at the smallholder level, but has an impact on larger grower and exporter ability to increase exporters through subcontract and outgrower relationships with smaller producers.
- **Lack of certification, MRL, traceability, organic, pest residue** The above constraint concerns getting information on market requirements to small holders and to the firms involved with assembling small holder product for market. This constraint addresses an institutional weakness—lack of appropriate controls and enforcement mechanisms to ensure that product assembled matches the requirements of the market it is assembled for.
- **Low knowledge and skill level in crop husbandry.** This is the technical side of the lack of management skills constraint among small holders.
- **Inadequate extension services** Most participants agreed that the existing extension network lacked the resources to provide adequate technical and management skill transfer to small

holders. There is also a lack of coordination between private stakeholders in the subsector to influence and shape the extension agenda so that it becomes more dynamic and responsive to market requirements.

- **High cost of product assembly** This constraint arises from inefficiencies and lack of information at the farm gate. There is very little grading or packaging at this level. Broker traders often pick just what they think they can sell to a particular buyer leaving the rest of the crop on the tree. Poor packaging, transport and, low cold chain utilization leads to high slippage rates further increasing losses and contributing to high product assembly costs.
- **Poor match between varieties demanded and those produced** This is related to the R&D constraint above. Most of the mangoes and avocados are quite old. The bulk of Kenyan avocado produced by small holders are Fuerte. The major demand by the EU market is for the Hass variety. There is also very little product differentiation in Kenya. Hass and Fuerte are but two of a large number of varieties each desired for its own characteristics. Fuerte avocados have much higher water content and tend to be sweeter than the Hass varieties and better suited for some processing. Hass are desired for their higher oil content. There is currently almost no processing of avocados in Kenya. An exception is a seasonal oil extraction plant from South Africa. Kenya produces large quantities of the “apple” mango that has many of the qualities desired by the EU market. At this time almost all Kenyan mango exported is sold into the generic mango market and mostly to consignment buyers.
- **Low quality product** Lack of input use, lack of variety selection, and poor production through post harvest technology all diminish the quality of the product particularly at the small holder level. This constraint is therefore linked to the R&D.
- **Lack of domestic and export product promotion.** This constraint is important because it is a factor that impacts the growth potential of the overall subsector even though it does not necessarily lend itself to a service or an intervention that specifically helps the small holder. Normally establishing local brand identity in the domestic and export markets require a high degree of coordination among a broad group of stakeholders and coordinating agencies.

3.1.2 Input supply Constraints can exist for a number of reasons. Since the reason we are trying to understand the constraints facing participants in the subsector is to identify services that would address them, it is important for us to understand the underlying causes of these constraints. Most of the constraints listed above arise from poor coordination among participants in the subsector. The underlying causes of the input supply constraints are not as clear and it was difficult to establish a consensus on the underlining causes during the participant workshop. Systemic problems in the legal and regulatory environment may constrain importers in licensing or being able to import without paying excessive duties, but most participants indicated that legal and regulatory constraints were not critical. Poor protection of intellectual property rights might make it difficult to access or develop new varieties that meet market demand and are suited to local environments. This has been the case in Kenya, but there have been a few cases in the cut flower industry where intellectual property rights for imported genetic stock has been protected. In some environments lack of input access, at least at the small holder level may be caused by a lack of credit access for input suppliers at terms that would allow them to sell inputs on credit. Credit access was cited as one of the constraints facing the subsector so this might explain part of the input access problem. The principal input access constraints identified by the participant stakeholders are:

- **Lack of genetic stock** More information is needed to determine whether this is an intellectual property right problem, an information problem or an extension problem.

- ***Insufficient local supply for processing*** This constraint was particularly illuminating because small holders were complaining about continual surplus and large quantities of product that are either used as animal feed or rot on the trees. At the same time processors and exporters complained of not being able to obtain an adequate supply of the raw fruit either for processing or exports. Surplus supply at one end of the value chain and excess demand at the other suggests a market imperfection. Resolution of product quality, market information, and product assembly constraints should have an impact on this constraint.
- ***Lack of appropriate processing technology*** This is particularly the case for small scale processing of fresh juice and processed fruits for the local market. There were no firms drying mangoes for the domestic or export market. A cursory look at retail stores from tuck shops to supermarkets in Nairobi and the significant level of imports of juice concentrate suggests that there is a local market for fresh juice. Participant stakeholders indicated that the problem had to do with a lack of information on appropriate technologies.
- ***Lack of input access*** The bottleneck here appears to be a market and an information access one. Input suppliers interviewed indicated that small holders do not use inputs on fruit trees so this market does not appear a lucrative one for chemical stockists. This constraint illustrates the interconnectedness of many constraints. If small holders had access to higher value markets, they would also begin to demand both information and inputs needed to serve those markets. To some extent however access to higher value markets depends on improving the quality of the product through the improved use of inputs.
- ***Lack of credit access*** This constraint was expressed both by small holders and by larger firms interested in investing in plant and equipment. Kenya is one of the leading countries microfinance markets in Africa but is certainly possible that Kenya's microfinance institutions do not extend services to smallholder farmers. The dominant form of financing of smallholder farmers is in the form of input credit from suppliers. Since these suppliers do not yet see the market, it is likely that small holders who wish to purchase inputs may have difficulty finding a supplier to sell on credit.
- ***High cost of inputs can*** be due to inefficiencies in the distribution of inputs resulting in high transaction costs. This does not appear to be the case in Kenya with smallholder producers of mango, avocado and passion-fruit. The greater constraint appears to be the returns from input use do not appear to cover the costs of using them. It appears that the input cost constraint is closely linked with a market access and product assembly constraint.
- ***Expensive irrigation equipment.*** Irrigation equipment and input use allows mango growers to change the production season so that their peak production period falls during the short season. This practice provides premium prices to producers. Most small holders believe that the cost of micro irrigation equipment is outside of their capacity to pay. The consultant team did not look at irrigation budgets for small holders. All medium scale growers use irrigation on their fruit trees and believe that the returns given the premiums they earn for marketing during the short season justifies the investment.

