

# TRAINING --- MANUAL

- MANAGEMENT OF ORGANISATIONS AND BUSINESS DEVELOPMENT -

## CORPORATE FUNDING MANAGEMENT



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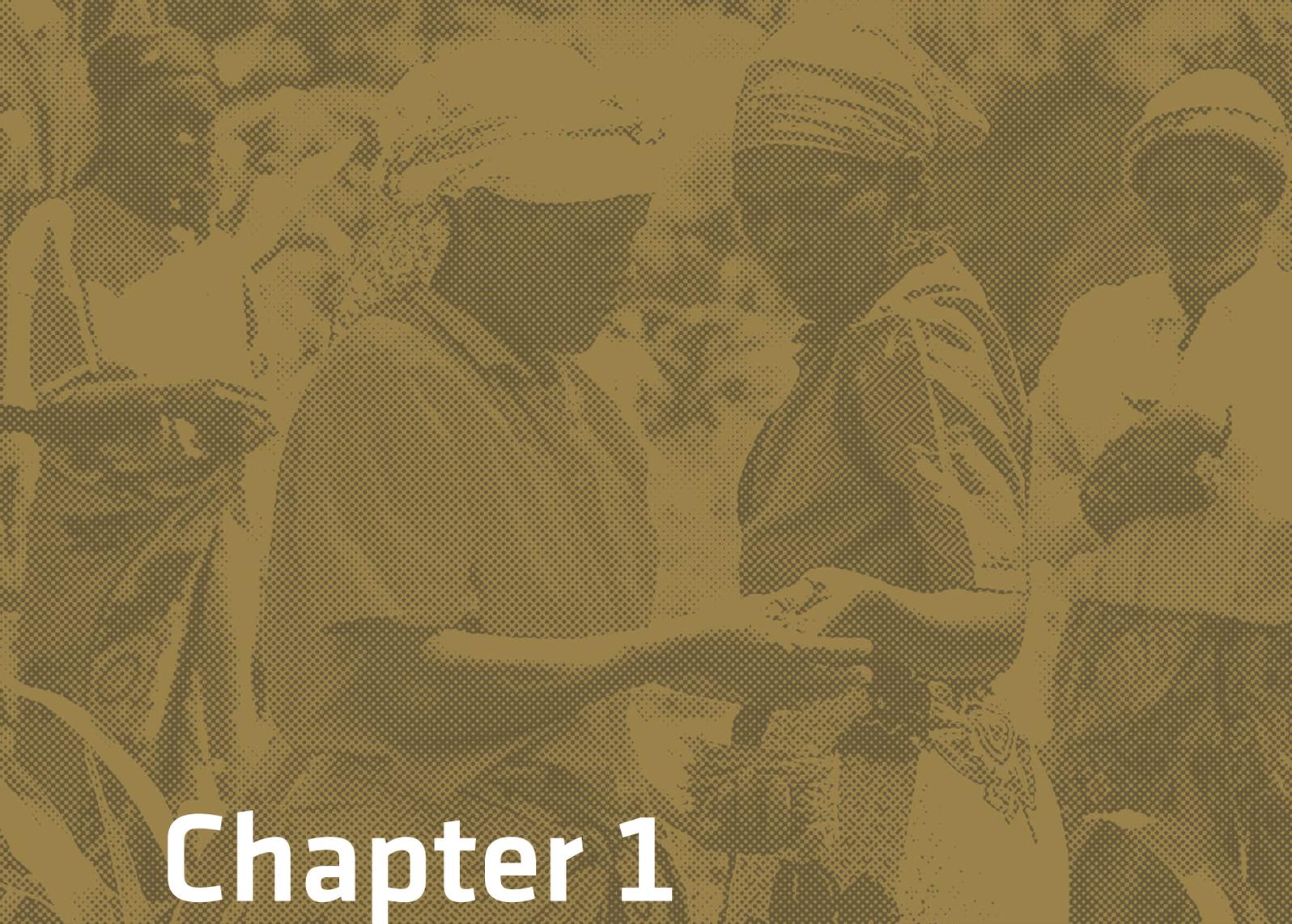
Both programmes form part of the intra-ACP indicative programme (2014-2020) of cooperation between the EU and the OACPS.



# CORPORATE FUNDING MANAGEMENT

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# Chapter 1

## Key horticulture SMEs funding requirements

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## 1.1. INTRODUCTION TO CORPORATE FUNDING MANAGEMENT

### 1.1.1. Corporate funding management

Corporate finance is the area of finance that focuses on how businesses raise and utilise finances to ensure continuous operations. An entrepreneur seeking to set up a horticultural business will require funding for land, greenhouses, machinery, and operating funding for staff and supplies. In addition, the new business may also need a range of equipment, from tractors and forklift trucks to potting machines and irrigation systems. On the other hand, an existing horticulture business may want to expand its operations having identified market opportunities by setting up additional production facilities in a different city or country. In both these instances, the business owners will need to acquire funds for the businesses from appropriate sources and prudently utilise these funds by planning their respective expenditure on assets and operations including working capital for seeds, inputs, or products.

Finance is one of the most important functions of any business. Not only is finance a good indicator of the overall health of the SME, it also plays a critical role in ensuring business growth. Whether growth is attributable to a larger market capitalization, a new location, a new product or service offering, or a new demography, finance is the enabler of such opportunities. Corporate finance involves identifying the various sources of funding, determining the **capital structure** of the business, and undertaking investments to increase the **value** of the firm (2020 Global Banking & Finance Review Report - GBAF Publications Ltd).

Businesses prudently manage funds by first assessing their funding requirements, determining the most appropriate sources of funds, and then investing the funds to realise their goals and objectives. Corporate funding management is that managerial activity which is concerned with the planning and controlling of the SME's financial resources. Corporate funding management is alternatively defined as the utilisation of a business' economic resources in such a way as to maximize the business owners' wealth. Corporate funding management entails raising funds, investing the funds in business operations and assets to generate return.

For the SMEs in the horticulture business to grow and develop, they must perform three important functions; finance, production and marketing. The corporate finance function of raising and using money has a significant effect on the functions of production and marketing. For instance, an SME in financial distress that is growing and locally selling fruits and vegetables will give more weight to financial considerations and devise their marketing and production strategies in light of the financial constraints. On the other hand, management of the SME, which has steady and/or regular supply of funds, will be more flexible in formulating its production and marketing policies.

### 1.1.2. Role of Corporate Finance in Business

Finance is critical in just about every business decision, from planning and budgeting, and cash flow management to the capital structure and mitigation of business risks and minimisation of costs. The importance of corporate finance lies in ensuring the SME operates smoothly without running out of cash while also securing funds for long-term investment. The specific roles of the finance function of the business include the following:

- a. **Strategic Planning and Budgeting:** Upon completing its Strategic Plan or business plan, the SME will develop a budget to estimate the financing required to implement all the proposed activities required to achieve its business goals and objectives. The financial plan/ budget will highlight the capital and operating expenditure required to implement the proposed business activities. These plans form the basis for raising finances, capital expenditure, hiring employees, and marketing activities, amongst others. Without the required finances, the SME will not be able to implement its planned activities and will therefore not achieve its business goals and objectives.
- b. **Equity or Debt/Loan:** On completing the budget, the business will need to decide how it will source the required finance. This could be either from additional equity finance from investors and business owners or loans from lenders. A small business may raise funds from friends and family, credit unions and personal savings. The financial manager is in charge of negotiating terms with these financial service providers to ensure availability of the required funds. Debt financing requires some sort of scheduled payment, usually monthly. In contrast, equity financing is financing provided in exchange for an ownership interest in the SME. In selecting the source of finance, the finance manager will put into consideration all these factors. In addition, the business will also need to determine the appropriate capital structure (proportion of equity and debt), while keeping in mind the business growth and expansion needs, organisational control, risk management, taxation, accounting, and legal/policy requirements.
- c. **Cash Flow Management:** One of the most important functions of a finance manager in the Horticultural SME is to project and manage the firm's cash flow. Cash flow refers to the actual receipt of money and payment of bills, as opposed to the SME's budgeted income and expenses. For example, if a business does not negotiate customer credit terms and vendor/ supplier payment terms correctly, the business will mismatch its cash receipts resulting in long waits to collect sales invoices and yet bills will be due, potentially leading to business failure. Proper cash flow management, therefore, requires monitoring of receivables turnover and keeping enough credit and cash reserves for the business to meet its obligations thus ensuring financial stability. However, it is also important to note that sound cash flow management should ensure that the SME does not carry excess cash that may increase its operational costs and thus reduce profitability.

- d. **Profit Planning and Cost Controls:** Financial planning entails setting revenue targets, costs containment and profit targets. It also requires setting targets for overhead and operational expense levels and debt-service management. The corporate financial manager will create a master budget and align it to the SME's balance sheet, accounts receivable and payable reports, cash flow statement and profit-and-loss statements. The finance manager is also required to regularly review the master budget and prepare budget variance analyses that highlight any difference and propose corrective measures. In addition, the finance manager is responsible for controlling the SME's expenses. This requires more than simply setting spending levels and cutting costs. Cost containment includes creating requests for proposals, bidding processes and purchasing policies for contractors, vendors, and suppliers to ensure the company gets the best combination of quality and price. For example, the finance manager sets benchmarks that determine when it is most cost-effective to perform activities using in-house staff and when it is better to use contractors. Cost-containment efforts also include managing debt to ensure interest payments do not wipe out company profits. Finance managers also create strategies that help reduce a company's tax liability, such as depreciating assets or lease rentals.
- e. **Managing Unavoidable Risks:** Any business undertaking will need to manage its financial risks exposure. Financial risks include interest rates risk (resulting in higher interest payment), currency fluctuations (arising from changes in foreign currency exchange rates), changes in commodity prices and credit risks (customers' failure to pay their invoices). Adverse changes arising from these risks can wipe away business profits and to this end, it is imperative the business manages this exposure through regular financial reports. Financial management analyses the risks of international markets, checks the credit standing of customers, goes through the terms of loans from lenders, and provides an assessment of the perils in these areas. Nothing is ever for certain, and finance helps put the hazards in perspective.
- f. **Investment opportunities:** In some instances of the business cycles, a business will have cash surplus to its requirements. The finance manager will need to make short-term investment decisions to earn an extra income from these funds, by determining the best investment options for the excess cash. The business should also be mindful to ensure that these investments mature at the time when the business will need funds for its planned activities as envisaged in the business plan.

## 1.2. IDENTIFYING THE FUNDING REQUIREMENTS

Identifying the key funding requirements is primarily informed by the SME's anticipated investments in long-term assets and operational requirements that should enable it to grow and sustain its projected sales volume and profitability. The funding requirements should cater for both capital expenditure items (CAPEX) and operational expenditure items (OPEX). The financing of these items depends on the current and projected growth trajectory of the SME as reflected in the business or strategic plan. Essentially, identifying of the funding items is a collective effort of the SME's management team and other technical staff. In some cases where internal staff skills capacity is inadequate, the firm may need to outsource technical advice on the items required to implement the business plan. For proper funding management, finance managers must garner sound knowledge of the nature and size of activities, funding amounts, timing, and tenure of the activities, etc.

**Capital Expenditure Items (CAPEX):** These (as may be dictated by the nature and size of horticultural undertaking by the firm) include:

- a. Land acquisition (through purchase or lease) – appropriate for production that ensures projected volumes of desired market quality and capable of realising premium prices; well drained, proximity to adequate water sources, good soils, accessible to necessary public infrastructure such as electricity, water, railways, etc.
- b. Construction of farm access and other infrastructure such as roads, power, water reservoirs, or bore holes, etc.
- c. Construction of farm and administration structures (green houses, irrigation facilities, stores, produce cleaning facilities, grading and pack houses, cold rooms, administration buildings, staff houses, etc.).
- d. Acquisition of machinery (for firms selling semi-processed or processed products such as for juice concentrate production).
- e. Acquisition of equipment: Tractors and accessories, trucks for general and refrigerated haulage, other vehicles, weighing machines, generators, driers, sprayers, and other long-term firm equipment.
- f. Communication and technology equipment, including hardware and software systems, and telecommunication gadgets.
- g. Acquisition of furniture for administration offices and pack houses such as sorting tables, etc.

Figure 1 - A Greenhouse and Vegetable garden



**Operating Expenditure Items (OPEX):** These include:

- a. Production and post-harvest requirements- inputs (such as seeds, seedlings, fertiliser, pesticides, manure, etc.), labour, farm tools, harvesting trays and protective wear.
- b. Product outsourcing- by buying from out growers (stock procurement, handling, and transport).
- c. Marketing – packing materials and accessories, pallets, shipping costs, agent commissions, certificates, trade exhibitions, etc.
- d. Administrative expenses: These include salaried labour, utilities, legal services, insurance, maintenance, communication, stationery, property taxes, licenses, security, and sundry items.

For proper funding management, both CAPEX and OPEX items must be properly determined in regard to quantities, capacity, timing of acquisition, quality, etc. Their costs must be realistically determined from reliable information sources such as supplier inquiries and quotations, catalogues and web search in order to avoid excessive cost variances at the time of acquisition or contracting the providers.

Another relevant consideration for sound corporate funding management is whether to buy particular assets or outsource them by way of hiring or leasing. For example, a firm may opt to hire tractors or transport trucks instead of buying them.

### 1.3. GROWTH AND EXPANSION OF THE BUSINESS

As the horticultural SME grows and continues to expand its operations, it will need to continually make the following key finance decisions; what to investment in, how to finance the investment, and how to reward the business owners (dividend decision). These three key finance decisions are articulated in detail below.

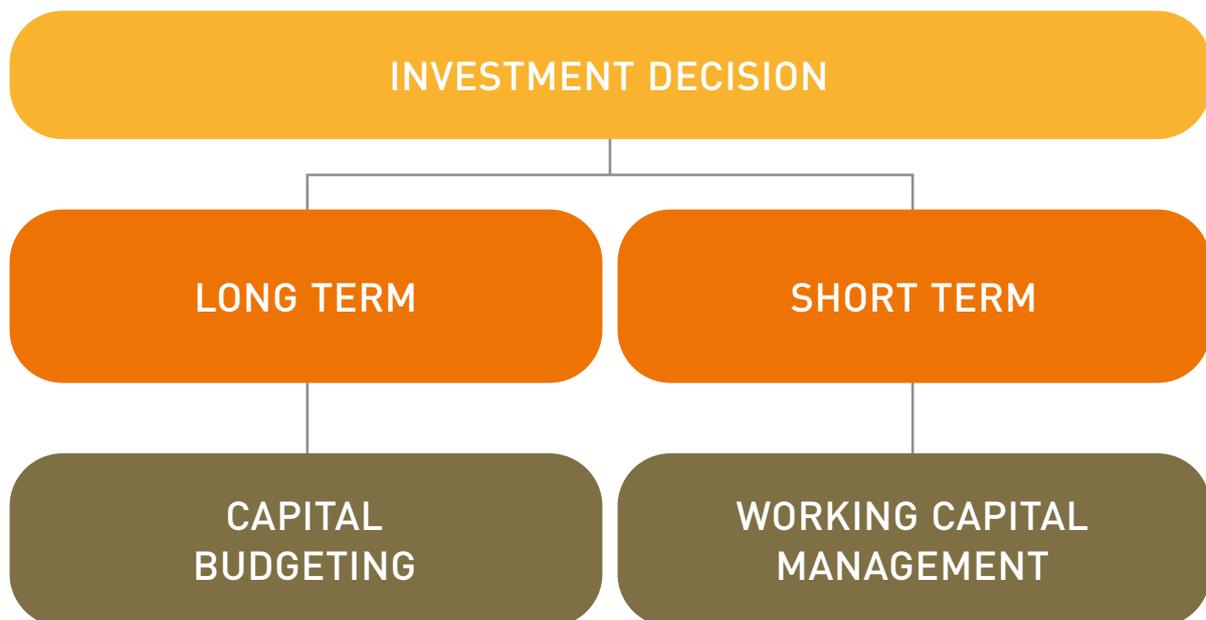
#### 1.3.1. Investment Decision

The business owners supported by the top-level management make the Investment decisions and it relates to what assets are necessary to either sustain or enhance business operations. These assets fall into two categories:

- Long-term Assets
- Short-term Assets

As diagrammatically explained below;

Figure 2 - Categories of Investment decisions



### *1.3.1.1. Capital Budgeting Decision*

Capital Budgeting is the process of selecting the asset or an investment proposal that will yield returns over a long period. Under capital budgeting, the SME makes a decision to invest its funds in long-term assets, which will result in it receiving benefits in terms of increases in cash inflows, or minimising cash outflows over a number of years. The long-term assets are those the SME will use for a period exceeding one-year period. The SME's capital investment decisions are informed by its long-term growth prospects and will include acquisition, modernization, and replacement of the long-term assets. Examples of long-term assets are highlighted in section 1.2.

#### **Procedures or steps of capital budgeting:**

- a. Identify possible opportunities available
- b. Screen them to reduce the number of alternatives to the most feasible ones
- c. Estimate cash flows (inflows and outflows) for the feasible alternatives.  
Inflows are benefits while outflows are expenditures
- d. Evaluate and appraise to determine feasibility
- e. Select and implement the most feasible alternative

#### **Significance of Capital Investment decisions**

Capital Investment decisions are highly significant due to a number of reasons;

- Investment linked with objectives – An SME with an objective of survival and growth, incurs capital expenditure every year, and makes investment decisions e.g. investment in land, greenhouses to increase its capacity to grow more fruits and vegetables.
- They influence the firm's growth in the long run
- They affect the risk of the firm
- They involve commitment of large amount of funds
- They are among the most difficult decisions to make.

Figure 3 - Significance of Capital budgeting



Source: Wall Street Mojo-Financial Analyst Bundle

### Investment decision types

There are many ways to classify investment. One classification is as follows:

- Expansion of existing business - A firm may add capacity to its existing product lines or farm production levels to expand existing operations such as expansion of the green houses, irrigation facilities, stores and produce cleaning facilities; to increase production to meet the market demands.
- Expansion of new business - A firm may expand its activities in a new business. Expansion of a new business requires investment in new products and a new kind of production activity within the firm.
- Replacement and modernization - The main objective of modernization and replacement is to improve operating efficiency and reduce costs. Cost savings will reflect in the increased profits, but the firm's revenues may remain unchanged. Assets become outdated and obsolete with technological changes. The firm may decide to replace those assets with new assets that operate more economically.

### 1.3.1.2. Working Capital

Working capital refers to financing that the SME uses to for its day-to-day operating activities. The SME that engages in locally buying and selling fruits and vegetables will need finances to purchase stock/ inventory from the local farmers, pay operating expenses such as rent, salaries, and local taxes in order to carry on its business activities. The SME engaged in growing its own fruits and vegetables will incur operating expenses such as insurance, purchase of inputs (fertilizers, herbicides, compost) and packing materials and accessories, purchase of horticultural products from suppliers/out-growers, export and other licenses, personnel expenses and general administration expenses. One of the typical responsibilities that management must contend with is determining how to reduce operating expenses without significantly affecting a firm's ability to compete with its competitors.

Operating expenses are necessary and unavoidable for all businesses. Some firms successfully reduce operating expenses to gain a competitive advantage and increase **earnings**. However, reducing operating expenses can also compromise the integrity and quality of operations, including delayed deliveries to the buyers, inadequate production inputs, inadequate insurance coverage, delayed servicing and maintenance of equipment, etc. Thus finding the right balance can be difficult but can yield significant rewards.

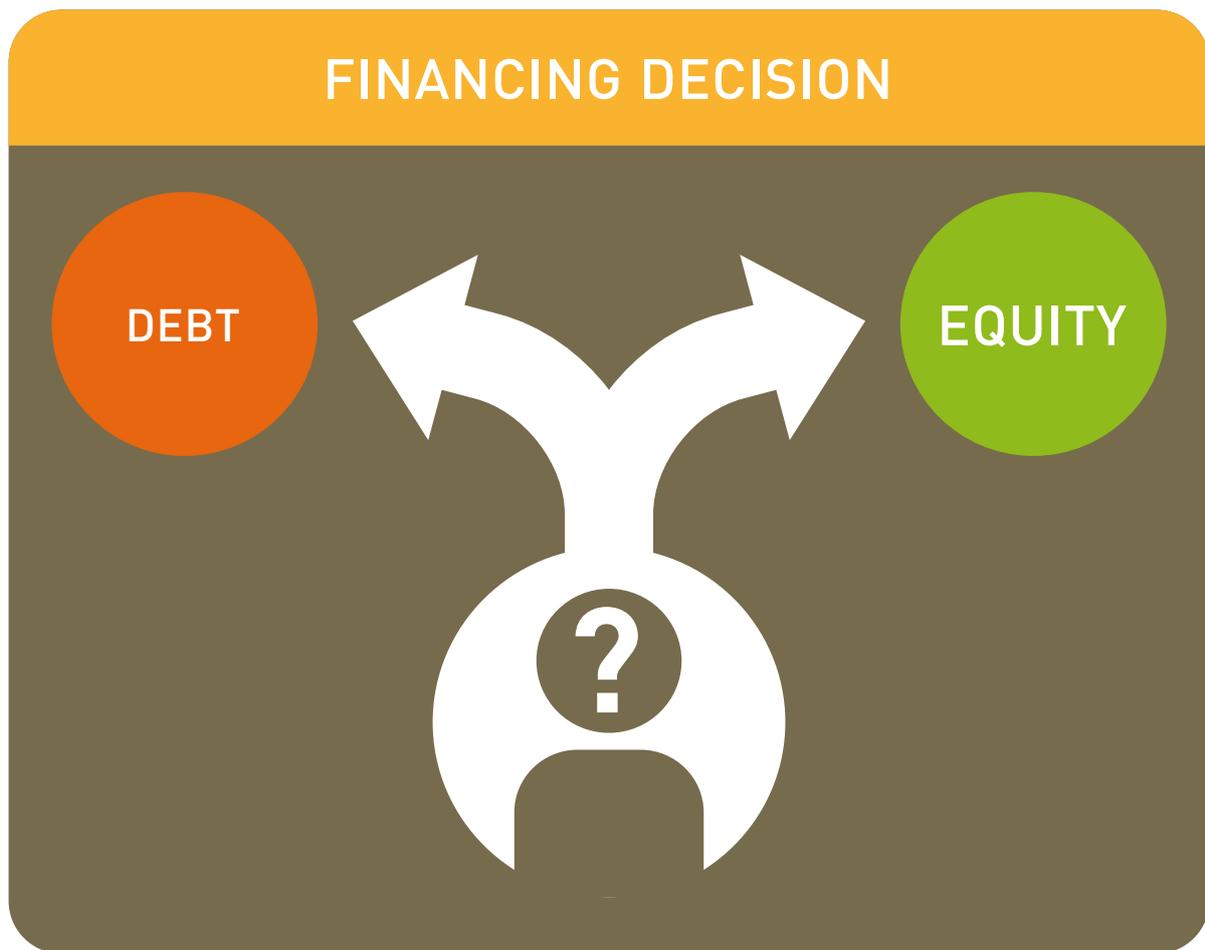
### 1.3.2. Financing Decision

The financing decision is yet another crucial business decision relating to the mobilisation and allocation of funds required for the investment decisions earlier explained.

The financing decision entails deciding on the most appropriate source of finance for the SME to ensure the profitability of the investment decisions. The SME principally has two financing options: using equity financing (cash from the business owners) or debt/ loans (borrowing funds from external sources). Smaller business can also mobilise funds from other sources such as grants and donations, personal savings, and family friends.

The objective of the financing decision is to maintain an optimum capital structure, i.e. a proper mix of debt and equity that results in lower cost of financing in terms of interest or dividends payments. All sources of finance have a cost implication to the SME and as such in selecting the appropriate financing proportion between equity and debt; the SME should always aim for a combination that results in the least cost of financing.

Figure 4 - Optimum Capital Structure



Source: Principles of Finance – By Besley & Brigham

Excessive financing than what the SME can utilise will result in undesirable financial performance indicators (profitability ratios- Return on Investments) showing poor utilisation of investments thereby making it difficult to raise future capital. On the one hand, if the SME has too much debt, its access to financing may be constricted, perhaps before it had a chance to complete its growth strategy. Besides if the SME has a high amount of debt and revenue suddenly stalls, such as in a recession, it may leave the business unable to fulfil its obligations. The SME that continually relies on equity financing, will also lose a certain amount of decision-making authority, a factor that could inhibit growth strategies just as much as a lack of funding.

Because debt and equity financing have such varying effects, SMEs should seek to find a specific balance, or an optimum level, of financing. The idea is to use debt enough to fund various business ventures without exposing the SME to too much debt, but to use a small enough amount of debt that adequate ownership interest is kept by the SME owners.

In any case, each type of financing has its own unique characteristics and can affect operations differently. Debt financing is a negative cash flow. Not only does it represent a fixed obligation for repayment, but also that repayment must come at set intervals and amounts regardless of the earnings of the SME. Equity financing on the other hand does not require the same regular payments, by in most cases, the business owners relinquish some level of management interests in exchange for the upfront financing.

While SMEs can in some instances finance business growth solely through the revenue received, most SMEs obtain financing to prevent weakening of their current financial position.

### *1.3.2.1. Optimal capital structure*

The optimal capital structure of a firm is the best mix of debt and equity financing that maximizes the SME's business value while minimizing its cost of capital.

The Debt – Equity Ratio (see formula) helps in determining the effectiveness of the financing decision made by the company.

$$\text{DEBT EQUITY RATIO} = \frac{\text{LONG TERM DEBT}}{\text{OWNERS' EQUITY}}$$

The recommended Debt Equity Ratio is 1:1, which means the amount of equity invested in the SME by the business owners should be equal to the debt owed by the SME. The implication is that when equity matches debt financing, the SME's exposure to the earlier discussed changes in business performance. However, attaining this balance can particularly be challenging for the new SME, which has significant investments to make that are way out of the owners means. The SME may therefore rely heavily on debt but the owners should work to remedy the situation by seeking out other financing options as discussed in Chapter 2.

