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BUSINESS PLAN FOR IDEAL MATUNDA

2009-2014

APRIL 2009

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BUSINESS PLAN FOR IDEAL MATUNDA

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Table of contents

Acronyms and Abbreviations	4
List of Figures, Charts and Tables	6
Acknowledgements	7
EXECUTIVE SUMMARY	8
1.0 Introduction	11
2.0 Business Background and History	12
3.0 Products and services	13
4.0 Operations Strategy for IML	15
4.1 Farmer mobilization and formation of ASCA's for smallholder producer groups.....	15
4.2 Access to reliable and profitable markets.....	17
5.0 Market Analysis	22
5.1 Marketing of Horticultural produce in Kenya.....	23
5.2 Fruits and vegetables.....	26
5.3 Analysis of producer areas for avocado.....	27
5.4 Marketing Channels for horticultural produce.....	27
5.5 Value Addition.....	33
5.6 Key market players in the avocado value chain in Kenya.....	33
6.0 Marketing strategy for IML	35
6.1 Target market.....	35
6.2 Vision of IML.....	35
6.3 Mission.....	35
6.4 Strategic objectives.....	35
6.5 Marketing plan for IML.....	35
6.6 Customers and markets.....	37
6.7 Price.....	37
6.8 Promotion.....	38
6.9 Place.....	38
6.10 Position.....	38
7.0 Management and organization	38
7.1 Overview.....	38
7.2 IML management structure Year 1.....	39
7.3 Staff Organogram Year 2 – 5.....	40
7.4 Human resource management.....	43
7.5 Staff incentive scheme.....	43
8.0 Premises and Equipment	43
9.0 Management Information Systems and Financial Management	44
9.1 Tax Accountants / Accounting system to be used.....	44
9.2 Internal control systems.....	44
10.0 Use of PQA program in implementation of the strategic business plan for IML	45
10.1 Benefits of using a PQA program.....	45
10.2 How the PQA works.....	46
Customer Measures.....	47
Financial Measures.....	47
Process Measures.....	47
Employee Measures.....	47

Learning and Innovation Measures	47
10.3 Implementation of PQA	47
10.4 Quarterly Audit Assessment consists of the following practice:	47
10.5 How is PQA different from other performance management systems?.....	48
10.6 6 Sigma.....	48
10.7 Malcolm Baldrige Quality Awards	48
10.8 How can PQA be automated?.....	48
10.9 Adoption of PAQ by IML	49
11.0 Financial Projections.....	50
11.1 Table banking financial modeling.....	50
11.2 IML Service Provision Model.....	51
11.3 Financial Modeling for Marketing of fruit	53
11.4 Factory operation financial modeling	54
11.5 Overall Cash Flow [5 Year]	56
11.6 Profit and Loss	57
11.7 Capital Requirements	59
11.8 Loan Repayment Schedule for financing	61
12.0 Risk Management / Mitigation	62
12.1 Table banking	62
12.2 Service Provision	62
12.3 Avocado brokerage.....	62
12.4 Processing	63
12.5 Other Overhead Costs.....	63
13.0 Conclusion and recommendations on the way forward	64

Acronyms and Abbreviations

AAK	Agrochemical Association of Kenya
ADA	Agricultural Development Adviser
BDO	Business Development Officer
DAI	Development Alternatives Inc.
EAG	East African Growers
FFV	Fresh fruits and Vegetables
HCDA	Horticultural Crops Development Authority
IBL	Ideal Business Link Ltd
IFG	Ideal Farmer Group
IML	Ideal Matunda Ltd
KARI	Kenya Agricultural Research Institute
KBDS	Kenya Business Development Services
KEPHIS	Kenya Plant Health Inspectorate services
KHE	Kenya Horticultural Exporters
KTDA	Kenya Tea Development Authority
MOA	Ministry of Agriculture

List of Figures, Charts and Tables

Figure 1: process map for farmer group mobilization and recruitment
Figure 2: IML model for delivery of high quality extension services
Figure 3: Process map for avocado harvesting and delivery to exporters
Figure 4: IML oil processing map
Figure 5: Farmer – IML – Supermarket model
Figure 6: Marketing channels
Figure 7: Farmer wholesaler kiosk method
Figure 8: Main FFV marketing and transactional relationships
Figure 9: Diagrammatic representation of supply map for major FFV in Nairobi

Chart 1: Value chain stakeholders in production and marketing of FFV
Chart 2: Value of exports in horticultural production in Kenya 2006
Chart 3: Percentage share in volume & value by horticultural commodity sub groups

Table 1: Value chain stakeholders in production and marketing of FFV
Table 2: Volume of horticultural exports in Kenya 2000 – 2006
Table 3: Projected production for key horticultural commodities
Table 4: Avocado production 2005 – 2007
Table 5: IML SWOT analysis

11.0 Financial projections

- 11.1 Table banking financial modeling
- 11.2 IML Service provision model
- 11.3 Financial modeling of marketing export fruits
- 11.4 Avocado oil processing financial modeling
- 11.5 Overall cash flow for IML
- 11.6 Projected profit and Loss for IML

11.7 Capital requirements

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Finally, it must be stressed that opinions expressed herein are purely those of Ideal Matunda Ltd.

Beth Mwangi
Managing Director
Ideal Matunda Link Ltd

EXECUTIVE SUMMARY

Ideal Matunda Ltd (IML) is an agricultural marketing company with an integrated operation, covering agricultural financing for farm inputs, high quality extension services, and facilitation of market linkages for smallholder agricultural producers. The mission of IML is to partner with smallholder farmers in Kenya to provide them with reliable markets and high quality extension service in order to maximize returns on investment in agriculture.

The potential for smallholder farmers to supply high quantities of high quality produce is well demonstrated by the success of the Kenya Tea Development Agency (KTDA) in Kenya. KTDA has had a major impact on the farm level incomes and on the quantity and quality of smallholder tea grown in Kenya.

IML hopes to replicate the same success for selected value chains in the horticultural sector. IML intends to start with the avocado value chain where invaluable lessons have been learnt under the Kenya BDS piloted initiatives. However, for success to be attained, it is imperative for the company to scale up operations and invest in appropriate infrastructure and technical capacity for effective and efficient service delivery in view of the low production levels and profit margins at the level of each individual smallholder farmer. To build the necessary capacity, the company proposes to partner with development agencies and financial institutions both for financial and technical support.

Horticulture is one of Kenya's most important sub sectors particularly in terms of rural employment, income generation and foreign exchange earning. It is estimated that the sub sector employs 2.5 million people directly and 3.5 million indirectly. The sub sector is a major source of income generation for both rural and urban population. According to the 7th version of the National Horticulture Marketing Task Force Report, the sub sector generated Ksh **131.4 billion** in 2006 consisting of **Ksh 82 billion** and Ksh 49.4 billion in the form of local and export value respectively and the sub sector now ranks second after tourism sector in the country's foreign exchange earnings. It generated about Ksh 14.9 billion in 1998, Ksh 36.5 billion in 2003, Ksh 44.9 in 2005 and Ksh. 49.4 Billion in 2006 with export earnings growing at approximately 12% compound growth rate over the last 5 years to reach Ksh 49.4 billion in 2006.

Smallholder production dominates the sector, accounting for over 60% of total area cultivated, 75% of production and 85% agricultural employment. Smallholder farmers play a crucial role in the cultivation of crops for both the domestic and the export market.

IML aims to position itself as socially responsible agricultural marketing company targeting smallholder horticultural farmers with an initial focus on smallholder avocado growers. Although export of horticultural produce is fairly well organized in Kenya, it is worth noting it is dominated by a few big companies and exploitation of smallholder farmers by middlemen and other cartels is still a big problem. In addition, due to inefficiencies along the different value chains, a lot of fresh produce goes to waste and it is farmers who bear the loss since the middle men are able to factor in the element of risk in their pricing.

IML will target both the domestic as well as the export markets because of the high potential in both markets for smallholder farmers. Decisions on products to be targeted will be informed by careful market research and gross margin analysis to ensure that both the farm enterprises and IML are profitable and sustainable. IML will start with the avocado value chain where a lot of work has been done and lessons learnt in the last four years.

Brokers who rarely have an interest in the long-term development of the market currently dominate the current avocado marketing channels. Their role between farmer and brokers has mainly been exploitative and been characterized by: Unreliability – one never knows when the broker will decide to come for the fruit. This leads to poor crop husbandry since there is no sure return; poor prices – since the broker is not sure of the quality of produce he/she offers the lowest possible prices to the farmers; and disorganized local marketing structure and strategy.

Avocados are grown in many countries of the world and are consumed principally as fresh fruit. In marketing fresh avocados, imperfect and odd sized fruits are usually rejected. Due to poor orchard management, few of the fruits meet the quality standards for export market in Kenya. In addition, the fruits selected require special handling because of their highly perishable nature. Therefore, the development of new avocado products and improved methods of preservation are of interest to avocado growers and markets.

For grade 1 avocados, IML will buy avocado fruits and sell them to established export companies in the short term. This will help in mitigating risk associated with international trade. In the medium to long term, IML will build in house capacity to export the fruits directly.

For Grade II IML will invest in a processing plant to process avocado oil from avocado pulp. Successful negotiations have been held with Ruiru Natural Oils to lease their processing plant to IML with effect from May 2009 with the option to buy the plant at the end of one year. The plant has the capacity to process 25 tons of avocados every day. IML intends to invest in a refinery to add value to the crude oil in order to attract a better price. Investment in the refinery will also allow the plant to remain operational through out the year as opposed to the current system where processors operate for only five months and remain closed for the rest of the year. This will lead to higher returns on investment which will be passed on to farmers in form of higher prices for grade two fruits. Direct processing by IML will immediately raise smallholder producer incomes by 75% from the Ksh 4.00 paid to the farmers in 2008 to the price of Ksh 7 to be paid by IML in 2009. As IML continues to add more value through oil refining and efficient operations, the price paid to the farmer is expected to increase by another 80% within the next five years. This is expected to motivate farmers to invest in avocado farming as a business which will contribute to economic growth and development.

The business plan shows clearly how the agricultural sector in general, and the avocado fruit sector in particular will be transformed by the entrance of Ideal Matunda Ltd. The impact of value addition through processing of avocado into oil will significantly reduce the perennial losses of avocado since avocado oil can be stored unlike the fresh fruit. Access to a reliable market will also facilitate farmers' access to financial services, agricultural finance and it will lead to a dramatic increase in rural household incomes. It is worth noting that income paid to smallholder producer groups will increase from an estimated Ksh 13.6 million in years 1 to Ksh 212 million in year 3 and 558 million in year 5 due to value addition and improvement in quality and quantity of production.

To realize the set targets, IML will require to a capital investment of Ksh 307,950,004 over the five year plan period. IML will adopt a gradual growth approach in order to minimize risk and to build on lessons learnt during implementation of the plan. Thus, the investment will be spread out as follows:-

	Ksh
Year 1	70,950,000
Year 2	52,921,000
Year 3	37,031,900
Year 4	106,562,522
Year 5	<u>40,484,582</u>
	<u>307,950,004</u>

In addition to the capital investment, IML will require overdraft facilities to meet the working capital requirements for the processing plant and for agricultural loans for the smallholder groups which will be recovered from sale of their avocados.

Out of the Ksh 70,950,000 capital investment required in the first year, it is imperative for IML to raise Ksh 10,100,000 immediately in readiness for the processing season that begins in May 2009 for infrastructure development. This will be required to meet the following costs:

Boiler for heating to replace diesel	1,200,000
Lease for 6 months	2,400,000
Oil refinery – 30% deposit	5,000,000
Storage tanks for crude oil	<u>1,500,000</u>
Total	10,100,000

Overdraft facilities of Ksh 12,000,000 will also be required for buying the fruits for processing by the beginning of May 2009.

It is encouraging to note that by the fifth year, IML will not require any overdraft facilities as all working capital requirements will be comfortably financed by internally generated funds.

1.0 Introduction

Ideal Matunda Ltd (IML) is an agricultural marketing company with an integrated operation, covering agricultural financing for farm inputs, high quality extension services, and facilitation of market linkages of agricultural produce. The objective of IML is to provide a “one stop shop” to address the problems facing smallholder farmers in carefully selected value chains through a commercial approach. The mission of IML is to partner with smallholder farmers in Kenya to provide them with reliable markets and high quality extension service in order to maximize returns on investment in agriculture.

The potential for smallholder farmers to supply high quantities of high quality produce is well demonstrated by the success of the Kenya Tea Development Agency (KTDA) in Kenya. KTDA has had a major impact on the farm level incomes and on the quantity and quality of smallholder tea grown in Kenya. The company acts as a management agency providing a comprehensive package of management services including marketing, procurement, accounting, banking and crop payment services. It has more than 500,000 smallholder farmers and it manages one of the most successful fertilizer credit programmes in Kenya.

IML hopes to replicate the same success for selected value chains in the horticultural sector. However, for success to be attained, it is imperative for the company to scale up operations and invest in appropriate infrastructure and technical capacity for effective and efficient service delivery in view of the low production levels and profit margins at the level of each individual smallholder farmer. Further development costs will have to be incurred in group mobilization, formation and capacity building of smallholder producer groups, management information systems, and quality control systems. To build the necessary capacity, the company proposes to partner with development agencies and financial institutions both for financial and technical support.

It is worth noting that Kenya consumes approximately 95 % of fresh fruits and vegetables produced annually. The only products with significant export share as a percent of national production are French beans (48%), avocado (14%), Chillies (12%) and garden peas (7%). Thus, as an agricultural marketing company, IML will target both the domestic and the export market in order to maximize revenue for smallholder farmers. The assurance of a reliable market is expected to motivate the farmers to invest in farming as a business. By adding value through timely delivery, grading, packaging, processing, handling and post-harvest management, IML hopes to enhance the net returns for smallholder farmers.

To hedge against the risks inherent in agriculture, IML will select fresh fruit and vegetable value chains that will compliment each other to ensure a steady cash flow for the farm enterprises through out the year bearing in mind that many rural households grow more than one crop. This is expected to increase the rural household incomes leading to improved livelihoods and a reduction in poverty levels.

Although IML has been operational for the last two years a formal business plan had not been developed. As the firm gears up for growth, it is imperative to have a solid plan and it is in this regard that IML sought the technical support of Ladder Management and DAI to facilitate the development of a strategic business plan for a five-year period to guide the operations of the firm. The objectives of the assignment were as follows:

- a) Analyze the current marketing structures for horticultural products (local and external)
- b) Identify, recommend and develop an operation strategy for IML

-
- c) Clearly identify infrastructure development needs and costs for successful agricultural marketing of horticultural produce with a special focus on avocados
 - d) Provide optional operational levels and explain rationale for recommendations
 - e) Identify key risks and strengths of the operations
 - f) Provide capital and operating costs and revenue estimates
 - g) Identify key performance areas and critical success factors
 - h) Develop an organization plan
 - i) Develop quality management systems for the company
 - j) Recommend optimal staffing levels
 - k) Recommend an appropriate HR policy

Ladder Management has worked very closely with the IML management to develop a comprehensive business plan covering the period 2009 – 2014, which is detailed here below.

The study methodology and approach used in developing the business plan comprised of literature review of available data and information from various sources including the MoA, HCDA, and detailed discussions with the staff and management of IML.

2.0 Business Background and History

Ideal Matunda Ltd is a subsidiary company of Ideal Business Link Ltd, a development and management consulting firm. It was incorporated in October 2006 with the primary objective of offering agro chemical services and advisory services to farmers in the tree fruit sub sector.

In 2005, IBL was contracted as a facilitator to implement a pilot project targeting the tree fruit sub sector by the USAID funded Kenya Business Development Services (Kenya BDS). The broad objective of the project was to increase rural household incomes through commercialization of business development services in the tree fruit sub sector with a special focus on avocados, mangoes and passion fruits. Two categories of services were successfully commercialized under the project namely: - grafting and pruning services and agro chemical spraying services. For grafting and pruning services, IBL was involved in identification and capacity building of independent commercial service providers (SP's). The SP's have since formed membership associations in the different geographical areas to enhance sustainability and for them to be recognized by key stakeholders in the industry. The success of the pilot project and the increasing demand for agrochemical spraying services led to the incorporation of IML in October 2006 to provide commercial extension service to the smallholder farmers. A critical and innovative component of the service offered to the farmers was linkage to a commercial bank, Equity bank Ltd that worked in collaboration with DAI and IBL to develop a tailor made loan product for avocado farmers. The bank innovatively waived the traditional collateral requirements to facilitate access to financial services to the farmers. It accepted co-guarantees of farmers within the group and supply contracts signed with the export companies as alternative collateral. By 2007, approximately 3600 farmers from Maragua district in Central Kenya were benefiting from the loan facility. The objective was to improve the quality of avocado fruits produced so that they could be sold in the export market, which offers better price compared to the local market. At the time, there were three market linkage firms working under Kenya BDS to link smallholder avocado farmers with both the export and processing markets and consequently there was ready demand for quality fruits produced by avocado farmers.

Unfortunately, the market linkage firms that were providing market support to smallholder avocado farmers ceased operations in 2007 and this affected farmers' access to profitable markets. The result was disintegration of the avocado producer groups formed under the Kenya BDS program and a significant decline in demand for agrochemical spraying services. However, few of the strong farmer producer groups that had enjoyed the benefits of spraying their crops requested IML to link them with a market for their quality produce at a fee and IML started offering market linkage services in 2008 on a limited scale. IML adopted the same model that had been promoted by Kenya BDS. Under the model, farmers signed supply contracts directly with export companies for sale of their fruits while they signed a different contract with IML for the market linkage services. Several challenges were experienced in marketing of the crop under the model, which discouraged many of the farmers and led to collapse of many groups. A deeper analysis of the pricing structure revealed there was a fundamental flaw in the model because the margin was too low to meet the cost of doing the business in a sustainable way. Based on their experience, the management of IML decided to restructure the business model in order to position the company more competitively in the agriculture sector. The primary objective of the restructuring process was to increase the value proposition for smallholder farmers in order to enhance the sustainability of business. A decision was made to position IML as an agricultural marketing company with a social mission.

The mission of the restructured business is to partner with smallholder agricultural producer groups to offer access to reliable and profitable markets and high quality extension services in order to maximize returns from investment in agriculture.

IML intends to start with the avocado value chain where invaluable lessons have been learnt under the Kenya BDS piloted initiatives. The main producing areas are Nyanza, Central and Eastern Provinces with the main export varieties concentrated in Central and Eastern Provinces and the business is currently operational in Central. These varieties are also being processed into crude avocado oil. Due to the seasonal nature of the crop, a second crop namely French bean will be promoted in the medium term to improve the cash flow of rural households in the target areas. Unlike the avocado, which takes at least six months to mature, French beans mature within 45 days. The avocado growing areas have a favorable climate for growing French beans as well and this will supplement household incomes from the tree fruit. The crop can also be grown on small sized land holdings that are found in Central Kenya.