3.1.3 Infrastructure Constraints are difficult to address in a BDS project. They are important to recognize however because significant infrastructure constraints can prevent a subsector from ever becoming competitive. This in turn will constrain growth in the subsector which will limit opportunities for smallholders to earn more in the subsector. It was the general consensus of most participants at the stakeholder workshop that infrastructure constraints, particularly poor roads were an important constraint to increasing the productivity and competitiveness of the subsector. Infrastructure constraints are included here because firms who take risks and earn their living in this

subsector told us there are important. There is not necessarily an appropriate BDS intervention to address these. They include:

- **High freight costs** This constraint is often articulated by smallholder farmers as a the main reason that they cannot sell their product profitably in regional and urban markets. The consultant team found no evidence of price fixing by transporters. This suggests that while high freight costs may be the problem, improved product assembly either by broker traders or smallholder groups is the only realistic solution.
- **Inadequate cold chain** Currently there is minimal use of cold chain by small holders producing mangoes, avocados and/or passion fruit. HCDA has underutilized cold chain facilities and there is at least the possibility that these could be leased to private firms. Demand for cold chain is unlikely to increase significantly until there is considerably more coordination in the subsector, a precondition for increasing exports to the EU which will require greater use of cold chain facilities.
- **Bad roads** Identified as a critical constraint especially during the rainy season. Participants were guardedly optimistic that with the new government there would be more investment in rural infrastructure. This constraint is not likely to be alleviated in the short term nor is there an obvious BDS solution to address it.

3.2 Identification of Key Business services to address critical constraints

After the participant stakeholders ranked the ten most important constraints, the consultant team directed an exercise in which participants were asked to identify business services that would address one or more of the most important constraints. The consultants explained that often constraints are interconnected so a single service may address multiple constraints. It is also possible that a single constraint is complex and has multiple components and may need more than one service to address. The consultants encouraged participants to provide examples of each case as an illustration.

Workshop participants were asked to break up into small groups to identify key business services that could eliminate or at least mitigate the critical constraints. Workshop participants were asked to rank services based on the following criteria:

- Impact on rural household income
- Impact on the largest number of MSE's
- Services that could be provided wholly or in part by private sector providers
- Potential to stimulate growth in the whole subsector (product markets)
- Potential to strengthen the performance of the value chain.
- Target the smallholder.

Not all of the above criteria are complementary. A number of participants observed that some services might be very good at reaching the small holder but have little impact on stimulating growth in the subsector. This was a source of rich discussion and some argument among participants. While most participants agreed that increasing smallholder participation, particularly in the higher value markets would benefit the whole subsector, there was no consensus on the relative weights of each criterion above. Nor should there be. Each participant represents a different position and perspective on the value chain. The consultants asked participants to rank their services based on the above but to assign their own weights based on their perceptions of which criteria were the most important.

Participants were also asked who they thought could provide this service. The results of this exercise were very interesting because a number of participants indicated that they either already were or could with some support provide the critical service. At the end of this exercise workshop participants came up with eight services based on the criteria above.

1. Improved Product assembly and grading.
2. Financial brokering (supplier credit and processor financing)
3. Quality control for MRL, source of production traceability, and weevil control
4. R&D for locally adapted varieties, appropriate processing technologies particularly for drying, and consumer preference testing)
5. Increased input supply targeted to the smallholder
6. Increased supply of appropriate technology for irrigation and processing
7. Business skill training for smallholders
8. Establishment and marketing of Kenya “brand” label.

The identification of critical services by workshop participants completed the workshop. Participant stakeholders reported a high degree of satisfaction and appreciation for being included in the design and development of project activities (more on this in the lessons learned section).

Kenya BDS staff and the consultants met after the workshop to develop a short list of three highest priority business services. Following the Kenya BDS methodology each of these three services would be assessed to verify demand, establish whether or not current providers already existed, and assess the quality of current service delivery. Based on this assessment Kenya BDS will offer a series of tenders with its intervention fund to both providers and facilitators interested in offering particular services or facilitating improved service delivery. The three services selected by the Kenya BDS staff and consultants are:

1. Improved product assembly and grading
2. Improved Quality control (extension, certification, establishment of grades)
3. Input supply at the smallholder level.