### 1.3.2.2. Factors affecting Financing Decisions

While making financial decisions, the SME owners have to consider the following points:

- **Cost:** Financing decisions are all about allocation of funds and cost cutting. The cost of raising funds from different sources, including interest and intermediation costs differ a lot. Therefore, the most cost-efficient source should be considered/selected.
- **Access and timing:** Ease and timing of access of the desired funding is of critical importance to facilitate the efficient execution of the targeted activities. If internal sources such as raising additional capital involve delays, it is worthwhile exploring external sources. Similarly, if external sources involve many stringent conditions to access such as excessive collateral and lengthy approval decision processes such an option may not be in the best interest of the SME. Chapter 2 covers the alternative funding sources and requirements for the SME to access the finances.
- **Risk:** The dangers of starting a venture with the funds from various sources differ. The risk exposure of the SME financing its operations using debt is higher since it will be required to make repayment regardless of the business performance. On the other hand, the SME using equity will not have similar worries since equity is permanent financing. This risk assessment is one of the main aspects of financing decisions.
- **Cash flow position:** Cash flow is the regular day-to-day cash receipts and payments by the SME. Good or bad cash flow position gives confidence or discourages the investors to invest funds in the SME.
- **Control:** In the situation where existing investors need to hold control of the business then finance can be raised through borrowing money, however, when they are prepared for diluting control of the business, equity can be utilized for raising funds. How much control to give up is one of the main considerations in financing decisions
- **Condition of the market:** The condition of the market matter a lot for the financing decisions. During boom period, issue of equity is highly feasible and preferred but during a depression, a firm will have to use debt.

The SME should make a judicious decision regarding where, when and how the funds shall be raised, since more use of equity will result in the dilution of ownership and whereas higher debt results in higher risk, as fixed cost in form of interest is to be paid on the borrowed funds.

### 1.3.3. Dividend Decision

Dividend decisions relate to the distribution of profits earned by the SME to the business owners. The business owners who provide equity finance, which is permanent are rewarded through dividend payment by the SME while debt providers are rewarded through interest payments. In declaring the dividend decision, the business owners will make a choice on whether to reward themselves immediately or retain the earnings/profit to finance future growth and therefore increase future earning capacity of the SME. If the SME decides not to distribute dividends, the business invests the retained earnings on the premise that it will generate more profits in the subsequent years. For the business owners, the decision to forego dividend is a trade-off between current and future earnings.

#### Factors Affecting Dividend Decisions

- **Earnings:** Returns to investors are paid out of the present and past income/profits. Consequently, earning is a noteworthy determinant of the dividend. If the SME makes losses, it cannot pay dividends (except from past-undistributed profits).
- **Dependability in Earnings:** The SME having higher and stable earnings can announce higher dividend than one with lower income.
- **Balancing Dividends:** For the most part, SMEs will attempt to balance out dividends per share. A consistent dividend is given every year. A change is made if the SME's income potential has gone up and not only the income of the present year.
- **Development Opportunity:** Organizations having great development openings (for growth and expansion) if they hold more cash out of their income to fund their required investment. The dividend announced in growing organizations is normally smaller than that in the non-development companies.
- **Cash flow:** Dividends are an outflow of funds. To give the dividends, the SME must have enough to provide them, which comes from regular cash flow. It is imprudent to borrow to pay dividends.
- **Contractual and Legal Constraints:** While giving credits to an organization, occasionally, the lending party may force certain terms and conditions on the payback of dividends in future. The organizations are required to guarantee that the profit pay out does not abuse the terms of the **loan** understanding in any manner.

## 1.4. WORKING CAPITAL MANAGEMENT

Working capital management refers to the SME ensuring it always has adequate finances to meet its short-term obligations by prudently investing in current assets or short-term assets. In case the SME has an inadequate working capital (less funds invested in the short-term assets), from which it will generate revenues, it may not be able to pay off its current liabilities such as suppliers of fruits and vegetables potentially leading to bankruptcy. Alternatively, if a firm has more current assets than required, it can have an adverse effect on the profitability of the firm due to the unnecessary financing costs associated with holding large inventories of fruits and vegetables amongst others. Thus, a firm must have an optimum working capital that is necessary for the smooth functioning of its day-to-day operations.

Working Capital Requirement is the amount of money needed to finance the gap between disbursements (payments to suppliers and service providers) and receipts (payments from customers and other inflows such as cash grants). Almost every business must incur expenses before obtaining the fruits of its labour (the payment of customer invoices).

### Management of working capital

Management will use a combination of policies and techniques for the management of working capital. The policies aim at managing the current assets (generally cash, inventories, and debtors) and the short-term financing, such that cash flows and returns are acceptable.

The key elements of Working Capital management are:

- **Cash management.** Identify the cash balance, which allows the business to meet day-to-day expenses, but reduces cash holding costs and risk.
- **Inventory management.** Identify the level of inventory (amount of fruits and vegetables), which allows for uninterrupted supply of the fruits and vegetables but reduces the costs associated with procuring them from the smallholder farmers or for the SME growing its own the associated input costs. Therefore, inventory management should ensure that the firm does not experience stock outs (such as of inputs, packing materials, equipment and machinery maintenance accessories, etc.) as well as not keeping excess inventory that may result into carrying costs of obsolescence, pilferage and damages.
- **Debtor management.** Identify the appropriate credit policy, i.e. credit terms which will attract customers, such that any impact on cash flows and the cash conversion cycle will be offset by increased revenue and hence Return on Capital (or vice versa); see Discounts and allowances.
- **Short-term financing.** Identify the appropriate source of financing, given the cash conversion cycle: the inventory is ideally financed by credit granted by the suppliers; however, it may be necessary to utilize a bank loan (or overdraft), or to “convert debtors to cash” through “factoring.” Also deferred payment for non-inventory supplies such as rent, logistics supplies, utilities, etc. can be a desirable good source of financing.

### Factors Determining the Requirements of Working Capital

For business operations, the important factors determining the requirements of working capital are as follows:

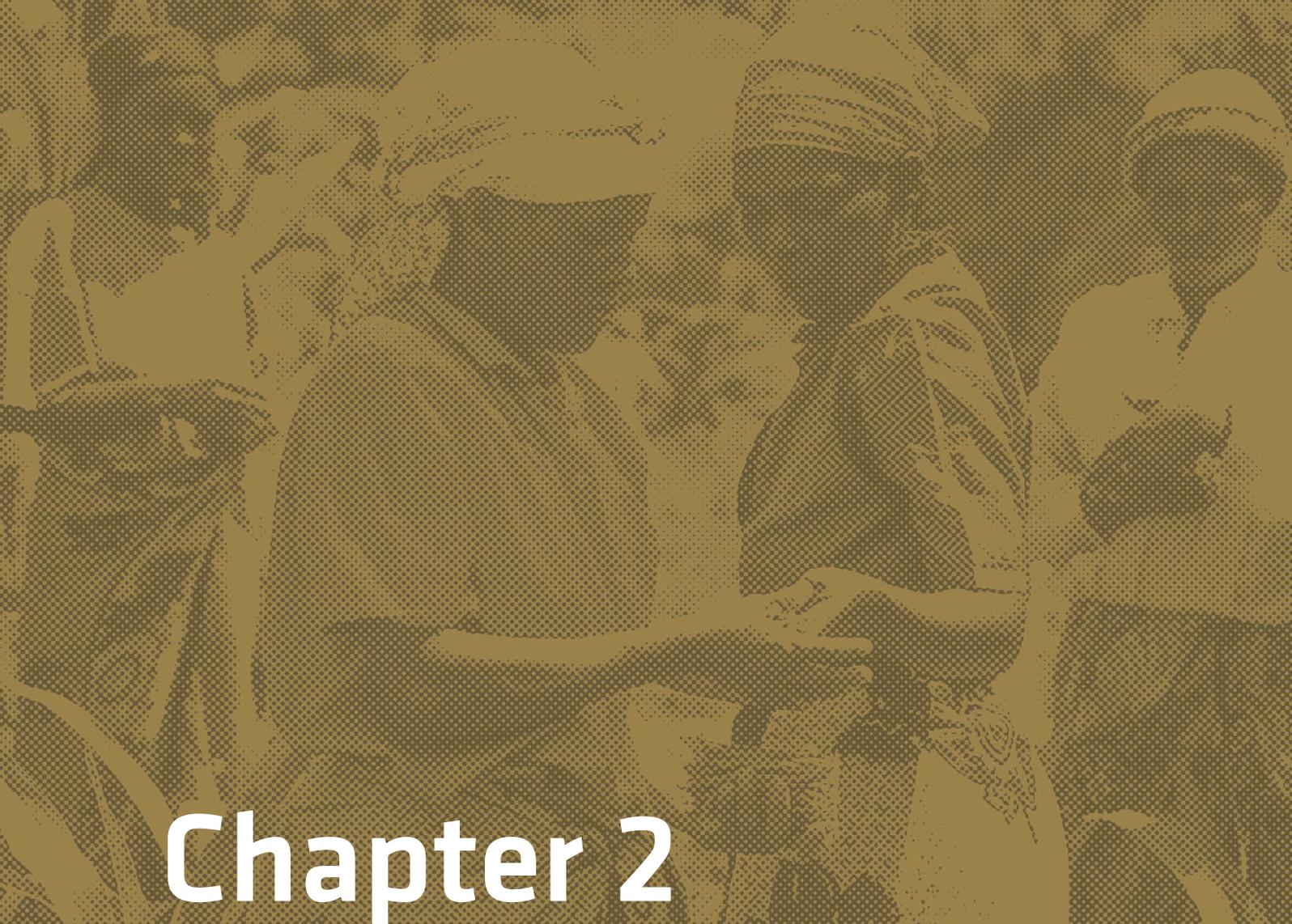
FACTOR	IMPLICATION ON WORKING CAPITAL
1. Sales	The higher the projected SME sales volumes, the higher the working capital investment to ensure no business opportunities are lost due to stock out periods when the SME has not adequate inventory of fruits and vegetables to sell to its customers.
2. Length of Operating Cycle	This is the time the SME takes to procure fruits and vegetables from its suppliers to the time it sales to its customers and receives payment. The longer the operating cycle the more working capital investment the SME will require to ensure it pays all its obligations that will include labour/ wages, rent, utilities, taxes amongst others.
3. Nature of Business	The SME engaged in growing and selling its own fruits and vegetables will require a significant investment in working capital for inputs like seeds, fertilisers amongst other. In addition, it will need to pay its obligations over the period the vegetables are planted, harvested, and sold to the customers, which can be a significant period. On the other hand, the SME buying vegetables from smallholder farmers and reselling will require a lower investment in working capital.
4. Terms of Credit	The longer the credit period provided to the customers the longer the investment in working capital will be required since the SME will take a longer time to receive the cash from its sales. The SME providing 30 days credit to its customers will require less investment in working capital in comparison to an export SME providing 90 days credit period.
5. Seasonal Variations	The SME whose operations pick up seasonally may require more working capital to meet their increased operations during the particular season. A popular example of seasonal enterprise may be tomatoes in is mainly rain-fed in most parts of the ACP countries and thus is highly seasonal.
6. Nature of Production Technology	In case of labour intensive technology, the SME will need more amount to pay the wages and therefore will require more working capital. On the other hand, if the production technology is capital-intensive, the SME will have to make less payment for expenses like wages, thus it will require less working capital
7. Contingencies	If the demand for and price of the fruits and vegetables usually vary significantly in its target market, the SME will require higher investments in its working capital to mitigate the risk to its operations.

### 1.5. EXAMPLE/CASE STUDY: ILLUSTRATION OF HOW CORPORATE FUNDING MANAGEMENT HAS IMPACTED ON THE MSMEs IN THE HORTICULTURAL INDUSTRY

A research study conducted by the Jomo Kenyatta University of Agriculture and Technology, School of Business in 2016 on horticultural SMEs in Nakuru County in Kenya established working capital had the greatest impact on the SMEs growth prospects. The general objective of the research was to establish the financial factors that significantly influence the growth of SMEs in the horticulture sector. 98 SMEs participated in the research with 300 respondents from accounts, finance and management staff interviewed. The research team adopted a cross-sectional research design and administered questionnaires to the respondents.

The study established that financial aspects and particularly access to credit to compliment the equity investment by the business owners is critical to the survival of the SMEs. Prudent investment in working capital by the SMEs resulted in adequate liquid thereby ensuring continuity of business operations and exploitation of emerging business opportunities. In addition, a number of financial institutions also perceive the SMEs as being risky thereby mitigating their credit exposure to the SMEs by restricting lending to them. The study also noted that the SMEs lack adequate capital, experience high costs of credit access from financial institutions. As such, it is important for firms to develop closer ties and collaborations with firms that supply them with quality agricultural products.





# Chapter 2

## The available funding options and sources

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## 2.1. SOURCES OF FINANCE

SMEs engaged in the horticulture sector will always require funds for both CAPEX and OPEX as highlighted in Chapter 1. For business continuity, the SME owners should carefully identify and access funds from appropriate sources to finance the various business activities that will lead to the attainment of the SME business goals and objectives. The SMEs engaged in the horticultural sector in the African, Caribbean, and Pacific (ACP) countries will need to decide on the following key questions in determining the most appropriate financing for their activities:

1. What are the SME's short-term, medium-term and long-term business objectives?
2. What business activities are they going to implement to achieve the short-term, medium-term and long-term objectives?
3. How much finance is required for implementation?
4. When and for how long is the financing required?
5. What collateral (if any) is required from the source of finance?
6. Are the business owners willing to give some control (ownership) of the enterprises in return for finance?

The SME owners will have to choose between financing the business activities/operations using either long-term or short-term finances as explained below.

Long-term finance is funding with a maturity date exceeding one year and on the other hand, short-term finance has a maturity date of less than one year.<sup>1</sup> The principle of assets matching requires that SMEs match the economic life of assets with the maturity of the source of finance. Non-current Assets and Capital Expenditure (CAPEX) as much as possible be financed using long-term finance while current assets and Operating Expenditure (OPEX) using short-term finance. In other words, the cash inflows generated from the business activity undertaken by the SME should match the timing and amount of the cash outflow required to settle the source of finance. The following example highlights the asset matching principle. An SME wishing to lease land for growing fruits and vegetables at USD30,000 for a period of 3 years should seek to finance the lease using a facility payable over the 3 years. This will ensure the SME can pay the facility using cash inflows it generates from selling the fruits and vegetables harvested from the leased land. If the SME uses a source of finance that is payable in say 2 years, it will have to use other sources of finance to settle its obligations which can present significant difficulties for the business. In addition, if the leased land is not adequately utilised, the time for repaying the facility will reach presenting the business with the challenge of looking for alternative sources of finance to settle its obligations, which can lead to heavy losses or potentially business failure.

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[https://www.tutorialspoint.com/international\\_finance/long\\_and\\_short\\_term\\_financing.htm](https://www.tutorialspoint.com/international_finance/long_and_short_term_financing.htm)

### 2.1.1. Long term finance

#### 2.1.1.1. Use of long-term finance

##### i. Financing fixed assets/ CAPEX

The SME that seeks to grow its own fruits and vegetables to sell to its target market will require non-current assets like land, machinery and equipment, trucks, buildings, greenhouses, which it will use to generate business revenues over many years. The assets matching principle therefore requires that the SME uses long-term finance to acquire these assets. On the other hand, the SME that will purchase the fruits and vegetables from farmers for resale to its target markets will not invest heavily in those non-current assets. On the contrary, it will purchase the fruits and vegetables, sell them and receive the cash from sales for instance in a period of only 7 days. In this case, it will not need long-term finance but rather short-term finance.

##### ii. Financing permanent part of working capital

Whereas working capital is by its nature short-term, the SMEs need buffer inventory permanently consisting of fertilisers, seeds to use in production to avoid missing business opportunities. On the other hand, SMEs that simply trade in fruits and vegetables will need to maintain a minimum level of inventory at all times so that the customers do not ever miss the fresh fruits and vegetables. To this end businesses use long-term finance to fund the buffer stock that it maintains for the long-term thereby ensuring business continuity. The SMEs will therefore need some amount of working capital that they finance using long-term finance even if working capital by its very nature is short-term to avoid liquidity challenges thereby missing business opportunities.

##### iii. Financing growth and expansion of the business

In the normal course of business, the SME will need to keep on growing every year, both in terms of revenues generated and scale of operations as it identifies and exploits new business opportunities. It is therefore imperative that the business owners plan for this anticipated growth and expansion by seeking appropriate financing. The SME that is engaged in growing fruits and vegetables, which it eventually resells, will require more land for future expansion of the facilities as the business continues to grow. Similarly, an SME that simply wholesales or retails vegetables may need to acquire more facilities in order to meet the needs of its growing number of customers by acquiring equipment such as refrigeration facilities. In both these cases, the SMEs will need long-term finance to be able to expand their operations and increase sales and overall profitability.

### 2.1.1.2. *Factors determining the need for long-term finance*

The amount required to meet the long-term needs of the SME depends upon many factors that include:

#### **i. Nature of the business**

A horticulture SME engaged in the growing of fruits and vegetables requires land for production, building, machinery and equipment, trucks etc. The long-term nature of these assets therefore necessitates that the business will require long-term finance, which it will pay from revenues generated using the asset it purchases. On the other hand, an SME engage in buying fruits and vegetables from farmers will mainly require short-term finance for its working capital requirements to enable it purchase the agricultural produce from the farmers for resale to its customers. It is important to note that both these SMEs will need long-term financing only that the one growing fruits and vegetables will require a significant amount in comparison to the SME that purchases its inventory from the farmers.

#### **ii. Scale of business operations**

If a business is engaged in small-scale operations, it will require a smaller amount of fixed capital as compared to one engaging in large-scale operations, which requires a big piece of land, large greenhouse, big storage area, cold rooms, big refrigerated trucks to enable it meet the requirements of its target markets, which may include the export markets. The large-scale operations will therefore require that the business use long-term finance to acquire the business assets to avoid facing liquidity challenges that will arise if it uses short-term financing.

#### **iii. Technology used in the business**

SMEs with operations that are technology intensive will require long-term finance to acquire the necessary equipment compared to the SMEs, which rely more on labour.

### 2.1.1.3. *Sources of Long-term Funds*

#### **1. Equity**

In finance, equity refers to funding injected in the SME, which gives the finance providers an ownership stake in the business and entitles them to engage in decision-making processes. Equity financing is permanent since the equity holder cannot withdraw it from the SME and divesting interest in the SME is only through selling the equity stake to another investor. The Investment Funds that provide equity finance to SMEs will normally have an exit strategy that will entail selling its equity stake to other parties at the end of an agreed period, which could be 10 years. The implication is after the expiry of the 10 years, the investment fund will either offer the shares to existing shareholders and if they decline then new shareholders will purchase the equity stake. The permanent nature of equity implies that the SME can rely on this funding to undertake the long-term business activities without the fear of the financing being recalled.

When an SME decides to source for equity financing to meet its liquidity needs, for diversification or expansion purposes, it often has to prepare a prospectus in which it presents the financial details of the business. The prospectus will also include the desired amount of funding, intended utilisation of the funds and projected financial performance after undertaking the desired investment clearly indicating the repayment plans.

The sources of equity financing include:

- a. **Personal Finances:** In many instances on starting a business, the first equity injection is usually from the personal finances of the owners since other equity finance providers will still be sceptical about the business prospects and so view it as risky. The personal finance could be in form of cash or even equipment to start the horticulture SME. Equity injection from the owner demonstrates long-term commitment to the SME and convinces other long-term finance providers such as bankers to support the SME. The business owners may also decide to finance any business growth and expansion using personal finance as opposed to seeking external equity financing especially if they do not want to relinquish control of the business.
- b. **Angel investors:** These generally wealthy people provide seed capital to horticultural SMEs owned by other people. The angel investors are often leaders in their own field who not only contribute their experience and network of contacts but also their technical and/or management knowledge. Angels tend to finance the early stages of the business with investments in the order of \$25,000 to \$100,000. **An example of where horticulture SMEs could get Angel Investors is in the Start-up Battlefield Africa event that is organised for business start-ups to pitch their business ideas before angel investors who could pick up interest and provide equity finance. The other networks are the African Business Angel Network (ABAN), a pan African non-profit organisation founded to support business start-ups or the Angels4Africa who mainly focus on the tech industry.**
  - Angel investors are usually entrepreneurs themselves, who understand the level of risk involved in investing with the SMEs and will not require as much details as providers of debt
  - Angel investors bring years of expertise and already understand the challenges your business will need to overcome before reaching success.
  - Angel investors may take an active role in managing the SMEs and so the owners will have to explain every decision
- c. **Crowdfunding:** is another avenue through which SME owners can raise equity finance by asking a large number of people each for a small amount of money. Traditionally, financing a business, project, or venture involved asking a few people for large sums of money. Crowdfunding switches this idea around, using the internet to talk to thousands – if not millions – of potential funders. Typically, the SME seeking funds will post a business pitch (campaign) on the platform of the crowdfunding organisations indicating the fundraising target it needs.

The crowdfunding platforms include Africastart, M-Changa, Thundafund, Kickstarter, RocketHub and Ulule, KissKissBangBang amongst many others. Crowdfunding models include:

- Donation-based crowdfunding (in which donors are not typically granted anything in return for their donation),
  - rewards-based crowdfunding (in which backers contribute funds in exchange for some reward, in many cases the item produced by the campaign),
  - Equity crowdfunding (in which backers contribute funds to companies in exchange for a piece of equity in the company), and
  - Debt/lending crowdfunding (in which lenders provide money and expect their loan to be paid back with interest).
- d. **Venture capitalists:** These are professional investors seeking business start-ups with high potentials but very risky undertakings. Venture capitalists provide equity and take up ownership stakes in the SME in addition to participating in the management of the SMEs. The venture capitalists expect to earn high returns in the future upon selling of their equity stakes once the SMEs have grown. Amounts invested are generally greater than USD1 million. The venture capitalist will divest their interest in the SME after a period of between 5 to 10 years from initial investment. The table highlights some of the venture capitalist firms providing long-term finance to a wide range of SMEs within the East African region.

Table 1 - Examples of Long-Term Investor Funds in the East African Region

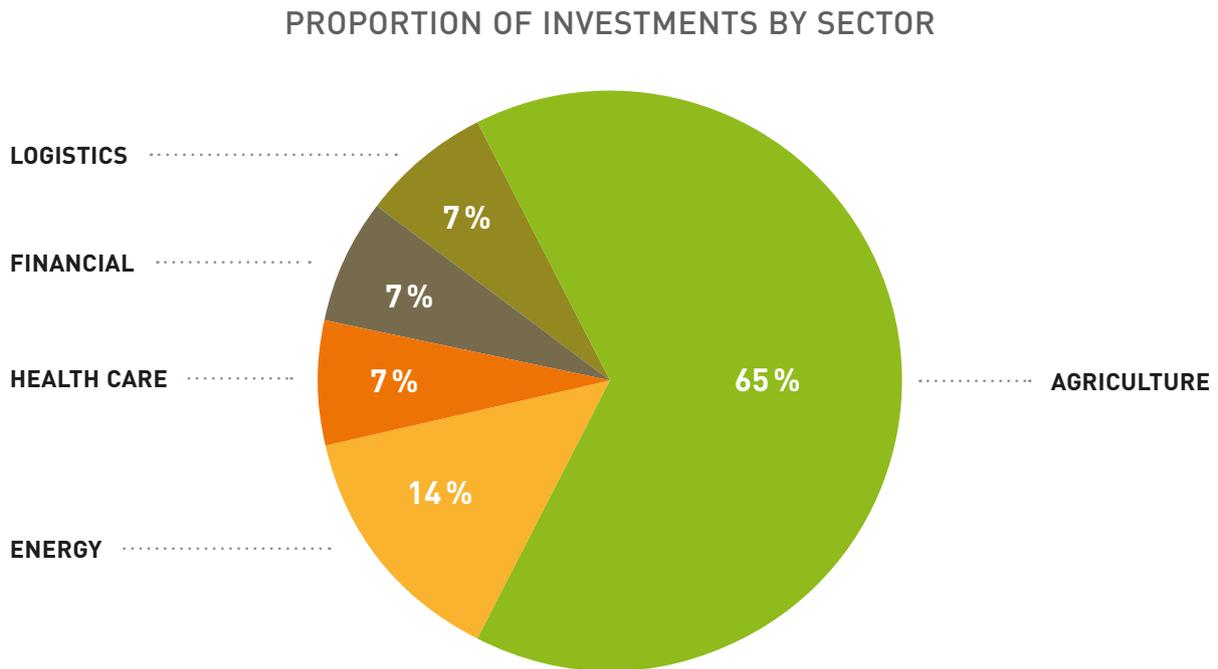
FIRM	SECTOR FOCUS AND FUNDING REQUIREMENTS	INVESTMENT SIZE
<b>Pearl Capital Partners</b> A Specialist agriculture investment firm that has been investing in small and medium sized East African agribusinesses since 2006.	Fund invests across all areas of the Agricultural sector on Agribusinesses and across all segments of the value chain- including primary production.	\$250,000 to \$2,500,000
<b>Voxtra East Africa Agribusiness Fund</b> Invests in capital constrained agribusinesses that play a pivotal role in improving livelihoods of smallholder farmers	Fund invests in all segments within agriculture, aquaculture, and forestry, and across all segments of the value chain.	\$500,000 to \$2,000,000
<b>GroFin</b> A pioneering SME development financier specialized in financing and supporting small and growing businesses, leveraging patient capital and specialized business support.	Grofin supports local owned and managed businesses across a range of sectors and business stages, but does not invest in primary agriculture.	\$50,000 to \$1,500,000

<p><b>Root capital</b> A non-profit social investment fund that grows rural prosperity in poor, environmentally vulnerable places in Africa, by lending capital, delivering financial training, and strengthening market connections for small and growing agricultural businesses</p>	<p>Root Capital works primarily small agribusinesses, and farmer associations. Most common form of financing is trade finance</p>	<p>\$50,000 to \$2,000,000</p>
<p><b>Yunus Business Fund</b> Yunus social business invests in companies addressing social problems in their communities, and supports these businesses to do so in a financially sustainable way.</p>	<p>SME's that are addressing social ills in society.</p>	<p>Maximum of \$50,000</p>
<p><b>ICCO</b> ICCO Investments targets high impact SME's that are not able to attract capital for their businesses at affordable conditions mostly because their risk profile.</p>	<p>It invests in social businesses that have a clear positive social and/or environmental impact combined with feasible commercial strategy towards financial stability and independence</p>	<p>€200,000 to €800,000</p>

A study by Oxfam Novib<sup>2</sup> in Uganda established that most of the financing by Impact investment and venture capital funds support SMEs within agricultural value chains. This finding aligns well with the fact that the majority of the population in the developing countries just like in Uganda are dependent on the Agricultural sector for their livelihoods. Most impactful opportunities for catalysing social impact-inclusion of rural, poor, yet enterprising Ugandans are presented through Agribusinesses SMEs. The analysis below further analyses the investments to date by subsector and agribusiness activity.