3.0 Products and services

IML will partner with smallholder farmer producer groups to offer the following products and services:-

- a) Table banking – This is a form of a managed Accumulated Savings and Credit Association (ASCA). It is a Kenyan innovation prevalent in rural areas, which has proved effective in mobilizing savings. It is a self-regulating financing model introduced to individual groups. It is not based on a formal financial institution and exists in order to give the farmer an opportunity to save and to borrow cash as the need arises, especially for domestic necessities. The ASCA will contribute to the financial stability of the smallholder producer groups, provide much needed cash for farm inputs and curb incidences of side selling of farm produce to meet urgent household needs.

-
- b) High quality extension services – to access high quality markets, farmers must have quality produce that is competitive at the international level. IML will offer advice on good agronomic practices for avocado orchards and link farmers to service providers for grafting and pruning. Agrochemical spraying services will be provided by well trained service providers with supervision by IML ensure compliance with international quality standards
- c) Agricultural finance for farm inputs – this will be given in form of embedded credit through the ASCA's. This will facilitate timely access to farm inputs in order to maximize production. The farm input loans will be recovered directly from sale of farm produce.
- d) Access to reliable and profitable markets for selected high value agricultural products through purchase of contractually agreed produce. Initially IML will deal in avocados but in the long term, it will venture into other carefully selected value chains in order to maximize value for partner smallholder producer groups. Three strategies will be pursued in marketing of the produce in order to maximize value for smallholder producers:
- Brokerage – For grade 1 avocados, IML will buy avocado fruits and sell them to established export companies in the short term. This will help in mitigating risk associated with international trade. In the medium to long term, IML will build in house capacity to export the fruits directly. All the export companies buy fruits through brokers but the brokers are not well organized and they do not have capacity for quality control and post harvest handling. The result is heavy losses from fruit rejection at the pack house which are passed on the smallholder farmers through low prices. Through its partnership with farmers, IML is able to control post harvest losses through training on grading and quality issues, and grading at collection centres in order to minimize rejection levels at the pack house. The benefit is passed on to the farmer in form of high prices. Currently IML is offering the highest price to farmers in the market of Ksh 4/ and Ksh 4/50 for Fuerte and Hass avocados respectively compared to prices of Ksh 1- 2 offered by brokers.
 - Value addition through processing – Avocados are grown in many countries of the world and are consumed principally as fresh fruit. In marketing fresh avocados, imperfect and odd sized fruits are usually rejected. Due to poor orchard management, few of the fruits meet the quality standards for export market in Kenya. In addition, the fruits selected require special handling because of their highly perishable nature. Therefore, the development of new avocado products and improved methods of preservation are of interest to avocado growers and markets. IML will invest in a processing plant to process avocado oil from avocado pulp. There are three main oil processors in Kenya currently namely: Ruiru Natural oils which is the oldest and is located at Ruiru; Avo Oil, which is located at Thika and Olivado, which is located at the EPZ. The three companies process avocado into crude oil and export it to South Africa and Europe where it is refined further and used for cosmetics / beauty products and high quality edible oil. Successful negotiations have been held with Ruiru Natural Oils to lease their processing plant to IML with effect from May 2009 with the option to buy the plant at the end of one year. The plant has the capacity to process 25 tons of avocados every day. IML intends to invest in a refinery to add value to the crude oil in order to attract a better price. Investment in the refinery will also allow the plant to remain operational through out the year as opposed to the current system where processors operate for only five months and remain closed for the rest of the year. This will lead to higher returns on investment, which will be passed on to farmers in form of higher prices for grade two fruits. Direct processing by IML will immediately raise smallholder producer incomes by 75% from the Ksh 4.00 paid to the

farmers in 2008 to the price of Ksh 7 to be paid by IML in 2009. As IML continues to add more value through oil refining and efficient operations, the price paid to the farmer is expected to increase by another 80% within the next five years. This is expected to motivate farmers to invest in avocado farming as a business

- e) Direct trading in the Fresh Fruit and Vegetable (FFV) domestic market – The bulk of avocado fruits in Kenya are consumed by the domestic market. In the medium term, IML will develop the necessary infrastructure to become the market leader in avocado trade in the domestic market.

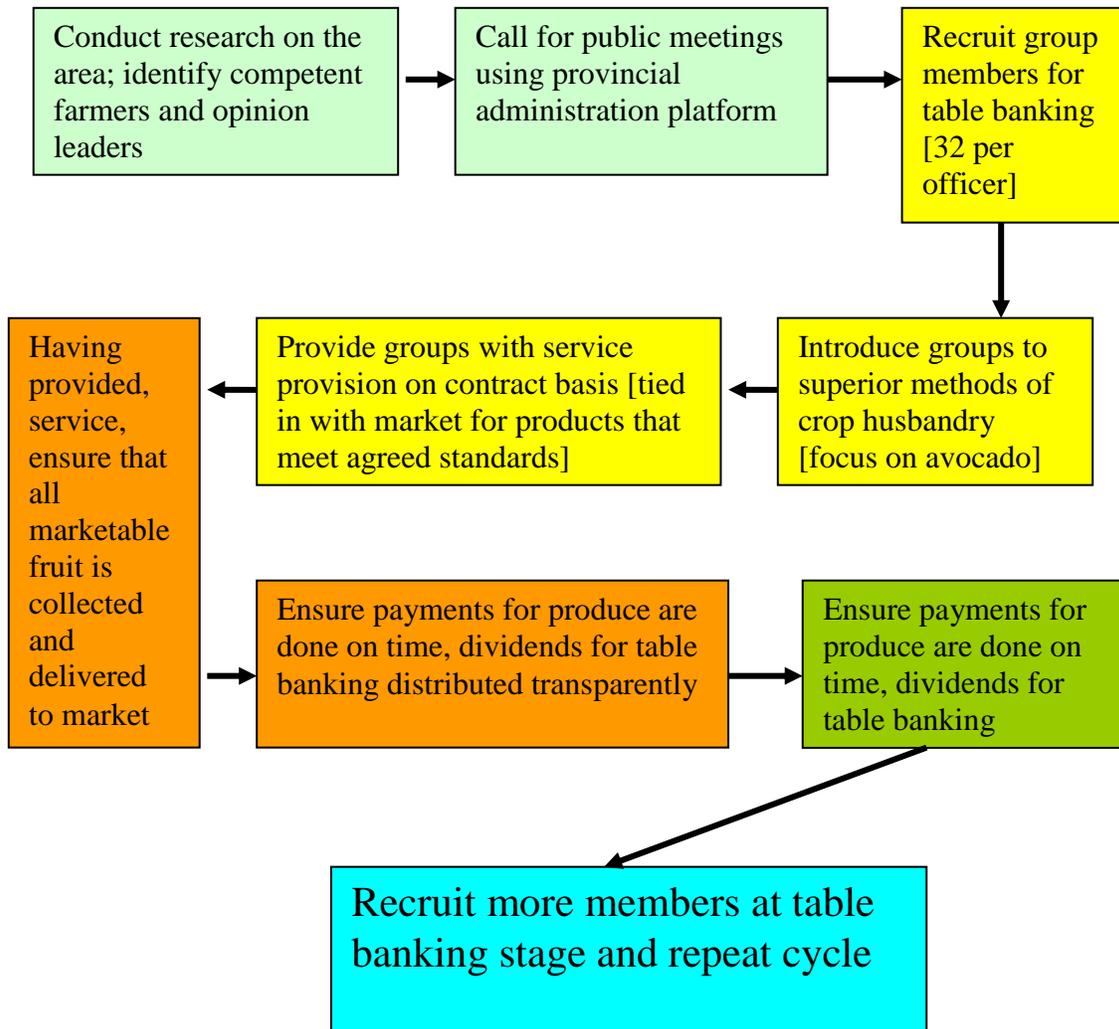
4.0 Operations Strategy for IML

4.1 Farmer mobilization and formation of ASCA's for smallholder producer groups

IML will employ business development officers (BDO's) who will mobilize and sensitize farmers on business opportunity available for them to partner with the firm in order to access high value markets for their avocados. They will be sensitized on the partnership agreement and how it works and the roles and responsibilities of each party in the agreement. A detailed Ideal Farmer group (IFG) partnership program description is attached as Annex 1. Smallholder producers willing to partner with IML will be mobilized to form groups of 25-30 farmers. The groups referred to as "Ideal Farmer group (IFG)" will be governed by bylaws. Detailed copies of IFG program agreement, IFG rights and responsibilities and IFG bylaws are attached as Annexed II, III, and IV.

The BDO' will take the new IFG through comprehensive 12 hours training on how to work together and manage an efficient ASCA. The training will be spread over three weeks with sessions of three hours each held once a week. The IFG will the start with an ASCA whereby all members start saving Ksh 200/ every month. Accumulated savings are advanced to members at an interest rate of 10% per month. Advances together with interest are repayable after one month. Members will meet once a month to conduct their table banking activities. This will serve to strengthen the group and make it cohesive enough to engage in joint production and marketing activities of their avocados or other farm produce. BDO's will attend the monthly group meetings to provide management oversight of table activities and continuous capacity building of the group. A management fee of 1% per month of total revolving fund of the group will be charged. A BDO be responsible for managing a minimum of 32 groups in order to optimize operational efficiency. The 32 groups will form a business unit with its own cost and profit centre. From our financial analysis, an ASCA will become self-sustaining within 3 years. The BDO's will report to the Micro finance Manager who will be in charge of all table banking activities and agricultural finance.

Figure 1: Process map for group mobilization & recruitment for table banking and fruit production

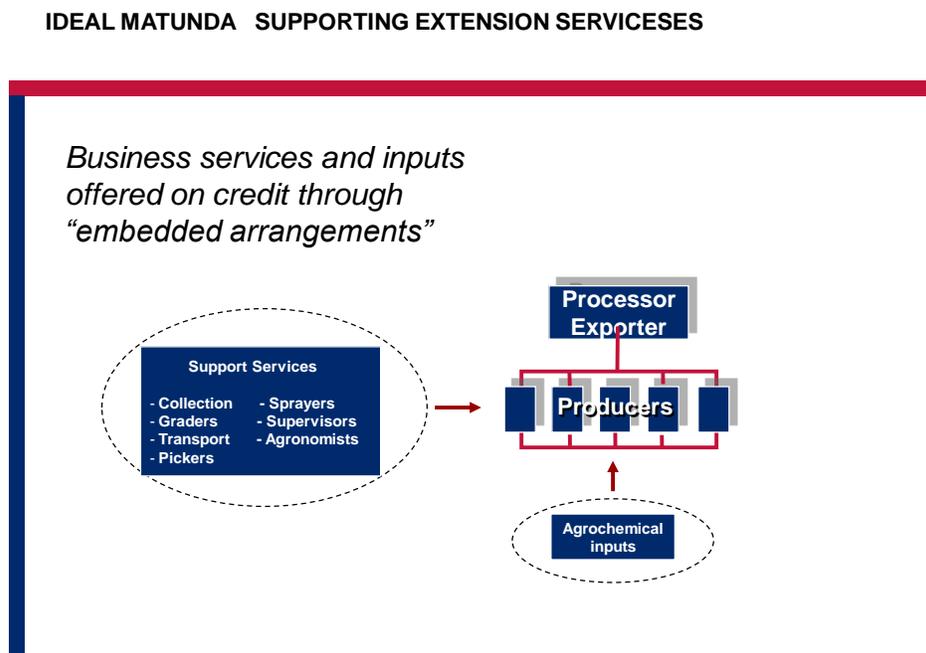


All the IFGs in a business unit will have an agricultural development adviser (ADA) with expertise in agronomy. The ADA will be responsible for building the capacity of the group to adopt good agricultural practices and facilitating access to high quality extension services in order to maximize production. They will also be responsible for production planning and projections to facilitate marketing planning. At harvesting time, they will be responsible for coordinating delivery of picking orders to farmers, grading, quality control and timely delivery to the market. The ADA will meet the farmer group once a month to discuss production related issues. Supply contracts between IML and the IFG's will be signed at the beginning of the avocado season in July of each year stipulating the minimum guaranteed price for both Grade I and II fruits. The ADA's will monitor and supervise production activities during the avocado season to ensure farmers practice good agricultural practices in order to get quality produce that will be competitive in the market place. Contrary to popular belief, good quality fruits are required for both the export market

and for oil processing. Processing of poor quality fruits can lead to high acidity in the oil thus reducing its value.

To maximize production and enhance the quality of the produce, IML will offer agricultural finance through embedded credit to IFG's for farm inputs like fertilizers and agrochemical spraying. This will facilitate timely use of farm inputs. For example, it is a documented fact that agrochemical spraying during the flowering stage can reduce flower abortion by up to 70%. IML will develop a spraying regime at the beginning of each season and advise the farmers on the costs. Agrochemical spraying will be compulsory for all IFG's in order to protect the avocado crop against pests and diseases. Technical support and advice will be sought from KARI in developing the spraying regime; and regular scouting of the avocado orchards for pests and diseases. Farmers will also be linked to independent service providers for grafting and pruning services to ensure their avocado orchards are well managed.

Figure 2: IML model for delivery of high quality extension services



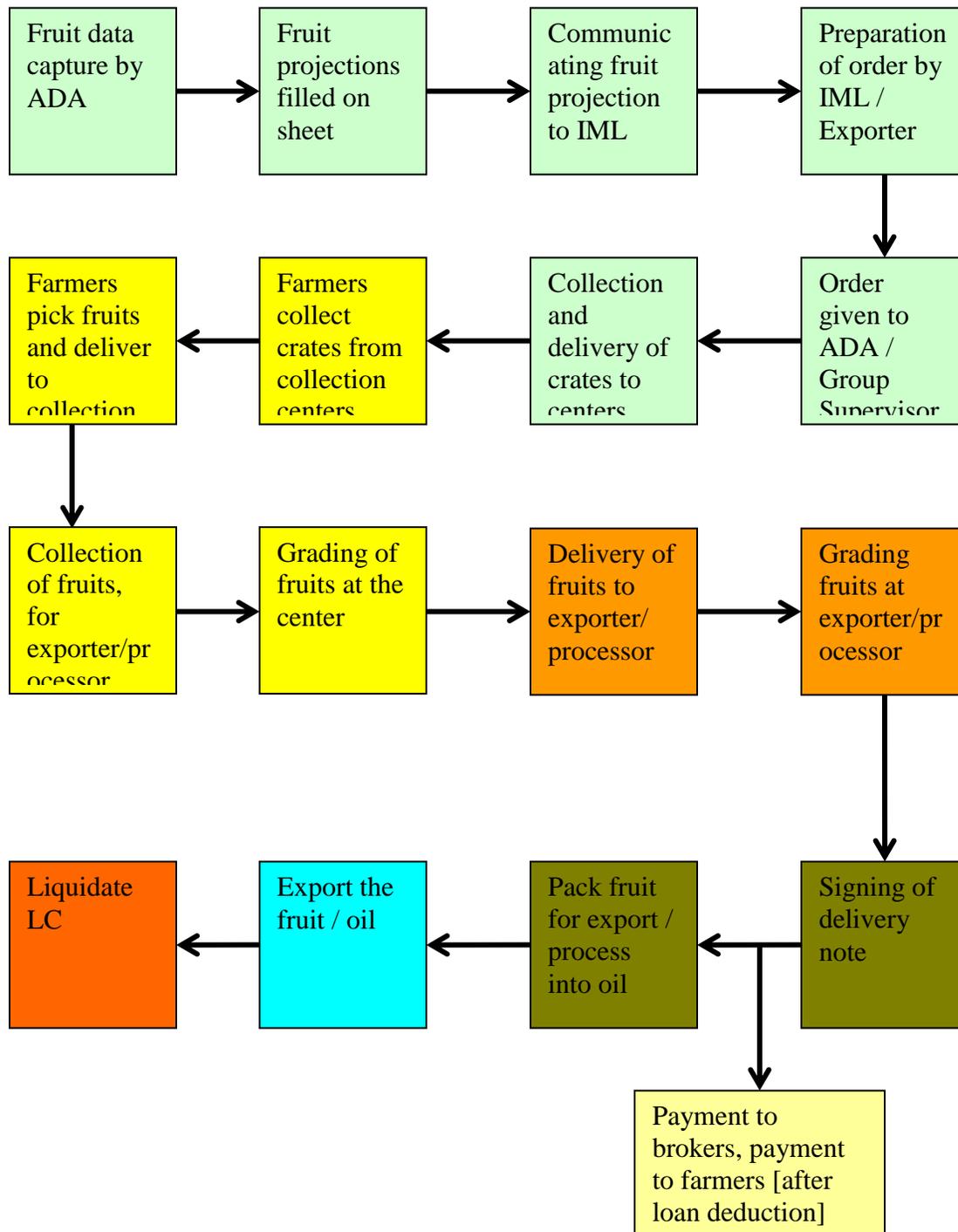
4.2 Access to reliable and profitable markets

The mission of IML is to offer access to reliable and profitable markets for smallholder producer groups. This will be achieved through use of three different strategies namely:

- a) Brokerage – where IML will buy avocados and then look for a buyer. This strategy will be pursued for grade I avocado fruits which will be sold to the export market. All Grade 1 fruits will be sold to an established exporter. Currently IML is selling export fruits to Kakuzi. It also has established relationships with East African Growers (EAG) and Kenya Horticultural Exporters (KHE) and has sold fruits to them in the past. This is primarily because IML does not currently have the expertise and

capacity to trade in the international market for fresh produce and the high risks / costs associated with international trade.

Figure 3: process map for avocado harvesting and delivery to an exporter e.g. Kakuzi or KHE / EAG



***Notes on the process map**

Projections

- Farmers give ADA's the projected number mature of fruits and expected dates for picking by filling the projection forms.
- The ADA consolidates projections for all the groups in his cluster
- ADA submits projections to the Area Manager / field coordinator to consolidate cluster projections.
- Area manager / Field Coordinator emails to the Marketing manager in Nairobi for verification.

Communication to / from Exporter e.g. EAG or Kakuzi

- The Marketing Manager communicates to purchasing officer on projections specifying varieties of fruits and the volume available
- The purchasing officer gives order in writing to IML Marketing Manager clearly indicating the sizes and variety of fruits to be delivered. The order can be sent via email on Exporter's letter head

Communication to IML field coordinator / Field Office

- The marketing manager checks order against projections given to Exporter and confirms order
- The marketing manager scans order and sends it by email to the field coordinator.
- The Area manager / field coordinator takes copies of the order and gives them to the ADA's for onward delivery to groups in their respective clusters
- The ADA's organize field logistics for harvesting, grading and collection in their respective clusters.
- The Marketing Manager organizes transport from collection centres to Exporter

Collection of crates

- Collection of crates from IML stores by IML field driver
- Delivery of crates to collection centres.
- Farmer group leaders collect crates for their respective groups

Fruit harvesting

- Farmers and pickers harvest required fruit sizes.
- Farmers grade fruits to ensure only export quality fruits are packed
- Farmers deliver the packed fruits to collection centres

Collection centres

- Farmer leaders and any identified grader(s) sort out the fruits for their members.
- ADA and an Assistant supervise the grading.
- Recording clerk records quantity of fruits delivered and accepted by IML
- Farmers load the fruits in the truck for delivery.