In March 2003, Kenya BDS staff conducted market assessments of these three services. The result of that assessment will be used in the development of initial tenders.

4.0 Lessons learned and Recommendations

4.1 Lessons learned The following “lessons learned” were drawn from the interviews, focus groups and one-day participant workshop as well as from discussions among consultants and Kenya BDS staff during this assignment. They are not ranked in importance; they stand alone on their own merits.

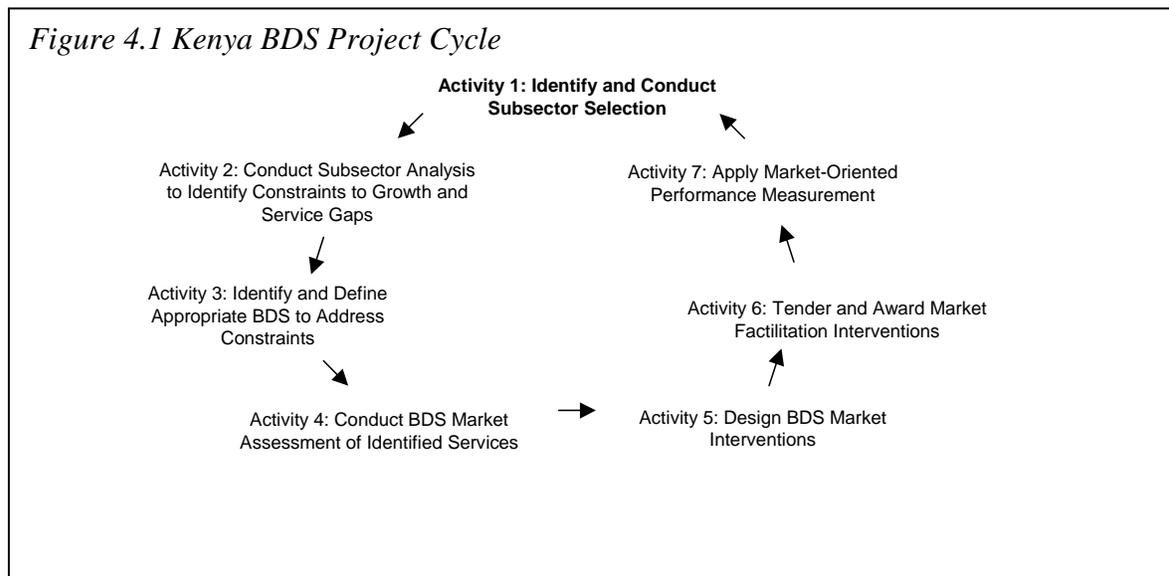
- **Bringing stakeholders together to make deals is itself a business service.** At 100% of the participatory stakeholder workshops I have facilitated or observed, participants value the opportunity to meet other participants and make deals. The deal making aspect of bringing participants together suggests that stakeholder meetings and workshops are themselves a business service. To the extent that part of the service of bringing participants together creates private goods, firms should be willing to pay for part of the costs of these workshops.
- **The tree-fruit subsector is considerably less developed than the rest of the horti- and floriculture subsector.** The lower level of organization among producers processors and exporters of mangoes, avocados, and passion fruit is creates both opportunities and challenges for Kenya BDS and the participants in this subsector. There are few outgrower schemes in tree fruits. Exporters are relatively small and compete against each other to sell to consignment buyers. Low levels of coordination suggests that there are opportunities for innovations to increase productivity and growth at multiple levels. Kenya BDS faces the challenge of facilitating greater coordination within the subsector and increased MSE contribution to the subsector’s growth.
- **Bringing together stakeholders from most or all functions in the value chain to identify constraints and services increases their commitment to invest in and contribute to solutions.** A positive outcome of the workshop was the absence of expectations that Kenya BDS or USAID was going to fix the problem. A number of participants already provide services that address important constraints, others expressed interest in learning how they could provide or contribute to provision of services to strengthen the subsector.
- **Business services that target MSEs are necessary but not sufficient conditions to ensure sustainable increases in rural household incomes.** There has been an evolution in donor approaches to microenterprise development. In the 80’s there was a lot of focus on skill building and training of microenterprise operators with little attention to the performance of the clusters and subsectors in which MSE’s provided goods and services. Concern for impact on large numbers of microenterprises led many donors to look for leverage. Working with subsectors that employed large numbers of MSE’s provided leverage. Often it also led to overcrowding by MSEs in activities with diminishing marginal returns. In other instances MSE participation was temporary as subsectors became more concentrated and integrated. Sustainable increases in MSE incomes for large numbers of MSEs require that MSEs and the subsectors they work in become and remain competitive. A business service approach to improve MSE incomes should look at strategies to facilitate MSE contribution to that competitiveness but also at services that increase the competitiveness of the whole subsector.
- **BDS is a means to an end, not an end itself** There is a lot of discussion and debate on what is good or best practice in BDS. BDS is a much broader universe of activities that financial services defining a narrow set of good practice is much more difficult than for financial services. The provision of services to increase firm income and subsector and cluster productivity is not new. Terms that include BDS facilitator and BDS provider, are relatively new. The terms are useful to helping us understand whether our activities create undesirable market distortions, and whether the incentives exist for a range of providers to continue providing needed services after subsidies are removed. BDS concepts are best used as a filter to look at a set of interventions that

make sense to us and respond to clear needs rather than a set of rules about what can or cannot be done. The real measure of success for the Kenya BDS project will be the number of rural households who earn significantly more than they did or would have in the absence of the project. Sustainable growth in MSE income for large numbers of firms without ongoing subsidy is the most important measure of BDS good practice.