<sup>2</sup> Mapping the Impact Investment Space in Uganda- A report for Oxfam Novib Impact Investments

Figure 5 - Impact Investment by sector in Uganda



## 2. Debt

Debt is also another source of long-term finance that the SME owners can use to finance CAPEX. The key difference is that the SME will have to make regular principal and interest payments to the debt providers over the debt tenor, which can particularly be challenging especially for start-up as they grow the business. The providers of debt include the following:

- e. **Financial Institutions:** Commercial Banks and Development Finance Institutions are by far the main providers of term-loans to the SMEs. Banks that provide long-term debt include both commercial banks and development banks and each has its peculiar advantages. It is a good idea to shop around and find the bank that meets your specific needs.

Traditionally, commercial banks largely rely on deposits to advance loans to SMEs and as such, their loan terms do not usually exceed three years. On the other hand, development banks provide debt for up to five years or more in some cases.

**Table 2 - Kenyan Financial Institutions and a brief description of their loan products**

ORGANISATION	CATEGORY	BRIEF DESCRIPTION
Commercial Bank of Africa (CBA)	Commercial Bank	They have several products to serve farmers. Value Chains supported: dairy, tea and sugar cane
CFC Stanbic Bank	Commercial Bank	An Agricultural Production Loan (APL) is a short-term credit that lets you pay for your agricultural input costs. This product is suitable for grain farmers cultivating on either dry land or on an irrigation basis. Loans are provided to individual farmers, groups and legal entities in the agricultural sector, including commercial farmers and agri-businesses. Input costs that qualify for production credit include: Seeds and fertilizer; Fuel, oil and lubricants; Herbicides and pesticides; Repairs and maintenance; Crop insurance premiums
		The vehicle and asset finance packages are designed to support business, cash flow and tax requirements. Vehicles and assets we finance include: Tractors; Harvesters; Centre pivots; Solar panels
Co-operative Bank of Kenya	Commercial Bank	Small-scale loans. Loan offered to large scale farmers to enable them access farm inputs, working capital, farm equipment and other social needs e.g. school fees, medical bills, furniture etc.
		Loans for cereal and horticulture producers: To enable individual farmer, associations/group/co-operatives to access farm inputs and agro-dealers access working capital under the Ministry of agriculture credit guarantee scheme.
		Large Scale Loans: Loan offered to large scale farmers to enable them access farm inputs, working capital, farm equipment and other social needs e.g. school fees, medical bills, furniture etc.
Juhudi Kilimo	Microfinance Institution	Contract Grower Finance, input loans: This loan product is designed for qualifying farmers who want to obtain credit facilities for land preparation, certified seed, fertilizer, chemical applications and appropriate post-harvest handling & storage. The farmers may either be engaged in: Cereals, maize, wheat, barley, sorghum & other cereals varieties; Horticulture crops; Sugar cane; Tea; Cotton

SMEP Microfinance Bank	Microfinance Institution	Agricultural Asset Financing. This is financing for acquisition of agricultural farm machineries, equipment and implements like tractors, milking machines, chuff cutters, etc., and motor vehicles used in the agricultural value chains
		Green house Financing. This is financing for acquisition of Greenhouse structures, inputs, irrigation kits, and agronomical support.
Jamil Bora Bank	Commercial Bank	Green House Financing: This is a facility to provide personalized farming solutions to farmers and enhance farming as a business in Kenya. The product seeks to address the issues of securities of the loan, huge and continuous harvests, market linkages, and value for their money.

### Merits of bank loans

- It's a flexible source of finance as loans can be repaid when the need is met
- Finance is available for a definite period; hence, it is not a permanent burden.
- Banks keep the financial operations of their costumers' secret.
- Banks do not interfere in the internal affairs of the borrowing concern; hence, the SME owners retain the control of the business
- Loans can be paid back in easy instalments
- In case of small-scale industries and industries in villages and backward areas, the interest charged is low.

### Demerits of bank loans

- Banks require personal guarantee of the business owners to pay the debt in the event that the SME (separate business entity) defaults. The business owners may be required to pledge their personal assets and business cannot raise further loans on these assets.
  - In the short term, loans are extended again and again, there is always uncertainty about this continuity
  - Too many formalities make the borrowing from banks time consuming and inconvenient.
- b. **Government grants and Subsidies:** In pursuit of the objective of promoting economic growth and job creations, Governments provide assistance in terms of subsidised loans to the private sector. The SMEs access the funding through various financial institutions that will include State owned Development Finance Institutions (DFIs), regional development banks and multilateral financial institutions. In some instances, the Governments channel this assistance through lines of credit accessed through their bankers such as commercial

banks or microfinance institutions. Usually loans accessed from public financial institutions have more favourable terms than those from commercial banks such as lower interest rates, low financial costs, higher grace period, and longer loan tenure. Whereas the DFIs usually invest in private sector projects to promote job creation and sustainable economic growth, the minimum loan amounts are usually high and not within the reach of many horticultural SMEs. An example of government subsidies is the Ugandan Agricultural Credit Facility (ACF) that the Ugandan Central Bank, Bank of Uganda (BOU) administers. The SMEs can access the loans through participating commercial banks. The main purpose of the ACF is to provide medium- and long-term financing for the Agricultural sector at subsidised interest rates of 10 percent per annum and loan periods of between three to eight years. In addition, the Government provides a 50 percent guarantee to the Financial Institutions.

- c. **Leases:** A lease is an arrangement between the lessor (leasing company) and the lessee (SME) whereby the lessor purchases an agricultural asset for the lessee (SME) and allows the SME to use the asset in its usual business operations in exchange for periodical payments called lease rentals or minimum lease payments (MLP).

At the conclusion of the lease period, the asset goes back to the lessor (leasing company) in an absence of any other provision in the contract regarding compulsory buying of the asset by the SME. There are four different things possible post-termination of the lease agreement:

1. The lease is renewed by the SME perpetually or for a definite period of time
2. The asset goes back to the leasing company.
3. The asset comes back to the leasing company, which sells it off to a third party.
4. Leasing company sells to the SME.

### Merits

- **Balanced cash outflows.** Cash outflow or payments related to leasing is spread out over several years, hence saving the burden of one-time significant cash payment for example USD100,000 to purchase agricultural land. This helps the SME to maintain a steady cash-flow profile as well as use the asset to generate cash inflows that it uses to make the lease payments.
- **Quality assets.** While leasing an asset, the ownership of the asset still lies with the leasing company whereas the SME just pays the rental expense. Given this agreement, it becomes plausible for the firm to invest in good quality assets, which might look unaffordable or expensive otherwise.
- **Better usage of capital.** Given that the SME chooses to lease over investing in an asset by purchasing, it releases capital for the business to fund its other capital needs or to save money for a better capital investment decision.
- **Tax benefits.** Leasing expense or lease payments are considered as operating expenses, and hence, of interest, are tax deductible.

- **Better planning.** Lease expenses usually remain constant for over the asset's life or lease tenor or grow in line with inflation. This helps in planning expense or cash outflow when undertaking a budgeting exercise.
- **Low capital expenditure.** Leasing is an ideal option for a newly set-up business given that it means lower initial cost and lower CAPEX requirements.
- **No risk of obsolescence.** For businesses operating in the sector, where there is a high risk of technology becoming obsolete, leasing yields great returns and saves the business from the risk of investing in a technology that might soon become outdated. For example, it is ideal for the technology business.
- **Termination rights.** At the end of the leasing period, the lessee holds the right to buy the property and terminate the leasing contract, thus providing flexibility to business.

### Demerits

- **Lease expenses:** Lease payments are treated as expenses rather than acquisition costs towards an asset; it therefore becomes very expensive in the end.
- **Limited financial benefits:** If paying lease payments towards a land, the business cannot benefit from any appreciation in the value of the land. The long-term lease agreement also remains a burden on the business as the agreement is locked and the expenses for several years are fixed. In a case when the use of asset does not serve the requirement after some years, lease payments become a burden.
- **Debt:** Although lease does not appear on the balance sheet of a company, investors still consider long-term lease as debt and adjust their valuation of a business to include leases.
- **Limited access to other loans:** Given that investors treat long-term leases as debt, it might become difficult for a business to tap capital markets and raise further loans or other forms of debt from the market.
- **Processing and documentation:** Overall, to enter into a lease agreement is a complex process and requires thorough documentation and proper examination of an asset being leased.
- **No ownership:** At the end of the leasing period, the lessee does not end up becoming the owner of the asset though quite a good sum of payment is being done over the years towards the asset.
- **Maintenance of the asset:** The lessee remains responsible for the maintenance and proper operation of the asset being leased.
- **Limited tax benefits:** For a new start-up, the tax expense is likely to be minimal. In these circumstances, there is no added tax advantage that can be derived from leasing expenses.

In summary lease finance is appropriate for the SME that cannot raise money through other means of finance like debt or term loan.

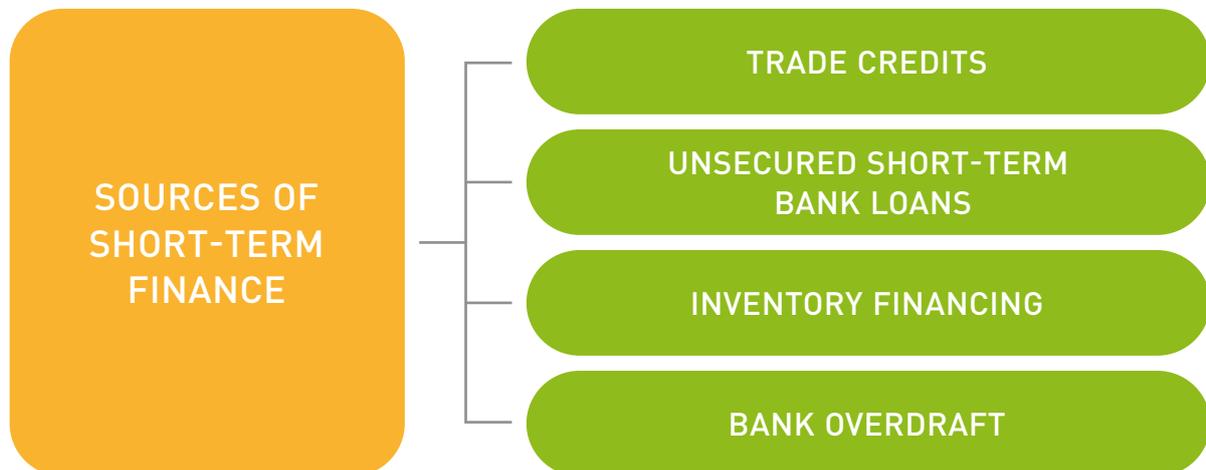
### 2.1.2. Short-term sources of finance

Short-term financing are funds extended to the SME by a financial institution for a period usually not exceeding three years to finance its OPEX. The availability of short-term funds ensures sufficient liquidity in the SME to facilitate the smooth functioning of the enterprise's day-to-day activities<sup>3</sup>. The SME needs short-term financing because of the following reasons:

- **Seasonal fluctuations** – These often result in changes in demand and supply of fruits and vegetables, which requires the SME to have adequate financing to ensure it always meets the needs of its customers. Therefore, the SME will require short-term funds to cope up with the temporary rise in the demand of the product.
- **Liquidity position** – Liquidity position refers to the capability of the SME to meet the immediate cash need for managing the current liabilities. The short-term financing helps in maintaining the liquidity position of an enterprise by providing excess cash to an enterprise.
- **Credit sales** – The SME may often times extend credit facilities to its institutional customers like hotels, which takes huge volumes of fruits and vegetables. The SME will therefore seek short-term credit from financial institutions to meet its daily operating expenses needs.

The main short-term financial products used by the horticultural SMEs include the following:

Figure 6 - Short-term sources of finance



The short-term sources of finance are:

### 1. Trade credits

Trade credit is one of the most common forms of short-term financing available to SMEs. Trade credit involves the SME negotiating with its suppliers to extend credit for supplies such as inputs, seeds, fertilisers, or fruits and vegetables that it will pay at a later agreed time. The SME will pay no explicit interest cost, making trade credit a very attractive source of finance.

The SME receives its supplies along with an invoice, which details the price, quantity, and description of the goods, along with a specified time for payment.

### Merits

There are several merits associated with the use of trade credit.

- The greatest is that this source of credit is readily available for most SMEs. No formal credit application is required since the SME will have established a business relationship with the suppliers. Only in the initial application does an SME go through a credit check by the supplier to assess its credit worthiness.
- If the SME has been taking cash discounts and a liquidity problem arises, additional credit is available by allowing the payables to lapse until the end of the net period. Generally, there are no restrictions associated with trade credit such as those that are common with other forms of short-term lending. The only specific restriction pertains to the amount of trade credit that will be extended at any particular time.
- Trade credit is particularly important to SMEs, which have difficulty receiving loans from financial institutions due to their lack of credit worthiness as viewed by the financial institutions. In a period of tight money where the availability of loanable funds becomes limited, trade credit is an even greater source of financing for the small firm.

### Demerits

Associated with the use of trade credit are two distinct disadvantages, which can become costly for the SME.

- The first relates to stretching the accounts payable beyond the credit period. Frequently firms feel that since they regard trade credit as a cost free source of financing, they can stretch the accounts payable and no harm will be done. This is a very dangerous assumption. Most firms have an accounts payable aging schedule in which accounts payable are due within 30 days, 60 days, 90 days, and beyond. The longer the aging schedule, the more difficult it is for a firm to pay off overdue bills. If they go to banks for financing, banks will require that payables be current within 60 days. If there is a significant percentage, which goes beyond this period, the bank will require that part of the loan proceeds be used to bring the payable current. A firm's response to a liquidity crisis is often to lengthen its payables. If this continues, however, its suppliers will no doubt cut the line of credit.

- The second disadvantage of trade credit concerns firms that extend this form of credit and thereby record accounts receivables. If it does not receive immediate cash, a firm extending trade credit may have to look to other sources of financing to underwrite the production cycle. The longer customers take to pay their accounts payable, which are the suppliers' receivables, the more critical the cash shortage becomes. Frequently, a firm extending trade credit will have to slow down on the payment of its own accounts payable when there is a significant lengthening in its accounts receivable aging schedule. This in turn can jeopardize the firm's credit relationship with its suppliers.

## 2. Unsecured short-term bank loans

Bank loans are another vital source of short-term credit for the SMEs to help address their financing needs in addition to trade credit. Frequently during the course of a year, cash inflows are not sufficient to meet cash outflow demands during some periods of the year. SMEs usually look to commercial banks to finance working capital requirements and credit for short-term liquidity management. However, they often fail to access financial resources in the required amounts because banks evaluate them on a basis of a checklist including:

- Audited financial statements,
- Feasible and convincing funding proposals
- Financial projections,
- Credit or default risk

As is often the case, financial and accounting records are rarely in place, and where available the financial records are usually seen as unreliable. In addition, the SMEs also lack the required collateral requirements, have low levels of technical and management skills, apply inadequate and inefficient production technologies, have limited awareness of market and competitive dynamics, and generate low returns on capital.

### Types of Unsecured Bank Loans:

Unsecured bank loans usually take the form of a line of credit, a revolving credit agreement, or a transaction loan.

#### a. Line of Credit:

A limit of credit usually sets an upper limit as to the amount a firm can borrow on an unsecured basis. It is usually set for one year and is subject not only to an annual clean up but also to an annual review before renewal. This review consists of an examination of an audited annual report. The line of credit is established after the bank has evaluated the credit worthiness and financial needs of the borrower.

Usually this form of financing is considered to be a temporary source which carries a firm through a seasonal low in terms of cash inflows. A cash budget is frequently drawn up to show the estimated cash inflow and outflow pattern over the next year. It may be that in 3 of the 12 months a negative cash flow pattern emerges; this can be handled by a line of credit.

The required clean-up period usually extends for 30 days out of the year. When a firm is unable to clean up its line of credit, it is an indication to the bank that a more permanent source of financing may be needed.

#### **b. Revolving Credit Arrangement**

Unlike the line of credit, which does not involve a legal commitment on the part of the bank, the revolving credit agreement is a formal commitment by the bank to lend up to a specified amount at the wishes of the borrower. In essence, this is a guaranteed line of credit issued by the banks. Negotiations between bank and borrower will determine the maximum amount of commitment.

If, for example, the firm borrowed USD30,000 four months ago from a USD50,000 revolving credit agreement, it can borrow the remaining amount at any time. For this privilege of having a guaranteed line of credit, the firm must pay a commitment fee on the unused portion of the revolving credit.

#### **c. Transaction Loans**

Some SMEs do not need a line of credit or a revolving credit agreement but may need short-term capital for a specific use. A good example is where a firm needs funds to complete say harvesting or cover shipping expenses.

After the firm receives payment for the harvests or shipped consignment it can repay the bank. Banks examine each request on an individual basis. The ability of the borrower to repay the loan through projected cash flows is quite important in this type of arrangement

### **3. Inventory Financing**

Inventory is another asset that has considerable merit as collateral for short-term financing. The lender usually will advance only a specified percentage against the face value of the inventory. This loanable value is based on the type of inventory being considered and the ability of the lender to dispose of it in case of default.

The more specialized the inventory and the market for the product, the more unwilling is the lender to advance a large percentage of the face value. The more standard and saleable the inventory, the higher the loan percentage. Frequently lenders will loan 90 per cent of the face value when they feel the inventory is standard and has a ready market, apart from the marketing organization of the borrower.

Lenders usually consider such factors as marketability, perishability, market price stability, and difficulty in liquidating the inventory in determining the percentage value that they are willing to advance on an inventory loan.

The most important aspect of a lender's analysis is to substantiate that there is enough liquidating value in the inventory to cover the loan and accrued interest in case of default on the part of the borrower.

### Terminal Warehouse Receipt Loans

Under another arrangement for using inventory as collateral for a loan, the borrower's inventory is housed in a public, or terminal, Warehouse Company. A warehouse receipt, which specifies the inventory located there, provides the lender with a security interest in the inventory.

Because the goods in inventory can only be released on authorization by the lender, it can maintain strict control over the inflow and outflow of inventory. In addition, an insurance policy is usually issued which contains a loss-payable clause for the benefit of the lender.

The warehouse receipt can be in a negotiable or non-negotiable form. If it is negotiable, the receipt can be transferred from one party to another by endorsement, but before the goods can be released the receipt must be presented to the warehouse man.

A non-negotiable warehouse receipt is issued in favour of the lender, which has title to the goods and is the only one that can release them. The non-negotiable receipt arrangement provides that the release of goods must be authorized in writing. Most arrangements are of the non-negotiable form.

### Field Warehouse Receipt Loans

With the form of collateralization known as the field warehouse receipt loan, the inventory remains on the property of the borrower. A field warehouse company sets off a specific part of the borrower's storage area in which to locate the inventory being used as collateral. Often this area is physically fenced off and only the field warehouse company has access to it.

Once the collateral value of the inventory is verified by the field warehouse company, the lender advances the funds. This arrangement is desirable when there is great expense involved in locating the inventory elsewhere, especially true when the borrower has a high inventory turnover ratio.

There is no question that the cost of this form of collateral financing is very high. This is primarily due to the cost of the warehouse company, which acts as a third party (for collateral management purposes) in this arrangement.

The evidence of collateral is only as good as the warehouse company issuing the receipt. Historically there has been evidence indicating fraud in terms of the validity of the inventory actually being stored in a particular spot.

An example of the Warehouse Receipt System is the Agricultural Commodity Exchange (ACE) in Malawi, which has warehouses across the country to enable farmers store the agricultural produce when prices are low and sell them later when the prices have improved. A key challenge faced by the agribusinesses is price fluctuations, which oftentimes results in high losses but this measure, can mitigate the loss.

#### 4. Bank overdraft

The bank overdraft is a temporary arrangement with the bank that allows the SME to overdraw from its current deposit account with the bank up to an agreed limit. The overdraft facility is granted against securities, such as promissory notes, goods in stock, or marketable securities. The rate of interest charged on overdraft and cash credit is comparatively much higher than the rate of interest on bank deposits and bank loans.

Short-term financing enables horticultural businesses to address the following needs in their normal course of carrying out business operations:

- a. **Fulfilment of Operational Demand** – It refers to the fulfilment of working capital need to carry out the operations of the enterprise. Short-term financing helps in purchasing raw material, making payment to labour, and maintaining inventory, and cash reserves.
- b. **Smooth Running of Business** – It refers to the continuity in the operations of the enterprise. The short-term fund helps in fulfilling day-to-day financial needs of the enterprise.
- c. **Fulfilment of Emergency Needs** – It implies that short-term finance is needed to meet any urgent or emergency requirement of funds
- d. **Increase in Productivity** – It refers to the use of short-term fund to enhance the production level of the enterprise. The proper utilization of fund for the procurement of labour, materials or inputs, and machine can increase the productivity of the enterprise.
- e. **Efficient Allocation of Resources** – It refers to the rational use of the short-term resources to meet the working capital requirement. The enterprise should make the judicial use of short-term financial resources to meet the short-term objectives.

## 2.2. TYPES OF FINANCING

SMEs raise financial resources to implement business activities through either Equity financing or Debt financing.

### 2.2.1. Equity Financing

As earlier explained Equity is the financing from the business owners and is permanent in the sense that the SME will not repay it to the individual/ entity. The equity provider's only recourse in the event that they want to divest their interest in the SME is to sell their equity stake to another party willing to buy into the business.

The return on investment for equity investors is mainly from the appreciation of their equity stake in the SME. For instance, an equity financier investing USD10,000 will expect the SME to grow its business to the extent that future equity investors seeking to buy into the SME will find it very attractive and therefore offer significantly higher amounts for their equity stake. Assuming that over a period of 5 years, new equity investors will value and offer USD25,000 for the equity stake, the profit earned by the original investor will be USD15,000.

The horticultural SME seeking to attract equity investors will have to prepare a business prospectus showing the growth outlook for the business. The investment prospectus should contain the following:

1. Background of the SME
2. General products and services offered and the target markets
3. Past Financial Performance
4. Proposed Business/ Investment strategy
5. Projected Financial Performance
6. How much funding is required
7. How the SME will utilise the finance

### Merits

- The SME can tap into the horticultural sector expertise and connections of the equity finance providers. The expertise can be in the production processes, management expertise or market connections to grow the SME profitability.
- Equity by its nature is long-term and the investors do not expect annual repayments, which implies that the SME owners can plan business activities without much worry about repayments that can create liquidity challenges.
- Investors understand that it takes time to build a business. You will get the money you need without the pressure of having to see your product or business thriving within a short period.

### Demerits

- Potential loss of control: Investors may wish to be involved in management decisions, which can lead to conflict if there are disagreements on how to manage the business operations.
- It is a time-consuming process: You will need to provide detailed business plans and forecasts that clearly demonstrate to potential investors that their investment in the SME will be secure and profitable. You will also have to devote time to meeting with and updating shareholders on an ongoing basis

Examples of equity finance providers is shared in section 2.1 under sources of equity.

### 2.2.2. Debt financing

Debt financing on the other hand is 'temporary' in the sense that the SME will repay it to the providers of the finance along with interest. The repayment period of the debt will vary depending on whether it is short-term or long-term and it is agreed beforehand when providing the debt finance to the SME.

The SME owners often look towards debt to address the financing gaps that emerge due to their own resource limitations which results in their inability to finance all the business needs. The SMEs will thus seek financing from financial institutions to bridge the financing gap by seeking either long-term debt to finance some non-current assets or short-term debt to finance their working capital requirements. In all the cases, the financial institutions will evaluate the SMEs' creditworthiness by asking for the following requirements:

1. Audited financial statements for the last three years including management accounts;
2. Business plan highlighting the strengths, weaknesses, opportunities and threats;
3. Management team experience
4. Financial projections;
5. Monitoring costs;
6. Credit or default risk

**Note:** Debt is easier to obtain for small amounts of cash needed for specific assets, especially if the SME has an asset it can use as collateral. While debt must be paid back even in difficult times, the SME retains ownership and control over business operations.

#### a. Merits of Debt Financing

There are several advantages to financing your business through debt:

- The lending institution has no control over how you run the SME, and it has no ownership. It's only when the SME defaults that the lending institution seeks recourse from the courts

- Once you pay back the loan, your relationship with the lender ends. That is especially important as your business becomes more valuable
- The interest you pay on debt financing is tax deductible as a business expense.
- The monthly payment, as well as the breakdown of the payments, is a known expense that can be accurately included in your forecasting models.

#### b. Disadvantages of Debt Financing

Debt financing for your business does come with some downsides:

- Adding a debt payment to your monthly expenses assumes that you will always have the cash inflow to meet all business expenses, including the debt payment. For small or start-up SMEs that is often far from certain.
- Small business lending can be slowed substantially during recessions. In tougher times for the economy, it's more difficult to receive debt financing unless you are overwhelmingly qualified.
- If a company fails to generate enough cash, the fixed-cost nature of debt can prove too burdensome. This basic idea represents the risk associated with debt financing.
- Some SMEs are considered high risk and as such the financial institutions charge them a relatively high interest rate on account of the perceived risk.

#### 2.2.3. Debt to Equity Ratio

The debt-to-equity ratio indicates the proportion of debt that finances the SME operations to the SME owners' funds. To calculate it, investors or lenders divide the company's total liabilities by its existing equity. Both figures can be found in a company's balance sheet as part of its financial statement.

$$\text{DEBT EQUITY RATIO} = \frac{\text{LONG TERM DEBT}}{\text{EQUITY}}$$

The D/E ratio shows clearly how much of the SME's financing is through debt compared with its own funds. This ratio indicates the SME's ability to cover its debt obligations in the event of a business downturn. Lenders prefer to see a low D/E ratio, which indicates more of the SME's resources are from the owners, which demonstrates their confidence in their business.