Transportation

- Truck is directed by the ADA through the selected routes to the collection centres.
- Fruits are delivered to Exporter by ADA and recording clerk

Delivery of fruits at EAG

- Exporter employees unload fruits from the truck.

-
- IML to give delivery information to Export officer at the factory level
 - Grading of fruits and processing by Exporter.
 - Confirmation of rejected and acceptable fruits i.e. pack ability and signing of delivery book by Export office
 - Rejected fruits returned to IML for delivery to processing plant at Ruiru

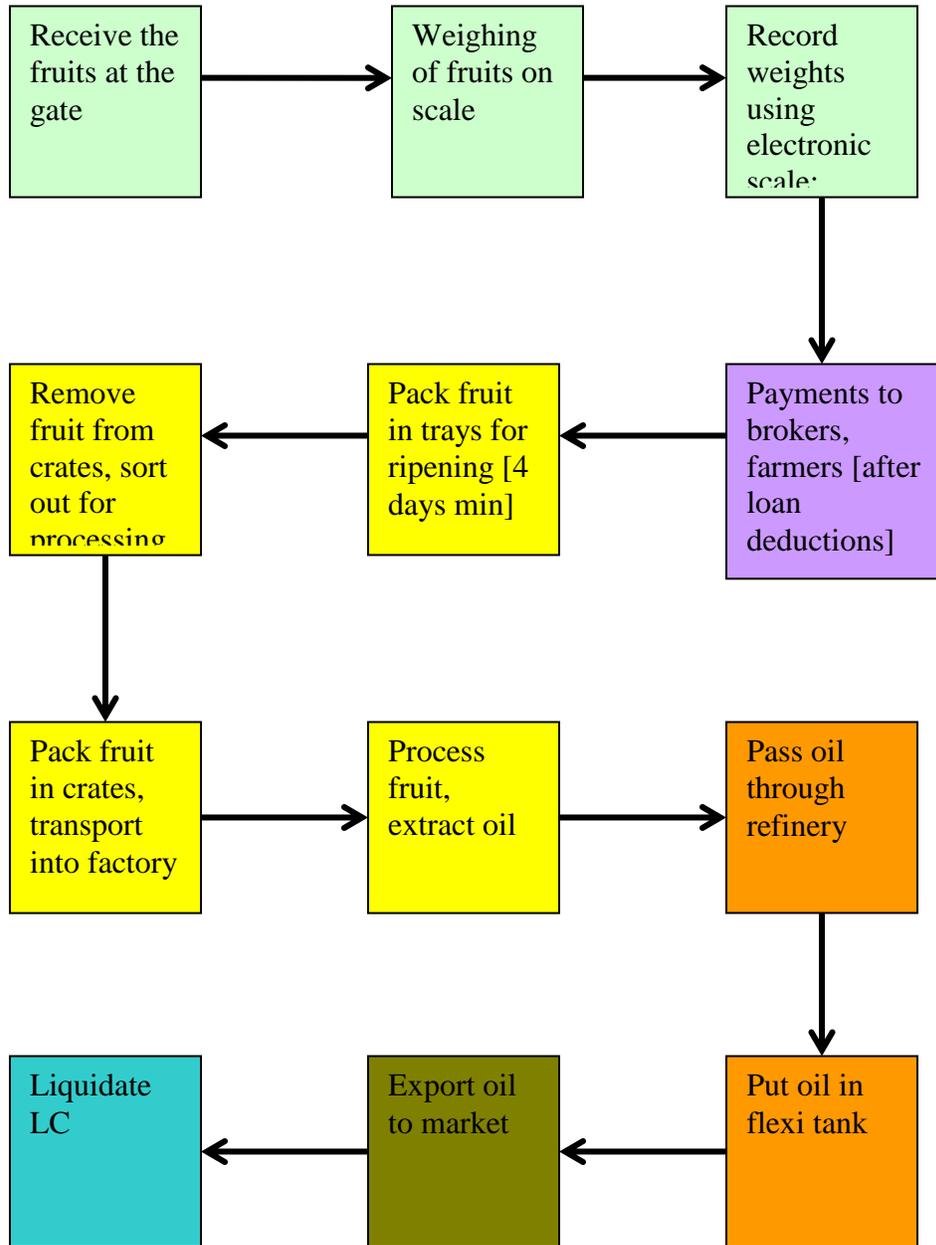
Due to the small number of players in the export market, IML has experienced some challenges in the marketing of avocado fruits through established exporters and an alternative strategy will be explored in the medium term. For example, although Kakuzi is a good buyer, experience during the current season has clearly demonstrated the firm has limited capacity in handling produce from smallholder producers. As an established avocado grower, Kakuzi gives first priority to produce from its own farm during processing and packing. Thus, fruits delivered by IML and other brokers are processed later and this can take one to three days. This leads to deterioration in quality and weight leading to unnecessary losses. Consequently, in the medium term, IML will build its capacity to export fruits directly.

b) Value addition through processing

All grade II fruits will be processed into avocado oil by IML. The company will source mature avocados from both its out growers as well as brokers to ensure the plant operates at optimal capacity. Currently, the avocado oil processing companies in Kenya process crude oil, which they export in bulk to South Africa and Europe.

IML intends to add more value by investing in a refinery to refine the oil further. Refined oil fetches a higher price in the international market and it is more competitive as it attracts more buyers than crude oil. During the first year, 95% of the processed oil will be sold to bulk importers while 5% will be refined further and used to develop sample products for testing in the cosmetics industry in Kenya. Depending on the results of the pilot products, IML will invest in development and packaging of beauty / cosmetics products. Further market research will be conducted to establish the viability of packing premium edible oils for the high-end market that can be sold in the local and regional markets as finished products.

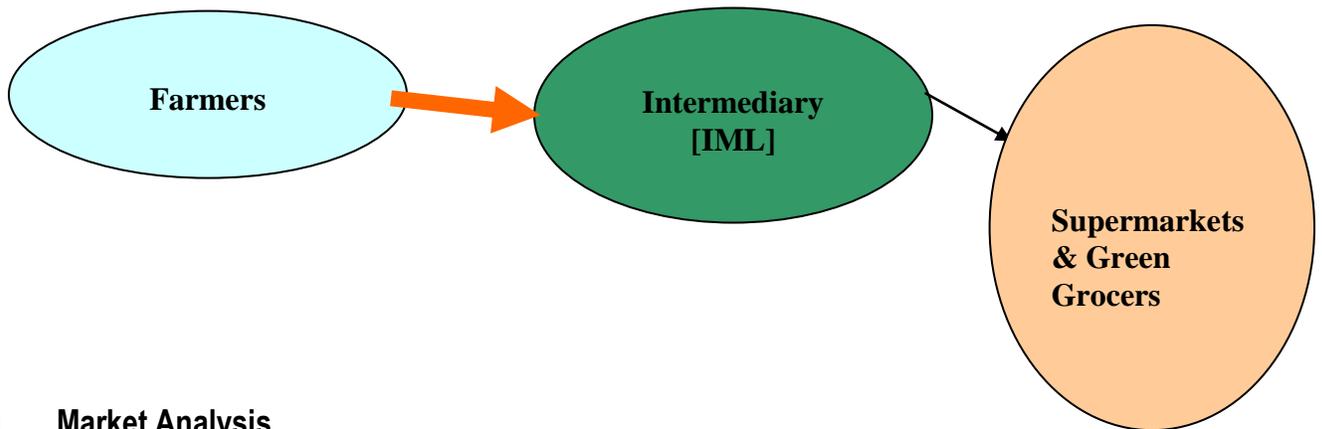
Figure 4: IML Oil processing map



c) Direct trading in the domestic and regional markets

From the statistics available on horticulture production in Kenya, 95% of total production is consumed in the domestic market while only 5% is export. As an agricultural marketing company, IML intends to position itself strategically in the FFV market. Since it already has a captive market for smallholder farmers partnering with the firm, IML will develop the necessary infrastructure to trade actively in the domestic market. As a starting point, IML will establish commercial linkages with supermarkets and green grocers through which produce from smallholder farmers will be sold. Figure 4 below is an illustration of the marketing channel that IML will use to penetrate the domestic market initially.

Figure 5: Farmer – IML – Supermarket Channel



5.0 Market Analysis

Horticulture is one of Kenya's most important sub sectors particularly in terms of rural employment, income generation and foreign exchange earning. It is estimated that the sub sector employs 2.5 million people directly and 3.5 million indirectly. Of this total, smallholder farmers are substantial and account for approximately over 80% of the country's production of fruits and vegetables.

The sub sector is a major source of income generation for both rural and urban population. According to the 7th version of the National Horticulture Marketing Task Force Report, the sub sector generated Ksh **131.4 billion** in 2006 consisting of **Ksh 82 billion** and Ksh 49.4 billion in the form of local and export value respectively and the sub sector now ranks second after tourism sector in the country's foreign exchange earnings. It generated about Ksh 14.9 billion in 1998, Ksh 36.5 billion in 2003, Ksh 44.9 in 2005 and Ksh. 49.4 Billion in 2006 with export earnings growing at approximately 12% compound growth rate over the last 5 years to reach Ksh 49.4 billion in 2006.

Smallholder production dominates the sector, accounting for over 60% of total area cultivated, 75% of production and 85% agricultural employment. Smallholder farmers play a crucial role in the cultivation of crops for both the domestic and the export market.

Table I: Value Chain Stakeholders in production and marketing of FFV

Value Chain Components	The Stakeholders
The Operator	<ul style="list-style-type: none"> ➤ Farmers ➤ Transporter ➤ Traders at the markets ➤ Brokers ➤ Processors
The Supports	<ul style="list-style-type: none"> ➤ Service Providers (Both Financial and non-financial) ➤ Customers ➤ Farm Input suppliers. ➤ Development Partners and well-wishers ➤ Common Interest Group
The Enablers	<ul style="list-style-type: none"> ➤ Policy makers (Government Ministries) ➤ Development Partners

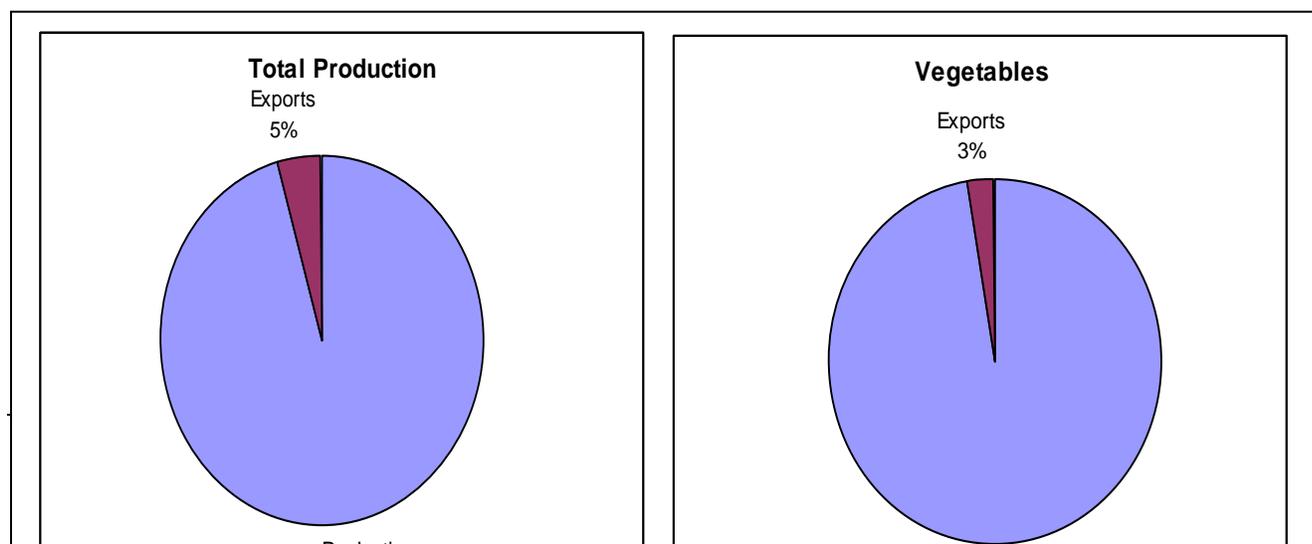
5.1 Marketing of Horticultural produce in Kenya

Marketing of export horticultural produce is well controlled and organized. However, the domestic trade in horticultural produce, which accounts for about 96% of total horticultural production is disorganized with little investment in management and physical infrastructure in all urban areas countrywide (see chart 1 below). The result is high wastage of these highly perishable commodities due to lack of proper handling and suitable physical market infrastructure.

Failure to regulate domestic horticulture markets has over time resulted in very poor returns to producers due to unethical trading practices, heightened health risks for consumers and low collection of fees and charges for Local Authorities. The current state of urban market facilities are a physical barrier to trading large volumes of perishable agricultural produce.

Most producers and traders in fruits, flowers and vegetables business operate individually. There are very few product based farmers and traders associations resulting in exploitation and low investment in value addition processes at production and market levels. This has also resulted in low ability for farmers and traders to lobby for services from public and private sector service providers.

Chart 1: Proportion of export volumes in horticultural production in Kenya, 2006



All horticultural products combined are estimated to have generated a total of Ksh 82 billion in 2006 consisting of vegetables-Ksh 36.6 billion or 44.6%; fruits-Ksh 30.3 billion or 37.4%; Cut flowers-Ksh 13.5 billion or about 16.5%; and the rest Ksh 1.4 billion. Thus, fruits and vegetables together accounted for approximately or 82% and about Ksh 66.9 billion of total horticultural production and domestic value respectively.

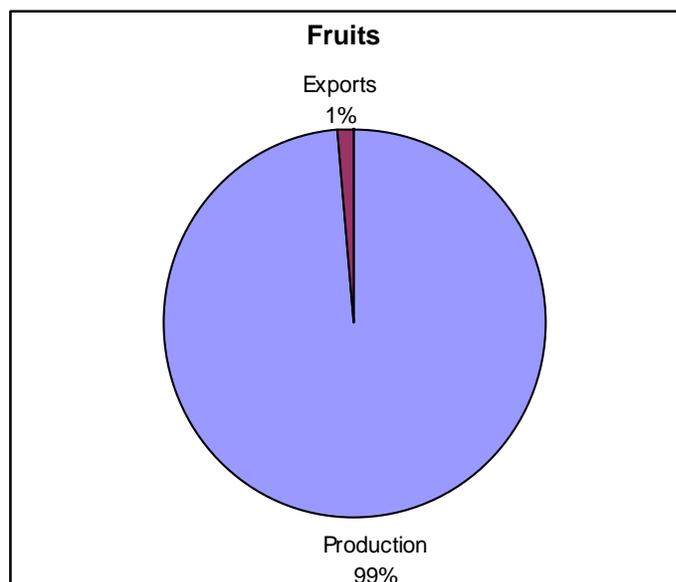


Table 2 below shows the trend in volumes of horticultural exports from year 2000 – 2006.

Table 2. Volume of horticultural exports in Kenya, 2000 – 2006 (Metric Tonnes)

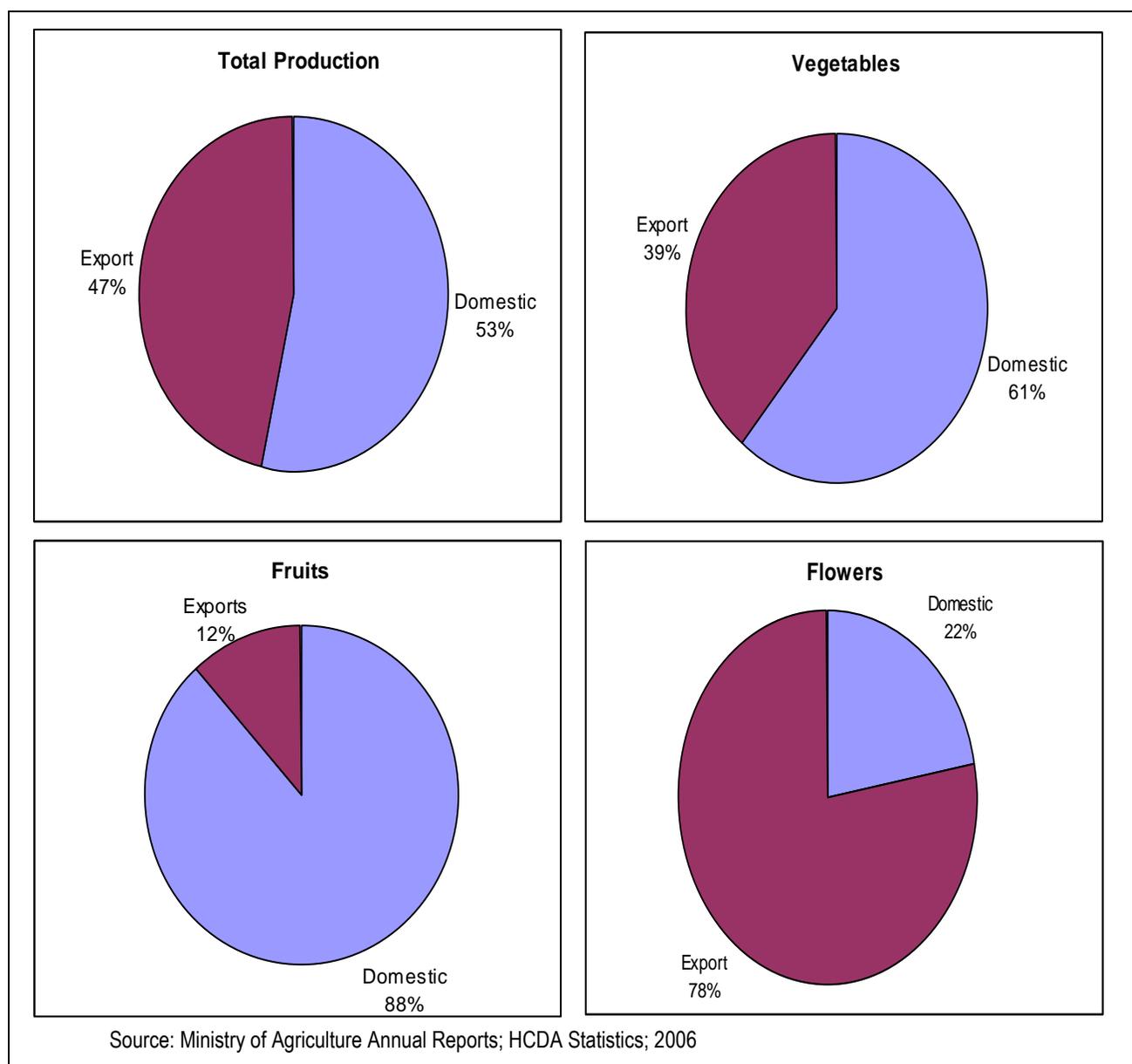
Produce	2000	2001	2002	2003	2004	2005	2006	Growth (‘00-’06)
Vegetables	45,038	33,921	43,969.7	48,270.5	52,805	61,220	78,780	74.9%
Irish Potatoes	-	-	-	-	-	-	-	-
Cabbages	12	14	83	4	8.5	10.9	13.1	9.2%
Kales	-	-	-	-	-	-	-	-
Tomatoes	54	13	33	6	7.2	4.2	0.8	-98.5%
Onions	965	551	724	518	420.7	462.9	57.7	-94.0%
Carrots	46	28	23	58	52.6	112.8	63.6	38.3%
French beans	29,071	19,425	29,669	35,448	46,103	53,215	46,431	59.7%
Spinach	74	4	3	1	0.1	9.7	29.9	-59.6%
Garden peas	1,780	1,123	1,371	1,618	1,806	2,206	2,064	16.0%
Snow peas	3,564	3,127	3,700	2,780	3,617	2,449	4,400	23.5%
Asian Vegetables	7,006	6,075	6,877	5,412	16,129	18,413	19,210	174.2%
Indigenous vegetables	-	-	-	-	-	-	-	-
Herbs & spices	1,318	850	713	406	556.3	796.4	813.5	-38.3%
Others	1,150	3,559	2,672	2,829	2,995	3,171	5,696	395.3%
Fruits & Nuts	15,416	22,595	22,482	23,575	20,090	18,522	17,293	12.2%
Bananas	26	21	18	19	16.5	17.2	6.3	-75.8
Pineapples	484	319	336	487	598	1,388	1,547	219.6%
Mangoes	2,687	3,166	7,081	2,227	2,009	1,002	1,182	-56.0%
Citrus	42	59	5	33	1.9	10.7	0.4	-99.0%
Avocadoes	10,716	15,372	12,890	19,020	15,960	15,243	12,960	20.9%
Paw paws	7	8	6	5	13	12	5	-28.6%