- **Kenyan BDS partners (providers and facilitators) need more than facilitation and grants.** The participant workshop made it clear that there are a number of private firms already, or at least ready, to provide a range of services. The quality of these services is critical to ensuring impact. Much has been learned in recent years about the delivery of product assembly, standards and grading services to MSE's. The same is true for building competitiveness within sectors. Information is available on how to facilitate direct and indirect linkages between MSE's and larger firms. Sustainable linkages that increase MSE incomes provide MSE's access to higher value markets without their becoming captive firms. Conversely larger firms benefit from access to a quality and quantity of product at lower transaction and capital investment costs. Facilitation of the services identified in this report will require an active partnership between grantees, stakeholders in the subsector and the Kenya BDS staff.

4.2 Recommendations for Activities 4-6

Activities 4-6 constitute the heart of the Kenya BDS approach. Figure 4.1 below illustrates each of the project cycle steps. These steps include a market assessment of services, the design of BDS market interventions and the tender and award of Market facilitation interventions.



These activities follow a process developed in collaboration with Kenya BDS and USAID mission staff. The process is a good one. The devil is in the details however. The following list of recommendations is based on an effort to anticipate some of those details.

- **BDS market assessments should make an effort to collect key lessons learned from similar services and experience both from Kenya and elsewhere.** The market assessments in the current methodology attempt to identify supply, demand, willingness to pay, and potential service

providers. This is important information. Background information on lessons learned is useful both in the design of interventions and in assisting providers and facilitators participating in the program to be more effective at providing or facilitating services.

- **Kenya BDS should work in close collaboration with service providers or grantees funded by the program.** There are a number of models for funding agency grantee relationships. Under the Kenya BDS project grantees become implementing partners for the project. Grants will be structured so as to avoid subsidy of services especially at the point of transaction. Project staff will be careful to think through how services can continue after the project without external subsidy. The goal however is to increase MSE incomes through a set of activities that increase the productivity of the subsector and of the MSE's in it. To ensure results Kenya BDS project staff should work as mentors and conduits of information on best practices to grantees.
- **Avoid BDS jargon in communications to grantees and participants in the subsector.** There is already too much of it in this report. We are trying to raise enterprise incomes, we do not need the market to understand what BDS paradigms, facilitators, providers, or market distortions are. Jargon will confuse more than add clarity.
- **Draft interventions that strengthen coordination within the subsector even if all of them do not directly target the MSE.** Without doubt most of the activities funded by Kenya BDS should target the MSE. Lessons learned from supporting MSE's while ignoring the competitiveness of the subsector suggest that both need to occur and at the same time.
- **Draft interventions to strengthen MSE organizations** MSE's in this subsector are largely fragmented and lack strong cooperatives or marketing institutions that represent them. This weakens their sustainable access to the discussion table on how to build the subsector and places them in a position of constantly needing a benevolent broker, like Kenya BDS, to ensure that their voice is heard. Building capacity of smallholder groups is not an alternative to other service delivery approaches. It is critical to building the capacity of smallholders to maintain a voice in discussions on how to build the competitiveness of the subsector.
- **Consider funding competing approaches to provision of the same service.** There is an experimental component to Kenya BDS and different approaches to providing the same service. Project staff should be careful to separate out impact by requiring competing provider approaches to work in different geographical areas.
- **Draft interventions that 'target and tailor' services to MSEs.** MSE's vary considerably in their factor conditions (see next section). Factor conditions include access to infrastructure, management and husbandry skills, entrepreneurship, and level of organization. Despite diverse factor conditions most MSE's will respond to opportunities to earn more income. Not all MSE's have the factor conditions necessary to participate in all markets; most have the capacity to improve the quality and quantity of their product or organize to reduce transaction costs so that they can sell into higher value markets than they are currently selling in.
- **Use BDS principles and donor guidelines as a guide not a rulebook.** The litmus test for good BDS is whether services provided result in increased MSE incomes, quickly and sustainably—where sustainably means without ongoing subsidy. Current BDS principles should be used as a lens through which we can improve upon the design of sound interventions; they should not be used as filter through which all possible interventions must pass.

5.0 A business service approach to increasing rural household income: Increase productivity and competitiveness, reduce perceived barriers to increased service delivery, and target services to MSE factor conditions.