If the D/E ratio is high, it indicates the SME has borrowed heavily on a small base of investment. An SME with a high D/E ratio is often described as a business that is "highly leveraged", meaning lenders are taking a greater risk than investors in the event of a business failure because of contributing a higher proportion of the total business financing.

## 2.3. FINANCING STRUCTURES

### 2.3.1. Commercial Banks

The commercial banks are the main providers of short-term financial services to the fruits and vegetables SMEs. The financing from the commercial banks mainly helps address the working capital needs of the SMEs. The commercial banks are frequently used by the SMEs that are engaged in the export business because their diverse financial products that facilitate international trade.

The key products provided by the commercial banks include:

1. **Agricultural Loan Products:** These finance all the activities along the agricultural value chains and are classified into:
  - a. Production Loans
  - b. Marketing Loans
  - c. Farm equipment Loans
2. **Working Capital Loans/ Trade Finance:** These products include:
  - A Letter of Credit (LC) is usually issued by the SME's bank to another bank (in another country) to guarantee of payments for or on behalf of the SME for either import or exports. The LC helps facilitate importation/exportation of fruits and vegetables by the SMEs engaged in international trade.
  - Pre-shipment Finance: is a short-term loan facility offered by the Bank to the SME to enable purchase of inputs for the production process of goods which are for on-ward sale/ export
  - Post-shipment Finance on the other hand is a short-term loan facility offered by the Bank to an importer for settling the Bills of Exchange that have matured in a situation when the importer has not mobilized adequate financial resources to settle the same.
3. **Term loans:** these are loans provided for a period of up to 5 years to help finance key activities such as non-current assets by the SME. The term loans are the most widely used instrument because they can finance a wide range of investments and allow a considerable degree of flexibility in designing disbursement and repayment modalities.
4. **Financial lease:** offers the advantage of reducing or even eliminating the need for additional collateral and the problems related to the creation, perfection, and enforcement of security interests.
5. **Collection and Payment of Credit Instruments:** In modern business, different types of credit instruments such as the bill of exchange, promissory notes, cheques etc. are used. Modern banks collect and pay different types of credit instruments as the representative of the customers.

### 2.3.2. Development Finance Institutions (DFIs), Multilateral/ Bilateral Institutions

DFIs are financial institutions mainly owned by Governments and Development partners that provide medium-term to long-term debt to SMEs at lower interest rates in comparison to commercial banks. In most instances, these are multi-lateral institutions or bilateral institutions that are usually set up to promote inclusive growth and as such provide credit for a longer period compared to the commercial banks as well as technical support to the SMEs. Examples of development banks include the multi-lateral East African Development Bank (EADB), the African Development Bank (ADB) that were formed by the East African countries and the greater African countries respectively to finance huge development projects in the East African region and African continent. Other examples include:

- **Agri-Business Capital Fund:** Originally sponsored by IFAD in 2019, the ABC Fund is an independent private investment fund managed by Bamboo Capital Fund with Injaro Investments Limited as the investment advisor. This impact fund proposes an innovative approach for attracting much needed capital to rural areas and to underserved segments of agribusiness value chains in developing countries.
- **FMO** is a Dutch development bank structured as a bilateral private-sector international financial institution that invests risk capital in companies and financial institutions in developing countries and emerging markets in Africa, Asia, Latin America, and Eastern Europe. FMO works very closely with local partners and commercial investors, such as international banks and companies.
- **Proparco** is the private sector financing investing arm of the French Development Agency (AFD) through which it supports particularly microenterprises, SMEs, and start-ups, in key development sectors, such as infrastructure, health and the agro-industry.

### 2.3.3. Micro-Finance Institutions (MFIs), Credit Unions and Cooperatives

Micro-finance Institutions (MFIs) play a vital role in the horticulture sector by providing appropriate financial services to value chain actors who normally don't have access to formal financial services because they are deemed risky clients. The clients of these financial institutions normally constitute the smallholder farmers, input suppliers, producer groups, SMEs, and traders dealing in fruits and vegetables. These financial institutions offer short-term finance micro-loans of lower amounts compared to the other financial institution and these include the following:

1. **Agricultural Loan:** A short-term credit facility available to both individuals and groups of entrepreneurs engaged in active farming activities along the value chains. The loans include agricultural production, Agricultural processing, and agricultural marketing activities. The microfinance institutions normally require that their clients should have been engaged in agricultural activities for a minimum of one year.
2. **Working capital/ Business loan:** This loan is usually a short-to-medium term credit facility specially designed to support SMEs finance their working capital requirements. The SMEs use this facility to acquire inventories like fruits and vegetables for resale as well as paying some of their operating expenses. This loan is usually provided to entrepreneurs who have been operating business for a minimum of six months.
3. **Self-Managed Group loans:** This is a short-term credit facility for groups of at least 5 active entrepreneurs who form a group and self-guarantee each other in order to access the loan facilities. The five entrepreneurs are usually engaged in diverse economic activities and do not necessarily have to be engaged in fruits and vegetables.

Microfinance institutions vary in size and outreach from institutions service many clients across multiple countries to institutions servicing communities in a given geographical location. Examples of the microfinance institutions include:

- a. **Advans:** Is a leading microfinance institution providing financial services that include microloans, savings and advisory services though which contribute to strengthening local businesses, creating and sustaining jobs and improving clients' living standards in order to foster private sector-led economic and social development in Africa, the Middle-East and Asia. Advans operates in Ghana, Democratic Republic of Congo, Ivory Coast, Nigeria, and Tunisia.
- b. **FINCA International:** This is one of the pioneer microfinance institutions that has operated for many years with a mission to alleviate poverty through lasting solutions that help people build assets, create jobs, and raise their standard of living. FINCA has operations in various countries across Africa, Latin America, Eurasia and the Middle East.
- c. **Musoni Microfinance Limited:** Musoni is a microfinance providing its services through mobile technology in Kenya. Musoni provides the usual microfinance services and seeks to harness technology by being paperless, cashless and data driven to offer best value to its clientele.

Figure 7 - A typical roadside trader who access financing from MFIs



#### 2.3.4. Investment/ Impact funds

An investment fund is a pool of capital that a number of individual investors pay into, which is used to collectively invest in stocks and bonds.

Using investment funds is a popular strategy for investors. Some of the most popular global investment funds include USAA Capital Growth Fund, Polaris Global Value Fund and Steward Global Equity Income Fund.

In an investment fund, each investor owns their individual shares but they don't have any influence on where the money in the fund is invested. This is down to the investment manager, who decides which assets to buy or sell, how many and when.

Investors decide to enter an investment fund based on the fund's objective – these generally target geographic area or specific industry sectors. In addition to the venture capital/ Impact Investors earlier cited, the following are some other examples.

**Oikocredit International** is a social impact investor and worldwide cooperative that is guided by the principle of empowering low-income people to improve their livelihoods. Oikocredit supports its partner organisations in Africa, Asia, and Latin America by providing loans, equity investments, and capacity building. It focuses its investments on financial inclusion, agriculture, and renewable energy. Oikocredit provides credit to trade cooperatives, fair trade organisations, and small-to-medium scale enterprises (SMEs) in the developing world.

**I&P** (Investisseurs & Partenaires) is an investor dedicated to African SMEs. I&P manages and advises several funds and programs entirely dedicated to small and medium-sized African companies (SMEs), which are distinguished in particular by the size of the targeted companies. I&P offers a continuum of investment ranging from several thousand euros to 3 million euros.

## 2.4. SELECTING THE APPROPRIATE SOURCE OF FINANCE

When a firm needs finance, it becomes crucial to choose how much finance they need and for how long. A firm will have a wide range of sources to choose finance from such as a bank loan or overdraft, equity and venture capital, or trade credit amongst others. However, some sources of finance are suited best for short term financing requirements while others are best for long term financing needs and some are suited for little injections of cash while others are suited to huge injections of cash. The choice of financing will depend on whether the SME wants to invest in non-current assets (greenhouses, land acquisition, trucks) or current assets (purchase of fruits and vegetables to sale or payment of business expenses).

Before a business decides what source of finance it should choose, they need to ask the question: **How Much Finance Can the Business Obtain and efficiently invest?**

### 1. Long-Term Goals

For a business owner who is starting a new business or an existing business that needs to expand, it will be critical for you to think about what you actually hope to achieve in the end. What is the purpose of starting your business or expanding the operations? Where do you hope for your business to be in ten years? Twenty years? By answering these questions, it will be easier for you to decide how financially entrenched in your business you will actually be.

### 2. Available Interest Rates

Naturally, the opportunity cost of choosing equity over debt finance will largely be determined by how much you will actually need to pay to borrow money. Equity investors will have an exit strategy after a few years ranging from 5 to 10 years and will not need interest payments but the business **MUST** have very good prospects to interest them. On the other hand, the Development Banks can provide low interest debt or speciality loans by Government grants to for instance the Agricultural sector including horticulture. In order to make sure you are getting competitive quotes from potential lenders, it will be a good idea to compare multiple options before making any final decisions. Working to improve your business' current credit score can also make a major difference.

### 3. The Need for Control

By accepting equity investors into the SME, you will be partially surrendering ownership of the business for a period until the exit of the equity investors. In order to make sure they can still outvote all other stakeholders, many business owners will maintain 51 percent ownership of the business while selling the remaining 49 percent. If having total or significant control of your business is something that's important to you, be sure to limit the amount of equity you end up distributing.

#### 4. Borrowing Requirements

As earlier highlighted, the commercial banks and other lenders will always seek critical business information to determine the risk of lending to the SME. The lenders will require financial projections to determine the future capacity of the business to repay the loan from the future business operations. The financial projections are based on the articulated growth in the business plan, the future sales of fruits and vegetables, fixed monthly expenses amongst others. These requirements can often be rather rigid, which is why your business needs to plan its financing strategy in advance.

#### 5. Current Business Structure

Another variable that will impact the opportunity cost of borrowing (or issuing equity) is your business structure. If your business is already formally structured as a partnership, for example, this may complicate the process of selling equity. Additionally, if you hope to secure your equity finance via public means—such as selling stocks on the open market—you will need to formally declare your business to be a public corporation. Though your business structure is something that can (and likely should) be changed in the future, there is no doubt that the pre-existing structure will have a major impact on your short-term financing decisions.

#### 6. Future Repayment Terms

While many business loans are simple, flat loans with a fixed interest rate, there are many loans with repayment terms that are notably more complicated. For example, some loans will not require any repayment for several years down the loan. When this is the case, you will need to calculate both the average total interest rate as well as the time value of money. If you are hoping to borrow from a single venture capitalist or angel investor, they may be able to dictate additional terms that are not found in traditional bank loans. Sometimes, these investors will offer a complex mix of debt and equity financing for new businesses

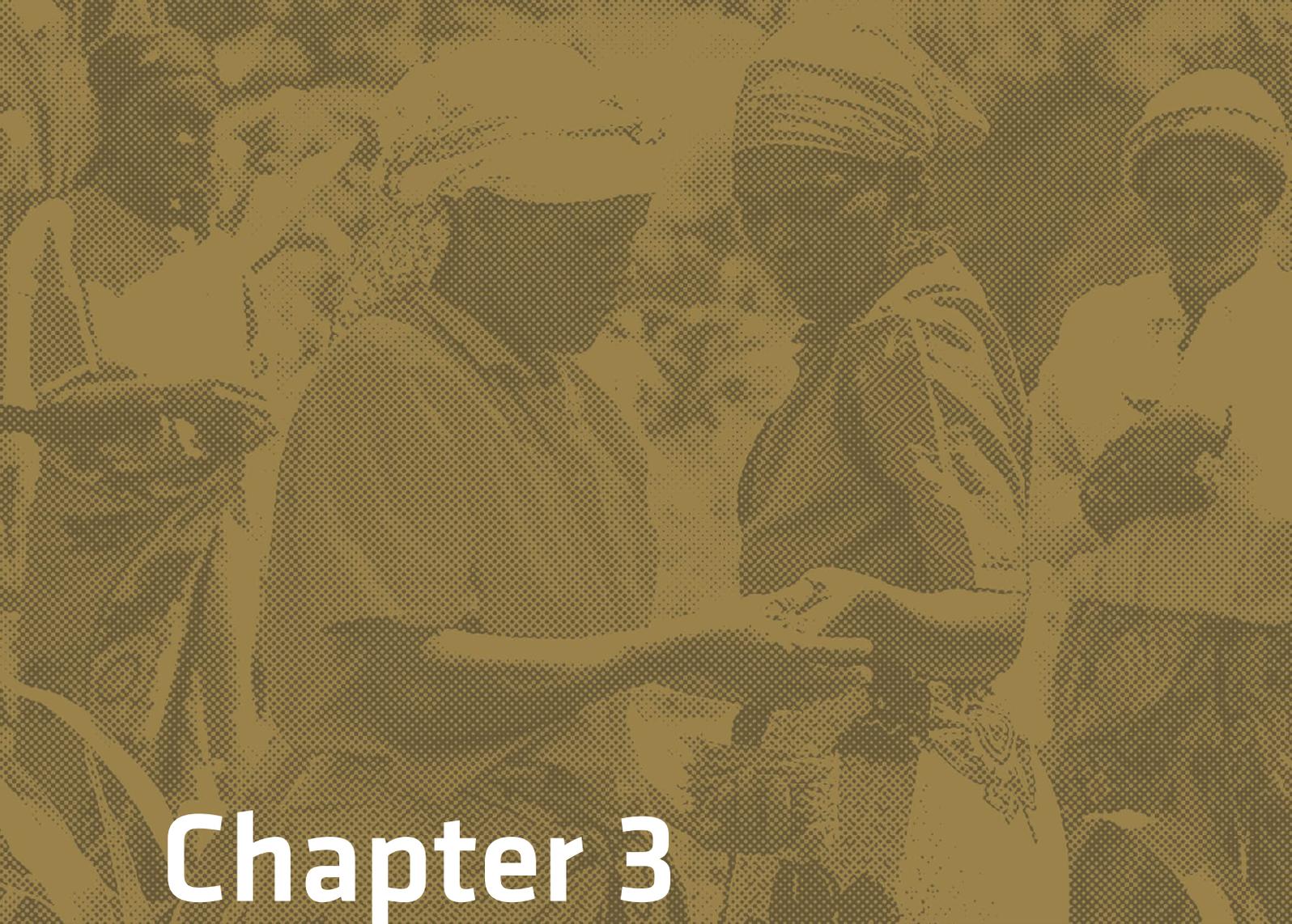
#### 7. Access to Equity Markets

If you do hope to finance your business via equity, it will be crucial that you have access to people who are actually interested in buying. Contrary to what some entrepreneurs initially assume, there is not a readily available “counsel” of venture capitalists, ready to fund new businesses without scrutiny. If you do hope to finance via equity, you will need to significantly develop your business plan, meet with a wide range of individuals, and also be willing to make compromises. For some business owners, the time it takes to do this is justified by the lack of debt that only equity financing can provide. For others, traditional lending is a more appealing option.

## 2.5. RECOMMENDED FINANCING OPTIONS

The table below highlight the envisaged business activities that the SME trading in fruits and vegetables and how the SME owners should plan to finance the activities.

ASSETS ACQUISITION OR BUSINESS ACTIVITY	RECOMMENDED FINANCING
1. Cooling and Storage facilities	<ul style="list-style-type: none"> <li>a. Owners personal funds</li> <li>b. Equity Finance</li> <li>c. Term Loan</li> </ul>
2. Transportation facilities to market	<ul style="list-style-type: none"> <li>a. Equity Finance</li> <li>b. Term Loan</li> <li>c. Assets Finance/ Leases</li> </ul>
3. Supplies and packaging	<ul style="list-style-type: none"> <li>a. Trade Credit</li> <li>b. Working Capital Loans</li> </ul>
4. Building or Purchasing Land, Green House, Trucks	<ul style="list-style-type: none"> <li>a. Equity Finance</li> <li>b. Term Loan</li> <li>c. Leases</li> </ul>
5. Purchases of fruits and vegetables for trade	<ul style="list-style-type: none"> <li>a. Trade Credit</li> <li>b. Working Capital Loans</li> </ul>
6. Maintenance of Business Assets	<ul style="list-style-type: none"> <li>a. Working Capital Loans</li> </ul>
7. Export of fruits and vegetables	<ul style="list-style-type: none"> <li>a. Pre-shipping loans</li> <li>b. Assets Leasing for refrigerated trucks, etc.</li> </ul>
8. Sales and Distributions	<ul style="list-style-type: none"> <li>a. Working Capital Loans</li> <li>b. Assets Leasing for trucks, etc.</li> </ul>
9. Rent for Business Premises/ Market Stall	<ul style="list-style-type: none"> <li>a. Owners personal funds</li> <li>b. Working Capital Loans</li> </ul>



# Chapter 3

## The impact of the funding options on the financial statements

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## 3.1. FINANCIAL STATEMENTS

### 3.1.1. Definition

Financial Statements represent a formal record of the financial activities of the SME. During the implementation of the business activities, the SME conducts financial transactions that entail making payments to settle its bills and receiving cash from the sales of fruits and vegetables amongst other sources. The Financial Statements are thus the reports that quantify the results of all the transactions and summarises them to highlight the financial performances, financial strength, and liquidity of the SME.

### 3.1.2. Characteristics of financial statements

The majority of business decisions have financial implications and the financial status of the SME informs these decisions. It is therefore critical that the financial statements have the following attributes:

- a. **Relevancy:** All transactions undertaken by the SME relating to its usual business activities must be included and disclosed in the financial statements. The Financial Statements should be able to meet all the stakeholders' needs and information requirements. Unnecessary and confusing disclosures should be avoided and all those that are relevant and material should be reported. For instance, transactions undertaken by the business owners that do not relate to the SME activities are personal transaction that should not be included in the financial statements of the SME.
- b. **Accuracy:** They should convey full and accurate information about the performance, position, progress, and prospects of the SME. The SME should only report the accurate financial values of transactions without overstating or understating the financial value of transactions. An example is if the SME sells fruits and vegetables for USD10,000 to one of its customers, it should disclose the true value of the sales and not report a lower amount in the business records. It is also important that those who prepare and present the financial statements should not allow their personal prejudices to distort the facts.
- c. **Comparability:** They should be easily comparable with previous statements or with those of similar concerns or industry. Comparability increases the utility of financial statements and enables the performance of the business entity to be assessed over a longer period. The users of financial statements of the SME will need to determine whether it is growing over the years and as such, it is important to compare the financial statements over the selected periods. For example, if the SME acquires more land and increases production and sales of fruits and vegetables resulting in significant increases in annual revenue from USD100,000 to USD200,000, the financial reports should disclose the acquisition and further attribute the doubling of revenue to the increase in capacity due to the land acquisition. If the acquisition is not disclosed, the users of financial statements will think the growth in revenues was entire attributable to increased production from the previous land.

- d. **Timely:** The financial statements should be prepared and presented at the right time. This is usually about three months after the end of the financial year. Undue delay in their preparation will reduce the significance and utility of these statements. Financial statements inform decisions and any delays will result in poor quality decisions due to the lack of adequate financial information, which will be costly to the SME.
- e. **Understandability:** The financial statements must have general acceptability and understanding to all the users. This can be achieved only by applying certain “generally accepted accounting principles” in their preparation. This helps to create uniformity in the financial statements.
- f. **Objectivity:** The financial statements should not be affected by inconsistencies arising out of personal judgment and procedural choices exercised by the accountants/bookkeeper.
- g. **Financial Statements should comply with the legal requirements if any, as regards form, contents, and disclosures and methods.**

### 3.1.3. Importance of financial statements

The importance of financial statements lies in their utility to satisfy the varied interest of different categories of parties such as management, creditors, public, financial institutions, etc.

#### a. To Management

The management team requires up-to-date, accurate, and systematic financial information to execute their stewardship role. Financial statements help the management to understand the position, progress, and prospects of the SME and can therefore benchmark its performance with the industry peers.

By providing the management with the causes of business results, it enables them to formulate appropriate policies and courses of action for the future. The management communicates through these financial statements, their performance to various parties and justify their activities and thereby their existence.

A comparative analysis of financial statements reveals the trend in the progress and position of enterprise and enables the management to make suitable changes in the policies to avert unfavourable situations.

#### b. To the business owners:

In most businesses, management is separated from the ownership. The owners do not directly take part in the day-to-day activities of the business. However, the results of these activities should be reported to the owners at the annual general meeting in the form of financial statements. These financial statements enable the owners to know about the efficiency and effectiveness of the management and also the earning capacity and financial strength of the company.

By analysing the financial statements, the prospective business owner could ascertain the profit earning capacity, present position, and future prospects of the company and decide about making their investments in this company.

**c. To Lenders/Creditors**

The financial statements serve as a useful guide for the present and future suppliers and probable lenders of a company. It is through a critical examination of the financial statements that these groups can come to know about the liquidity, profitability, and long-term solvency position of a company.

**d. To Employees**

Employees are entitled to bonus depending upon the size of profit as disclosed by audited profit and loss account. Thus, Profit or Loss Statement becomes greatly important to the workers. In wages negotiations also, the size of profits and profitability achieved are greatly relevant.

**e. To the Public**

Businesses are social entities. Various groups of society, though directly not connected with business, are interested in knowing the position, progress, and prospects of a business enterprise.

Thus, financial statements interest the financial analysts, lawyers, trade associations, trade unions, financial press, research scholars and teachers, etc. It is only through these published financial statements these people can analyse, judge and comment upon business enterprise.

**f. To National Economy**

The rise and growth of business sector largely influence the economic progress of a country. Unscrupulous and fraudulent corporate managements shatter the confidence of the public in businesses, which is essential for economic progress and retard the economic growth of the country.

Financial Statements come to the rescue of the public by providing information by which they can examine and assess the real worth of the company and avoid being cheated by unscrupulous persons.

The law endeavours to raise the level of business morality by compelling the companies to prepare financial statements in a clear and systematic form and disclose material information. This has increased the confidence of the public in companies' financial statements. Financial statements are also essential for the various regulatory bodies such as tax authorities, Registrar of companies, etc. They can judge whether the regulations are being strictly followed and also whether the regulations are producing the desired effect or not, by evaluating the financial statements.

### 3.1.4. Limitations of financial statements

Most of the limitations are mainly due to the cumulative effect of recorded facts, accounting conventions, and personal judgment on financial statements. Unless they are prepared specially they fail to reflect the current economic picture of business. As such, financial statements have a number of limitations.

- a. **Qualitative Information is ignored:** Financial statements depict only those items of quantitative information that are expressed in monetary terms. But, a number of qualitative factors, such as the reputation and prestige of the management with the public, cordial relations and efficiency of workers, customer satisfaction, competitive strength, etc., which cannot be expressed in monetary terms, are not depicted by the financial statements. However, these factors are essential for understanding the real financial condition and the operating results of the business. An example is the skills, experience of the workers in the horticulture SME cannot be quantified, and yet it's the abilities that enables the SME to grow good quality fruits and vegetables and there earn significant revenues.
- b. **Financial Statements Mainly Show Historical Information:** As the financial statements are compiled on the basis of historical costs, they fail to take into account such factors as the decrease in money value or increase in the price level changes. Since these statements deal with past data only, they are of little value in decision-making.
- c. **Financial Statements are based on Accounting Concepts and Conventions:** Accounting concepts and conventions used in the preparation of financial statements make them unrealistic. For example the income statement prepared on the basis of the convention of conservatism fails to disclose the true income, for it includes probable losses and ignores probable income. Similarly, the value of fixed asset is shown in the balance sheet on the 'going concern concept'. This means that the value of the asset rarely represents the amount of cash, which would be realized on liquidation.
- d. **Personal judgment influence Financial Statements:** Many items in the financial statements are left to the personal judgment of the accountant. For example, the method of inventory valuation, the method of depreciation the treatment of deferred revenue expenditure, etc., depend on the personal judgment of the accountant.

### 3.1.5. Components of Financial Statements

#### 3.1.5.1. Statement of Financial Position (Balance Sheet)

Statement of Financial Position, also known as the Balance Sheet, presents the financial position of the SME at a given date. It shows a snapshot of a Business's assets, liabilities and Owners' equity at the end of the reporting period. Below are the elements of a balance sheet.

1. **Assets:** These are resources owned and control by the SME from which it will derive economic value. This means the SME will either sell the assets or use them to grow and sell the vegetables thereby earning revenues from utilising the assets. The horticulture SME's assets include: Farmland, Plantations, Farm buildings, cash, inventory/ harvests and farm machinery, etc. It also includes things that cannot be touched but nevertheless exist and have value, such as trademarks and patents.
2. **Liabilities:** These are obligations of the SME to pay third parties. This can include all kinds of obligations, like money borrowed from a bank to set up a nursery bed for vegetables, rent for use of land and building, money owed to suppliers for raw materials, payroll expenses to its employees, environmental clean-up costs, or taxes owed to the government. Liabilities also include obligations to provide goods or services to customers in the future.
3. **Equity:** What the business owes to its owners. This represents the amount of capital that remains in the business after its assets are used to pay off its outstanding liabilities. Equity therefore represents the difference between the assets and liabilities.