Passion	830	800	1,024	1,506	1,335	998	1,074	29.4%
Macadamia	498	2,717	916	171	28	811	419.5	-15.8%
Others	126	133	245	106	36.3	48.9	98.3	-22.0%
Cut flowers	38,757	41,396	52,097	60,983	66,805	82,056	107,040	176.2%
Total	98,964	93,283	119,262	133,235	139,726	162,196	203,113	105.2%

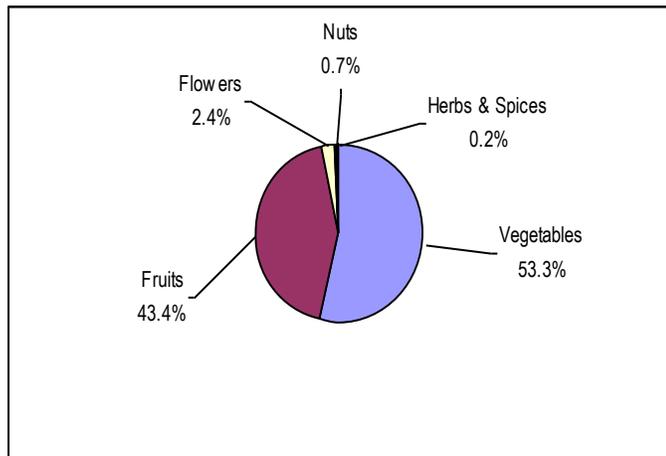
Source: Ministry of Agriculture Annual Reports, 2003; 2006; HCDA

Because of poor or no planning for fresh produce marketing infrastructure including access roads, processing facilities and physical markets in urban centers, the level of wastage in the marketing chain for fresh fruits, flowers and vegetables has remained high. The result is that although internal domestic trade accounts for 96% of total horticultural production, in terms of value the percentage contribution of the domestic market is 53% while exports contribute 47%. This is illustrated in chat 2 below:-

Chart 2: Value of exports in horticultural production in Kenya, 2006

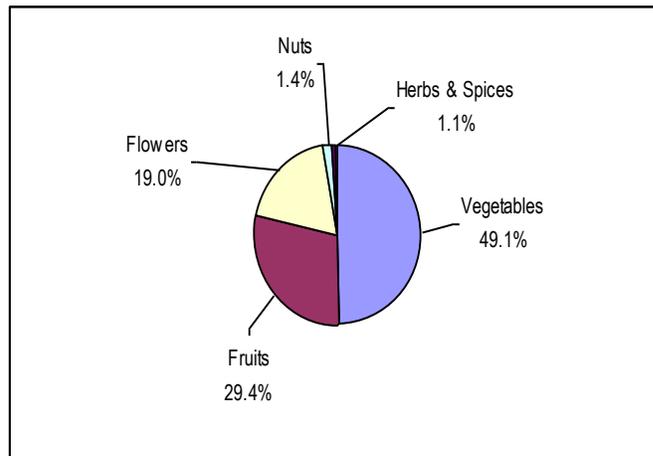


Percentage Share of Total Volume (2006)



Source: MOA

Percentage Share of Total Value (2006)



Source: MOA

5.2 Fruits and vegetables-

The main fruits produced in the country in order of volume are *Bananas*¹, *Pineapples*, *Mangoes*, *Citrus*, *Avocadoes*, *Paw paws* *Passion fruits* and *Water Melons*. Except for pineapples, which are dominated by Delmonte and Kakuzi in Thika, the rest of the fruits are predominantly produced by small-scale farmers, mainly in Nyanza, **Central**, Rift Valley, Coast and Eastern Provinces. These varieties are also being processed for oil. Production of these fruits has been growing and the trend is expected to continue. This is shown in the table below and will form the basis of the financial projections for IML.

Table 3: Projected production for key horticultural commodities

Commodity	2002	2003	2004	2005	2006	Aver. Volume	Est. CGR (%)
						(2002-2006)	
A: FRUITS							
<i>Avocado</i>	52,431.00	70,948.00	80,316.00	80,851.00	94,819.00	75,873.00	1
<i>Passion</i>	29,118.00	28,993.00	31,951.00	32,551.00	40,567.00	32,636.00	1
Sub Totals	81,549.00	99,941.00	112,267.00	113,402.00	135,386.00	108,509.00	
<i>Average Growth Rate per annum</i>							
B: VEGETABLES							
<i>French Beans</i>				62,189.00	63,821.00	63,005.00	
<i>Spinach</i>				29,173.00	35,095.00	32,134.00	1
Sub Totals	-	-	-	91,362.00	98,916.00	95,139.00	
Total	81,549	99,941	112,267	204,764	234,302	203,648	
<i>Average Growth Rate Per Annum</i>							

[1] Refers to Compound Growth Rate of 3.54% per annum

[2] Based on trend growth rate in the last two years i.e. 6.30%

¹ Which by virtue of being consumed mainly in the form of ripened bananas, i.e. 60-70%, is treated as a fruit in this report

5.3 Analysis of producer areas for avocado

Avocado is an important fruit for both export and local consumption and processing for oil. The main varieties grown are Hass and Fuerte with the latter being the main variety grown for export market. However, the market demand has shifted to Hass hence currently this variety is being established more than Fuerte.

Table 4: Avocado Production 2005-2007

Province	Hectarage (Ha)			Production (MT)			Value (Kshs.'000')		
	2005	2006	2007	2005	2006	2007	2005	2006	2007
Eastern	1,770	1,682	1,682	23,010	21,866	21,866	345,150	327,990	327,990
Western	553.6	558	563	7,197	7,254	7,319	107,952	108,810	109,785
Central	2,175	2,411	2,411	28,275	31,343	31,343	424,125	470,145	470,145
Rift Valley	1,979	1,880	984	25,727	24,440	12,792	385,905	366,600	191,880
Nyanza	1,106	1,334	1,436	14,378	17,342	18,668	215,670	260,130	280,020
Coast	120	124	124	1,560	1,612	1,612	23,400	24,180	24,180
Nairobi	10	6	3	130	78	39	1,950	1,170	585
Total	7,714	7,995	7,203	100,277	103,935	93,639	1,504,152	1,559,025	1,404,585

[Source: Final Horticultural Data Validation report May 2008]

The above table shows that concentrating on Central Province as an entry strategy for IML is prudent because this is the region with the greatest output of avocado fruit in Kenya. It is also neighbours Eastern Province which is the second highest avocado producing region and operations can be easily scaled up to serve the two regions. The model can be replicated in other areas with great ease.

5.4 Marketing Channels for horticultural produce

A number of marketing channels exist and are discussed below:

i) Producer-wholesaler-retailer

This is the most common channel used in the marketing of horticultural products. Most urban markets have both wholesale and retail activities taking place at the same time.

Strengths

- wholesaler usually provides transport for the produce
- Wholesaler bears the risk of handling the produce

Weaknesses

- Farmers are price takers as they have no means of establishing commodity market prices
- Production by farmers is often not demand driven
- Market quality standards are determined by the wholesalers

ii) Producer-broker-wholesaler-broker-retailer

Brokers exist between producers and wholesalers and also between wholesalers and retailers. The Brokers between producers and wholesale buyers identify and assemble produce after which they are paid a commission. This occurs where farmer (producers) are scattered in a given geographical region. In some cases, wholesale traders engage brokers to sell fresh produce on their behalf. The wholesalers who use this arrangement will have traveled from the countryside (sometimes all night) and therefore, need to engage brokers to carry-out the business of selling on their behalf while they rest at the market location. In addition, some brokers have long-term establishment of business relationships and acquaintance with most of the regular customers.

Strength

- Broker have a network of buyers and wholesalers who they at times give produce on credit
- Through these brokers, many small scale farmers are able to attract wholesalers

Weakness

- Presence of many players in the chain erodes the farmers margin
- Possibility of farmers getting nothing or negative returns particularly during glut supplies is high.

iii) Producer- contracted wholesaler- institutions

Many institutions with a high daily demand for fruits and vegetables are located within urban areas around the country. Such would include hospitals, schools, colleges and universities, defense establishments (barracks), and hotels. The normal procurement procedure for these institutions is through annual tenders whereby a contractor is appointed to supply a range of products for a year or so. Sourcing for larger volumes of products would normally be through the wholesale markets. However, some contractors could also be growers or source directly from farmers.

Strengths

- Low wastage because of the shorter chain
- Packaging is done to ensure that produce arrive in the desired destination with minimum spoilage
- These are informal/formal contracts involved between the supplier/wholesaler-institutions thus reducing risks and uncertainties

Weakness

- The channel handles very low volumes

iv) Producers-processors

In this channel, the processor buys directly from the farmer. At times, the processor contracts farmer(s) to grow specific products and gives specifications. Often the processor pre-finances the farming activities, and later recovers the cost at the time of delivery. The pre-financing could be in form of farm inputs, or direct cash. Some processors provide extension services to the producers to ensure that production is done according to specified standards. Grading and packaging is undertaken at farm gate. Some of the products that undergo processing include: tomatoes, potatoes, chillies, mangoes, bananas, etc.

Strengths

- Farmers are assured of markets
- Pre-financing arrangements between processor and farmer possible
- Training through processor's extension services possible

Weaknesses

- Low prices
- Failure to honour contracts by both producers and processors.

v) ***Producers-retailers***

This involves producers selling direct to retailers such as Green Grocers, Supermarkets, kiosks, hawkers, etc. However, some upper segment markets such as the supermarkets in major urban centers contract suppliers who are either producers or traders in fresh produce.

Most trading centres in the rural areas have green grocers and hawkers who buy their produce direct from farmers. Hawking is normally concentrated in residential areas or transit points such as matatu and bus terminus, and shopping centres. In big urban centres most produce that goes through this channel arrives in low tonnage pickups.

Strengths

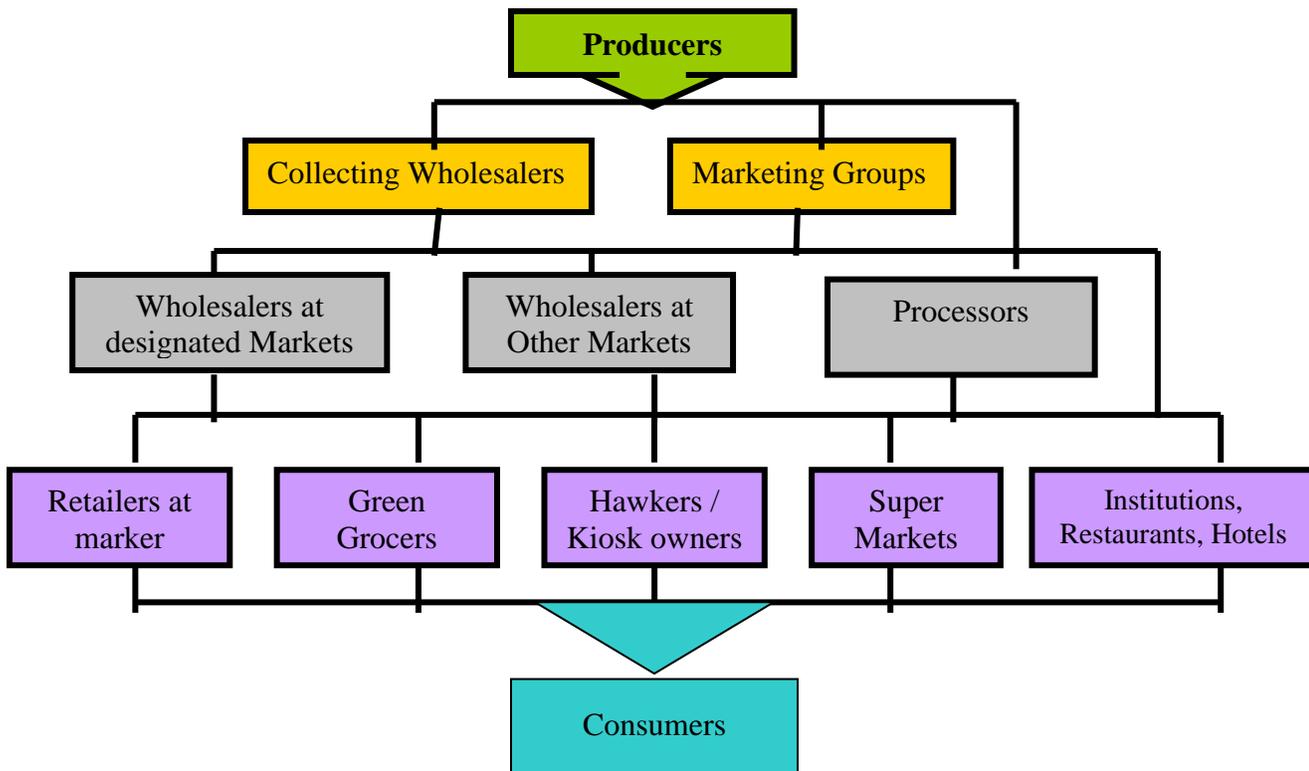
- There is minimal value addition done in terms of packaging.
- Produce sold through supermarkets is well graded and packaged and relatively clean
- Produce reaches the consumers when fresh with low post harvest losses

Weaknesses

- Suppliers at times escape Local Authorities fees and charges
- In most cases, this channel works best with farmers near urban centers or those traveling up-country in pick-ups.

Model 1 below shows the relationship between various players in the marketing channels discussed above.

Figure 6: Marketing Channels



In Nairobi City and its environs, these are the two main marketing channels through which produce is delivered and marketed.

(i) **Farmer-Wholesaler Trader Channel:**

The wholesaler(s) go out to buy produce directly on cash basis from farmers that they may or may not have established contacts with. They often use 4-8 ton trucks to deliver produce to the market where they sell to retailers and consumers through brokers as commonly happen at the Wakulima, Gikomba and Korogocho).

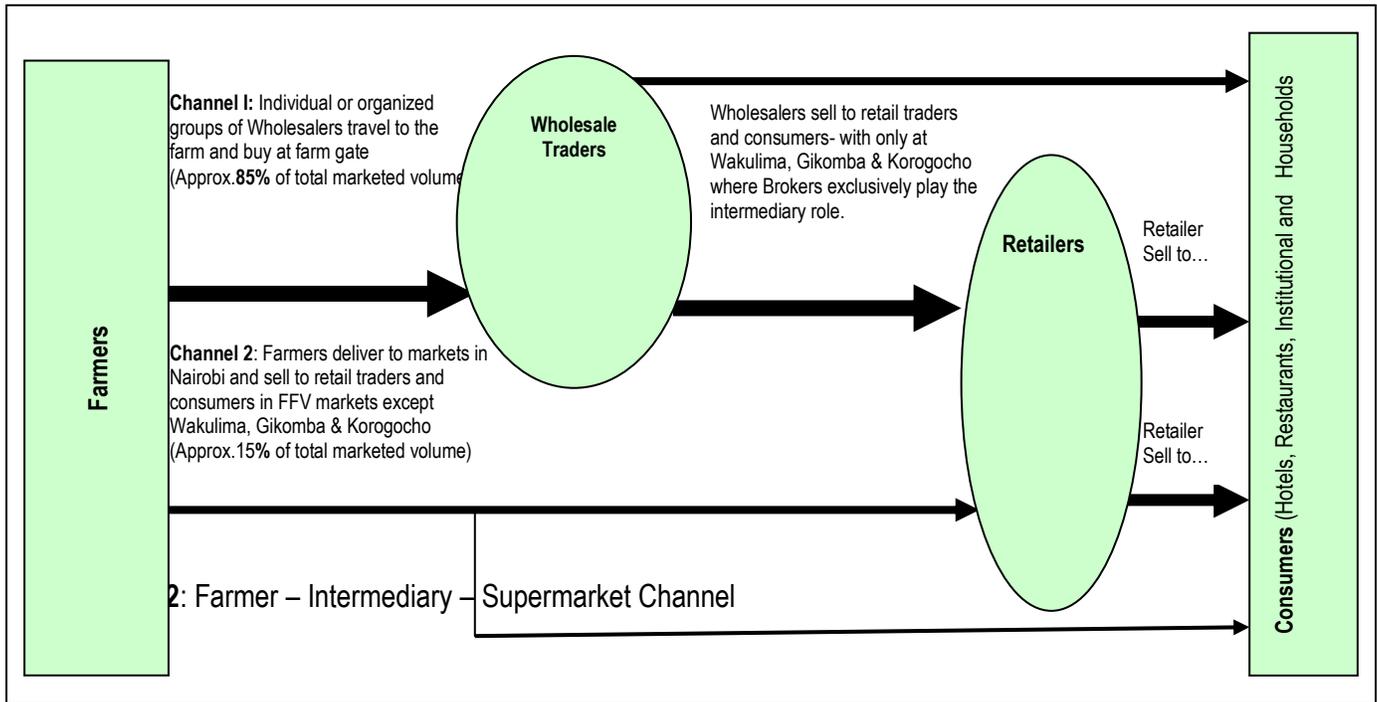
(ii) **Farmer-Retailer Trader Channel:**

The farmer delivers the produce to the market directly often using 1-4 ton trucks and sells to retailers and consumers. This mainly involves medium to large sized farmers within the proximity of towns especially from parts of Central, Eastern and Rift Valley provinces.