Kenya BDS will achieve the intermediate result *IR 7.3*, —increased access to business support services for MSE's. and in so doing help realize *SO7*, Increased Rural Household incomes by combining elements from three sources: the BDS approach as articulated in the Guiding Principles for Donor Intervention, tools from subsector approaches to economic development and lessons learned from a range of private sector-donor approaches to MSE development. What have we learned that will help us maximize sustainable increases in MSE incomes for rural households in Kenya?

1. Sustainable increase in large numbers of MSE income can only occur in subsectors and clusters that are growing, productive and competitive.
2. Increasing business service access by rural MSE's requires reducing the real and perceived barriers to business service delivery. These barriers include risk, culture and cost.
3. SE business services tend to be most effective when the services can be implemented by the MSE client and result in relatively quick increase in revenue and income for the MSE. Successful business service delivery requires effective targeting of clients and tailoring of services.

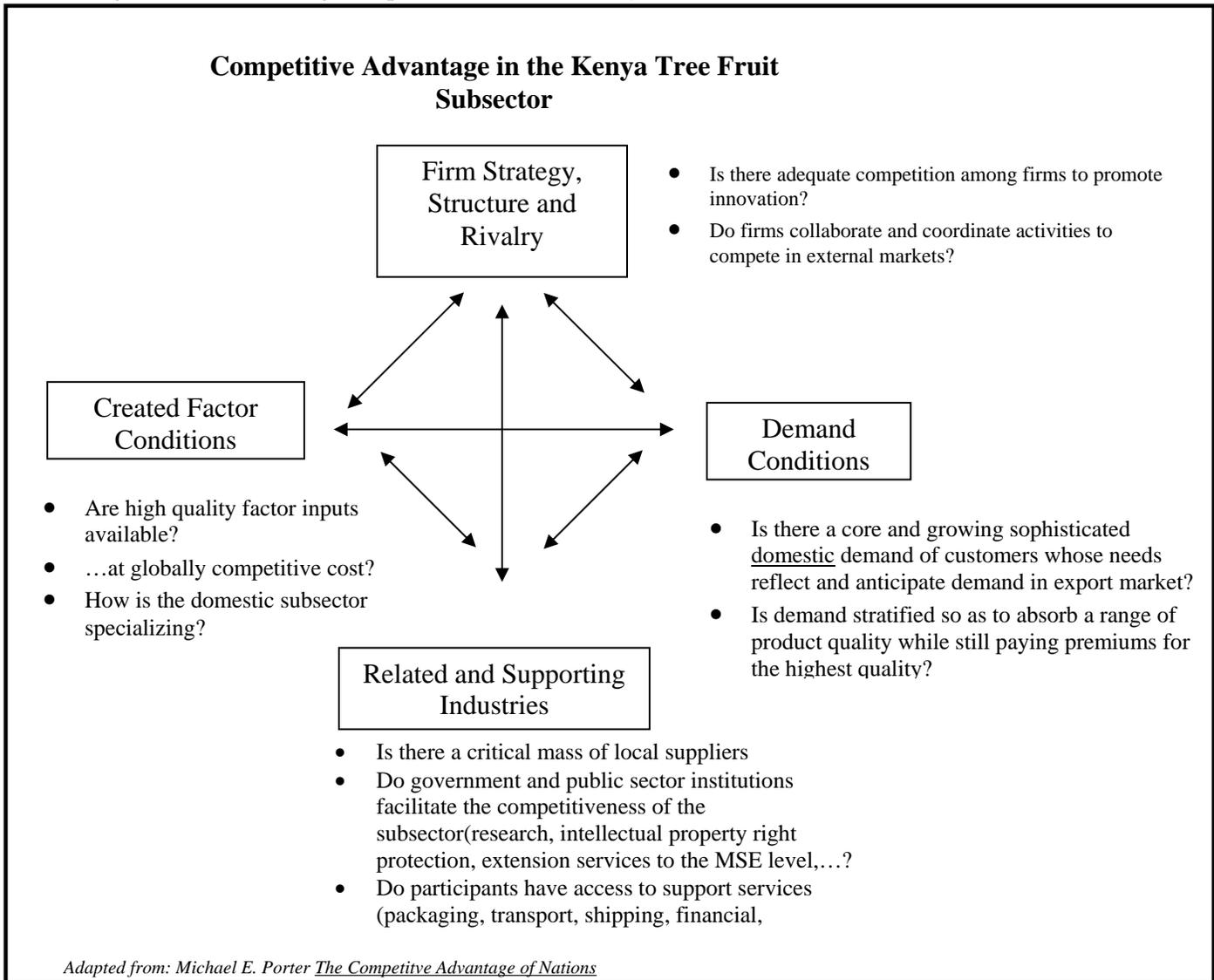
The challenge for Kenya BDS is to act as a facilitator in subsectors that are currently growing or have significant growth potential to: help increase the competitiveness of the whole subsector; identify those services that will enable a broad range of MSE's to contribute to and benefit from the increased competitiveness of the subsector, and reduce the real and perceived risks and costs of business service delivery to large numbers of MSE's. The selection and prioritization of business services that Kenya BDS will design and tender under Activities 6 have and will continue to consider the above challenges. One of the exciting results of the participatory workshop held under Activity 3 was that many of the stakeholders were aware of and openly discussed what needs to be done to increase the competitiveness of the subsector, what the barriers were to increased service delivery to MSE's and the frustrations poor targeting and tailoring of business services.