THE BALANCE SHEET EQUATION IS

$$\text{ASSETS (A) = LIABILITIES (L) + EQUITY (E)}$$

Table 3 - Balance Sheet

XYZ HORTICULTURE FIRM LIMITED		
STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2019		
	AS AT 31 DECEMBER	
	2019	2018
	USD	USD
<b>NON-CURRENT ASSETS</b>		
Property, plant and equipment	159,880	181,895
Intangible assets	131	131
	<u>160,011</u>	<u>182,026</u>
<b>CURRENT ASSETS</b>		
Inventories	15,743	28,375
Trade and other receivables	33,300	21,190
Cash and cash equivalents	53,828	49,436
	<u>102,871</u>	<u>99,001</u>
<b>TOTAL ASSETS</b>	<u><b>262,882</b></u>	<u><b>281,027</b></u>
<b>EQUITY</b>		
Share capital	5,000	5,000
Retained earnings	148,813	135,554
<b>Equity attributable to owners of the Company</b>	<u>153,813</u>	<u>140,554</u>
<b>NON-CURRENT LIABILITIES</b>		
Long term loan	44,610	63,302
Deferred tax	4,000	9,000
	<u>48,610</u>	<u>72,302</u>
<b>CURRENT LIABILITIES</b>		
Trade and other payables	43,845	48,247
Operating loan	15,392	18,702
Accrued interest	1,222	1,222
	<u>60,459</u>	<u>68,171</u>
<b>TOTAL EQUITY AND LIABILITIES</b>	<u><b>262,882</b></u>	<u><b>281,027</b></u>



### 3.1.5.2. *Income Statement*

An income statement is a report that shows how much revenue the SME earned over a specific period. Usually for a year. An income statement also shows the costs and expenses. The bottom line of the statement usually shows the SME's net earnings or losses. This tells you how much the SME earned or lost over the period. It also shows how profitable a firm was over a given reporting period. Income Statement is composed of the following two elements:

1. **Revenue:** is the total amount of income generated by the sale of goods or services related to the company's primary operations. Revenue is often referred to as the top line because it sits at the top of the income statement. The revenue number is the income a company generates before any expenses are taken out. Therefore, when a company has "top-line growth," the company is experiencing an increase in gross sales or revenue. According to the revenue recognition principle in accounting, revenue is recorded when the benefits and risks of ownership have transferred from seller to buyer, or when the delivery of services has been completed.
2. **Expenses:** The cost incurred by the firm over a period. They are divided into categories.
  - a. Administration expenses these include Salaries and wages, printing and stationery, legal and professional fees,
  - b. Selling and distribution costs these include transport auction, ware house etc.,
  - c. Other operating expenses these include depreciation, amortisation, rent, insurance etc.

Net profit or loss is arrived by deducting expenses from revenue.

Table 4 - Income Statement

XYZ HORTICULTURE FIRM LIMITED - STATEMENT OF COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 DECEMBER 2019		
	2019 USD	2018 USD
<b>REVENUE</b>		
Fruits	76,400	42,535
Nuts	42,000	31,675
Vegetables	13,200	9,955
Nursery	8,400	6,335
<b>Total revenue</b>	<b>140,000</b>	<b>90,500</b>
Cost of sales	(58,000)	(39,000)
<b>Gross profit</b>	<b>82,000</b>	<b>51,500</b>
Other operating income	14,000	22,000
<b>SELLING AND DISTRIBUTION EXPENSES</b>		
Transport	5,430	4,771
Auction	479	400
Warehouse	1,060	920
Catalogues	40	90
	<b>7,009</b>	<b>6,181</b>
<b>ADMINISTRATIVE EXPENSES</b>		
Salaries and wages	23,706	17,566
Vehicle running expenses	297	335
Legal and professional fees	126	550
Interest expense	2,027	2,795
Subscriptions	133	129
Bank charges	254	260
	<b>26,543</b>	<b>21,635</b>
<b>OTHER OPERATING EXPENSES</b>		
Insurance	4,921	3,844
Rental expense on operating leases	8,500	8,500
Depreciation	3,040	1,580
Amortisation of prepaide lease rentals	1,280	1,280
	<b>17,741</b>	<b>15,204</b>
<b>OPERATING PROFIT BEFORE TAX</b>	<b>44,707</b>	<b>30,480</b>
Tax	12,812	11,844
<b>Net profits</b>	<b>31,895</b>	<b>18,636</b>
<b>TOTAL COMPREHENSIVE INCOME FOR THE YEAR</b>	<b>31,895</b>	<b>18,636</b>



### 3.1.5.3. *Statement of Cash Flows*

A statement of cash flows is a financial statement showing how changes in balance sheet accounts and income affect cash & cash equivalents. Cash Flow Statement presents the movement in cash and bank balances over a given period. The movement in cash flows is classified into the following segments:

1. **Operating Activities:** Represents the cash flow from primary activities of a firm. The operating activities on the Statement of cash flow (CFS) include any sources and uses of cash from running the business and selling its products or services. Cash from operations includes any changes made in accounts receivable, depreciation, inventory, and accounts payable. These transactions also include wages, income tax payments, interest payments, and cash receipts from the sale of a product or service.
2. **Investing Activities:** Represents cash flows from the purchase and sale of assets other than inventories (e.g. purchase of a firm land) include any sources and uses of cash from a company's investments into the long-term future of the company. A purchase or sale of an asset, loans made to vendors or received from customers or any payments related to a merger or acquisition is included in this category.
3. **Financing Activities:** Represents cash flows generated or spent on raising and repaying share capital and debt together with the payments of interest and dividends. Include the sources of cash from investors or banks, as well as the uses of cash paid to shareholders. Financing activities include debt issuance, equity issuance, stock repurchases, loans, dividends paid, and repayments of debt.

Table 5 - Cash Flow Statement

<b>XYZ HORTICULTURE FIRM LIMITED</b>		
<b>STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 DECEMBER 2019</b>		
	2019	2018
	USD	USD
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Profit before tax	44,707	30,480
<b>Adjustments for</b>		
Depreciation on property, plant and equipment	19,798	11,865
Amortisation of prepaid operating lease rentals	306	306
Interest paid	2,000	(1,500)
<b>Changes in working capital</b>		
• Trade and other receivables	(12,110)	46,975
• Inventories	12,632	(19,796)
• Trade and other payables	(4,402)	2,911
Cash from operations	58,931	71,241
Tax paid	(2,876)	(18,348)
Net cash flow from operations	<u>56,055</u>	<u>52,893</u>
<b>INVESTING ACTIVITIES</b>		
Cash paid for purchase of property, plant and equipment	(15,910)	(32,250)
Net cash used in investing activities	<u>(15,910)</u>	<u>(32,250)</u>
<b>FINANCING ACTIVITIES</b>		
Proceeds from borrowings	(22,002)	80,000
Net cash from/(used in) financing activities	<u>(22,002)</u>	<u>80,000</u>
Increase in cash and cash equivalents	<u>18,143</u>	<u>100,643</u>
<b>MOVEMENT IN CASH AND CASH EQUIVALENTS</b>		
At start of year	49,436	117,493
Effect of exchange rate changes	(13,758)	(168,700)
Increase in cash and cash equivalents	<u>18,143</u>	<u>100,643</u>
<b>AT END OF YEAR</b>	<u>53,828</u>	<u>49,436</u>



## 3.2. INTERPRETATION AND ANALYSIS OF FINANCIAL STATEMENTS

### 3.2.1. Financial Objectives

Financial statements contain a lot of information that is necessary for the prudent management of the financial resources. This information however does not appear on the face of financial statements and is therefore subject to in depth analysis by the financial managers through financial analysis methods, which include ratios analysis, fund flow analysis and cash flow analysis. In undertaking the daily operations, business seek to achieve the following financial objectives:

- a. **Profitability:** is the primary goal of all business ventures. It measures the success of the business in generating revenues and earning a net return on its operations. Profit is an important performance measure and a failure to achieve profitability leads to business closure due the inability to meet operating costs. A business that is highly profitable has the ability to continue in the foreseeable future and is able to reward its owners with a large return on their investment. Increasing profitability is one of the most important tasks of business managers. Managers constantly look for various ways to enhance profitability.
- b. **Liquidity:** refers to the ability of the business to meet its short-term requirements with liquid assets. The business' short-term requirements will include settlement of its creditors, which may require converting short-term assets into cash to settle these obligations.
- c. **Solvency:** refers to the ability of the business to meet its total debt burden, which includes both the short-term and long-term debt obligations. Creditors often use solvency indicators to assess the extent to which the business can meet its total debt obligations from its assets and capital base in case of liquidation.
- d. **Efficiency:** refers to the intensity with which the business uses its assets to generate revenues while minimising resource wastage. It assesses whether the business appropriately balances its investments in both the current and long-term assets without prudently invests in long-term and short-term assets. Investing too much or too little in either results in loss of income generating opportunities for the business since too much funds are tied up in non-income generating assets leading to lower profitability and sustainability.

Businesses assess financial performance and the extent of achievement of the financial objectives through the analysis of selected ratios.

### 3.2.2. Key Performance Ratios

A ratio is a statistical yardstick by means of which relationships between two or various figures can be compared or measured. The term accounting ratio is used to describe significant relationship between figures shown on a statement of financial position and statement of comprehensive income. Accounting ratios therefore show the relationship of accounting data. Ratios used in the analysis and interpretation of financial statements are classified as follows:

### a. Profitability ratios

These ratios measure the efficiency of management in the employment of firm resources to earn profits. These ratios indicate the success or failure of a business for a particular period. Profitability ratios include the following:

- Net profit ratio,
- Gross profit ratio,
- Operating ratio,
- Expense ratio,
- Price earnings ratio,
- Dividend pay-out ratio,
- Return on Investment/Return on equity.

These are calculated from the statement of comprehensive income.

#### i. Gross profit Ratio (GPR)

GPR is the ratio of gross profits to the net sales expressed as a percentage. It expresses the relationship between gross profit and sales. The Gross Profit Ratio from the financial statements earlier presented is shown below.

$$\text{GPR} = \text{GROSS PROFIT} / \text{NET SALES} \%$$

	2019	2018
<b>GROSS PROFIT RATIO =</b>	$\frac{82,000 \times 100}{140,000}$	$\frac{51,500 \times 100}{90,500}$
	59%	57%

There is an improvement in the economic performance of the firm since the GPR has increased from 57% in 2018 to 59% in 2019.

#### Significance/ interpretation of Gross profit Ratio

- Gross profit indicates to what extent the selling price of goods per unit may be reduced without incurring losses on operations
- It reflects efficiency with which a firm produces its products

#### ii. Net profit Ratio (NPR)

NRP is the ratio of net profit (after taxes) to net sales. It shows the remaining profit after all costs of production, administration, and financing have been deducted from sales, and income taxes recognized. It's expressed as a percentage.

$$\text{NPR} = \text{NET PROFIT} / \text{NET SALES} \%$$

	2019	2018
NET PROFIT RATIO =	$\frac{31,895 \times 100}{140,000}$	$\frac{18,636 \times 100}{90,500}$
	23%	21%

There is an improvement in the performance of the firm since the NPR has increased from 21% in 2018 to 23% in 2019. This mainly attributed direct proportionate increase in expenses and sales/revenue.

### Significance/ interpretation of Net profit Ratio

NPR is used to measure the overall profitability and hence it is very useful to proprietors. The ratio is very useful because if the net profit is not sufficient the firm shall not be able to achieve a satisfactory return on its investments.

#### b. Liquidity ratios

These measure the adequacy of current and liquid assets and help evaluate the ability of the firm to pay its short-term debts (day-to-day financial obligations as they fall due). The ability of a firm to pay its short-term debts is frequently referred to as short-term solvency position or liquidity position of the Firm. Liquidity ratios include: Current ratio, Quick ratios or acid test ratio.

#### i. Current ratio

The current ratio is a financial ratio that shows the proportion of a firm's current assets to its current liabilities. The current ratio is classified as a liquidity ratio and a larger current ratio is better than a smaller one. However, a firm's liquidity is dependent on converting the current assets to cash in time to pay its obligations.

$$\text{CURRENT RATIO} = \text{CURRENT ASSETS} / \text{CURRENT LIABILITIES}$$

Picking figures from the financials above:

	2019	2018
CURRENT RATIO =	$\frac{102,871}{60,459}$	$\frac{99,001}{68,171}$
	1.7 times	1.5 times

The liquidity position of the SME has improved over the two-year period. The ratio has improved from 1.5 in 2018 to 1.7 in 2019. This shows that the firm is able to meet its day-to-day obligations. A current ratio of 1.2 is always recommended as a good liquidity position.

### Significance/ interpretation of Current Ratio

- This ratio is a general and quick measure of liquidity of a firm. It represents the margin of safety or cushion available to the creditors. It is an index of the firm's financial stability. It is also an index of technical solvency and an index of the strength of working capital.
- A relatively high ratio is an indication that the firm is liquid and has the ability to pay its current obligations in time and when they become due. On the other hand, a relatively low current ratio represents that liquidity position of a firm is not good and the firm shall not be able to pay its current liabilities in time without facing difficulties.

### ii. Quick ratio/acid test Ratio

This is the ratio of liquid assets to current liabilities. The true liquidity is the ability of the firm to pay its short-term obligations as and when they became due. To do the analysis we weight liquid current assets of the company against the current liabilities, which result in the ratio that highlights the liquidity of the company.

$$\text{QUICK RATIO} = (\text{CURRENT ASSETS} - \text{INVENTORY}) / \text{CURRENT LIABILITIES}$$

	2019	2018
QUICK RATIO =	$\frac{102,871 - 15,743}{60,459}$	$\frac{99,001 - 28,375}{68,171}$
	1.5	1.04

The liquidity position of the company has improved over the two-year period. The ratio has improved from 1.04 in 2018 to 1.5 in 2019. This shows that the firm is able to meet its day-to-day obligations.

### Significance/ interpretation of Quick Ratio

The quick ratio/acid test ratio is very useful in measuring the liquidity position of a firm. It measures the firm's capacity to pay off current obligations immediately and is a more rigorous test of liquidity than the current ratio because it eliminates inventory and prepayments as part of current assets.

### c. Activity ratios/efficiency ratio

Activity ratios show how frequently the assets are converted into cash or sales and, therefore, are frequently used in conjunction with liquidity ratios for a deep analysis of liquidity. These ratios help managers to determine the efficiency of management in management of resources. These ratios include: Inventory turnover ratio, Receivables turnover ratio, Average collection period, Accounts payable turnover ratio, Asset turnover ratio, Working capital turnover ratio, fixed assets turnover ratio.

#### i. Inventory turnover ratio (ITR)

Every firm has to maintain a certain level of inventory of finished goods as to be able to meet the requirements of the business. The level of inventory should be neither too high nor too low. As a high inventory means high carrying costs and high risk of inventory becoming obsolete whereas too low inventory may mean loss of business opportunities. It is therefore essential to keep sufficient stock in the business.

$$\text{INVENTORY TURNOVER RATIO} = \frac{\text{COST OF GOODS SOLD}}{\text{AVERAGE INVENTORY}}$$

	2019	2018
INVENTORY TURNOVER RATIO =	$\frac{58,000}{15,743}$	$\frac{39,000}{28,375}$
	3.69 times	1.38 times

There is slight improvement in the ITR from 1.38 in 2018 to 3.69 in 2019. The higher the inventory turnover, the better since a high inventory turnover typically means a firm is selling goods very quickly and that the demand for their product exists.

#### Significance/ interpretation of inventory turnover Ratio

Inventory turnover ratio measures the velocity of conversion of inventory into sales. A high inventory turnover velocity indicates efficient management of inventory because more frequently, the inventory is sold, and this means that lesser amount of money is required to finance the inventory. A low inventory turnover on the other hand indicates an inefficient management of inventory.

#### ii. Debtors Turnover Ratio

The Debtors Turnover Ratio also called as Receivables Turnover Ratio shows how quickly the credit sales are converted into the cash. This ratio measures the efficiency of a firm in managing and collecting the credit issued to the customers.

$$\text{DEBTORS TURNOVER RATIO} = \frac{\text{NET CREDIT SALES}}{\text{AVERAGE TRADE DEBTORS}}$$

	2019	2018
DEBTORS TURNOVER RATIO =	$\frac{140,000}{33,300}$	$\frac{90,500}{21,190}$
	4.21	4.20

Management of trade receivables was better in 2019 compared to 2018.

Since the receivables turnover ratio measures a firm's ability to efficiently collect its receivables, it only makes sense that a higher ratio would be more favourable. Higher ratios mean that companies are collecting their receivables more frequently throughout the year.

#### Significance/ interpretation of debtors' turnover Ratio

Account receivables turnover ratio or debtors' ratio indicates the number of times the debtors are turned over years: the higher the value of debtors turnover the more efficient is the management of debtors or more liquid the debtors are. Similarly low debtors turnover ratio implies inefficient management of debtors or less liquid debtors. It's the reliable measure of time of cash flow from credit sales.

Accounts receivable turnover also is an indication of the quality of credit sales and receivables. A firm with a higher ratio shows that credit sales are more likely to be collected than a company with a lower ratio.

#### d. Solvency ratios

These ratios measure the ability of a business to survive for a long period of time. Solvency ratios are normally used to:

- Analyse the capital structure of the company
- Evaluate the ability of the company to pay interest on long term borrowings
- Evaluate the ability of the company to repay principal amount of the long term loans (debentures, bonds etc.).
- Evaluate whether the internal equities (stockholders' funds) and external equities (creditors' funds) are in right proportion.

These ratios include: Debt to equity ratio, Times interest earned (TIE) ratio, Fixed assets to equity ratio and Current assets to equity ratio.

### i. Debt to Equity Ratio

The debt to equity ratio is a ratio that compares a company's total debt to total equity. The debt to equity ratio shows the percentage of company financing that comes from creditors and investors. A higher debt to equity ratio indicates that more creditor financing (bank loans) is used than investor financing (shareholders). Very high debt to equity ratio indicates that a company is highly leveraged.

$$\text{DEBT EQUITY RATIO} = \text{LONG TERM DEBT} / \text{SHAREHOLDERS' EQUITY}$$

	2019	2018
DEBT TO EQUITY RATIO =	$\frac{44,610}{148,813}$	$\frac{63,302}{135,554}$
	0.30 times	0.47 times

There is a reduction in ratio from 0.47 in 2018 to 0.30 in 2019. This shows that the firm is able to meet its long-term obligations. A current ratio of 1.1 is always recommended.

### Significance/ interpretation of debt to equity Ratio

A lower debt to equity ratio usually implies a more financially stable firm. Companies with a higher debt to equity ratio are considered more risky to creditors and investors than companies with a lower ratio. Unlike equity financing, debt must be repaid to the lender. Since debt financing also requires debt servicing or regular interest payments, debt can be a far more expensive form of financing than equity financing. Companies leveraging large amounts of debt might not be able to make the payments

### ii. Fixed Assets to Equity Ratio

Fixed-asset-to-equity-capital ratio is made up of two parts: fixed assets and equity capital. Business's fixed assets are any type of physical assets that have an expected lifetime of at least one year. Buildings, vehicles, furniture and heavy equipment are all examples of fixed assets. Equity capital is the money that investors have put into a company. As a reward for these funds, investors receive part ownership of a business. These investors then hope that the business thrives and that the value of their shares in a company increases.

$$\text{FIXED ASSETS TO EQUITY RATIO} = \frac{\text{TOTAL FIXED ASSETS}}{\text{EQUITY}}$$

	2019	2018
FIXED ASSETS TO EQUITY RATIO =	$\frac{160,011}{153,813}$	$\frac{182,026}{140,554}$
	1.04	1.3

There is a slight decline in the firm's ratio. Implying an increase in the owners' equity. This is a positive sign to the business.

#### Significance/ interpretation of fixed assets to Ratio

If fixed assets to stockholders' equity ratio is more than 1, it means that stockholders' equity is less than the fixed assets and the company is using debts to finance a portion of fixed assets. If the ratio is less than 1, it means that stockholders' equity is more than the fixed assets and the stockholders' equity is financing not only the fixed assets but also a part of the working capital.

Different industries have different norms. Generally, a ratio of 0.60 to 0.70 (or 60% to 70%, if expressed in percentage) is considered satisfactory for most of the industrial undertakings.

### 3.3. THE IMPACT OF FUNDING OPTIONS ON THE FINANCIAL STATEMENTS

#### 3.3.1. Equity financing

##### a. Impact of equity on Profitability

With equity financing, the SME issues shares to the equity investors in exchange for the cash paid in the company making them part of the SME ownership. There is no promise to repay the investment like in a loan arrangement, nor is there an interest component. The cash out flow in this case will be dividend in case they are paid. Therefore, equity financing has no effect on the firm's profitability; however, it dilutes the existing shareholders' holdings because the company's net income is divided among a larger number of shares.

In order for investors to agree to invest in the company, they expect to earn an acceptable return that justifies the risk of the investment. That return varies over time and across industries as investors compare the potential upside, the potential risks, and the risk-reward profile of investment opportunities other than the given company. If the company fails to meet these return expectations, investors can divest their ownership interest and move capital elsewhere, reducing the value of the company, and hampering future efforts to raise capital.

##### b. Impact of equity on the firm's Liquidity

Money received from issuing shares increases the SME's cash holding and funds available for growing the business or paying some of its debts. Equity is not paid back by the SME and as such, it improves the liquidity position in both the short-term and long-term since the SME receives cash to finance its operations without the challenge of having to repay the amount to the equity holders. This will help a firm in meeting its day-to-day as well as long-term obligations.

##### c. Impact of equity on the firm's Solvency

Equity improves the firm's solvency position since the funds available for settling total debts increases as earlier explained. Equity injection in the SME gives assurance to the creditors of the ability to meet its short-term and long-term debt obligations as and when the fall due.

### 3.3.2. Debt Financing

Debt financing decision is among the key financial decisions that are taken by firms since debt financing has an effect on the financial performance. Debt financing is a key source of capital in many growing firms since the SMEs often lack adequate internal financing and therefore have to rely on funding from external sources.

#### a. Impact of debt financing on Profitability

An SME obtaining debt finance will have to enter into an agreement to make regular payments to the debt finance providers. This payment will include both principal and interest amounts. Interest payments on debt reduces the net income hence affecting the profitability of the firm. This reduction in net income also represents a tax benefit through the lower taxable income. Increasing debt causes leverage ratios such as debt-to-equity and debt-to-total capital to rise.

#### b. Impact of debt financing on the firm's liquidity

Money received from debt acquisition increases the SME's liquidity and therefore its ability to meet its obligations due to the improved liquidity position. However, debt financing increases the liabilities on the balance sheet and can affect the long-term liquidity of the SME especially if it does not properly service the debt obligations. The SME can also get debt financing only to a certain point beyond which most financiers will avoid further financing its operations because of over indebtedness.

Lenders have no claim to a company's profits outside of the original financing agreement. The upside for lenders is capped from the onset of the transaction at the interest rate, but their downside is also mitigated through loan covenants, collateral requirements, and a senior position to be repaid should the company face bankruptcy.

#### c. Impact of debt financing on the firm's Solvency

If a firm raises funds through debt financing, the liabilities on the balance sheet increases, this liability is either long term or short term. This therefore increases the debt burden of the firm. If a company has a higher debt to equity ratio the firm is considered more risky to creditors and investors than companies with a lower ratio. Unlike equity financing, debt must be repaid to the lender. Since debt financing also requires debt servicing or regular interest payments, debt can be a far more expensive form of financing than equity financing. Companies leveraging large amounts of debt might not be able to make the payments.

### 3.4. COST OF FINANCING

#### 3.4.1. Cost of Equity

Cost of equity is the return that an investor requires for investing in a company, or the required rate of return that a company must receive on an investment or project. It answers the question of whether investing in equity is worth the risk. Firms often use it as a capital budgeting threshold for the required rate of return. A firm's cost of equity represents the compensation the market demands in exchange for owning the asset and bearing the risk of ownership. In finance, the cost of equity is the return a firm theoretically pays to its equity investors and it varies every year. The return the equity financiers earn is in the form of dividends payments and capital appreciation. The higher the dividends payment the more attractive the shares of the SME will be and thus the easier it will be to attract equity financing.

#### How to compute the cost of equity

Using the **capital asset pricing model formula**

$$\begin{aligned} \text{COST OF EQUITY} = & \\ & \text{RISK FREE RATE OF RETURN} \\ & + \\ & \text{B\^ET} \times (\text{MARKET RATE OF RETURN} - \text{RISK FREE OF RETURN}) \end{aligned}$$

Where  $\text{B\^e}$  is the sensitivity to movement in the relevant market.

Capital asset pricing model (CAPM):

$$ES = R_f + B_i (E[R_m] - R_f)$$

**Where:**

$ES$  is the expected rate on investment

$R_f$  is the expected risk-free return in that market

$B_i$  is the sensitivity of the investment compared to the general market

$(E[R_m - R_f])$  is the risk premium of market assets over risk free assets

Using the **Dividend capitalization model**:

Dividend capitalization model:

$$R_e = (D_1 / P_0) + g$$

**Where:**

**R<sub>e</sub>** is the expected rate on investment based on dividends

**D<sub>1</sub>** is the yearly dividend per share

**P<sub>0</sub>** is the current price of one share in a company's stock

**g** is the dividend growth rate

### 3.4.2. Cost of debt

A company's cost of debt is the interest rate a company pays on its debt obligations. The cost of debt is very useful in assessing a firm's credit situation, and when combined with the size of the debt, it can be a good indicator of overall financial health.

**How to compute the cost of debt**

$$\text{COST OF DEBT} = \text{INTEREST RATE} \times (1 - \text{TAX RATE})$$

Since firms can deduct the interest paid on business debt, the cost of debt is typically calculated after taxes.

### 3.4.3. Debt versus equity

When obtaining external financing, the issuance of debt is usually considered to be a cheaper source of financing than the issuance of equity. One reason is that debt has fixed interest payments, which the SME can properly plan to pay. In equity financing, however, there are claims on earnings. Net Income is a key line item, not only in the income statement, but in all three core financial statements. While it is arrived at through the income statement, the net profit is also used in both the balance sheet and the cash flow statement. The larger the ownership stake of a shareholder in the business, the greater the participation in the potential upside of those earnings.

#### 3.4.4. Capital Structure

“Capital structure refers to the mix of long-term sources of funds, such as, debentures, long-term debts, preference share capital and equity share capital including reserves and surplus.”—I. M. Pandey.

“Capital structure of a company refers to the make-up of its capitalisation and it includes all long-term capital resources viz., loans, reserves, shares and bonds.”—Gerstenberg.

“Capital structure is the combination of debt and equity securities that comprise a firm’s financing of its assets.”—John J. Hampton.

The capital structure is the particular combination of debt and equity used by a company to finance its assets and fund the overall operations and growth. Debt comes in the form of bond issues or loans, while equity may come in the form of common stock, preferred stock, or retained earnings.

$$\text{CAPITAL STRUCTURE} = \text{DO} + \text{TSE}$$

Where:

**DO** = debt obligations

**TSE** = total shareholders’ equity

#### Types of Capitalization Structures

There two types of capital structures that is Low leverage and high leverage. Firms can either issue either more debt or equity to fund its operations. By issuing equity, firms give up some ownership in the business by issuing share to the investors without the need to pay back investors; by issuing debt, companies increase their leverage by needing to pay back investors. A company’s debt-to-equity ratio is a measure of risk for investors.