(iii) **Farmer/Wholesaler- Kiosk System:**

This channel is a source of Fruits and Vegetables accounting for market share in excess of 30%. Kiosk owners source their Fruits and Vegetables from wholesale markets and sometimes direct from farmers. In Nairobi kiosks are being transformed into descent structures in some of the residential areas e.g. Nairobi south B, Upper Hill (Nairobi Hospital)

Figure 7: Farmer wholesaler kiosk method



(iv) Farmer /Wholesaler -Fresh Green Grocer System:

This channel is also a source of Fruits, Vegetables and Flowers with Green Grocers procuring their wares direct either from the farmers or wholesale markets.

(iv) Farmer -Intermediary- Supermarket System:

In this channel, supermarkets through their subsidiary companies or traders source their Fruits and Vegetables direct from the farmers and do value addition before delivery (cleaning, packing and trimming). In most supermarkets there are special spacious areas (pre-cooled) for fresh produce

Figure 8: Main FFV Marketing Systems and Transactional Relationship of Actors

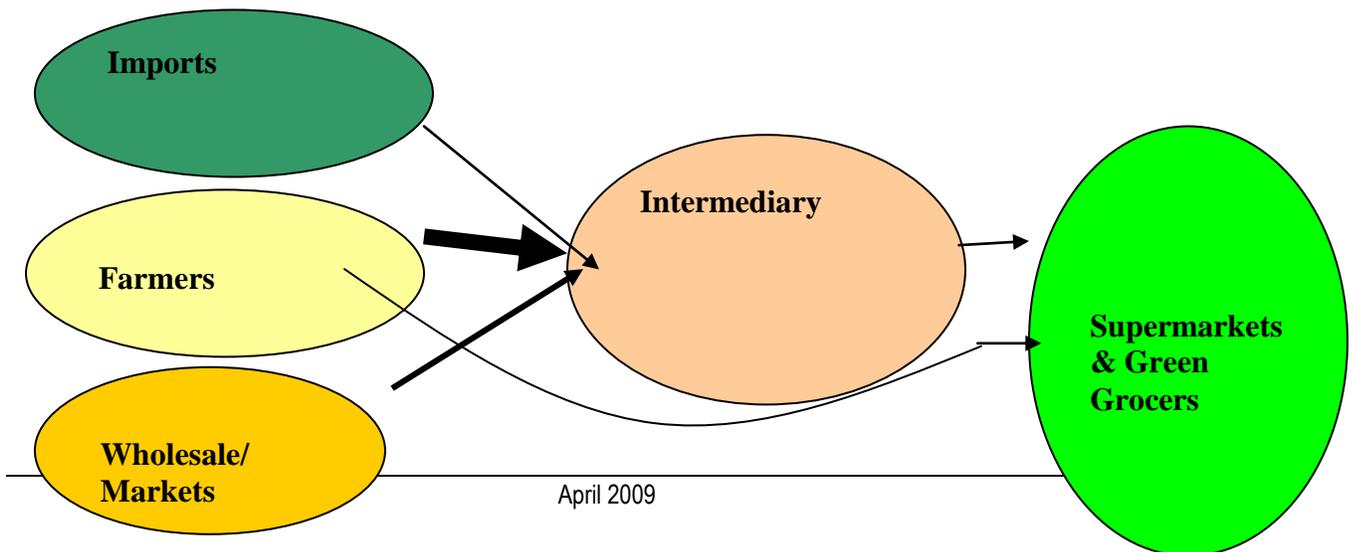
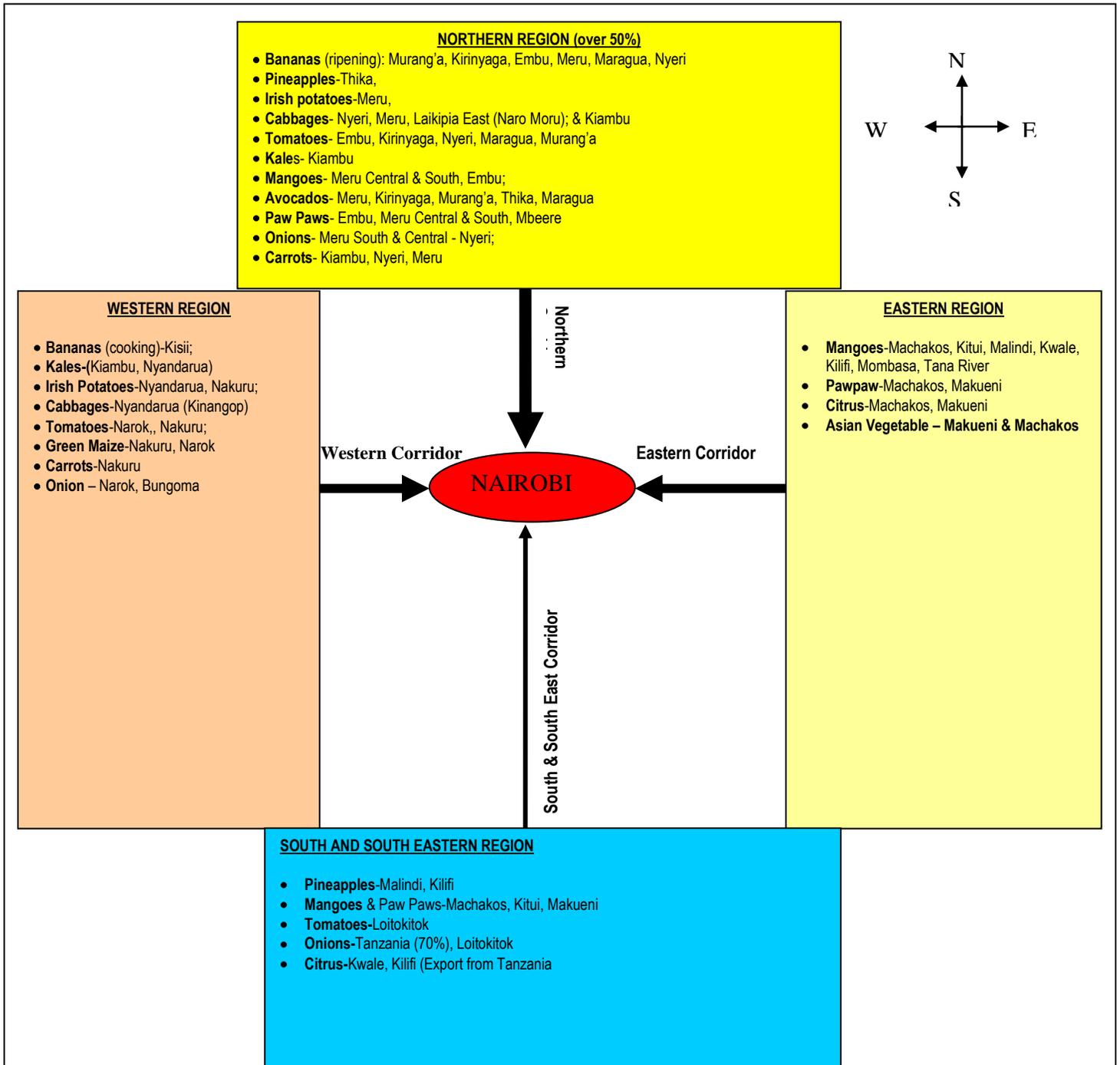


Figure 9: Diagrammatic Representation of Approximate Supply Map for Major FFV into Nairobi



The above diagram indicates specific observations as far as supply of FFV to markets in Nairobi are concerned:

- **Northern region** - mainly Central Province and to a lesser extent parts of Eastern Province - are a major source of FFV, particularly for dessert bananas, tomatoes, cabbages, pineapples, avocado, mangoes, and paw paws.
- **Western region** - mainly Rift Valley Province (especially Nakuru and Narok) and to a significant extent parts of Nyanza (especially Kisii, Nyamira and Gucha districts) and parts of Central Provinces (especially Kiambu and Nyandarua district) is particularly important for Irish potatoes, green-maize, kales, cabbages and cooking bananas.
- **Eastern region** - mainly Eastern Province and the northern parts of Coast Province (especially Machakos, Kitui, Makueni, and parts of Tana River), is particularly important for fruits – mangoes, paw paws and citrus.
- **South and South Eastern Regions** – mainly Coast Province (Malindi, Mombasa, Tana River, Taita Taveta, Kwale and Kilifi) are significant sources for mangoes, paw paws and citrus; southern parts of Rift Valley Province (especially Loitokitok which is a significant source for onions and tomatoes); southern parts of Eastern Province (especially Machakos and Makueni which are significant sources for mangoes and paw paws). Thus, districts in these regions are very important sources for fruits. In addition, the south/south eastern corridor is a very important source of supply of onions imported from Tanzania through the Namanga border.

From the above analysis, it emerges that Central Province; Central parts of Rift Valley, Northern parts of Eastern Province are typically the major sources of vegetables; while central parts of Eastern Province and Coast Province are the main sources for fruits. In the case of cut flower products with respect to domestic consumption, the main sources are Central, Rift Valley, Nairobi, and Eastern provinces.

Thus, the choice of Central province as the target market for Ideal Matunda Ltd is of strategic importance.

5.5 Value Addition

Lack of value addition strategies deprives the sub-sector major socio-economic benefits. A lot of post harvest losses for fresh fruits and vegetables (FFV) exist due to their short shelf life (highly perishable), poor packaging, poor transport facilities and poor infrastructure. In adding value through timely delivery, grading, packaging, processing, handling and post-harvest management, the growers and traders would enhance their net returns.

5.6 Key market players in the avocado value chain in Kenya

The bulk of smallholder avocado farmers depend of brokers for sale of their produce. The brokers sell the fruits to exporters and to produce in Kenya is bought by brokers. Main exporters of avocado include KHE, East African Growers (EAG), Indu Farm, Sunripe and Kakuzi. There are other smaller and medium sized exporters like Hill Side and KEITT Exporters but they deal with much lower volumes. With the exception of Kakuzi, the other exporters source all their produce from smallholder farmers through brokers.

Kakuzi is owned by an English investing corporation and is growing the avocados professionally. Kakuzi is the largest player on the Hass avocado market in Kenya.

There are three avocado oil processing companies in Kenya namely: Ruiru Natural Oils; Avo Oil Ltd and Olivado Oil. All three are family owned businesses and they source avocados from smallholder farmers through brokers. However, none of the local player's produces refined avocado oil either for local or export markets.

Avo Oil Ltd is owned by Sunil Savla and it commenced crude oil processing in May 2005. They process 20 tonnes per day through contract arrangements. The firm has invested in an 800 acre avocado orchard where they have planted Hass avocados. They intend to process their own avocados in addition to sourcing from smallholder farmers.

Olivado Oil is a New Zealand based company that has set up an avocado processing plant in Kenya. The operations currently are focused on organic products and their production capacity is still very small. They should however not be dismissed prematurely since they have access to technology and funds from their mother operation.

Ruiru Natural Oils is based in Ruiru and is the oldest processing avocado plant in Kenya. It is owned by Andrew Kamere. Successful negotiations have been held with him to lease the processing plant to IML with effect from May 2009 with the option to buy the plant at the end of the first year. During the year, he will provide the necessary technical and marketing support to ensure a smooth transition in the management of the business. This arrangement was agreed upon to cushion IML against the risk of investment in second hand equipment and to provide a quick entry into the international market for avocado oil. The land and buildings on which the plant is located is owned by the Kamere family and an agreement to lease the land for a two year period with the option to buy has been reached.

The current avocado marketing channels are currently dominated by brokers who rarely have an interest in the long term development of the market. Their role between farmer and brokers has mainly been exploitative and been characterized by:

- Unreliability – one never knows when the broker will decide to come for the fruit. This leads to poor crop husbandry since there is no sure return.
- Poor prices – since the broker is not sure of the quality of produce he/she offers the lowest possible prices to the farmers
- Tendency to steal from farmers – this is either done in collusion with disgruntled family members or at the point of fruit picking or packing into the vehicle. This is a measure taken to protect the broker from the possibility of making losses.
- Disorganized local marketing structure and strategy

From these observations, there is room for an honest intermediary between the farmers and the retail market for fresh fruits and vegetables, an opportunity, which IML intends to tap.

6.0 Marketing strategy for IML

6.1 Target market

IML will position itself as socially responsible agricultural marketing company targeting smallholder horticultural farmers with an initial focus on smallholder avocado growers. Although export of horticultural produce is fairly well organized in Kenya, it is worth noting it is dominated by a few big companies and exploitation of smallholder farmers by middle men and other cartels is still a big problem. In addition, due to inefficiencies along the different value chains, a lot of fresh produce goes to waste and it is farmers who bear the loss since the middle men are able to factor in the element of risk in their pricing. Since they are not well organized, the small holder farmers remain as passive price takers of unacceptably low prices even in the face of rising global prices for food.

IML will target both the domestic as well as the export markets because of the high potential in both markets for small holder farmers. Decisions on products to be targeted will be informed by careful market research and gross margin analysis to ensure that both the farm enterprises and IML are profitable and sustainable. IML will start with the avocado value chain where a lot of work has been done and lessons learnt in the last four years.

6.2 Vision of IML

The vision of IML is to be a socially responsible agricultural marketing company partnering with smallholder horticultural farmers to increase rural household incomes through efficient and effective management of farm enterprises

6.3 Mission

The mission of IML is to provide high quality extension services and access to reliable and profitable markets for smallholder farmers

6.4 Strategic objectives

1. To provide high quality extension services and advise in order to improve quality and quantity of production from smallholder farmers in carefully selected value chains
2. To provide agricultural finance through embedded credit to ensure timely and optimal use of farm inputs in order to maximize production by smallholder farmers
3. To facilitate access to reliable and profitable markets in both the domestic and export market by stimulating demand for horticultural products, increasing processing capacity and product diversification.

6.5 Marketing plan for IML

Below is a detailed SWOT analysis for IML:-

Table 5: IIML SWOT Analysis

Strength [S]

- 1) It targets a win-win partnership with farmers
- 2) It assures quality supply of fruit
- 3) It has advantage of formal relationship with farmers
- 4) Experienced and skilled staff in sector
- 5) More efficient model of getting produce
- 6) Planned harvesting
- 7) Helps to minimize post harvest losses
- 8) Farmer feels ownership of the system
- 9) Helps in forward budgeting
- 10) Guaranteed business continuity / competitiveness
- 11) Strong assertive proactive top leadership

Weaknesses [W]

- 1) High cost of farmer education: return on this is not assured.
- 2) Owners of the trees are elderly; not enthusiastic about increased production / new ideas
- 3) Owners of the trees are mainly men; experience hostility / bitterness from sons/wives.
- 4) Loss potential at handling
- 5) Operating margin risk
- 6) Lack of self confidence in field officers
- 7) Mistrust by farmers due to past experiences with unreliable market intermediaries
- 8) Lack of access to superior scions and planting material

Opportunity [O]

- 1) Unexploited avocado oil local demand potential
- 2) Favorable season for export to Europe
- 3) Market potential still huge for growth
- 4) Availability of cash for innovative business ideas
- 5) Availability of performance management systems to monitor individual staff contribution
- 6) Availability of information on internet and other research facilities; great amount of research done on this topic and available on specified websites
- 7) Definite window of opportunity for export.
- 8) Ideal Matunda strategy to provide services for dairy farmers

Threats [T]

- 1) High prices may not be sustainable. Low operating margin is risky.
- 2) Lack of ambition among the elderly farmers – no drive to plant more.
- 3) Side selling
- 4) High investment cost for farmer education cost, running business [very capital intensive]
- 5) Market conditions – fluctuating prices and presence of many brokers
- 6) Climatic changes
- 7) Global standard on fruit safety / world competition
- 8) Global recession – reduced purchasing power
- 9) Hostile major competition from established marketing firms

To overcome the weaknesses and threats identified above, IML will employ a similar strategy to that adopted by Calavo Growers Inc based in California and customize it to the Kenyan situation (see www.calavo.com). Calavo began working with avocado growers in 1924 by introducing handling and defect standards, branding [1926] and advertising. The company only began to diversify [into other products like limes] and forward integrate [into avocado oil] in 1931. Calavo is also involved in marketing of

other fruits e.g. coconuts, mangoes etc under various product names. It was in 1962 that Calavo went into Avocado Processing [production of guacamole] and in 1964 that it went into the export market [Japan, Asian, Europe and Canada] and its growth led

In adopting such a strategy, IML will partner with smallholder producers to instill strict discipline and adherence to quality measures and standards; provide access to high quality extension services to enhance quality and quantity of production; add value through processing and efficient post harvest handling; and facilitate access to reliable and profitable markets in order to maximize returns on investment in farm enterprises.

For success to be achieved a systematic approach will be pursued to ensure that there is a strong foundation to support the anticipated rapid growth. This will involve:

- Establishing table banking (ASCA) as a precondition for farmers groups to be served by IML
- Provision of high quality extension services [e.g. spraying, provision of agricultural inputs on credit etc.] to the compliant groups
- Provision of reliable markets for the produce coming from the farmers
- Processing of the produce
- Developing finished products and
- Hiring of competent staff for delivery of efficient and effective services

The following is a summary of the marketing plan for IML:-

6.6 Customers and markets

IML will partner with smallholder horticultural farmers to facilitate production and marketing of high quality products for both the domestic market and the international market. IML will trade in the FFV market and the processed goods market through value addition. The target market is the export market and the domestic market for high quality fresh produce. Value addition will include processing of avocado into refined oil, which will initially be sold to bulk buyers in the international market. In the medium term, IML will invest in product development to produce finished products for the domestic, regional and international markets.

6.7 Price

Prices charged / paid to smallholder producers will be pegged to the prevailing market prices at the beginning of each season for all products and services.

- Table banking (managed ASCA) – A management fee of 1% of the total revolving fund will be charged after the first three months. No fees will be charged during the first 3 months. This compares favourable with other managed ASCA's in Kenya
- Agro chemical spraying services – This will be charged per tree per spraying cycle. Average spraying regime is 7 months. The exact price will depend on prevailing prices for agrochemical. IML has been charging Ksh 40/ per tree per cycle but this is expected to go up to Ksh 50/ during the next season due to high increases in price of agro chemicals
- Purchase of fruits - IML will endeavor to offer highly competitive prices by minimizing post harvest losses through quality controls and negotiating for bulk volumes based on projections for all IFGs. For instance, during the 2008-2009 seasons, IML has been paid Ksh 4 and Ksh 4/50 for Fuerte and Hass

avocado varieties respectively. This is way above the prices paid by brokers of Ksh 1 - 2 /50. Based on the cost analysis, the margin is 30% in order to cater for post handling costs and earn some profit for sustainability of the business.

6.8 Promotion

Different marketing strategies will be used to advertise and promote IML products. A key strategy will be aggressive awareness campaigns in rural areas in collaboration with the MOA. Invitations to the meetings will be made in churches and other public places through use of posters. Key opinion shapers in the community and product champions will be identified to share the benefits of avocado farming as a business. Local FM radio stations will also be used to educate farmers on benefits of avocado farmers and invite them to partner with IML.