The following section provides a brief framework for looking at each of these elements.

5.1 Building competitiveness in the the Kenya tree-fruit subsector.

The diagram below adapted from Michael Porter's The Competitive Advantage of Nations illustrates the interrelationships between multiple factors that are critical to building and maintaining competitiveness within the tree-fruit subsector in Kenya. As we have discussed above, sustained growth in MSE incomes in the tree-fruit subsector is linked to the growth, productivity and competitiveness of the whole subsector. Recognizing this the subsector-business services approach used in Activity 3 solicited broad based participation by multiple stakeholders in the subsector including MSE growers, medium scale growers, processors, brokers, exporters, and government representatives. From the questions listed in *Figure 1.1*, and the participatory workshop held at the end of Activity 3, it is clear that many but not all of the determinants of competitiveness are in place. Understanding strengths and weaknesses of the determinants of competitiveness clarify constraints and suggest services that will strengthen the subsector.

Figure 5.1 Building Competitiveness in the Kenya Tree Fruit Subsector



Firm Strategy, Structure and Rivalry There is very little coordination in the subsector among stakeholders in order to more effectively compete in the global marketplace both for exports and against imports particularly of juice concentrate and processed fruits. Stakeholders who participated in the Constraints-business service workshop overwhelmingly supported the initiative of Kenya BDS to bring key stakeholders together. This raises the question of whether it is an appropriate activity for Kenya BDS to bring together key stakeholders for the purpose of increasing coordination and collaboration within the subsector or at least to facilitate this activity with local Kenyan associations such as but not limited to F-Peak, or other association capable of representing the interests of this subsector. There are few barriers to entry however and there is considerable competition among participants in most functions in the subsector.

Demand. There is a growing sophisticated local demand as evidenced by the growth in the domestic juice market. Currently most of the mango and passion fruit juice in Kenya is packaged from imported concentrate. There is very little local processing of either mango, and avocado (some

seasonal extraction of oil occurs). Kenya also imports avocado oil for both baby food and the cosmetics industry. The sophistication of local demand is a driving force in the subsector because it creates opportunities for local firms and multiple firms in the subsector to compete with international producers. There is very little grading or differentiation of either mangoes, avocados, or passion fruit in the local market. There is an emerging segmentation in avocados with consumer preference favoring the Hass variety following the export preference. There has been no market development promoting the relative advantages and uses of the two varieties in the local market. Marketing, developing a Kenya brand identification and local consumer demand have not yet received much attention from participants in the subsector.

Related Support Sectors These factors represent both the biggest weaknesses and strengths in the tree-fruit subsector. Most participants felt that government regulations were not a constraint to improving growth and competitiveness of the subsector. Some participants did complain that the government was less efficient than private sector providers and should get out of the cold chain business. There has not been enough varietal research and it is not clear from the workshop whether there was adequate protection of intellectual property rights for Kenyan producers to be able to introduce new and premium varieties. The principal weakness among related support sectors arises from the poor organization of and coordination among tree-fruit stakeholders.

Factor conditions Kenya has an excellent climate for production, adequate availability of inputs, at reasonable cost. There are infrastructure problems due to poor secondary road access, but this was not considered a binding short-term constraint by participant stakeholders. An important created factor condition is the specialization of local products relative to its global competition. Participant stakeholders at the constraint-business service workshop were aware of the impact that developing and promoting a Kenya 'brand' or label could have in increasing demand for Kenyan products both domestically and abroad. Lack of coordination among stakeholders to function as a cluster in a coordinated manner is the biggest obstacle to developing this specialization.

The life of project challenge for the Kenya BDS project is to stimulate delivery of services that enable MSE's to contribute to and benefit from the increased competitiveness of the subsector as well as services that enhance the competitiveness of the whole subsector even if the direct client is not a MSE.

Figure 5.2 Increasing private sector delivery of services that assist rural households

One of the critical questions in the private sector BDS approach is why are private sector providers not delivering services if MSE demand for services exist. Understanding the answer to this question is important if the facilitating institution, in this case Kenya BDS, is to avoid market distortions and develop a sound exit strategy that ensures ongoing service delivery after the facilitation activity, of if the activity is not designed to continue that the benefits are not lost with the suspension of the service.