Figure 8 - Low Leverage

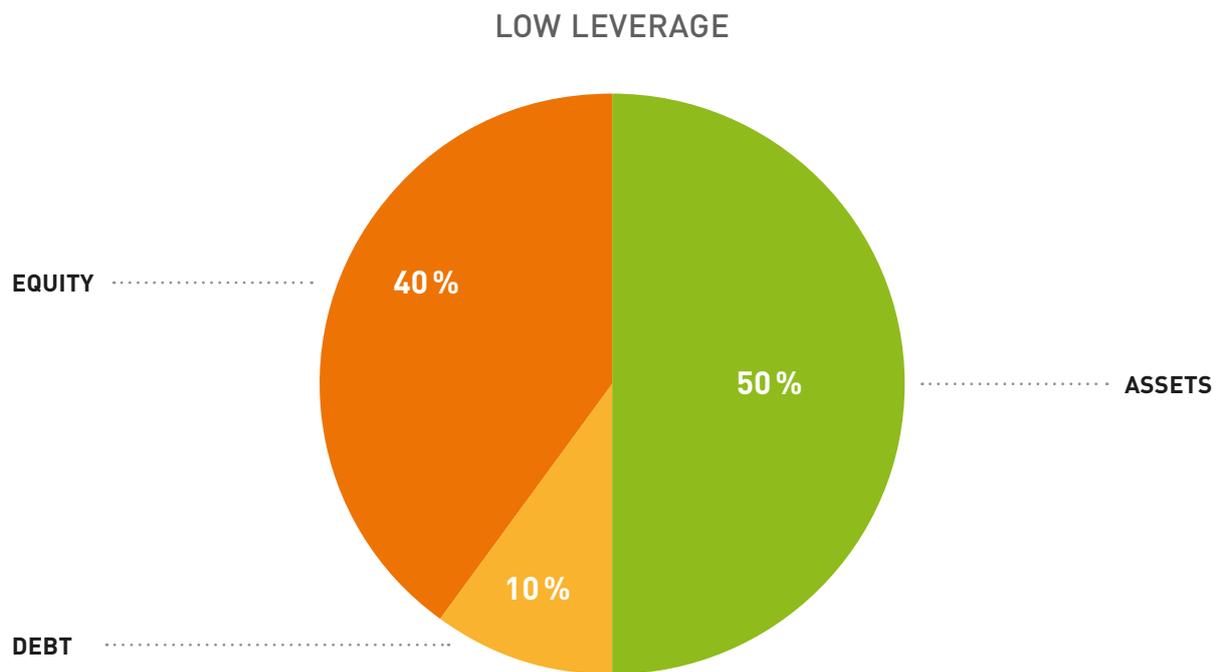
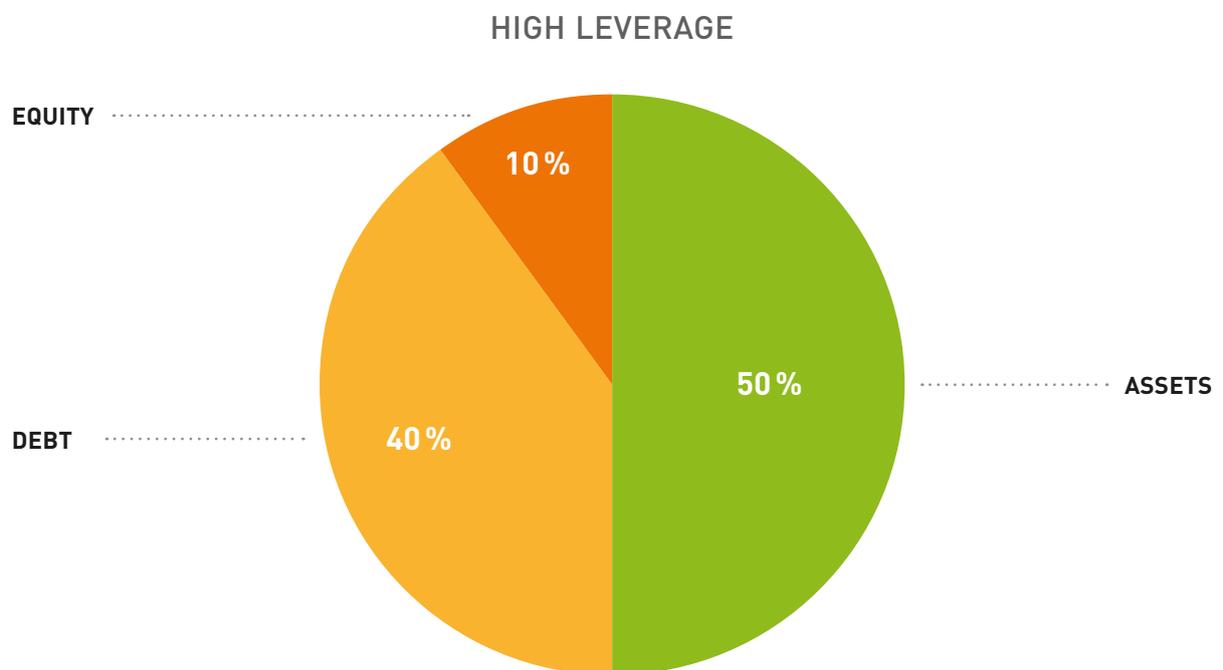


Figure 9 - High Leverage

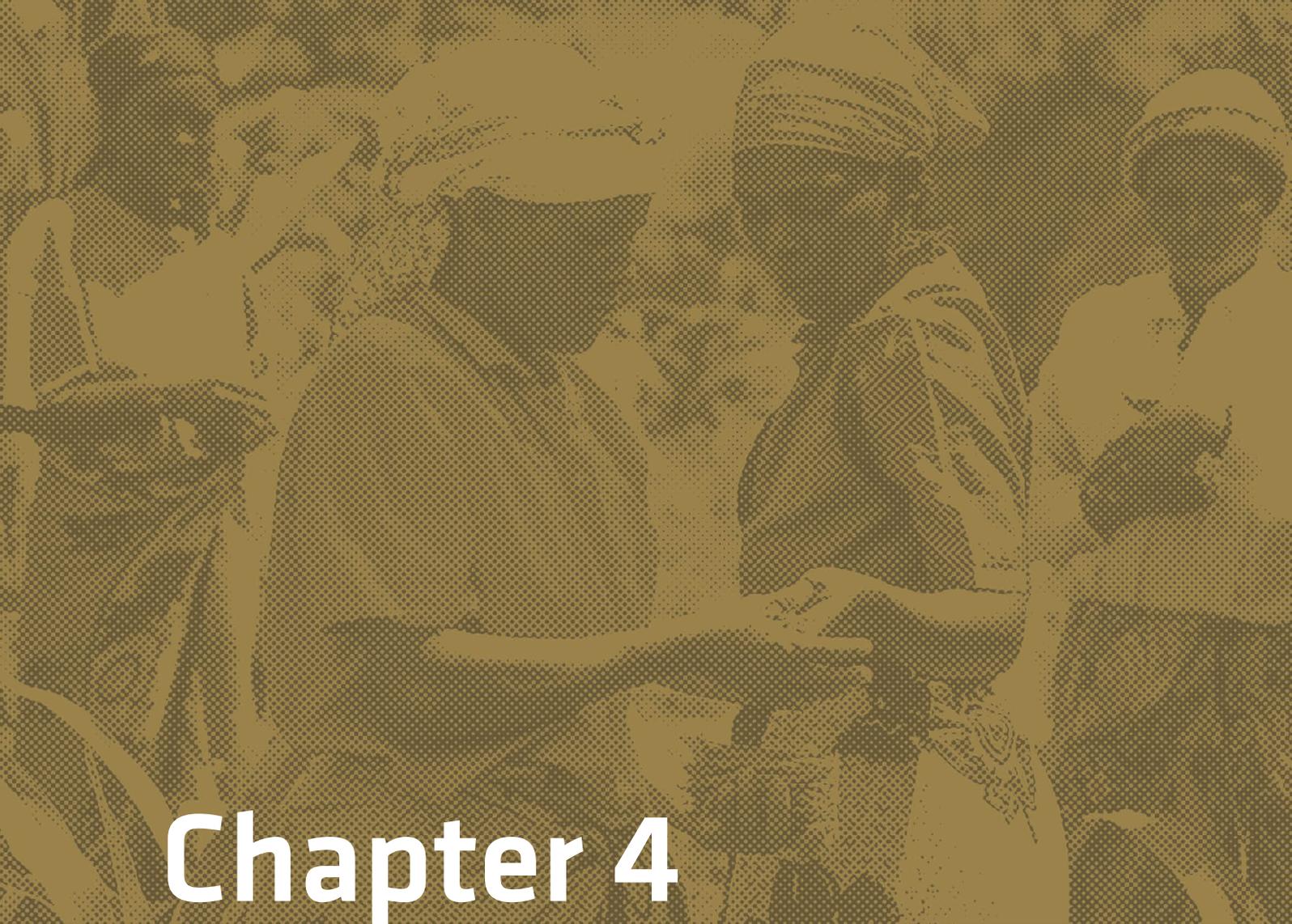


### Measures of Capital Structure

Firm that uses more debt than equity to finance its assets and fund-operating activities has a high leverage ratio and an aggressive capital structure. A company that pays for assets with more equity than debt has a low leverage ratio and a conservative capital structure.

There is no magical formula a company can achieve to establish a balanced capital structure therefore financial managers use the debt-to-equity (D/E) ratio to compare the capital structure. It is calculated by dividing total debt by total equity. Firms have learned to incorporate both debt and equity into their corporate strategies. At times, however, companies may rely too heavily on debt. Shareholders can monitor a firm's capital structure by tracking the D/E ratio and comparing it against the company's industry peers. All in all at the end of the day, each firm must carefully weigh the pros and cons of debt and equity in order to strike the perfect balance that works for their business.

It is the goal of a business management mainly through the financial manager to find the ideal mix of debt and equity, also referred to as the optimal capital structure, to finance their operations.



# Chapter 4

## Insurance and guarantee schemes

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## 4.1. INSURANCE SCHEMES

### 4.1.1. Definition of insurance

Insurance is a risk mitigating measure that seeks to protect a business from financial loss. It is a form of risk management, primarily used to hedge against the risk of a contingent or uncertain loss occurring leading to significant loss to the SMEs. Insurance is an arrangement by which an insurance company or the State undertakes to provide a guarantee of compensation for specified loss, damage, illness, or death in return for payment of a specified premium thereby providing protection against a possible eventuality.

The idea behind insurance schemes (private, public, or mutual insurance) is that of risk pooling. Risk pooling involves combining the risks faced by a large number of individuals or businesses that agree to contribute premiums (regular payments) to a common fund from which losses incurred by any individual/ business in the pool are covered.

As discussed in the earlier chapters, the SME will raise funds from equity and debt financiers who will be interested in the financial performance of the business. In the case of debt financing, the SME will need to make regular repayments and as such, it needs to mitigate any events that can result in poor financial performance. Insurance as a risk mitigating measures therefore becomes very important for the sustainability of its business operations.

### 4.1.2. Agricultural insurance

Agricultural insurance is a special line of insurance applied to individuals and firms engaging in agribusiness undertakings. Agricultural insurance seeks to mitigate losses in agricultural production and reducing the risks and uncertainties, crop failures associated with pests, diseases, and natural disasters amongst others. Owing to the specialised nature of agricultural insurance, the insurance companies often establish dedicated agribusiness units or outsource the underwriting to agencies that specialize in it. Agricultural insurance is not limited to crop insurance, it also applies to livestock, bloodstock, forestry, aquaculture, and greenhouses (source: Agricultural Insurance – by Ramiro Iturrioz).

Three main factors have contributed to the growth in agricultural insurance. These are:

- The increase in the underlying value of agricultural production in recent years, which has affected directly the agricultural insurance premium volume.
- The increase in value of agricultural assets, which has also increased the sensitivity of agricultural value chain participants to loss, consequently raising their demand for insurance.
- The development of new markets for agricultural insurance and the increase of public sector support in existing markets, which have contributed to an increase in the demand for agricultural insurance.

### 4.1.3. Agricultural risk exposures in the horticultural MSMEs

Two major risks are of concern to the agricultural sector:

- **Price risk** caused by potential volatility in prices, which is attributable to agriculture trade liberalization thus the prices are determined by the forces of demand and supply. This is the very way agricultural prices are determined in commodity markets in many global economies.
- **Production risks** related to weather conditions, pests, and diseases resulting into uncertainty about the levels of production that primary producers can achieve from their current activities. To be specific, in times of drought, production levels are low, and tend to rise during rainy seasons. In effect, production risk relates to the unit cost of production being higher than the realisable price and thereby resulting into activity loss.

Other risks affecting the horticultural farmers are as follows:

- **Human or personal risks** - The farm operator can get health problems or even die.
- **Institutional risks**- associated with policy changes, which intervene with agricultural issues and can have a negative impact on farm revenue.
- **Financial risk** - This depends on the possible increase of interest of a mortgage, insufficient liquidity, and loss of equity.
- **Asset risks**- risks such as theft, fire and other damage or loss of the agricultural asset.

Agricultural insurance schemes seek to cover the above risks thereby leading to the mitigation of financial loss by the horticultural MSMEs.

### 4.1.4. Agricultural insurance schemes

Considering the contribution of the agricultural sector in many developing countries, various public and private actors are developing initiatives that will shield SMEs and other agribusinesses from shocks and ensure business continuity.

**In Uganda**, the Government and the Uganda Insurers Association (UIA) established through a Public Private Partnership arrangement established the Uganda Agriculture Insurance Scheme (UAIS) for a period of 5 years effective July 2016. The general objective of the scheme is to ensure that Ugandan farmers are protected against the effects of agriculture risks (especially the production risks) by introducing measures, which shall ensure an indemnity sufficient to keep the farmer in business. The specific objectives of the Scheme are:

1. To make agriculture insurance affordable to farmers in Uganda
2. To increase access of farmers to credit by protecting agriculture loans disbursed by financial institutions from the effects of specified agriculture risks.

The UAIS provides premium subsidies to farmers who directly purchase agriculture insurance and those that access agriculture loans through financial institutions.

The premium subsidies depend on the scale of production with the small-scale farmers (earning a seasonal income of USD5,000 and 5 acres of production land) in particularly vulnerable areas receiving up to 80% premium subsidies while large-scale farmers receive 30% subsidies. To ensure the scheme is successful, the following key actors are playing the following roles:

1. The Government provided the premium subsidy funds, and in collaboration with other industry players, is also undertaking publicity, sensitization and training of farmers
2. The Insurance Regulatory Authority of Uganda (IRA) provides the regulatory oversight and quality control,
3. Bank of Uganda (BoU) manages the drawdown on UAIS Account, and
4. The UAIS Technical Working Committee monitors and evaluation implementation of the Scheme.

Insurance companies are now introducing and promoting agricultural insurance products targeting agribusinesses because of this intervention.

#### *4.1.4.1. Insurance schemes listed from the point of view of the risks covered*

##### **Single-risk insurance**

Single-risk insurance covers against one peril or risk, or even two but of a non-systemic nature (most often hail, or hail and fire). Single-risk insurance for hail is the most developed insurance with a long history and exists in many countries.

##### **Combined (peril) insurance**

Combined insurance covers a combination of risks as opposed to single-risk insurance. This insurance covers two or more risks associated with agricultural activities with the hail cover as the basic cover. In some countries, this type of insurance is referred to as multi-risk insurance.

##### **Yield insurance**

Yield insurance seeks to mitigate this risk exposure to occurrences such as drought and floods that will drastically affect yields. Premiums can be calculated from individual historic yield or from regional average yield when individual yield records are not available. Losses (and premiums) can be calculated either by quantifying the losses due to each individual risk separately, or as the difference between the guaranteed yield and the insured yield. This scheme of insurance is also called combined or multi-peril insurance.

### Price insurance

This covers an insured amount of production against price decreases below a certain threshold. Price should be transparent and, to avoid moral hazard and adverse selection problems, loss assessment should be based on a price that cannot be influenced by the insured (futures price, spot market price). If losses resulting from a loss of quality are excluded from cover, price insurance provides less protection for the farmer. However, including loss of quality may involve significant moral hazard problems, as quality depends to a certain extent on management decisions.

### Revenue insurance

Revenue insurance combines yield and price risks cover in a single insurance product. It can be product specific or whole farm. It has the potential advantage of being cheaper than insuring price and yield independently, as the risk of a bad outcome is smaller (low yields may be compensated by high prices and the contrary). In order to offer revenue insurance, an insurance company must be able to determine the joint probability distribution of price and yield risks.

### Whole-farm insurance

This type consists of a combination of guarantees for the different agricultural products on a farm. Depending on the cover of the guarantees, it can be whole-farm yield insurance or whole-farm revenue insurance.

### Income insurance

Income insurance covers the income, so it covers yield and price risks, as well as the costs of production. Usually this type of insurance is not product specific but covers whole-farm income. Income insurance is potentially more attractive to farmers than other forms of insurance (e.g. yield, price), because it deals with losses affecting farmers' welfare more directly.

### Index insurance

Index-based insurance products are an alternative form of insurance that make payments based not on measures of farm yields, but rather on indexes measured by government agencies or other third parties. Unlike most insurance where independent risk is a precondition, the precondition for index insurance to work best for the individual farmer is correlated risk.

Insurance works best when it is combined with other development and disaster management strategies. It works most effectively when it is addressing a clearly defined risk, such as drought, with other risks covered by other risk management options. It is almost always cheaper to reduce your risk (through irrigation or terracing or using improved seeds) than to transfer it by purchasing insurance.

Therefore, insurance works best when it addresses risks that cannot be reasonably predicted and reduced in other ways.

- **Area yield index insurance:** Indemnities are computed from the decrease of the average yield in an area, where the area is some unit of geographical aggregation larger than the farm.
- **Area revenue index insurance:** Indemnities are computed from the decrease on the product of the average yields and prices in an area.
- **Indirect index insurance:** Indirect index insurance reports to those indices of yields or vegetation computed from weather-based indices, satellite images and others.

Source: European Commission JRC Ispra - Institute for the Protection and Security of Citizens

#### 4.1.4.2. *Insurance schemes listed from the Product applications point of view*

##### **Crop Insurance**

This is the most developed form of agriculture insurance, and its risk management effect has proven to provide the best development options for the growth of the horticultural MSMEs. It covers farm crops against various perils such as losses due to adverse weather conditions (floods, hailstorms, drought etc.), barn fire, uncontrollable pests, theft etc. The sum insured can be the farmers input costs, output (expected yield) or both.

This policy covers all commercial field crops including wheat, maize, barley, rice, tea crop, coffee, sugar cane, tobacco, all horticultural crops, floriculture, and tree crops. Also covers farm assets and equipment including green houses and irrigation facilities.

The main feature with crop insurance is that as soon as the damage is done, the Insurance Company calculates the percentage of damage in the field to ascertain the compensation amount. The two policies available under crop insurance are:

- Multi-Perils Policy which covers the crop against the various perils.
- Index Based is a micro insurance product, which covers crops against identified weather perils that can be measured using a computerized weather station.

In Uganda, the Agricultural Business Initiative Group (social enterprise) formed a partnership with Lion Assurance Company Limited (an insurance company) to provide crop insurance to smallholder farmers in the drought prone district of Nakaseke in central Uganda. Farmers who had previously suffered losses are now compensated under the scheme. Mr. Mubarak Kigundu, a smallholder farmer in the district who suffered the loss of two acres of maize to the effects of drought and floods was compensated under the scheme. It cost him Ush250,000 (USD67) to subscribe to the scheme, which according to him was affordable and made economic sense. “The floods and drought are a common occurrence in the area, which had made farming a very risky venture.”

### Greenhouse insurance

Greenhouse farming is a very capital-intensive activity. Farmers growing crops in greenhouses often face challenges. Therefore, in insuring the infrastructure, insurers typically provide comprehensive cover for material damage to the structures, glass, equipment, stock, and the crops in the greenhouses. The infrastructure is insured against damage from storm water, fire, smoke, lightning, explosion, malicious acts, aircraft impact, and earthquake.



Greenhouse farmers will require insurance policy covers against Greenhouses and crops, Equipment breakdown, and Crop spoilage due to power or equipment failure.

The sum insured under policy Greenhouse insurance is determined on either an agreed value or production cost basis. Indemnities are calculated as a percentage of damage to both the structures and the contents. A deductible of 10% of the loss subject to a minimum of 1% of the sum insured is usually applied. Rates for greenhouse insurance vary from 0.3% to 0.7% of the total sum insured depending on the construction of the greenhouse.

### Agricultural reinsurance

Agriculture reinsurance covers farmers' production and financial risks as well as related shortfall risks of interconnected stakeholders, such as input suppliers or grain processors. Agriculture reinsurance is, in simple terms, insurance taken by insurers. Agriculture reinsurance covers the production and financial risks of agribusinesses.

The reinsurers that are involved in agricultural reinsurance assist insurance companies in providing advisory services in risk assessment, risk modelling, pricing, and risk structuring; as well as in the designing of loss adjustment and operational manuals, risk rating and risk accumulation control software, and in the awarding of insurance contracts.

#### 4.1.5. The role of public sector in agricultural insurance

The Agricultural sector employs the majority of the population in many ACP countries and as such, it is incumbent upon government to provide appropriate support to ensure inclusive economic growth. A key area of intervention is therefore agricultural insurance, for the growth of horticultural SMEs, among other prioritised agricultural actors. The market and regulatory impediments are often invoked to justify government intervention in the provision of agricultural insurance, to help farmers complement their risk management activities.

**Specifically, the factors that would justify government intervention are as below.**

- **Systemic risk:** A large number of economic units such as farmers and the interconnected stakeholders are affected by the systemic risks. This can generate major losses in the portfolio of agricultural insurers, affecting their financial solvency, and hence the inability to indemnify their clients. Government intervention is therefore justifiable because no private insurer or pool of reinsurer has the capacity to cover such a large liability.

A key example is the Covid-19. The coronavirus Covid-19 pandemic of 2019-20 resulted in significant disruption and threatened losses in the portfolio of agricultural insurers, therefore prompting government intervention.

- **Lack of insurance culture:** The demand for agricultural insurance in many developing countries is low because of the limited understanding of its benefits. Insurance is therefore seen as non-viable because premiums are paid every year but indemnities are paid much less frequently (only when risk materializes). The government may therefore play a role of providing farmer awareness and education programs.
- **Regulatory impediments:** The regulatory framework governing agricultural insurance markets are underdeveloped. This has affected the penetration and development of the agricultural insurance products like the index-based crop insurance and parametric (weather base) crop insurance. It is therefore imperative that the government creates an enabling regulatory framework.
- **Low risk awareness:** Farmers tend to be very unaware of their production risks, and hence underestimate the likelihood or severity of catastrophic events. Government intervention is therefore important in providing farmer awareness and education programs, in supporting the marketing and promotion programs of the insurance sector.
- **Post-disaster assistance programs:** The government, through the Ministry of disaster and preparedness, may alleviate the effects of crop failure by providing direct compensation as a relief measure.

#### 4.1.6. Example/Case Study 1

Illustration of using insurance as the best option to mitigate the financial risks exposures in the development and growth of horticultural SMEs, while minimising their overall cost of capital.

#### **A study of crop insurances from the perspective of small farmers in India ("Coping with catastrophes")**

Small farmers in India are one of the hardest hit groups in the world by the negative consequences of a changing climate. Micro insurances have become more popular as risk management instrument and are offered to marginalised communities to build resilience at relatively affordable rates. The country has the most experience in insurance, and has gone as far as including it in its national policies. With over three quarters of its farming population cultivating on less than 2 hectares of land (and thus falling in the category of small farmers) and being home to a wide range of climatic risks and conditions, the country is incredibly interesting and relevant to the study regarding risk management for climate change in general and crop insurance in particular. However, its crop insurances also face several challenges (such as basis risk, delays in payments and lack of awareness among farmers).

#### **Risk management strategies applied by small farmers**

Based on talking to farmers about their risk management strategies, both informal and formal strategies are distinguished.

#### **Informal risk management strategies**

Various informal risk management strategies are applied, and these include:

1. **Diversification of income** - In addition to their main crop cultivation, majority of the farmers supplement their crop income with livestock rearing, incense stick making, bidis (cigarettes) making and matchbox making, alongside crop cultivation.
2. **Crop diversification** - Farmers have diversified their arable land to grow other crops alongside their main crop (e.g. ragi, horse gram, cotton, paddy, horticulture, mushrooms, tomatoes, brinjal, grapes, garden bean).
3. **Diversification towards plantation crops** - Some relatively bigger farmers have diversified their arable land towards plantation crops (such as teak wood, mango, banana, coconut).
4. **Inter-cropping** - Farmers are intercropping groundnut cultivation with other crops (e.g. green gram, black gram, red gram, fodder sorghum, little millet, field bean).
5. **Adoption of advanced cropping technique** - Some of the advanced cropping techniques used by farmers are: compost heap, gypsum and complex (if there is moisture in the soil) and potassium.
6. **Groundwater irrigation** - Although majority of small farmers depend on rain for crop production, some farmers use and have access to tube wells and bore wells to irrigate their land.

### Formal risk management strategies

Government action plays an important role in agricultural risk management. In the study area where farmers were asked about their risk management strategies, small farmers have access to services provided by a local NGO (DHAN Foundation). The formal risk management strategies farmers apply include:

1. **Diversification of income** - Farmers are supplementing their income by taking part in a government provided rural employment scheme.
2. **Supply of inputs** - The local NGO provides to its members quality red gram and groundnut seeds at appropriate time as well as gypsum at market rate. Supply of quality agricultural inputs help reduce risk of procuring fake or low-quality inputs from the market.
3. **Risk pooling** - The government of India insures groundnut farmers by its NAIS scheme while DHAN Foundation pools risks by insuring their members through its mutual crop insurance scheme.
4. **Infrastructure & advanced cropping techniques** - The local NGO promotes tank fed irrigation, and land levelling and silt application amongst its farmers as advanced cropping techniques.
5. **Other strategies** - other formal strategies include government provided social assistance schemes (e.g. rice, education, health care). In addition, farmers can access credit from government or DHAN Foundation.