A website will be developed clearly highlighting the products and services offered by IML.

6.9 Place

The main coordination office for IML activities is based in Kenol Murang'a South district, which is strategically positioned to serve neighboring districts of Thika, Kiambu, Murang'a North and Nyeri. Producer groups are categorized into clusters and there are sub stores in each of the clusters. IML will open offices in each of the respective districts as the business grows in order to take services closer to the people. Collection centres are identified and selected in collaboration with the producer groups to ensure they are conveniently located for farmers to deliver their produce. Grading of fruits is done at the collection centres from where it is delivered to the pack house.

The processing plant is located in Nairobi, which is within close proximity to Nairobi and is accessible to the railway line for transportation to Mombasa, which is the port of shipment

6.10 Position

IML will position itself as a socially responsible agricultural marketing company partnering with farmers to provide access to reliable and profitable markets.

7.0 Management and organization

7.1 Overview

IML will pursue a managed growth strategy in order to manage risk. Consequently, it will start operations as a lean organization based on current operations and growth in personnel will be driven by growth in business. The proposed organizational chart for IML is shown here below.

A board of Directors will be appointed to provide overall leadership in the strategic direction of the firm. Board members will be appointed on the basis of their potential contribution in terms of experience and expertise to the growth and development of the firm. The Managing Director will provide overall leadership and guidance to staff on both strategic and operational issues. She is also expected to motivate and

inspire staff in order to maximize their productivity and enhance efficient and effective delivery of services to customers. An operations manager will be contracted to coordinate all operational activities. Clear performance targets and indicators will be provided. Performance will be reviewed periodically and outstanding performance will be recognized and rewarded.

7.2 IML management structure Year 1

As shown in the organization structure the key roles and responsibilities of the management staff are:

Managing Director

- Reports to the board.
- Provide leadership and formulate strategy to guide the operations of the business
- In charge of all operations and assets
- In charge of timely sourcing profitable contract markets for all fruits and fruit products.
- Must have strong management background with knowledge of agricultural production and marketing. Strong analytical and people management skills critical.

Finance Manager

- Reports to the Managing Director
- Responsible for financial record keeping, monitoring of financial performance within all the business units
- Must have management and accounting skills as well as ability to supervise staff working away from head office in the field.
- Must be qualified accountant

Operations Manager

- Reports to Managing Director
- Responsible for achievement of production target from farmers, accurate crop projection and timely delivery to the designated markets.
- Also directly responsible for factory production
- Must have experience in agricultural production especially with horticultural crops.
- Must have people management and analytical skills.

Marketing Manager

- Responsible for marketing of avocado fruit and fruit products in the local and international market
- Responsible for sourcing orders for fruits in the domestic market, timely issuance of orders for harvesting to groups through the ADA's and coordinating collection and delivery to the exporters, oil processing and domestic market.
- Responsible for developing strategies to increase volume of produce from farmers to consumers
- Responsible to anticipate ratio of processed, fresh and exported avocado products to meet optimum profitability.

Microfinance Manager

-
- Reports to the Managing Director
 - Directly responsible for providing leadership and supervision to the BDO's
 - Responsible for formation and management of table banking groups, strict enforcement of all rules and regulations as stipulated by IML
 - Must have management and people skills.

Factory Production Manager

- Reports to the Operations Manager
- Responsible for the running of the avocado oil extraction factory and its premises, ensuring extraction process meets targets and quality standards.
- Must have plant management experience, familiar with maintenance planning and processes, ability to quickly resolve breakdown situations as well as ability to manage the entire process chain and staff.

NB For these managers and staff at all levels are to be effective they will be equipped with a performance score card which clearly states what Key Performance Indicators will be used to evaluate their performance, what initiatives they are expected to take, the time frame within which these initiatives are to be undertaken and finally how they perform against the set targets. This will ensure that their daily activities are directly tied to IML's strategy.

NB 2 The salaries for these staff members are included in the financial projections.

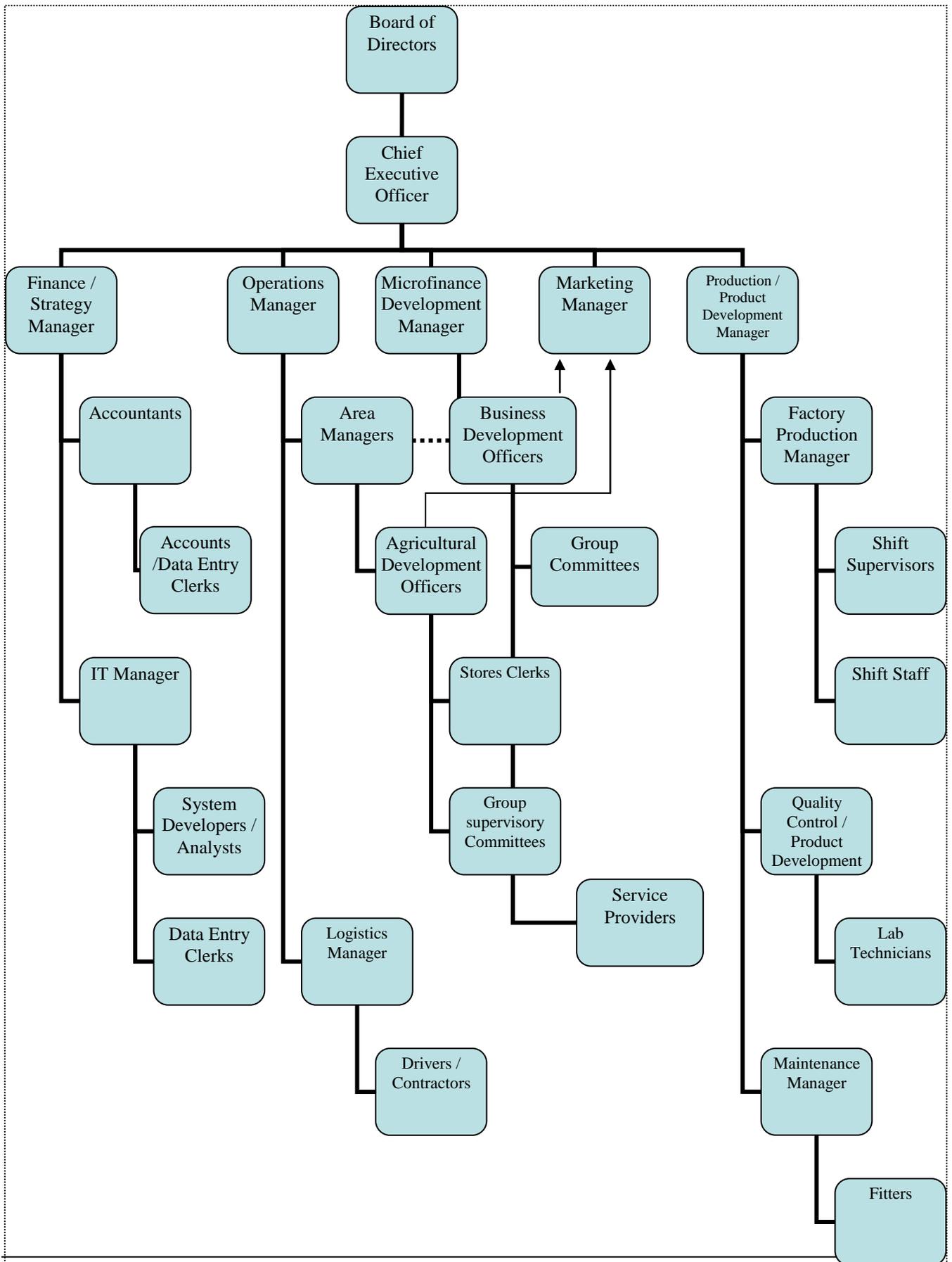
7.3 Staff Organogram Year 2 – 5

Significant growth is expected during the second year of operation if targets set for year 1 are achieved. This is well illustrated by the cash flow projections attached. To support the growth, new staff positions will be created and additional staff hired. New positions that will be introduced include the following:

- Finance and Strategy Manager – Reports to the C.E.O. Will be in charge of all financial issues as well as development of strategy and IT for the organization. Will be the custodian of performance management functions.
- Information Technology Manager – reports to the Finance and Strategy Manager. Will be in charge of all IT applications, correct data entry, installation and maintenance of E.R.P, development of technological innovations to make the organizations more efficient.
- Production / Product Development Manager – reports to the C.E.O. Will be in charge of the processing plant and development of processed products for the local / international market. Will liaise closely with marketing manager to identify customer demand and come up with products to meet this demand. Supervises the factory manager, quality control manager and maintenance functions.
- Quality control Manager – Reporting to Production / Product Development Manager. Will be responsible to ensure quality of products consistently meets international standards at every process. Will be in charge of lab technicians.
- Maintenance manager – reporting to the Production / Product Development Manager. Will be responsible for the electrical / mechanical / civil aspects of the plant. Will plan and execute routine weekly maintenance as well as the annual shutdown maintenance. Will be the custodian of all operation and maintenance logs and equipment manuals.

-
- Area Managers – Reporting to the Operations Manager. Will be responsible for all Business Development Activities in their territory.
 - Logistics Manager – Reports to Operations Manager. Responsible for all transport issues for fruits and finished products to and from farmers, exporters, processors, export market. Also in charge of fleet [motorcycle and motor vehicle] maintenance and efficiency.

The Organogram below shows the manner in which the organization is expected to grow and how the HR requirements will be modified to support this growth. It is important to note that the highest growth will come from value addition through processing and product development and as such great HR emphasis is placed on this department.



7.4 Human resource management – staff recruitment / retention / development / incentives

A comprehensive HRM policy will be developed to guide staff training and development, and incentives. Management of human resources will also include the following:

- Recruitment and placement (job analysis, personnel planning and recruiting, employee interviews and selection).
- Training and development (determining training needs, training and developing employees, managing organizational renewal).
- Compensation (establishing pay plans, pay-for-performance and financial incentives, benefits and services).
- Labour relations and employee security (collective bargaining, employee safety and health).

This will include development of staff policy and operational and procedure manuals

7.5 Staff incentive scheme

IML will develop a well-designed **staff incentive scheme** that will have a positive and powerful effect on the productivity, efficiency and quality of operations. Technical support will be sought from experienced HR consultants to design the staff incentive scheme. The system should not be overly complex and should contain as many objective factors and as few subjective variables as possible. The goals set out by the scheme must be attainable, and better performing staff members must indeed be rewarded with higher salaries. Ultimately, everyone must be able to achieve a higher compensation by working better and harder.

Staff incentive will transform best into improved performance if:-

- Staff perceive a strong link between their individual effort and the reward;
- Performance is measured and rewarded in the short term (monthly or quarterly);
- The performance of individual employees is measured and rewarded;
- Rewards are monetary and make a significant change to the employees' total remuneration;
- Bonuses are not capped;

The Staff incentive scheme will be integrated into IML's overall human resource function.

8.0 Premises and Equipment

IML is currently housed in leased premises with renewable leases of one year. Assets include motor vehicles, office furniture and equipment, and agrochemical spraying equipment.

Avocado oil processing is a new business for IML. Processing will start with leased equipment on leased premises but the lease agreements allow for purchase of the equipment at the end of the first year. The land and buildings will be leased at the cost of Ksh 100,000 per month while the equipment will be leased

at a cost of Ksh 2 million per year. To add value and increase return from the business, IML will invest in an oil refinery. This will be purchased through lease financing. IML intends exercise the purchase option for the processing plant at the end of the first year. Additional processing equipment will be bought to increase the capacity of the plant.

IML will buy motorbikes for ADA's and BDO's to facilitate field travel while vehicles will be bought for managers.

9.0 Management Information Systems and Financial Management

A robust management information system will be sourced and installed to facilitate real time sharing of information. The system should be dynamic enough to capture data from all the business units to minimize manual data entry. The objective will be to automate all transactions to enhance operational efficiency and effective delivery of services.

9.1 Tax Accountants / Accounting system to be used

In order to synchronize all financial activities IML will use Pastel configured accounting software enabled with internet facilities to allow remote updates by staff stationed in the field

Apart from being fast this will allow users to monitor spending, inflows and inventory levels of various inputs / consumable items.

The accounting function will be monitored on periodic basis by Kigundu and Associates of Nairobi who are the current auditors for IML

9.2 Internal control systems

These are the processes that will ensure that the management runs the operations to meet the objectives of the organization [in planning, directing, organizing and controlling the business], ensuring compliance to applicable laws, safeguard all the assets and ensuring that all the reporting is done in a reliable system that ensures that data is captured, recorded and appropriate reports generated. This will be achieved by doing the following:

a) Creating a control environment

This will be done through clear ethical and integrity values of the key executives. IML will recruit using a system that emphasizes character traits as much [if not more] than performance or knowledge traits since the latter can be taught in the course of employment.

b) Consistent risk assessment

IML will continuously assess the risks involved to identify, analyze and manage these risks to eliminate risks of fraud / error. This will involve setting up authorization systems requiring managers to approve transactions of more than a given amount [e.g. Ksh 100,000/=], especially for pay outs in order to make sure that they are correct and legitimate. This system should not be unnecessarily long hence the need to recruit mid-level / senior managers who have integrity.

c) Carrying out monitoring activities

Consistently assess the quality of the performance of internal control systems over time. This will be done through the PQA audit system that will clearly show if/where the system has failed through accurately set performance measures that are periodically reviewed for relevance and accuracy.

d) Instituting financial control measures

These will include:

- Monthly bank reconciliation by accountants
- Debtors / accounts receivable updates on a weekly basis
- Creditors / accounts payable updates on a weekly basis
- Stock / inventory using inventory sheet that shows: date of entry, sheet no, form no, columns that show opening balance, goods received, goods issued, goods disposed of [due to spoilage etc.], closing balance.

For this system to be effective clear guidelines as to acceptable debtor / creditor levels, stock levels [both of raw and finished products and expected recovery ratios will be established by sampling of raw product for oil content etc, percentage of spoiled goods etc]. This will be incorporated in the balanced score card for every employee which will give an alert when there are anomalies.

10.0 Use of PQA program in implementation of the strategic business plan for IML

PQA is a performance management execution program that works with the organization to formulate the organizational strategy and then identify the correct measurement metrics to create a corporate scorecard that will guarantee consistent sustainable results. The program is used to establish new levels of execution excellence in Strategic Planning, Leadership, Results Measurement and Analysis, and Human Resource Management

10.1 Benefits of using a PQA program

With PQA, an organization can:

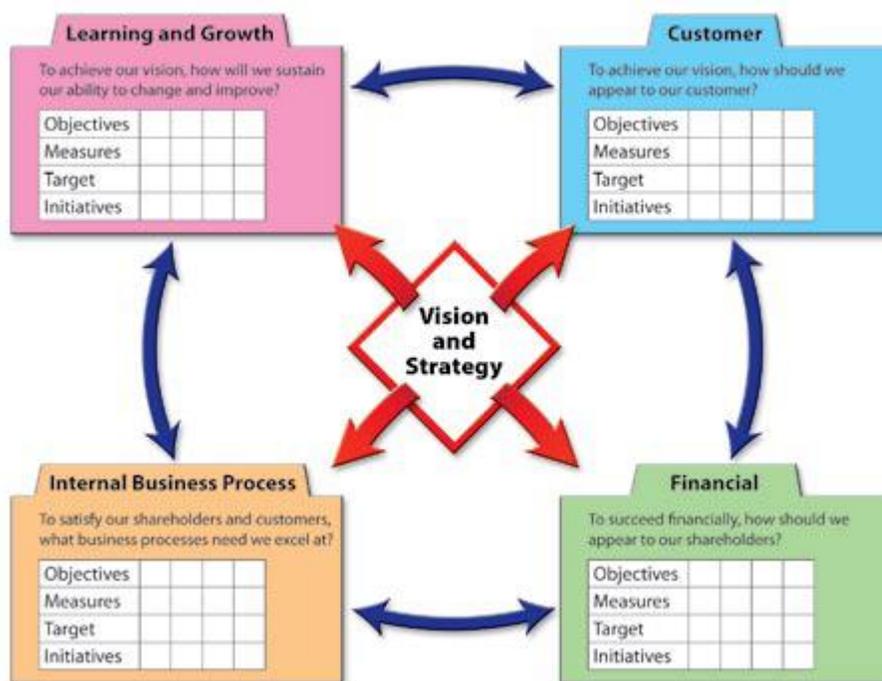
- Perform better by transforming strategy into actionable plans, aligned with day-to-day activities and communicated organization wide
- Give early alerts to performance issues so that corrective action is taken to ensure targets are met
- Assign ownership key metrics, increasing accountability and ensuring employees are focusing on task essential to strategy
- Establish the discipline of performance and continuous improvement from quarterly performance audits
- Make performance management everyone's job in the organization.

The PQA system ensures that all staff in the organization have clear roles and responsibilities. Efforts to attain the set targets and performance measures will drive the organizations strategy and lead to the achievement of all goals and objectives. The PQA system has an inbuilt early warning system that highlights the points at which targets are not being met so as to ensure corrective measures are taken before any long term damage occurs. PQA also allows all staff involved in implementation of strategy to own the processes by which the strategy comes alive. It also ensures that the organization embraces a culture of execution, the discipline by which it will attain all its strategic objectives.

10.2 How the PQA works

The entire PQA system is based upon the Balanced Score Card pioneered by Kaplan Norton of the Balance Score Card Institute. It is basically assigning a measurement parameter for every task/initiative, target, measure and objective in such a way that actual performance can be measured against projected values to reveal any discrepancies. "People cannot manage what they cannot measure. If you can't measure it then you cannot manage it." [Kaplan Norton].

The Balanced Score Card allows an organization to measure, manage and finally perform in the 4 pillars of company performance namely Financial, Customer, Process and Learning/Innovation Measures. It not only allows the organization to keep track of performance but also enables and, indeed, encourages consistent improvements in organizational performance.



Customer Measures

This involves all issues that deal with the internal and external customers within the organization. This will involve measures such as market share, repeat business, customer complaints, customer satisfaction surveys, customer complaints / returns etc.

Financial Measures

These will involve turnover, sales, sales margins, net profit, return on investment, gearing ratio etc.

Process Measures

These will involve delivery time, cycle time, number of repeat jobs, no. of accidents, production per employee / machine etc.

Employee Measures

These will involve employee turnover rate, no. of employee complaints, rate of absenteeism, employee satisfaction rate, no of training hours achieved by individual employees etc.

Learning and Innovation Measures

These involve no. of new products per month/year, percentage of new product sales, no. of new ideas per month, rate of conversion for these new ideas into income generating products / services, no. of patents etc.

These measures are not exhaustive and can be developed / built on to suit individual organizational goals and strategies.