Figure 5.2 Barriers to BDS delivery

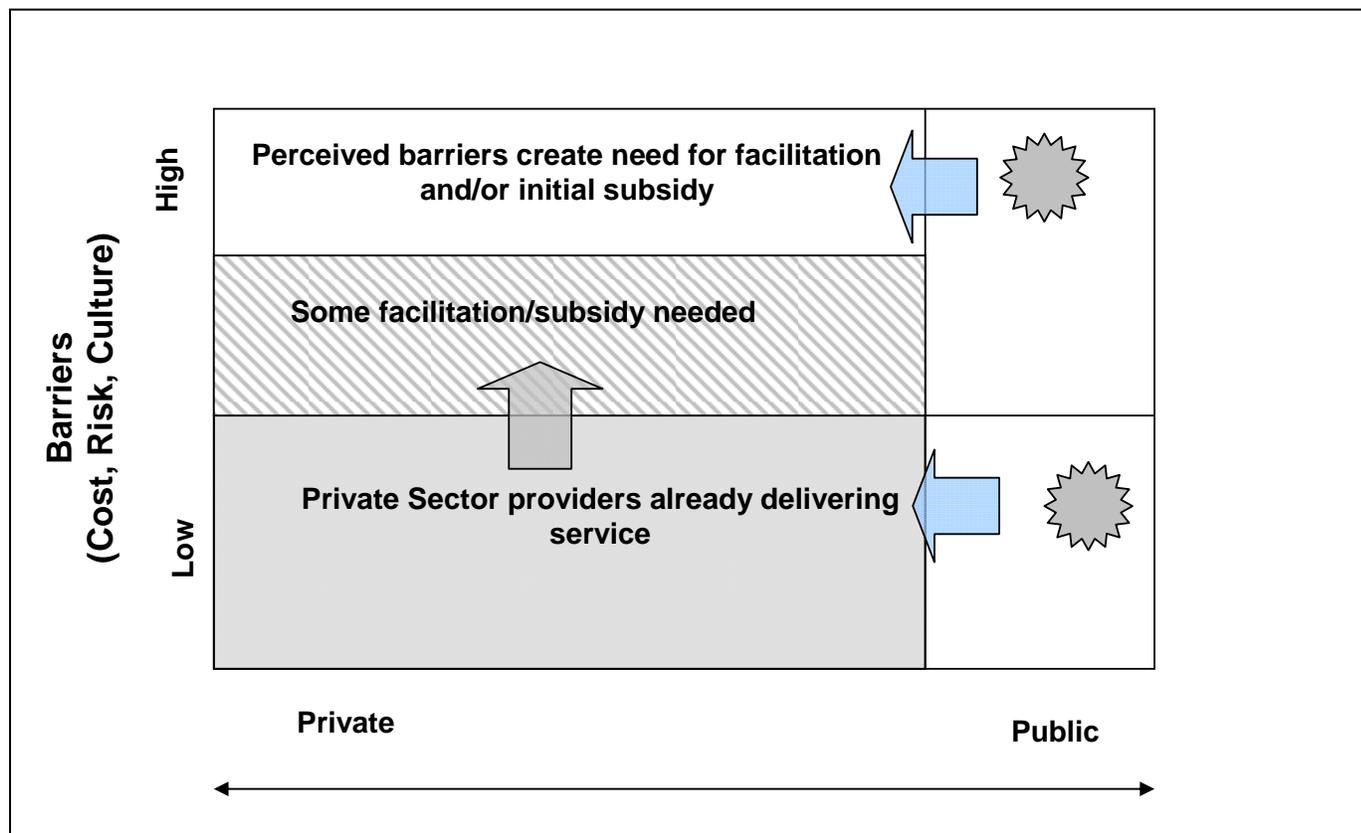


Figure 1.2 above illustrates conditions under which the private sector will offer business services that are key to improving MSE and subsector competitiveness. First the attribution of the services benefits must be private. In Zimbabwe before the current political crisis there was strong protection of intellectual property rights. In this environment the Pioneer Seed Company developed local tomato varieties adapted to small holder cultivation strategies (less capital more labor intensive production). Pioneer Seed was able to conduct this R&D and disseminate the results to MSE farmers because their intellectual property rights were protected and they could recover their R&D and extension costs through the sale of seed. If such property rights are not protected R&D cease to become an enforceable private good and local stakeholders will not invest developing new technologies. In Morocco, a donor partner operating as a benevolent broker helped an American developer of a higher quality strawberry recover royalties from local producers. This activity shifted a service from the public good quadrant on the right into the private good quadrant on the right. Improvements in the legal and regulatory environment protecting intellectual property was necessary to make this service a sustainable one after the end of the project.