### Current crop insurance in India

This is the most developed form of agriculture insurance in India, and its risk management effect has proven to provide the best development options for the growth of the horticultural MSMEs.

Two main existing agricultural insurance types in India that have been and analysed are the weather index insurance and area-yield insurance.

**Weather index insurance** - This is a relatively new tool that farmers can use to help manage risk. It pays out based on an index, such as rainfall, measured at a local weather station or by satellite, rather than based on a consequence of weather, such as a farmer's crop yield.

**Area-yield insurance** - With this type of insurance, the indemnity is based on the realized (harvested) average yield of an area such as a county or district.

**There are several challenges that both types of insurance are facing:**

- The main concern was whether the weather insurance and area yield insurance are basis risk. This occurs when the outcome for the insurance is not in line with the outcome for the farmer: a farmer experiences a loss without pay-out or vice versa. For weather index insurance this is mainly due to the poor density of weather stations and the lack of real time weather data. For area yield insurance this could be ascribed to the inefficiency of crop yield estimation, which implies that the area estimation differs from the actual yield of the individual farmer.

- Furthermore, both types of insurance are considered to face delays in payment. This could be due to the differences in availability of weather data and infrastructure in the different areas under study.
- The main difference in costs of the two insurance models is that weather index insurance needs relatively high start-up costs (i.e. weather stations), whereas yield area insurance does not face a high initial investment, but faces high administrative and transaction costs throughout the provision of the insurance.
- Another difference between the two types of crop insurance is that for area yield insurance information asymmetry problems (moral hazard and adverse selection) are considered to be a major obstacle while one main advantage of weather index insurance is that these types of problems are considered to be reduced.

**Table 6** - Challenges, opportunities and scope for improvement for weather index and area yield insurance

	WEATHER INDEX INSURANCE	AREA YIELD INSURANCE
<b>MAIN CHALLENGES</b>	Basis risk	Basis risk
	Infrastructure: lack of real time weather data	Inefficiency in crop yield estimation
	Delay in payment indemnities	Delay in settlement indemnities
	High start-up costs	Large manpower & transaction costs
	Reliance on historical data	Moral hazard & adverse selection
	Complex contract index design	Limited coverage (only production risks are covered)
<b>MAIN OPPORTUNITIES</b>	Lower moral hazard & adverse selection	Available for all crops where yield data is Available
	Quick claim settlement	Combines individual and area approach
	Low transaction costs (no field visits or yield estimation)	Relatively low start-up costs
<b>SCOPE FOR IMPROVEMENT</b>	Investment in weather stations	Simplified procedure
	Raising awareness among farmers	Wide publicity for creating awareness
	Wider coverage (pre-sowing & post-harvest)	
	Reduce insurance unit	
	Combining different insurance products	
Risk packaging; integrated risk management strategy (insurance as part of broader strategy)		

One of the main problems with both insurance types (i.e. weather insurance and area yield insurance) is the lack of awareness among farmers. Lack of understanding of the concept of insurance is one of the main reasons for the low uptake among non-borrowing farmers and also makes farmer's preference go out to cash reserves and savings when compared to insurance, as they often feel this is the safer choice.

One option of creating awareness among farmers is by lowering the insurance unit to a level closer to the farmer and using insurance agents at the village level. It is also believed that self-help groups can play an important role in provision of crop insurances and raising awareness among farmers.

The majority of insured farmers acquire an agricultural loan to which the insurance is linked. This implies that most of the insured farmers are involuntarily insured, and there is still a large group of farmers that are not aware of insurance (i.e. non-loanee farmers). Crop insurances and risk management for small farmers in India should be further improved which is helpful in making these farmers more resilient against the negative effects of climate change.

Source: Master thesis Sustainable Development, track International Development (GE04-2321,30 ECTS)

## 4.2. GUARANTEE SCHEMES

### 4.2.1. Credit guarantee schemes: definition

Credit Guarantee Schemes (CGSs) provide guarantees on loans to borrowers by covering a share of the default risk of the loan. In case of default by the borrower, the lender recovers the value of the guarantee. Guarantees are usually provided against a fee, covered by either the borrower, the lender or both. In case of a default, the lender usually is obliged to proceed with the collection of the loan and share the proceeds with the guarantor. Credit guarantees allow the partial transfer of credit risk stemming from a loan or a portfolio of loans. In this respect, they show similarity to credit insurance products and credit default swaps.

### 4.2.2. Purpose of guarantee schemes

The principal objective of guarantee schemes is to cushion the risk of lending to borrowers that would ordinarily not meet the lenders' requirements especially collateral, record of accomplishment and managerial capacity. In agriculture, majority of smallholder farmers and MSMEs chronically lack collateral such as titled properties that is demanded by lenders. They also lack proper records and financial statements that demonstrate clear record of accomplishment to enable the assessment of credit by the lenders. This situation severely constrains access to credit (a key growth factor for farms and firms) by these actors and is a documented reason for the low levels of credit to the sector granted by financial institutions. Thus, the guarantee schemes are intended to incentivize lenders to extend credit to prioritised sectors or targeted segments of the population by addressing their inherent credit access barriers.

The design of such programmes needs to strike a difficult balance between responding promptly to the pandemic and maintaining a sufficient level of prudence. Key features of a sample of programmes (e.g. target beneficiaries, coverage of the guarantee, loan terms, length of the programme) reflect this tension. Incentives have been created for the banks to join these programmes by exploiting flexibility in existing prudential requirements, while the central bank is set to provide liquidity support.

### 4.2.3. Types of guarantee schemes and how they operate

There are four major types of guarantee funds, identified as public guarantee schemes, corporate funds, international schemes and mutual guarantee associations.

Table 7 - Examples of Guarantee schemes operated in Uganda

CREDIT GUARANTEE SCHEMES	SOURCE OF FUNDING
Rehabilitation of Productive Enterprises (RPE)	USAID/ Government of Uganda (GOU)
Development Finance Fund (DFF)	Bank of Uganda (BOU) & Commercial banks
Apex I, II, III & IV	EIB (GOU)
Investment Term Credit Refinance Fund (ITCRF)	World Bank (GOU)
Export Refinance Scheme (ERS)	BOU
Cotton Sub-Sector Development Project (CSDP)	World Bank/IFAD
Export Promotion Fund (EPF)	GOU
Export Credit Guarantee Scheme (ECGS)	BOU /USAID (GOU)
Energy for Rural Transformation Refinance Fund (ERTRF)	World Bank (GOU)
Distressed Flower Project Fund (DFPF)	GOU

Source: Bank of Uganda (BOU)

#### Public Guarantee Schemes

Public guarantee schemes are established by public policy. They usually involve State subsidies, especially initially. Typically, they are managed by a private organisation or an administrative unit of the government. An advantage of this system is that, in case of loan default, the guarantee is paid out directly from the government budget. This gives such a scheme higher credibility within the banking sector. These are normally established by the Government to promote the establishment and development of small business units. They guarantee both long-term and short-term loans, in collaboration with banks. The scheme operates in such a way that all forms of support are provided on the basis of a public invitation to lenders to participate in the programme. Firstly, a loan must be accepted by the bank. Then the board of directors, which consists of representatives from banks and government, takes the final decision on which applications to guarantee under the fund.

#### Corporate Guarantee Schemes

Corporate guarantee schemes are generally funded and operated by the private sector, e.g. banks and chambers of commerce. Corporate guarantee schemes have the advantage of being managed by experienced corporate leaders, and generally benefit from the direct involvement of the banking sector.

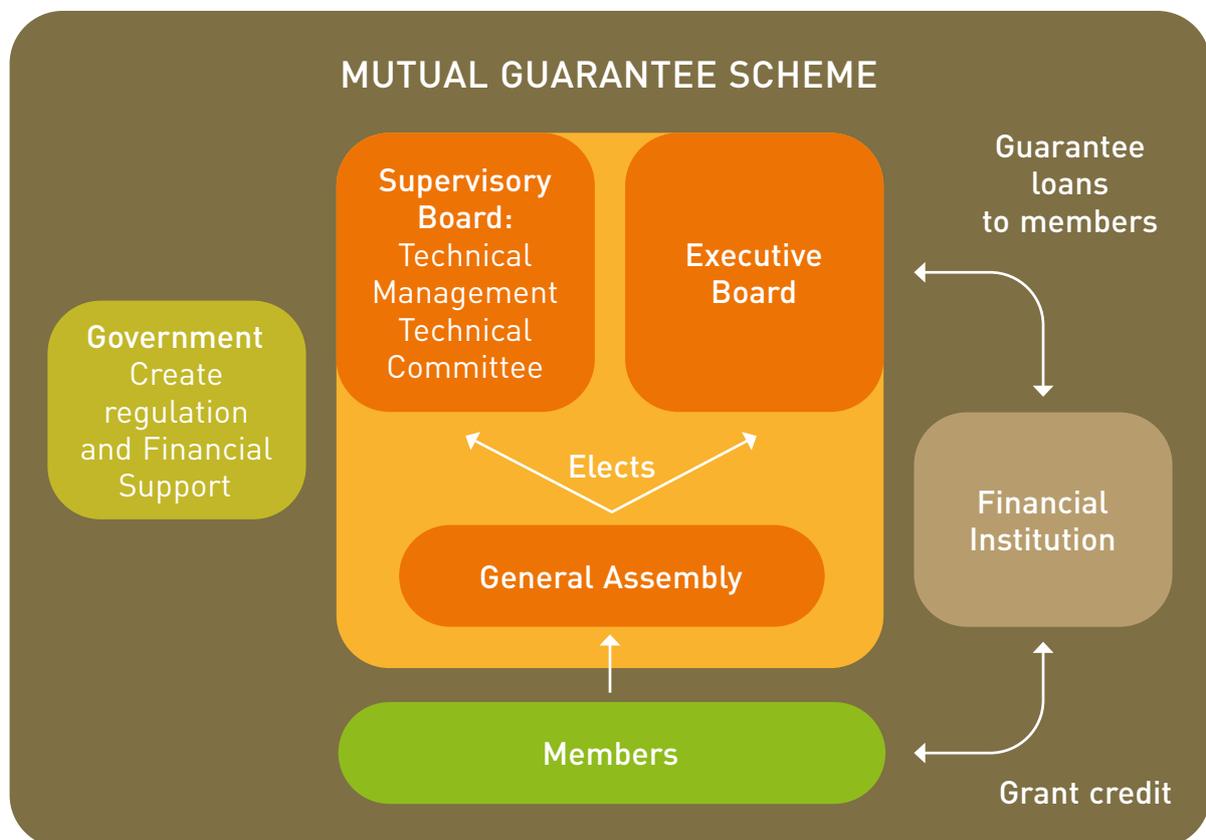
### International Schemes

International schemes are typically bilateral or multilateral government or NGO initiatives, e.g. the ILO, UNIDO or the European Investment Fund. Often, international schemes combine both a guarantee fund with technical assistance to firms.

### Mutual Guarantee Schemes

Mutual guarantee schemes are also sometimes known as mutual guarantee associations, societies or funds. They are private and independent organisations formed and managed by borrowers with limited access to bank loans. Although they are largely funded from membership fees, etc., in many instances, they operate with some form of government support. Mutual guarantee schemes benefit from the active involvement and experience of their members.

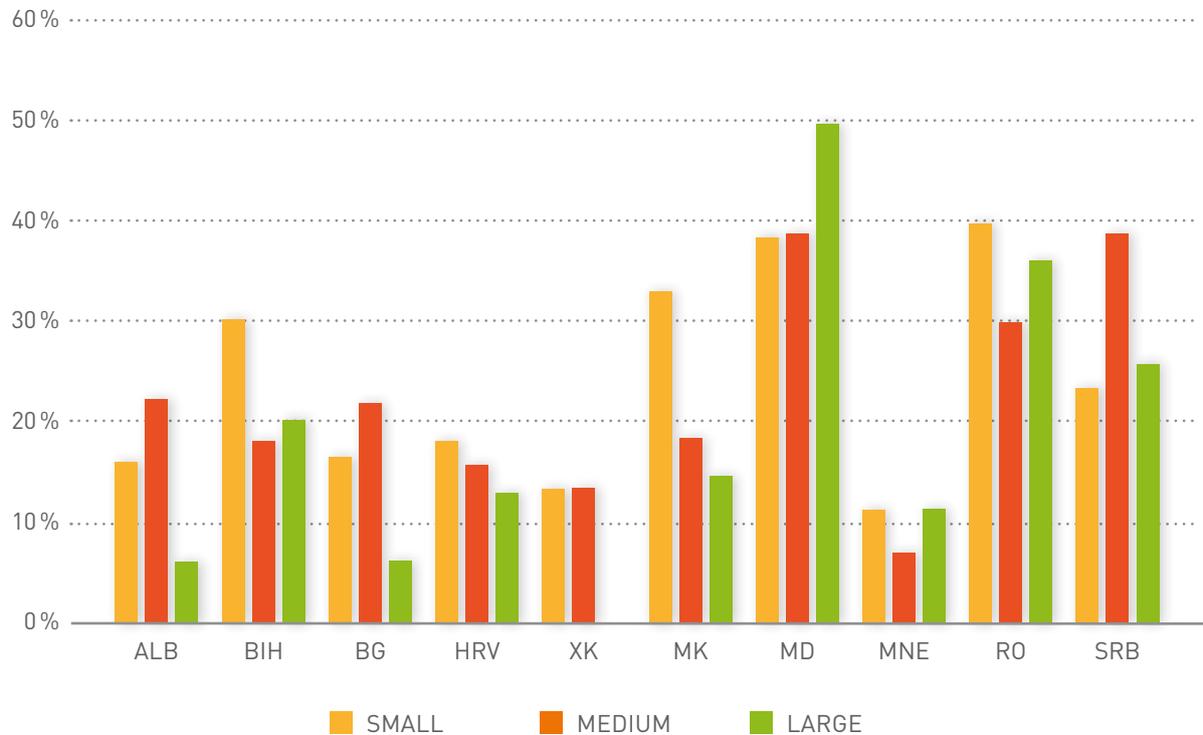
Figure 10 - Structure of a mutual guarantee scheme



Source: Green. A, 2003

#### 4.2.4. The Role of Credit Guarantee Schemes in the Development of Horticultural MSMEs

Figure 11 - Percentage of firms identifying access to finance as a major constraint



Source: BEEPS

The Horticultural MSMEs have a challenging task of accessing finance. This is mainly attributed to the high administrative costs of small-scale lending, the underdeveloped financial system, the high risk perception attributed to small enterprises, asymmetric information and lack of collateral security. In order to lessen the financing constraints governments, NGOs and the private sector have developed initiatives such as Credit Guarantee Schemes (CGSs). CGSs provide guarantees to firms that do not have access to credit by covering a share of the default risk of the loan. In case of default, the lender recovers the value of the guarantee.

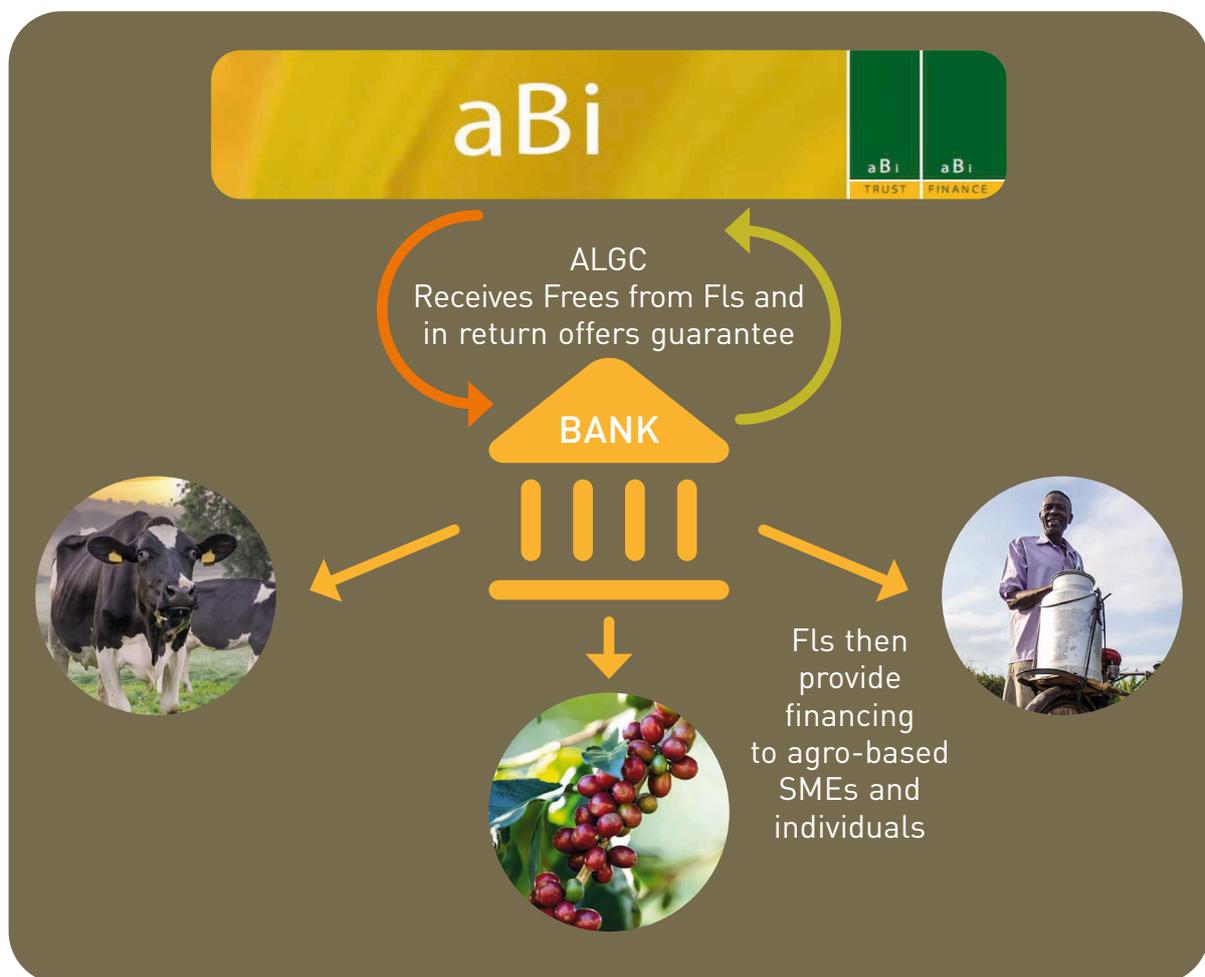
Therefore, access to finance by obtaining loans from financial institutions backed by credit guarantees is an important step in filling the financing gap of the Horticultural MSMEs, for their funding requirements for both capital expenditure items (CAPEX) and operational expenditure items (OPEX).

Financial institutions are usually reluctant to extend uncollateralised credit to SMEs, even at high interest rates, in part because of the high costs of obtaining adequate information on the creditworthiness of the typical SMEs. Even if it were collateralized credit, many of these firms do not have the necessary amount and type of assets that could serve as collateral for the loan. As a result, many SMEs with economically viable projects find it very difficult to obtain the necessary financing from the regular system of financial intermediation. Therefore, a sound credit guarantee scheme can

be an important step in filling the financing gap of the firm. The following example demonstrates the role of Credit Guarantee Schemes in improving access to credit for the development of Horticultural SMEs.

The Uganda Agency for Development Limited (UGAFODE) has specially tailored agricultural loan products, designed to finance active rural farmers and SMEs in crop production. The minimum loan amount is Ushs 100,000 (USD27) with subsidized interest rate of 25% p.a. The diagram below is a demonstration of aBi Finance's supporting process, through promotion and provision of credit facilities to agricultural based small and medium sized enterprises by availing Guarantee schemes and Lines of Credit to financial institutions for on lending to Agribusiness Enterprises. UGAFODE has partnered with aBi Finance in this endeavour.

Figure 12 - Line of Credit and Guarantee Programme



Source: aBi Finance

**Overcoming information asymmetries** - Information asymmetry or irregularity is a core reason commercial banks are generally reluctant to provide loans to SMEs. In most instances, SMEs are unable to provide information on their creditworthiness as they oftentimes lack appropriate accounting records, audited financial statements, and collateral. This leads to uncertainty on their expected rates of return and their integrity to borrow. Gathering such information on MSMEs can be challenging and costly. MSMEs that would benefit from lending by the commercial banks would therefore be carefully selected basing on the firm-size and available collateral. As a consequence, profitable firms that don't qualify may be unable to obtain financing, resulting in a suboptimal allocation of credit. CGSs can help financial institutions overcome information asymmetries by aiding accurate identification of lending risk and improving banks' ability to make appropriate lending decisions that may be enabled by the lending through CGS-backed risk cushion. This would therefore be an important step in filling the financing gap of the Horticultural SMEs.

**Diversifying or transferring risk** - Commercial banks often have a difficult time assessing smaller firm risk due to a lack of information. Moreover, MSMEs are more vulnerable in the wake of harsh economic conditions, and their mortality rates are relatively high. Horticultural MSMEs that deal in growing of flowers, fruits and vegetables are generally affected by climatic changes. The situation is likely compounded by weak creditor and property rights, the informal economy and non-existent collateral. Thus, lending to such firms may carry higher risks.

CGSs can be a mechanism of risk transfer and diversification. By covering part of the default risk, a lender's risk is lowered – guarantees secure repayment of all or part of the loan in case of default. In essence, CGSs absorb an important share of borrower risk. CGSs may also compensate for factors such as insufficient collateral and weak creditor rights, thus making it an important step in filling the financing gap of the Horticultural MSMEs.

**Reducing collateral requirements** - Credit guarantee schemes are designed to diminish the risk associated with lending to SMEs. Banks' lending decisions tend to be based on the amount/value of collateral available. Collateral reduces lending risk and is a key financial institutions regulatory requirement. Arguably, a firm that is willing to offer a higher level of collateral, particularly personal collateral such as a house, has a higher intention of repaying the underlying loan. Additionally, collateral provides insurance to a bank – if the firm defaults on its loan, the bank has recourse to the collateral used to recover the loan. However, many firms do not possess enough assets to cover the collateral requirements of banks. Thus, deficient collateral is one of the main reasons small firms are unable to obtain credit. CGSs can alleviate the high collateral requirements demanded by banks. Thus, when the MSME provides a guarantee or the bank has access to some form of loan guarantee, the bank can grant the loan (in some cases at a lower interest rate), hence allowing the firm with insufficient collateral to access the lending market.

Thus the above parameters are aimed at addressing the bankability gap that arise from the mismatch between the credit access requirements of the financial institutions and viability status of the agricultural borrowers. The bankability criteria of financial institutions raise the access bar to higher levels than many horticultural MSMEs can realistically meet.

The companies that benefit from credit guaranteed loans have got to perform certain activities that qualify them as direct beneficiaries, as demonstrated in the examples below.

**Table 8** - Examples of Agribusiness Enterprises qualifying for aBi Finance's support

Type of Agribusiness	Examples / other comments
Individual Farmers	Primary producers - crop production
Farmers Associations or groups	Registered as a legal entity
Traders in agricultural products	e.g. horticulture, maize, coffee,
Transporters of agricultural products	e.g. grains
Dealers in agricultural inputs	e.g. seed, fertilizer, pesticides, planting material
Suppliers of agricultural equipment	Dealer or producer
Processors of agricultural products	e.g. grain mills
Service providers	e.g. extension work, repair of farm equipment, MFIs, Training services

#### 4.2.5. Challenges faced by Credit Guarantee Schemes in the Development of Horticultural MSMEs

The development of Credit Guarantee Schemes is constrained by some factors, and this limits their ability to provide benefits in the development of Horticultural MSMEs. The key constraints are outlined below:

##### a. Financial sustainability

Financial assistance, especially initially, is usually required to start a CGS. Credit guarantee schemes are time and resource intensive. Although credit guarantee schemes can stand on their own, without outside assistance based on the registration fees raised, this should however be carefully done to ensure that the fees are not too high to discourage borrowers from taking advantage of the CGS, but also not too low to prevent the CGS from covering its costs.

Therefore, financial instability may be a major constraint to the development of credit guarantees schemes, which may significantly affect the development of Horticultural MSMEs.

For instance, the financial institutions implementing aBi Finance's programs in Uganda have raised serious concerns, as the loan guarantee schemes under their management have often exhausted their guarantee limits, which causes delays in their loan disbursements as they use loan repayments to get around the utilization limits.

### **b. Regulatory and institutional framework**

Many guarantee funds, especially mutual guarantee funds, have not had tremendous success in their development, due to the existence of a weak legal framework and a non-competitive banking sector. For instance, there has been an attempt by many developing economies to create mutual guarantee schemes; however, these have been constrained by the lack of minimum capital requirements, which is too high.

The primary role of the public sector in facilitating credit guarantee schemes is to create the appropriate regulatory environment.

Donors have also had an active role in funding guarantee schemes. Additionally, donors bring credibility to the scheme. Donors should, naturally, carefully examine guarantee schemes they are looking to fund. Donors should also clearly define the responsibility of each actor and determine payment conditions based on key milestones and outputs to encourage adequate risk allocation.

Without the active involvement of the private sector, guarantee schemes are unlikely to succeed. Private sector funds are particularly important to ensure a fund's sustainability. For instance, banks and other private institutions have a direct stake in a fund's capitalisation. However, private funds reduce the guarantee fund's dependency on public funds, which can sometimes be unstable.

As an example, some Financial institutions that implement aBi Finance's programs in Uganda are required to periodically report to aBi Finance. Some of them find it a challenge to ensure that data sent is accurate and timely, requiring back and forth communication and delays in reporting.

### **c. Risk management**

In order to reduce the exposure of schemes to default and diversify risk, funds might use risk management mechanisms such as reinsurance, loan sales or portfolio securitisations. However, these mechanisms require relatively well-developed local capital and financial markets.

The development of Credit Guarantee Schemes in developing economies has proven to be difficult due to inadequate financial development and legal conditions, and consequently limiting their ability to effect the development of Horticultural MSMEs.

### **d. Fees**

The fees charged by CGSs are also an important factor to consider. The fees impact not only the incentives lenders and borrowers have in participating in the programme, but also are a key factor in determining the financial sustainability of the fund. Fees must be high enough to cover administrative costs, but low enough to ensure adequate lender and borrower participation.