10.3 Implementation of PQA

Ladder Management Ltd, in conjunction with (Actuate Performance Soft) International, has developed a performance enhancement suite that is geared to continuously improve organizational performance through periodic audits and Variance management. The tools assist to assess the organization's performance at Levels 1, 2 or 3 and a PQA quality assurance certificate is issued at every audit. In consultation with IML's management, Ladder Management Ltd will come up with intervention measures to correct performance variances. An organization operating at Level 1 is ready to deploy performance management software.

10.4 Quarterly Audit Assessment consists of the following practice:

- Organization Strategy Assessment
- Strategic Alignment Assessment
- Team Motivation Assessment
- Performance Deployment Tools Assessment
- Performance Metrics Assessment
- 360° Leadership Assessment
- Customer Service Assessment
- Operational Assessment (Finance & Operations)

10.5 How is PQA different from other performance management systems?

PQA is relatively simple, easy to understand and involves minimal implementation costs especially for organizations, which have a competent, motivated human resource base when compared to the potential output. It has clear steps that can be followed to bring an organization up to speed on the basic requirements and issues certification at every stage. It is mainly designed to work through the people who determine the outcomes of the organizations strategy. It can be designed to work effectively in organizations of varying sizes with great success.

It should be noted that it is it's the only system that is based on the Balanced Score Card, which ensures that an organization is able to perpetuate growth and profitability. The system will release a sense of commitment and accountability in the team, focusing more energy on delivering targets and managing performance variance outcomes. Research shows that if a score card is well executed, a 40% immediate improvement in performance normally results in the organization.

There are other performance measurement systems available for use in different organizations. These include:

10.6 6 Sigma

This was pioneered by Motorola in 1986 and involves the use of continuous improvements of processes in a manufacturing setting to minimize / eliminate defects [anything that leads to customer dissatisfaction].

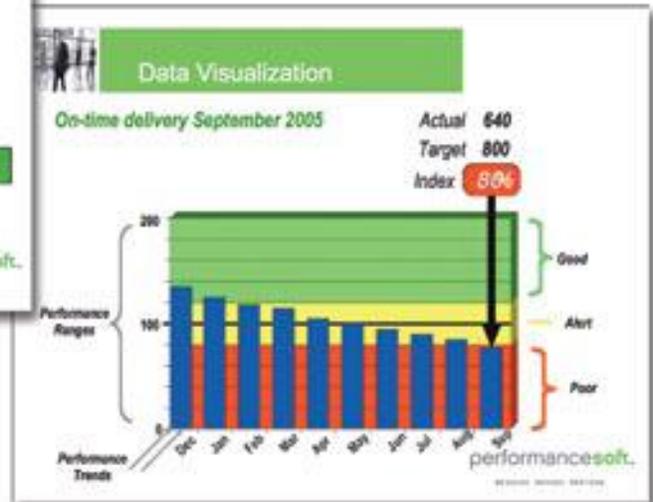
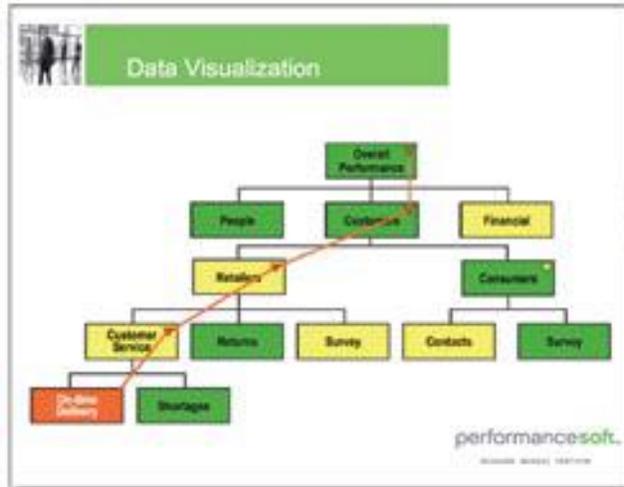
10.7 Malcolm Baldrige Quality Awards

This is a system that seeks to recognize quality service in business, health care etc. and is based on Total Quality Management [TQM] and is awarded by the President of the USA. This award is designed to improve organizational performance practice, capabilities and results, recognize quality achievements and publicize quality strategies. This is basically designed to make US firms more competitive in the world market.

10.8 How can PQA be automated?

This is achieved through the installation of the Panoramic Book Views [PB Views] software. PB Views is versatile performance management software that gives you a comprehensive view of your organization performance at a glance. Advantages of using PB views include the following:-

- PB Views gives you the relevant information you need to make the right decisions.
- PB Views is deployed worldwide by Performance Soft international, the world leading performance management software house. Performance Soft is represented in East Africa by Ladder Management Ltd.
- PB Views is used by leading companies, i.e. GSK, BAT, General Motors, Siemens, among many others.
- PB Views can be scaled down to fit in small and medium organizations



10.9 Adoption of PAQ by IML

IML will formulate a performance measurement mechanism that will enable the company to reach its strategic objectives.

The score cards for IML Managers, BDO's and ADA's are shown below.

PQA Laws of Engagement

In order of the PQA to work, the following laws must apply at all times. Deviation will be to the detriment of IML's performance and will defeat the purpose of the implementation of the system.

- 1) Discipline and order must be built into the system
- 2) The strategy paper must be revisited every week in order to compare the actual performance vs. the targets
- 3) Weekly reports must be generated
- 4) Management meetings must be held every week and the reports revised and appropriate measures taken.
- 5) Staff evaluation and PQA audit must be done quarterly
- 6) Action must be taken to reward good performance and penalize non-performance
- 7) Integrity in the filling of the documents and forms must be maintained to avoid laxity

11.0 Financial Projections

The financial models for all business units as independent cost centers are shown below. Costs for the top management i.e. for the Managing Director and the section heads [Finance, Agricultural, Marketing and Factory] are not been factored in the business unit but are financed from the general administration at head office level.

11.1 Table banking financial modeling

Ideal Matunda Ltd [Table Banking]

CASHFLOW FORECAST FOR THE PERIOD May 2009 TO April 2014

	Year 1	Year 2	Year 3	Year 4	Year 5
INFLOWS	Ksh	Ksh	Ksh	Ksh	Ksh
Collections from Groups [Group 1]	712,606	3,394,055	7,870,277	13,975,873	21,799,276
Sale of Passbooks @ Ksh100/=	480,000	480,000	480,000	480,000	960,000
Sale of Record books @ Ksh 500/=	80,000	80,000	80,000	80,000	160,000
Total inflow	1,272,606	3,954,055	8,430,277	14,535,873	22,919,276
OUTFLOWS					
Cost of Passbooks @ Ksh 50/=	240,000	240,000	240,000	240,000	480,000
Cost of Record Books @Ksh 200/=	32,000	32,000	32,000	32,000	64,000
Salaries & Wages	1,500,000	3,250,000	5,362,500	7,865,000	10,814,375
Motor cycle fuel	300,000	650,000	1,072,500	1,573,000	432,575
Telephone & postage	120,000	260,000	429,000	629,200	865,150
Motorcycle repairs	180,000	390,000	643,500	943,800	1,297,725
Travel Allowances	120,000	260,000	429,000	629,200	865,150
Depreciation Expenses					
Motorcycles	250,000	500,000	750,000	1,000,000	1,250,000
Total outflow	2,742,000	5,582,000	8,958,500	12,912,200	16,068,975
Net cash movement	(1,469,394)	(1,627,945)	(528,223)	1,623,673	6,850,301
Balance b/f		(1,469,394)	(3,097,339)	(3,625,562)	(2,001,889)
Balance c/f	(1,469,394)	(3,097,339)	(3,625,562)	(2,001,889)	4,848,413

Notes/Assumptions

- No.1 That new groups take 3 months to form
- No.2 That IML doesn't charge for its services for the 1st 3 months after group formation
- No.3 That every officer is engaged to form 32 groups in max period of 9 months
- No.4 That the costs of stationery remain as indicated by IML during training
- No.5 That all the funds raised in the table banking are lent out at 10% per month for year 1, 7% Yr 2, 6% Yr 3, 5% Yr 4 and 5

- No.6 That all the groups meet their own costs of meeting i.e. hire of venue, snacks etc
That all the officers are engaged in groups of 5 each, that groups take 3 months
No.7 to start meeting and are offered 3 months free service by IML
That the IML Financial Year ends on June 30 and that all dividends for groups are
paid on that day. After this only money in the revolving fund is accumulated
No.8 savings.
No.9 That all pass books and group record books are replaced after 4 years

11.2 IML Service Provision Model

Ideal Matunda Ltd [Service Provision]

Year 1 No of Trees 25,000
CASHFLOW FORECAST FOR THE PERIOD May 2009 TO April 2014

	Year 1	Year 2	Year 3	Year 4	Year 5
INFLOWS	Ksh	Ksh	Ksh	Ksh	Ksh
Collections from spraying @Ksh 50 per tree	8,750,000	36,960,000	60,480,000	87,360,000	117,600,000
Sale Of Service Provision Books	480,000	480,000	480,000	480,000	960,000
Total inflow	9,230,000	37,440,000	60,960,000	87,840,000	118,560,000
OUTFLOWS					
Payment for chemicals	2,450,000	10,348,800	17,075,520	25,044,096	34,435,632
Service Providers Payment	1,225,000	5,174,400	8,537,760	12,522,048	17,217,816
Fuel for spraying trees	875,000	3,696,000	6,098,400	8,944,320	12,298,440
Cost of Pass books	240,000	210,000	240,000	240,000	480,000
Salaries & Wages	1,500,000	3,250,000	5,362,500	7,865,000	10,814,375
Motor cycle fuel	300,000	650,000	1,072,500	1,573,000	432,575
Telephone & postage	120,000	260,000	429,000	629,200	865,150
Motorcycle repairs	180,000	390,000	598,950	943,800	1,297,725
Travel Allowances	120,000	240,000	429,000	629,200	865,150
Consultancy	120,000	308,000	508,200	745,360	1,024,870
Spraying Supervisor [Casual]	350,000	660,000	1,270,500	1,863,400	2,196,150
Stores Keeper	600,000	1,320,000	2,178,000	3,194,400	4,392,300

Chemical Store	600,000	1,320,000	2,178,000	3,194,400	4,392,300
Depreciation Expenses					
Motorcycles	250,000	500,000	750,000	1,000,000	1,250,000
Pump equipment	247,396	500,002	910,937	1,399,063	1,975,703
Crates	100,000	209,996	331,000	464,096	756,920
Total outflow	9,277,396	29,037,198	47,970,267	70,251,383	94,695,106
	-				
Net cash movement	47,396	8,402,802	12,989,733	17,588,618	23,864,894
		-			
Balance b/f		47,396	8,355,406	21,345,139	38,933,756
		-			
Balance c/f	47,396	8,355,406	21,345,139	38,933,756	62,798,650

Notes/ Assumptions

- No. 1 That the 2009 services are provided for 25000 avocado trees and manned by 4 officers currently in position
- No. 2 That the costs of the services are Ksh 14/= for the chemicals and Ksh 7/= for the labour adjusted upwards by 10% annually
- No. 3 That all the 4 officers currently on the ground are being paid Ksh 15,000/= per month, and that these wages will be reviewed to Ksh 25,000/= in Jan 2010
- No. 4 That no new officers will be engaged during 2009
- No. 5 That the officers will be assigned to groups as they are formed by the Table banking and will grow at the same rate i.e. 5 per year
- No. 6 That the facility to provide credit to farmers for the services rendered is already in place so payment to IML is immediate
- No. 7 That the prices of the chemicals will remain constant throughout 2009 and rise by 10% annually on account of inflation
- No. 8 That the charges of spraying will rise by Ksh 5/= per tree per year for the 5 year period
- No. 9 That all spraying equipment will be replaced after 2 years
- No. 10 That all spraying equipment will be replaced after 2 years and depreciation method is straight line
- No. 11 That the depreciation method used for motorcycles is straight line over 5 years

11.3 Financial Modeling for Marketing of fruit

Assumption: G2 fruit is all processed into oil by IML Processing plant

Ideal Matunda Ltd [Avocado Brokerage]

CASHFLOW FORECAST FOR THE PERIOD May 2009 TO April 2014

	Year 1	Year 2	Year 3	Year 4	Year 5
INFLOWS	Ksh	Ksh	Ksh	Ksh	Ksh
Grade 1 Fruit Sale	16,250,000	93,600,000	187,200,000	312,000,000	468,000,000
Grade 2 Fruit Sale	8,906,250	54,000,000	118,800,000	216,000,000	324,000,000
Total inflow	25,156,250	147,600,000	306,000,000	528,000,000	792,000,000
OUTFLOWS					
Payment for G1 Fruit	7,188,800	57,600,000	115,200,000	192,000,000	288,000,000
Payment for G2 Fruit	6,562,500	43,596,000	97,200,000	180,000,000	270,000,000
Casuals for grading, recording	330,000	330,000	1,197,900	1,756,920	2,415,765
Transport for G1 fruits	1,198,133	10,560,000	23,232,000	42,592,000	70,276,800
Transport for G2 Fruits	1,123,250	9,900,000	21,780,000	39,930,000	65,884,500
Loan repayment and interest	-	-	-	-	-
Office Expenses	-	-	-	-	-
Bank charges	-	-	-	-	-
Depreciation Expenses					
Measurement Equipment	800,000	800,000	800,000	800,000	800,000
Total outflow	16,402,683	121,986,000	258,609,900	456,278,920	696,577,065
Net cash movement	8,753,567	25,614,000	47,390,100	71,721,080	95,422,935
Balance b/f		8,753,567	34,367,567	81,757,667	153,478,747
Balance c/f	8,753,567	34,367,567	81,757,667	153,478,747	248,901,682

Notes / Assumptions

- No. 1 That there are 25000 avocado trees [according to the census submitted to Ladder Management] in year 1
- No. 2 That each of these trees will produce fruit at 20% of efficiency=100 G&37.5kg G2 fruits [as shown in the individual business plan for the Business development officers] and this shall grow 20% of target per year to reach full potential after 5 years
- No. 3 That the Grade 1 fruits are marketed between February and April with Grade 2 being collected and sold from May to Sep
- No. 4 That Grade 1 rejects are a small [negligible] percentage of the total payment
- No. 5 That the price of Ksh 7/= paid to the farmer is exclusive of transport costs

- No. 6 That the same officers who extend service provision also market the fruit
 No. 7 That the salaries for IML staff are covered by the service provision [see previous projection]
 That wages shown only reflect the money paid to casuals specifically engaged in brokerage
 No. 8 operations
 No. 9 That the margin between buying and selling avocados shall remain constant
 No. 10 That the measurement equipment is depreciated over 5 years using straight line method

11.4 Factory operation financial modeling

Ideal Matunda Ltd [Processing]

CASHFLOW FORECAST FOR THE PERIOD May 2009 TO April 2014

	Year 1	Year 2	Year 3	Year 4	Year 5
INFLOWS	Ksh	Ksh	Ksh	Ksh	Ksh
Sale of Crude Avocado Oil	13,416,000	16,250,000	25,350,000	16,453,125	10,968,750
Sale of Refined Avocado Oil	41,400,000	79,062,500	149,500,000	232,875,000	271,687,500
	-	-	136,500,000	417,656,250	632,812,500
Total inflow	54,816,000	95,312,500	311,350,000	666,984,375	915,468,750
OUTFLOWS					
Payment for fruit deliveries@Ksh 9.5 per kg	22,420,000	50,000,000	110,000,000	225,000,000	300,000,000
Salaries & Wages	2,040,000	3,234,000	5,759,600	14,095,290	20,263,144
Rent	4,800,000	-	-	-	-
Telephone & postage	72,000	55,000	60,500	73,205	73,205
Electricity & water	715,750	1,474,825	3,134,808	6,359,851	9,283,492
Flexitank	960,000	1,920,000	4,646,400	9,583,200	14,055,360
Waste Management	900,000	1,980,000	4,356,000	8,984,250	13,176,900
Diesel	1,908,000	4,435,200	9,757,440	20,124,720	29,516,256
Office expenses	65,000	78,100	85,910	94,501	103,951
Repairs & maintenance	400,000	385,000	1,694,000	3,493,875	5,124,350
Licenses and permits	12,500	12,500	12,510	12,510	12,510
Miscellaneous Funds	1,500,000	3,300,000	7,260,000	14,973,750	21,961,500
Freight	3,600,000	7,920,000	17,424,000	35,937,000	52,707,600
Loan repayment and interest	-	-	-	-	-

Bank charges
Drawings

Depreciation Expenses

Plant and Equipment	6,258,750	12,743,256	13,093,881	18,443,705	18,690,767
Total outflow	39,393,250	74,794,625	164,191,168	338,732,152	466,278,268
Net cash movement	15,422,750	20,517,875	147,158,833	328,252,223	449,190,482
Balance b/f		15,422,750	35,940,625	183,099,458	511,351,681
Balance c/f	15,422,750	35,940,625	183,099,458	511,351,681	960,542,163

Notes/Assumptions

- No.1 That the recovery on oil from avocado is 12% increasing by 0.5% annually with exception of year 3 when new machinery is installed
- No.2 That the plant capacity in Year 1 is 20 tonnes per day and this fruit is delivered in such a way as to allow constant production
- No.3 That all the extra avocado fruit required for the plant in Year 1 will be purchased at Factory Gate Price of Ksh 7/= per kg
- No.4 That the every month will comprise of 25 working days except from May Year 1 where it is 18 days
- No.5 That the selling price for the crude oil is 1.3 Euro per liter and that the exchange rate is Ksh 100=1 Euro
- No.6 That all avocados delivered will be suitable for oil production, that all G2 avocados produced by IML will be processed into oil
- No.6 That labour costs are Ksh 60,000 per 20 tonne batch of oil produced and that the plant produces 3 batches per month, that plant Manager is paid Ksh 80,000/=
- No.7 That the structure of the staff at the factory are as shown in the technical portion of the business plan.
- No.8 That whereas the plant will not be working for the 1st 7 days of May, this time will be used to conduct production trials which will need all the staff to be present.
- No.9 That the water to run the plant will be pumped from the borehole which is factored in by electricity costs
- No.10 That plant maintenance [shut down] will be done in October and preparation for new season starts in March.
- No.11 That the rent is only paid for the 1st year after which the plant's] will be purchased
- No.12 That 10% of the last months oil production Year 1 will be retained for refining. That 10% of total Production Yr 2 and 20% in Yr 3 - 5 will be sold as refined at Ksh 250/= per kg [net after costs of refining]
- No.13 That the factory price of refined avocado oil will be 2.3 Euro per kg