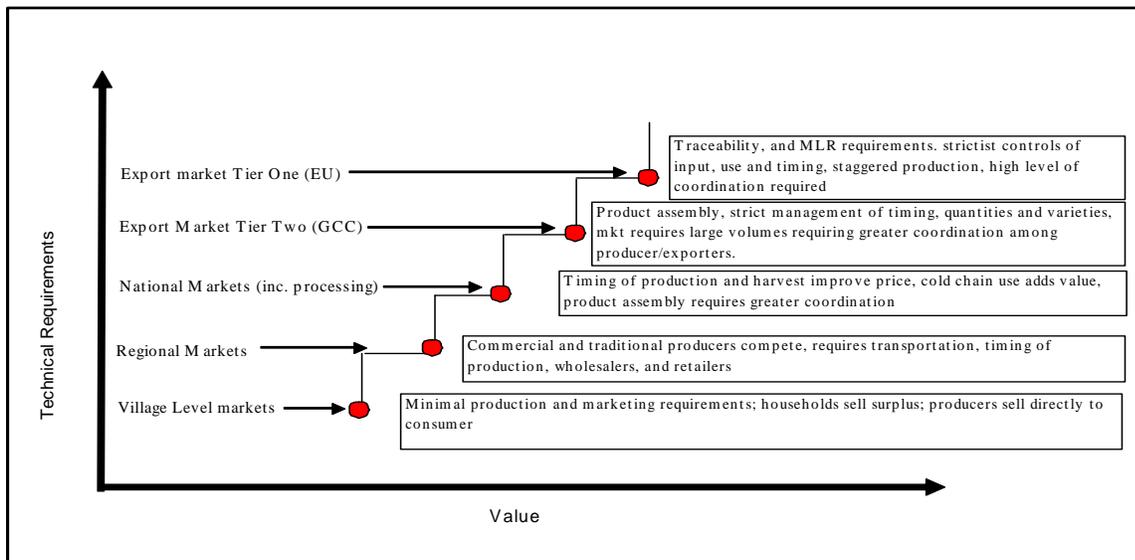
The difficulties in organizing successful outgrower schemes is an example from Kenya in both tree-fruits and vegetables and cut-flowers. Commercial growers and exporters recognize the potential value of working with large numbers outgrowers in order to increase their marketable production base. Kenyan producers and exporters have also had some catastrophic experiences in providing the services necessary to make outgrower schemes successful. These failures included poor control of quality, minimum residue levels (MRL), and quantity of product. The labor costs of organizing outgrowers, training them in production-post harvest techniques and controlling for quality and quantity controls was too high for many contracting firms. Most of the commercial tree-fruit

producers interviewed for Activities 2 & 3 cited some of these failures as reasons why they were unwilling to develop outgrower contracts by providing a range of embedded services to MSE producers. At the same time working with outgrowers enables commercial growers and exporters to deliver a larger quantity to markets than they can produce themselves and for much less up front capital investment. The private sector is not providing of a range of services key to building successful outgrower partnerships because the real and perceived costs and risks of service provision are too high. The challenge for Kenya BDS is to assist in the facilitation of services critical to building successful outgrower schemes. In addition to the intervention fund grants there is an enormous amount of information available from Kenya, other East African countries, and elsewhere on cost effective approaches to delivering business services that strengthen outgrower schemes. Success in this facilitation “lifts” the real and perceived barriers to service provision allowing private sector providers to expand the delivery of services they can provide without a continued subsidy. In the figure above, this lifting of barriers is illustrated by the shaded area. When barriers are lifted, the private sector will be able to expand services to MSE’s.

5.3 Matching services to client factor conditions

One of the challenges for Kenya BDS in designing appropriate services (Activities 5 and 6) will be to make sure that services match the factor conditions of the client. Client factor conditions include, education and business orientation of the enterprise operator, access to roads, extension, and financial support services, level of organization of MSE producers, and commitment to growth. Many failures in building outgrower schemes arises from a poor match between the requirements of the market that the outgrower is producing for, and his or her factor conditions to serve that market. Most MSE producers are willing and able to support the costs of services to sell their product(s) in a higher value market. Initially only a few have the necessary factor conditions to support the services that allow them to sell their produce into the highest value markets. A few, is relative in this context. With over 100,000 MSE producers of mangoes, avocados and passion fruit (Karuga 2002) even if 5% are able to sell at least part of their product into the highest value export markets, over 5,000 MSE’s will benefit. Debate and discussions about whether to build MSE and subsector capacity to serve export or domestic markets fail to recognize that the question is not which market to serve but which services enable producers to serve higher value markets. Figure 1.3 below provides an illustration.

Figure 5.3 Staircase diagram



The vertical (y) axis illustrates increasing technical requirements of different markets. These requirements are described vertically in the boxes on the right of the figure. The horizontal (x) axis illustrates marginal value. As MSE producers in the tree-fruit subsector develop those factor conditions within their control (moving up on the y axis), they gain the ability to compete a higher value market. This process continues as MSE firms continue to: acquire improved production-post harvest and management skills and collaborate more effectively with other MSE producers through production and marketing associations and groups. The BDS facilitation challenge is to make sure that facilitation subsidies do not encourage service providers to extend services to enterprises whose factor conditions prevent them from capturing the value of the service provided. The staircase diagram also suggests that the most effective strategy to build the competitiveness of the subsector is to tailor and target services based on MSE factor conditions.

To some extent brokers interviewed during Activity 2 and 3 are already doing this. Many fruit growers use virtually no inputs and do not operate their enterprise as a business. Essentially they possess fruit trees and when possible they sell fruit from those trees. With these MSE's brokers or broker agents visit the household and pick the fruit themselves separating it by quality and offering a price to the grower. Brokers also buy from more organized growers who pick and in some instances do their own pre-grading. Both growers, processors, and exporters indicated a willingness to pay more for higher quality graded product that meets market requirements and standards. This suggests demand for a range of services to enhance the competitiveness of the subsector tailored for and targeted to MSE's based on their factor conditions.