11.5 Overall Cash Flow [5 Year]

Ideal Matunda Ltd

CASHFLOW FORECAST FOR THE PERIOD May 2009 TO April 2010

	Year 1	Year 2	Year 3	Year 4	Year 5
INFLOWS	Ksh	Ksh	Ksh	Ksh	Ksh
Table Banking	1,272,606.18	3,954,054.91	8,430,277	14,535,873	22,919,276
Service Provision	9,230,000.00	37,440,000.00	60,960,000	87,840,000	118,560,000
Avocado Brokerage	25,156,250.00	147,600,000.00	306,000,000	528,000,000	792,000,000
Avocado Oil Processing	54,816,000.00	142,187,500.00	311,350,000	666,984,375	915,468,750
Other Income	-	-	-	-	-
Total inflow	90,474,856	331,181,555	686,740,277	1,297,360,248	1,848,948,026
OUTFLOWS					
Table Banking	2,742,000	5,582,000	8,958,500	12,912,200	16,068,975
Service Provision	9,277,396	29,037,198	47,970,267	70,251,383	94,695,106
Avocado Brokerage	17,202,683	122,786,000	259,409,900	457,078,920	697,377,065
Avocado Oil Processing	45,652,000	87,537,881	177,285,049	357,175,857	466,278,268
	-	-	0	0	0
HR Establishment Costs					
CEO, Senior Managers	4,560,000	12,672,000	13,939,200	15,333,120	16,866,432
Middle Managers, Accountants	-	14,784,000	17,714,400	21,083,040	24,948,264
Accounts Clerks , Admin staff	1,140,000	17,424,000	19,602,000	25,874,640	33,205,788
Office Space	1,500,000	1,980,000	2,541,000	3,194,400	3,953,070
Utilities	180,000	396,000	508,200	638,880	790,614
Telephone and Internet	360,000	396,000	435,600	479,160	527,076
Maintenance/repairs	600,000	1,056,000	1,597,200	1,996,500	2,459,688
Motor Vehicle Running Expenses	900,000	2,772,000	3,557,400	4,392,300	5,270,760
Printing and stationery @25,000/= pm	300,000	726,000	943,800	1,197,900	1,493,382
Traveling Expenses	180,000	316,800	392,040	479,160	579,784
Office Running Expenses	120,000	330,000	435,600	559,020	702,768
Marketing Costs	600,000	1,452,000	1,887,600	2,395,800	2,986,764
Loan Repayments	18,250,175	39,654,950	64,358,011	109,146,483	153,478,799
Staff Welfare	360,000	396,000	435,600	479,160	527,076
Bank charges	-	0	0	0	0
Staff Training	600,000	1,800,000	3,600,000	5,400,000	8,100,000
Performance Audits	200,000	800,000	1,000,000	1,200,000	1,400,000
Drawings		0	0	0	0

Depreciation					
Motor vehicles / Motorcycles	1,290,000	1,823,000	2,250,900	2,769,990	3,340,995
IT System	800,000	800,000	2,736,004	2,736,000	2,736,000
Total outflow	106,814,254	344,521,829	631,558,271	1,096,773,912	1,537,786,674
Net cash movement	(16,339,398)	(13,340,274)	55,182,005	200,586,336	311,161,353
Balance b/f		(16,339,398)	(29,679,672)	25,502,333	226,088,669
Balance c/f	(16,339,398)	(29,679,672)	25,502,333	226,088,669	537,250,022

Notes / Assumptions

- No. 1 That a Regional Manager is added every year to supervise the 5 new Table Banking and Agricultural Business Development Officers
- No. 2 That each regional Manager will be based in the region and will have an accountant, administrator, accounts and stores clerk
- No. 3 That all salaries / expenses are adjusted 10% upwards to cater for inflation
- No. 4 That new processing equipment will be installed in Year 2 [60 tons per day throughput], Year 4 and additional plant of 120 tons per day throughput to give combined capacity of 200 tons per day
- No. 5 That oil recovery efficiency will increase by .5% points to stabilize at 13.5%
- No. 6 That refined oil will be sold at Ksh 250/= per litre net of all processing costs
- No. 7 That an oil refinery will be installed in Year 1 at a cost of Ksh 10,000,000 and new refineries added with each increase in processing capacity
- No. 8 That the sale of fresh avocados will be conducted at the factory yard in order to eliminate need for extra handling/transport of reject fruit.

11.6 Profit and Loss

Ideal Matunda Overall Profit and Loss

Income from Business Activities	Year 1	Year 2	Year 3	Year 4	Year 5
Table Banking	1,272,606	3,954,055	8,430,277	14,535,873	22,919,276
Agricultural Services [Avocado]	9,230,000	37,440,000	60,960,000	87,840,000	118,560,000
Fruit Marketing	25,156,250	147,600,000	306,000,000	528,000,000	792,000,000
Processing	54,816,000	142,187,500	311,350,000	666,984,375	915,468,750
Total Revenue	90,474,856	331,181,555	686,740,277	1,297,360,248	1,848,948,026

Direct Costs [Ksh]	Year 1	Year 2	Year 3	Year 4	Year 5
Table Banking	2,742,000	5,582,000	8,958,500	12,912,200	16,068,975
Agricultural Services [Avocado]	9,277,396	29,037,198	47,970,267	70,251,383	94,695,106
Fruit Marketing	17,202,683	122,786,000	259,409,900	457,078,920	697,377,065
Processing	45,652,000	87,537,881	177,285,049	357,175,857	466,278,268
Total Costs	74,874,079	244,943,079	493,623,716	897,418,360	1,274,419,414
Gross Profit	15,600,777	86,238,476	193,116,561	399,941,889	574,528,612
Gross Profit Ratio	17%	26%	28%	31%	31%

Other Overhead Operating Expenses

Items	Year1	Year2	Year3	Year4	Year5
Salaries [Head Office]	5,700,000	44,880,000	51,255,600	62,290,800	75,020,484
Office Space	1,500,000	1,980,000	2,541,000	3,194,400	3,953,070
Utilities	180,000	396,000	508,200	638,880	790,614
Telephone and Internet	360,000	396,000	435,600	479,160	527,076
Maintenance and repairs	600,000	1,056,000	1,597,200	1,996,500	2,459,688
Motor vehicle running Expenses	900,000	2,772,000	3,557,400	4,392,300	5,270,760
Printing and stationery	300,000	726,000	943,800	1,197,900	1,493,382
Traveling Expenses	180,000	316,800	392,040	479,160	579,784
Office Running Expenses	120,000	330,000	435,600	559,020	702,768
Marketing	600,000	1,452,000	1,887,600	2,395,800	2,986,764
Staff Welfare	360,000	396,000	435,600	479,160	527,076
Loan Repayments	18,250,175	39,654,950	64,358,011	109,146,483	153,478,799
Bank Charges	-	-	-	-	-
Staff Training	600,000	1,800,000	3,600,000	5,400,000	8,100,000
Performance Management Audits	200,000	800,000	1,000,000	1,200,000	1,400,000
Drawings					
Depreciation Expenses					
Motor vehicles, motorcycles	2,090,000	2,623,000	4,986,904	5,505,990	6,076,995
Total Cost	31,940,175	99,578,750	137,934,555	199,355,553	263,367,259

Net Profit	(16,339,398)	(13,340,274)	55,182,005	200,586,336	311,161,353
Net profit ratio	-18%	-4%	8%	15%	17%

Notes / Assumptions

- No. 1 That the capital investments reserves are intended for replacement of machinery
 That the price of avocado fruit [at the factory gate] will rise from Ksh 9/50 Yr 1, 10/= Yr 2, 11/= Yr 3, 12/= Yr 4 and 5
- No. 2
- No. 3 That the loan repayments are over a period of 8 years [so will continue after Year 5]

11.7 Capital Requirements

Capital Requirements

		Year 1	Year 2	Year 3	Year 4	Year 5
Item	Cost/ Officer/ Plant					
Motorbikes for Flied Officers	250,000	2,500,000	2,750,000	3,025,000	3,327,500	7,320,500
Crates	100,000	500,000	550,000	605,000	665,500	1,464,100
Spraying Credit Extension Facility	2,150,400	10,752,000	23,654,400	39,029,760	57,243,648	78,710,016
Spraying Equipment	62,500	2,500,000	5,500,000	9,075,000	13,310,000	18,301,250
Manure Credit Extension Facility	576,000	2,880,000	6,336,000	10,454,400	15,333,120	21,083,040
Oil Refining Equipment	18,720,000	18,720,000			27,407,952	
Storage Tanks [Plastic - 30000 lts]	150,000	1,500,000		1,815,000		3,294,225
Boiler for Processing Plant	1,200,000	1,200,000				
Processing Plant Acquisition	30,000,000	30,000,000	33,000,000		43,923,000	
Total Requirement		70,552,000	71,790,400	64,004,160	161,210,720	130,173,131
Operating Processing Capital		Year 1	Year 2	Year 3	Year 4	Year 5
Fruit Stock Purchase	3,000,000	3,000,000	6,000,000	12,000,000	22,500,000	30,000,000
Work in progress stock	3,000,000	3,000,000	6,000,000	12,000,000	22,500,000	30,000,000
Finished Product Stock	3,000,000	3,000,000	6,000,000	12,000,000	22,500,000	30,000,000
Debtor Stock	3,000,000	3,000,000	6,000,000	12,000,000	22,500,000	30,000,000
Total Operating Processing			24,000,000	48,000,000	90,000,000	120,000,000

Capital	12,000,000					
Support Vans	1,200,000	2,400,000	3,960,000	1,452,000	1,597,200	1,756,920
Motorbikes	250,000	750,000	825,000	907,500	998,250	1,098,075
Total Motor Vehicle	3,150,000	4,785,000	2,359,500	2,595,450	2,854,995	
Other Items		Year 1	Year 2	Year 3	Year 4	Year 5
Information Systems	8,000,000	8,000,000		9,680,000		
Total Information systems	8,000,000			9,680,000		
Grand Total / External Capital Requirement	93,702,000	100,575,400	124,043,660	253,806,170	253,028,126	

Notes / Assumptions

- No. 1 That every officer will be assigned a new Motorcycle that is expected to last 4 years, replaced in Year 5
- No. 2 That every Head Office and Regional Manager will be assigned a motor vehicle that is expected to last 5 years
- No. 3 That all other officers will use their own means to get to/from their work
- No. 4 That the processing and refining plants will be used immediately when they are purchased
- No. 5 That the credit facility extended to the farmers will be recovered from fruit sales / delivery
- No. 6 That the cost of the spraying equipment takes into account purchase of spare units [1 for every 4 pumps] for emergency use
- No. 7 That every pump shall last only 2 seasons after which it shall be replaced
- No. 8 That the working capital and service provision facilities will be repaid during the year of operation
- No. 9 That all prices for goods have been adjusted upwards by 10% annually to cater for inflation
- No. 10 That all the crates will be replaced after 4 years for each officer
- No. 11 That 5 new vehicles will be purchased in Year 1 and 1 new one every year thereafter
- No. 12 That the head office will purchase 3 new motorbikes every year for use in the field / head office as pool vehicles

11.8 Sources of capital**Sources of Capital**

Grand Total Capital Requirement	93,702,000	100,575,400	124,043,660	253,806,170	253,028,126
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Sourcing of Financing

Long Term Loan Requirement	70,950,000	52,921,000	37,013,900	106,562,522	40,484,582
Overdraft Facility Internally Generated Capital	22,752,000	47,654,400	77,029,760	15,708,711	-
	-	-	10,000,000	125,459,937	212,543,544
Total Cash Required	93,702,000	100,575,400	124,043,660	247,731,170	253,028,126

11.9 Loan Repayment Schedule for financing**IML Loan Repayment Amounts**

Details	Year 1	Year 2	Year 3	Year 4	Year 5
Principle [Ksh]	70,950,000	52,921,000	37,013,900	106,562,522	54,318,110
Interest 8 years @ 15% p.a.	85,140,000	63,505,200	44,416,680	127,875,026	65,181,732
Total [Ksh]	156,090,000	116,426,200	81,430,580	234,437,548	119,499,842
Monthly Payments for 8 years	1,625,938	1,212,773	848,235	2,442,058	1,244,790
Working Capital [Overdraft]	22,752,000	47,654,400	87,029,760	147,243,648	198,710,016
Monthly payment of Interest 18% p.a. charged monthly for 7 months	199,080	416,976	761,510	1,288,382	1,738,713

12.0 Risk Management / Mitigation

As shown in the financial projections this business has clearly identified the revenue drivers, i.e. the critical activities upon which all revenue depends. Risks shall be analyzed relative to these activities and factors, starting from the table banking which is at the very beginning of the business cycle to the marketing / processing which are at the end of the process.

12.1 Table banking

The major risks in this activity are as follows:

- Fraud / theft by banking officers – this is a clear risk given the amounts of money that they individual officers will be handling after the initial stages. This risk will be mitigated by careful hiring procedures [hiring for character traits] as well as creation of cash systems and procedures that limit officers handling of cash. The fact that the IML officers are paid significantly higher salaries than conventional ASCA's will also serve as an attraction for high performing honest staff.
- Slow growth within the groups – this might arise because of poor group cohesion, adverse economic environment etc. This will be mitigated by setting strict targets for the officers [all officers must have formed the 32 groups within a period of 9 months].
- Dishonesty by group officials – as noted in the financial projections the sums that the groups shall be handling would be substantial as the groups operate for extended periods of time. Dishonesty in distribution of interest earned / dividends will lead to group disintegration. This risk shall be mitigated by ensuring that groups have at least 20 members at any given time and that free/fair elections are held annually to allow members to elect official. IML shall also endeavor to ensure that every member has updated statements of the group's cash / loan position and dividends due to him/her.

12.2 Service Provision

- Growth of number of groups [and corresponding number of avocado trees among the group members]. The model assumes that the growing of avocado fruits remains a lucrative business opportunity and that people will be encouraged to grow them and provide good husbandry to existing trees. This risk is mitigated by offering premium prices for contracted farmers. This will ensure that the farmers remain enthusiastic about the crop.
- Rising costs of chemicals, fuels etc. This remains a major risk, especially if the price increases exceed the 10% annually allowed for in the cash flow projections. This risk should be mitigated by ensuring that the contract for service provision has a clause that allows IML to pass on such additional costs to the farmer where there is reasonable justification.

12.3 Avocado brokerage

- Outbreak of unexpected diseases. Largely the service provision aspect of the business, which incorporates the use of KARI consultants who are able to diagnose such problems early and recommend immediate remedy, will mitigate this. The fact that IML will also have operating capital to run the spraying program means that any measures suggested will be acted on immediately and the problem contained.

- Poor weather conditions e.g. extremely wet / dry weather. This will be mitigated by sourcing for alternative supply of fruit should the contracted farmers fall short of the target. It is unlikely that the entire regions fruit harvest will be affected at the same time. Again, the fact that IML offers premium prices will be an incentive to attract alternative suppliers.
- Exporter frustration at buying point. IML has encountered situations where the exporter will change conditions for fruit acceptance or apply different grading standards to those the IML officers have been trained to use. In this case, IML stands the risk of losing fruit that it has already paid for. This risk will be mitigated by conducting market research on fruit exportation and undertaking to do this activity independently of other exporters.
- Poor handling of fruit from buying centers to exporter premises – in this particular event it is noted that the avocados are very delicate and rough handling [including rough driving of the collection vans] has a detrimental effect on fruit quality. This risk will be mitigated by engaging specialist contractors during the harvest seasons who will be contract bound to adhere to handling / transport guidelines. IML will also reward good performance [minimized rejection] for individual drivers / assistants.

12.4 Processing

- Unstable market for oil refined products. This risk will be mitigated by effective branding and marketing campaigns [both local and international – mainly using the internet] and establishment of reliable distribution channels. This will ensure that IML becomes a premium local supplier. The engagement of an internet savvy marketing manager will also ensure that IML is well aware of trends and changes in customer preferences long before they have significant effects on business volumes. The capital reserves mentioned in the financial projections will be specifically for new kinds of equipment that the industry may require to deliver products demanded to the customers.
- Machinery breakdown. This risk will be mitigated by instituting thorough out of crop maintenance during plant shut down during which time all defective equipment will be repaired or replaced. IML will also adopt preventive maintenance procedures using high tech equipment to detect symptoms of equipment failure long before it becomes a problem and use such findings to plan for and execute the weekly maintenance procedures. This has been factored into the projections.
- Increases in fruit prices. There is the risk that the fruit prices may increase more than budgeted for in the projections. Should this happen it may make the production of oil / oil products unprofitable. This risk will be mitigated by increasing the oil prices to correspond with prices of fruit or alternatively switching from processing to brokerage of Grade 2 fruit to the local / regional market. This will result from strategic market research carried out on a regular basis by the market department.

12.5 Other Overhead Costs

- Staff attrition. It is evident from the projections that there will be significant growth in the company that will require highly committed staff. This risk will be mitigated by ensuring that staff is trained on a regular basis, instituting a highly competitive performance based bonus system that will reward achievement of targets, innovation and learning and other critical aspects of job performance.
- Unclear performance measurement. This will be mitigated by installation of performance measurement software that will tract the performance of departments down to individual staff members to ensure that they all deliver on agreed measures. If this is done, the entire organization will achieve its strategic objectives. This cost is factored into the capital requirements.
- Fluctuating interest rates. This may result in loan repayments becoming higher than budgeted for and create cash flow constraints. This risk will be mitigated by negotiating for fixed interest [15%] over the 8-year loan period.

- Fluctuating currency exchange rates. Should currency exchange rates be depressed by more than 20% this would seriously affect the inflows from exports. This risk will be mitigated by taking insurance specifically for this eventuality during the loan period.

13.0 Conclusion

The business plan shows clearly how the agricultural sector in general, and the avocado fruit sector in particular will be transformed by the entrance of Ideal Matunda Ltd. The impact of value addition through processing of avocado into oil will significantly reduce the perennial losses of avocado since avocado oil can be stored unlike the fresh fruit. Access to a reliable market will also facilitate farmers' access to financial services, agricultural finance and it will lead to a dramatic increase in rural household incomes. It is worth noting that income paid to smallholder producer groups will increase from an estimated Ksh 13.6 million in years 1 to Ksh 212 million in year 3 and 558 million in year 5 due to value addition and improvement in quality and quantity of production.

To realize the set targets, IML will require to a capital investment of Ksh 307,950,004 over the five year plan period. IML will adopt a gradual growth approach in order to minimize risk. Thus, the investment will be spread out as follows:-

	Ksh
Year 1	70,950,000
Year 2	52,921,000
Year 3	37,031,900
Year 4	106,562,522
Year 5	<u>40,484,582</u>
	<u>307,950,004</u>

In addition to the capital investment, IML will require overdraft facilities to meet the working capital requirements for the processing plant and for agricultural loans for the smallholder groups which will be recovered from sale of their avocados.

Out of the Ksh 70,950,000 capital investment required in the first year, it is imperative for IML to raise Ksh 10,100,000 immediately in readiness for the processing season that begins in May 2009 for infrastructure development. This will be required to meet the following costs:

Boiler for heating to replace diesel	1,200,000
Lease for 6 months	2,400,000
Oil refinery – 30% deposit	5,000,000
Storage tanks for crude oil	<u>1,500,000</u>
Total	10,100,000

Overdraft facilities of Ksh 12,000,000 will also be required for buying the fruits for processing by the beginning of May 2009.

It is encouraging to note that by the fifth year, IML will not require any overdraft facilities as all working capital requirements will be comfortably financed by internally generated funds.