### **e. Types of loans**

Another important element that policy makers must take into account is whether a scheme should provide individual or portfolio loans. A loan-level or individual model applies when applications are approved by the guarantor (case for portable guarantees). In this case, there is a direct link between the borrowers and the lenders

since the application assessment is done on case-by-case basis. This allows for a more careful risk management and likely reduces the probability of moral hazard. Such a scenario probably results in a higher quality loan portfolio. However, this method can also be more costly for the fund to manage as well as failing to match the timing dimension that is a critical factor in agricultural ventures, particularly if the objective of the scheme is to increase guarantee and credit volume, the portfolio model might be a better approach.

Deciding on the types of loans to provide is a big challenge to the Schemes as making a wrong selection may constrain the development of the fund.

#### **f. Defaults**

The default rate is another important factor in the development of a Credit Guarantee Scheme.

The default rate is an important indication of a scheme's sustainability. When applications are appropriately assessed and monitored, an adequate default rate is possible and this should be between 2 and 3 percent. A higher default rate for example 5 percent is very dangerous to the scheme and should be avoided.

#### **4.2.6. What horticultural MSMEs need to do?**

- a. Identify what guarantee schemes are accessible (nationally, regionally and/or internationally) and their eligibility requirements for borrowers
- b. Identify the participating or eligible financial institutions in the specific guarantee schemes that are relevant for horticultural MSME activities
- c. Prepare and actively push their loan applications, without much fear about their unacceptability on the conventional requirements basis
- d. Seek for loan guarantee support where necessary, as in the case of portable guarantees
- e. Do what is in their capacity to repay the loans (even when guaranteed) to cultivate a good understanding with their lenders as well as helping to build the capacity of the lenders to reduce the information asymmetry of MSME borrowers that should elevate the bankability of these enterprises.
- f. Once they access credit, try to enhance their bankability status by addressing the key access requirements such as financial records, stepping up the management capacities, building the collateral base, etc.

#### **4.2.7. Examples/Case Studies of Credit Guarantee Schemes**

The following examples illustrate how guarantee schemes have become the best option to mitigate the financial risks exposures in the development and growth of horticultural MSMEs, while minimising their overall cost of capital.

### Example 1

Uganda Agency for Development Limited (UGAFODE) has specially tailored agricultural loan products, designed to finance active rural farmers and SMEs in crop production. The minimum loan amount is Ush100,000 (USD27) with subsidized interest rate of 25% p.a. compared to other products with average rates of 30% p.a. UGAFODE only operates the agricultural loan products programme with aBi Finance's support. aBi Finance has in this case acted as a guarantor for the majority of smallholder farmers and MSMEs who lack collateral such as titled properties that is demanded by lenders.

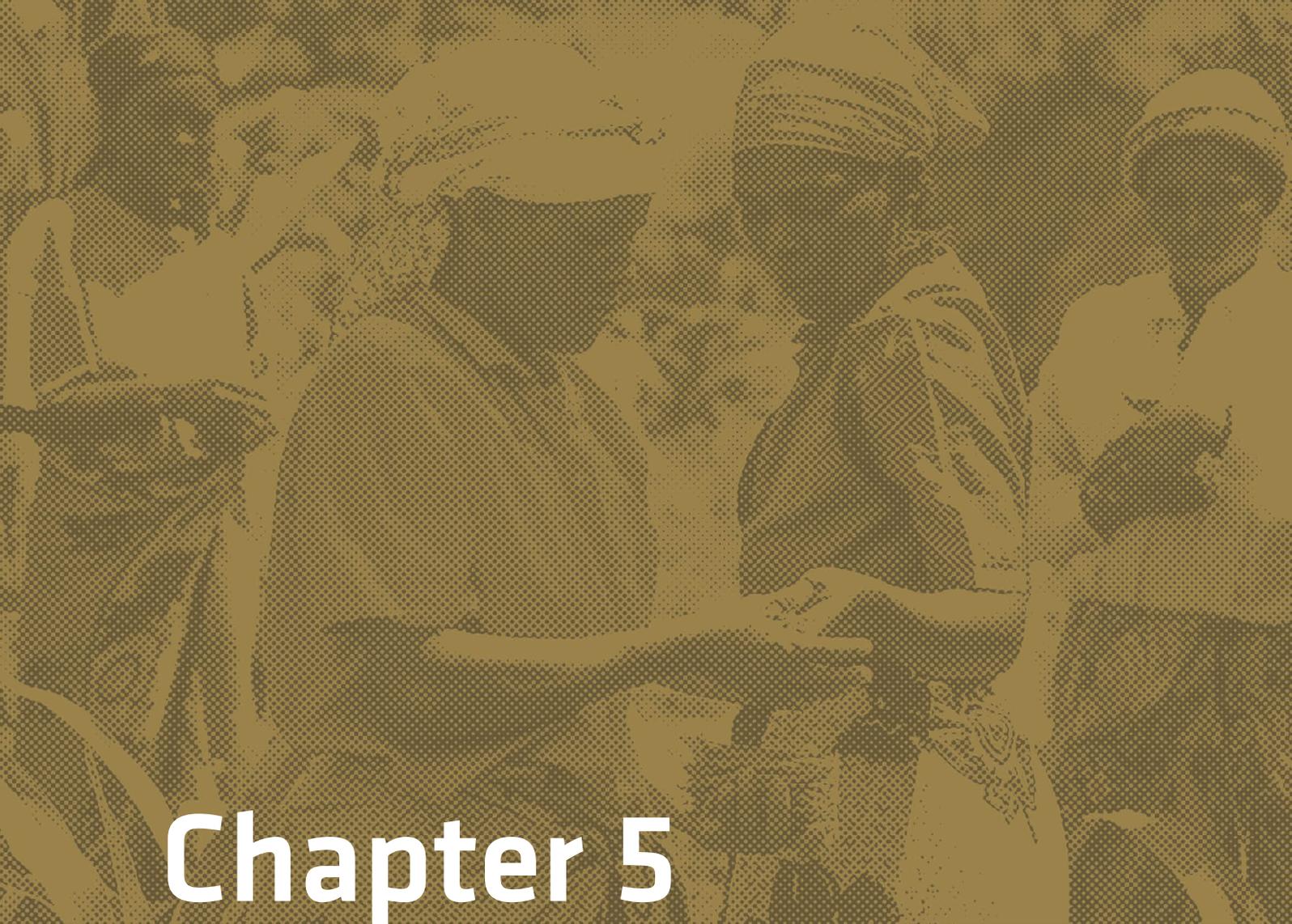
The aBi Finance supported loans account for about 20% of the total agriculture loan portfolio. Agriculture lending has been significant in the western region branches of UGAFODE, and the agriculture loan portfolio has increased by close to 700% from Ush. 900m in 2009 to over Ush6.9bn in 2013. UGAFODE provides flexible financing terms to its clients in the agricultural sector. For loan advances below Ush2m, UGAFODE can accept land sales agreements. Inherited land can be used with consent from the local authorities and family members. In case of loan default and need for loan recovery, the UGAFODE encourages other family members to buy the said land especially when they are co-guarantors. Farmers are also encouraged to form groups to co-guarantee each other.

UGAFODE also structures its loan repayments on a selective basis, depending on the respective farmers' cash-flow requirements and purpose of the loan, but agriculture lending is predominantly short-term (loan tenure of 12 months and below). There are 3 major repayment plans monthly, quarterly and termly (3 times a year). Despite the seven-fold increase in the agriculture loan portfolio cited earlier, the portfolio risk has remained low, with PAR standing at 3.5% (compared to 6% of the overall portfolio), which is a testimony of low risk and prudent credit appraisal process. However, threats and risk associated with agricultural production mainly due to unpredictable weather patterns has continued to hurt farmers especially in the absence of affordable crop insurance policies.

### Example 2

FINCA Uganda operates only the Loan Guarantee Scheme of aBi Finance, and has a portfolio guarantee limit of Ush4bn. FINCA has witnessed rapid growth in its agriculture portfolio, which has more than doubled from Ush6.1 billion (USD1.6 million) in 2010 to Ush14 billion (USD3.7 million) as at end of 2013. However, the sectors share of the total portfolio increased only marginally during this period from 21% to 23%. FINCA was originally not keen on lending to agriculture due to the perceived high risk; however, support from aBi Finance enabled FINCA to expand lending to agriculture. FINCA loan tenures are tailored to the customer's cash-flow projections, including monthly loan repayment or a structured repayment where the customer can pay on a quarterly basis (every 3 months) or termly (every 4 months). However, the objective is to keep the repayment period short (i.e., loans are predominantly short-term) and coincident with the harvesting period.

Source: Evaluation study of the aBi Finance Line of Credit and Guarantee Program



# Chapter 5

## Financial planning

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## 5.1. INTRODUCTION TO FINANCIAL PLANNING

### 5.1.1. What is Financial Planning?

As part of the business planning process, the SME will set goals and objectives along with the strategies and activities to achieve the desired performance targets. The goals will include both financial and non-financial goals that the SME will seek to achieve during the planning period. The SME will thus require financial resources to implement the planned short-term, medium-term and long-term activities needed to realise the desired goals over the planning period.

Financial planning refers to the setting of financial objectives and the development and implementation of appropriate strategies to achieve the quantifiable targets for all the financial objectives. Financial plans may cover a number of years, perhaps three to five years and should be part of the overall business plan for the SME. With good financial planning, the SME will assess in advance:

- a. How much finance it needs for long-term investment and short-term cash flow needs
- b. Whether it is likely to have surplus cash, and if so for how long and what can best be done with the surplus cash when it arises
- c. How any required finance should be raised?
- d. Whether the business is likely to be profitable and to achieve its financial objectives

### 5.1.2. Why Financial Planning is necessary?

SMEs secure and utilise finances from various sources to ensure continuity of their respective operations as earlier explained in chapter 2. These sources of finance for business operations are either permanent or temporary which means the business will have to repay after an agreed period. The failure to repay finances from the various sources can potentially lead to business failure. The main sources of finance include amongst others:

- a. Equity/ Share capital
- b. Bank loans and overdrafts
- c. Trade credit
- d. Government grants, loans and guarantees
- e. Venture capitalists and business angels
- f. Invoice discounting and factoring
- g. Leasing/hire purchase

The SME on securing the funding will invest in critical business operations that include the following:

- Investment in non-current assets: These assets include Greenhouses, land, tractors, farm equipment amongst others for the SMEs engaged in the growing and marketing of fruits and vegetables. SMEs that purchase fruits and vegetables from farmers will need less non-current assets like refrigeration facilities to keep the produce fresh.
- Sustain the SME's operations through initial loss-making periods: The SME that has just started operating will not have many customers resulting in low sales and cash inflows into the business implying it has to look elsewhere for cash to pay for its business expenses as it continues to grow its customer base. The SME owners therefore need to plan for this period when starting their business operations to avoid potential failure.
- Investment in current assets as the business operations grow: As the SME commences operations, it will grow its customer base thereby requiring more fruits, and vegetables to meet the increasing demand for their produce. The SME should therefore plan to have sufficient finances for purchasing more inventory to meet the increase in demand for its agricultural produce as illustrated in Figure 1 below.

It is therefore imperative that the SME develops good financial plans to ensure that funds are always available to pay off the various sources of funds while also continuing to invest in the business activities to ensure continuity and growth of operations.

Cash flow forecasts are an essential tool in planning the business' financing needs. One of the biggest dangers facing new successful businesses is overtrading, where they try to do too much with too little capital. Most SMEs know that capital will be required to finance non-current assets, but many overlook the need to adequately finance current assets for the day-to-day business operations as illustrated in the figure below.

Table 9 - Financing of current assets for growth

	STAGE 1			STAGE 2	
	\$000	\$000		\$000	\$000
NON-CURRENT ASSETS		1,000			1,000
CURRENT ASSETS					
INVENTORY	50		$\times 2$ →	100	
RECEIVABLES	40		$\times 2$ →	80	
CASH	<u>20</u>			<u>-</u>	
		<u>110</u>			<u>180</u>
		<u>1,110</u>			<u>1,180</u>
CURRENT LIABILITIES					
PAYABLES		10	$\times 2$ →		20
OVERDRAFT		-	Balancing figure ←		60
EQUITY		<u>1,110</u>			<u>1,110</u>
		<u>1,110</u>			<u>1,180</u>

The SME starts with a healthy liquidity position (Stage 1). Business then doubles, without raising more finance to invest in additional non-current assets and current assets. It is a reasonable assumption that if turnover doubles then so will inventory, receivables and payables (Stage 2). However, owing to the failure to raise additional finance, the SME is forced to rely on an overdraft (probably unexpected and unplanned) to finance its net current assets. Relying permanently on overdraft finance is precarious and expensive in the end. With proper financial planning, the SME should envisage such scenarios and prepare by seeking appropriate finance.

When the SME raises capital, the business owners will have to decide what to do with it, and there are two main uses:

- Invest in non-current assets
- Invest in current assets, including leaving it as cash.

The more capital invested in non-current assets, the greater should be the profit-earning potential of the business. However, leaving too little cash in current assets increases the risk that the SME will have liquidity problems. On the other hand, leaving too much capital in current assets is wasteful: cash will earn modest interest (but investors want higher returns from the SME), and cash tied up in inventory often causes costs (storage and damage).

## 5.2. STEPS IN FINANCIAL PLANNING

### 5.2.1. Cash flow Forecasts

On completion of its business plan, it is imperative that the SME prepares a financial plan that will indicate the resource requirement to implement the strategies that will lead to the attainment of both financial and non-financial goals by preparing its cash flow forecasts. The cash flows will provide details of actual cash required by the SME on a day-to-day, month-to-month and year-to-year basis. The needs of a business constantly change and the cash flow highlights any shortfalls in cash that will need to be bridged.

Good cash flow management is critical to running a successful business. The SME must be able to pay bills while awaiting payment from the customers including from the export markets. The SME will potentially fail due to the inability to meet their obligations even when profitable due to poor cash flow management. There will probably be a time lag between the SME making sells of fruits and vegetables to its customers and being paid. This means the SMEs have to make sure there is sufficient cash in the bank account for it to pay all its bills in the meantime – whether these relate to invoices from suppliers, employees' wages, rent, rates, tax, VAT or anything else. Even if your business is profitable, there may be times when you are short of cash because you are awaiting payment for a large order. This is likely to be a particular problem during your first year when you are building up your business and don't have regular cash inflows.

The general principle of cash flow management is that you should speed up your cash inflows (customer payments, interest from bank accounts etc.) and slow down your cash outflows within reason (purchase of inventory and equipment, loan repayments and tax charges etc.) as much as possible. It can be difficult to affect your outflows other than extending your credit terms with your suppliers, which will often occur on fixed dates in the month and your employees and suppliers might also not take too kindly to you delaying payment to them.

However, there is more scope for you to improve your cash inflows. This could mean billing regularly, selling your debt to a third party (factoring), negotiating extended credit terms with suppliers, managing your stock effectively (which could entail ordering little and often) and giving your customers 30-day payment terms.

### 5.2.2. Steps to Financing Planning

A financial plan is different from your financial statements. Instead of looking at what's already happened, you make projections for the coming months, forecasting income and outlays. Your projections will act as an early warning system, helping you to plan for cash flow dips, identify financing needs, and pinpoint the best timing for implementing activities articulated in the SME business plan.

It also gives you a tool for monitoring your finances, allowing you to gauge your progress and quickly head off trouble. Here are six steps to create a financial plan.<sup>4</sup>

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4

<https://www.bdc.ca/en/articles-tools/money-finance/manage-finances/pages/6-steps-to-create-your-companys-financial-plan.aspx>

## 1. Review your Business Plan/ Strategic plan

Financial planning should start with reviewing the SME's business plan. You should think about what you want to accomplish at the start of a new year and ask yourself a series of questions.

- Do I need to expand?
- Do I need more equipment?
- Do I need to hire more staff?
- Do I need other new resources?
- How will my plan affect my cash flow?
- Will I need financing? If yes, how much?

Then, determine the financial impact in the next 12 months, including spending on major activities articulated in the business plan that are critical to the realisation of the long-term business goals and objectives.

## 2. Develop financial projections

In developing the financial projections, it is critical to start from the operating activities, highlighting the bases and assumptions for the fruits and vegetables sales forecasts. The key questions in estimating the sales forecast will include:

- a. Which markets are we targeting?
- b. What quantities shall we sell in each market?
- c. What price are the customers willing to pay for the fruits and vegetables?
- d. How long will it take the customers to pay for the sales?

The answers to the above questions will enable the SME to project the sales and the cash inflows.

The next key section of the cash flow projections are the cash outflows, which mainly consist of the production costs if the SME will grow its own fruits and vegetables or purchases from the farmers. Other cash outflow items include labour, supplies, marketing, and general administrative expenses that the SME will incur in the execution of its daily operating activities.

The key question will include:

- a. What are the expenses needed to implement operations?
- b. How much shall we pay for the cost items?
- c. When shall we pay for the expenses?

The answers to these questions will enable the SME to determine the cash outflows required to ensure the smooth implementation of business activities.

The SME will also need to determine the CAPEX at this point for inclusion in the projected cash outflows over the planning period.

The financial projections will help to see if the business plans are realistic, whether there will be any shortfalls, and what financing may be needed to ensure smooth business operations.

### 3. Arrange financing

Having determined the cash inflows and outflows over the planning period, the SME will be in position to determine any cash flows shortages and when it will occur. The business owners will then determine the most appropriate solutions to address the envisaged cash shortages and arrange finances as and when required.

Many Financial Service Providers require SMEs to provide financial projections while evaluating their financing needs and well-prepared projections will help reassure bankers that your financial management is solid.

### 4. Plan for contingencies

The cash flow projections are mainly the SME business owners' outlook of what the business prospects are, however, unforeseen events might occur which change the bases and assumption that informed the projections. To this end, the SME must have contingency plans to address any such occurrences.

To ensure proper planning for contingencies, you will need to do the following;

- Determine the SME's crucial resources, such as finance, teams, tools, facilities, etc., then prioritize that list from most important to least important.
- Assess the SME's key risks that could compromise the resources.
- Determine the mitigating measures for the key risks identified and create a contingency plan.
- Share out the approved contingency plan with the entire team and prepare to implement the measures upon occurrence of the risk events.
- Regularly revisit the contingency plans to ensure that the risks and mitigating measures are updated with emerging risk events.

### 5. Monitor

Through the year, compare actual results with your projections to see if you're on target or need to adjust. Monitoring helps you spot financial problems before they get out of hand. Some key questions include:

- Is the business running smoothly?
- Is it successful, or is it failing?
- What bottlenecks, and what parts are acting as growth drivers?
- Do I need to expand?

The answers to all these questions lie in regularly monitoring the cash flow projections. Understand that without adequate profits, regular flow of cash, and strong sales numbers, no business can be successful. This is the reason as to why regular reports should be prepared by the financial managers as they provide many answers to the above questions.

The following ways will help you monitor the financial performance of the business:

- a. **Preparation of Key Financial Statements** – These will comprise the Statement of financial position and the profit/loss statement. These will give an overview of the financial health of the business, and in a nutshell, tell the owners everything that they need to know about the performance the business.
- b. **Preparation of Aged Debtors Statement** – This should be prepared on a monthly basis, so that management can keep track of the all the customers who owe them money. They can keep track of irregular accounts and follow up diligently with defaulters to get back their money.
- c. **Inventory Records Preparation** – These should be prepared for the inputs (such as seeds, seedlings, fertiliser, pesticides, manure, farm tools, harvesting trays protective wear, and other materials). This will help to tell how much stock was purchased, how much was used, how much of it went waste, and whether any asset has gone missing at any point of time. It will tell whether you need to purchase more assets. This process will also enable in the calculation of the input/output ratios and stock turnover ratios.
- d. **Preparation of Financial Ratios** – This is another way to monitor the financial performance of the business. It involves putting together regular working capital statements and periodic calculations of current ratios and quick ratios. This will guide you into knowing how many assets you have as compared to the liabilities, and how many assets you can convert quickly to cash.
- e. **Analysis of Overheads and other administration expenses** – There is need to check whether the overhead expenses, like rent, salaries, marketing expenses etc., are under control, or are they bringing down the overall profitability of the company.

### 5.3. EXAMPLE OF FINANCIAL PROJECTIONS

The Cash flow projections of ABC Horticulture, SME that deals in fruits and vegetables are shared below.

Monthly Cash flow Forecast (USD)														
ABC Horticulture														
Year Ended 31/12/21	Month													
	1	2	3	4	5	6	7	8	9	10	11	12	Total	
<b>Cash receipts</b>														
Cash sales	12,000	13,000	10,000	9,500	11,500	13,500	15,000	14,500	13,800	14,000	14,500	16,000	157,300	
Cash collected from debtors	4,200	4,550	3,500	3,325	4,025	4,725	5,250	5,075	4,830	4,900	5,075	5,600	55,055	
Other income	1,440	1,560	1,200	1,140	1,380	1,620	1,800	1,740	1,656	1,680	1,740	1,920	18,876	
Loan	70,000												70,000	
Sales of assets								20,000					20,000	
<b>Total cash inflow</b>	<b>87,640</b>	<b>19,110</b>	<b>14,700</b>	<b>13,965</b>	<b>16,905</b>	<b>19,845</b>	<b>22,050</b>	<b>41,315</b>	<b>20,286</b>	<b>20,580</b>	<b>21,315</b>	<b>23,520</b>	<b>321,231</b>	
<b>Cash cost of sales</b>														
Purchases of Fruits & Vegetables	10,530	11,408	8,775	8,336	10,091	11,846	13,163	12,724	12,110	12,285	12,724	14,040	138,031	
<b>Total cost of sales</b>	<b>10,530</b>	<b>11,408</b>	<b>8,775</b>	<b>8,336</b>	<b>10,091</b>	<b>11,846</b>	<b>13,163</b>	<b>12,724</b>	<b>12,110</b>	<b>12,285</b>	<b>12,724</b>	<b>14,040</b>	<b>138,031</b>	
<b>Cash expenditure</b>														
Salaries/wages	3,240	3,510	2,700	2,565	3,105	3,645	4,050	3,915	3,726	3,780	3,915	4,320	42,471	
Lease payments	850	850	850	850	850	850	850	850	850	850	850	850	10,200	
Repairs and maintenance	292	316	243	231	279	328	365	352	335	340	352	389	3,822	



An analysis of ABC Horticulture cash flow projections for the coming year shows the following

1. The Cash inflows from the sales of fruits and vegetables is stable over the period with little variations and no significant growth
2. The loan of USD70,000 in January will help finance the acquisition of the new asset at USD50,000 (non-current asset) and the balance of USD20,000 will support the financing of the current assets including the purchase of fruits and vegetables for sale to its clients
3. Due to the limited growth in overall sales, ABC has negative **Net Cash flows** as indicated in the second row. This implies that ABC will for 10 months of the year, with the exception of Month 1 & 8 be spending more cash than it will be receiving
4. The negative net cash flow will greatly affect the operations of ABC making it lack cash during Month 7 and 12 when the closing balances are negative. This will mean the SME relying on overdraft from its bankers

As can be deduced from the cash flow projections, the owners of ABC Horticulture can work to grow the sales of fruits and vegetables by identifying potential new markets, which should help improve the cash inflows of the SME. In addition, the owners could also seek to reduce on some of their operating expenses so that the cash outflows can reduce. Other measures can include negotiating with their suppliers to defer/ delay payments like for the Trade Credit terms for the supply of the fruits and vegetables to help improve the cash flows of the SME.

## 5.4. ETHICAL CONSIDERATIONS IN CORPORATE FUNDING MANAGEMENT

Business ethical values are a set of guiding principles that encourage individuals in an organization to make decisions based on the SME's stated beliefs and attitudes toward business practices within its industry, which in this case is the horticulture sector. It is essential to have a code of ethics in finance and to live up to those principles every day.<sup>5</sup>

### Ethics in Finance

The role of business ethics in corporate funding management is to balance, protect, and preserve all the SME stakeholders' interests. The SME stakeholders will include the owners, employees, customers, bankers, industry regulators, the communities, and public. Typical standards found in a code of ethics in finance include:

- Act with honesty and integrity.
- Avoid conflicts of interest in professional relationships. Also, avoid the appearance of such conflicts.
- Provide people with accurate, objective, understandable information. Disclose all relevant information, positive and negative, so that your listeners have an accurate picture.
- Comply with all rules and regulations governing the horticulture sector.
- Act with good faith and independent judgment. Do not allow self-interest or other factors to sway your recommendations.
- Never share confidential information or use it for personal gain.
- Maintain an internal controls system to guard against unethical behaviour.
- Report anyone you see violating the code.

Having ethics in finance means doing the right thing, even in situations at all times. If in doubt, find someone with the standing to give you ethical guidance.

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5 <https://smallbusiness.chron.com/business-ethics/>

### Conflicts of Interest

Underlying the role of ethics in financial management is a fiduciary duty. Managers must act in the interests of their clients and employers, not their own. If there is a conflict of interest in which you can enrich yourself while harming a client, you must take the client's side.

### Reputation and ethics in finance

Another role of ethics in financial management is to guard both your reputation and the SME's reputation. If you act ethically then both the SME and staff reputation is preserved, however, incidences of unethical behaviour will tarnish both the finance manager and SME's reputation and can lead to loss of business opportunities and in extreme cases business failure.

Some regulators and lawmakers assumed the risk of scandal and loss of reputation were sufficient to discourage financial managers from acting unethically.

Source: Falkender, M. & Petersen, M.A. 2006. Does the source of capital affect capital structure? *The Review of Financial Studies*, 19(1): 45-79.

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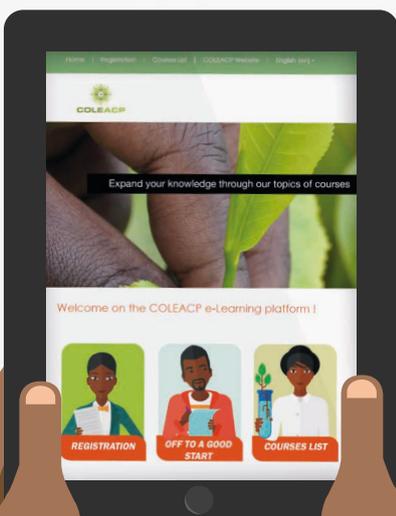
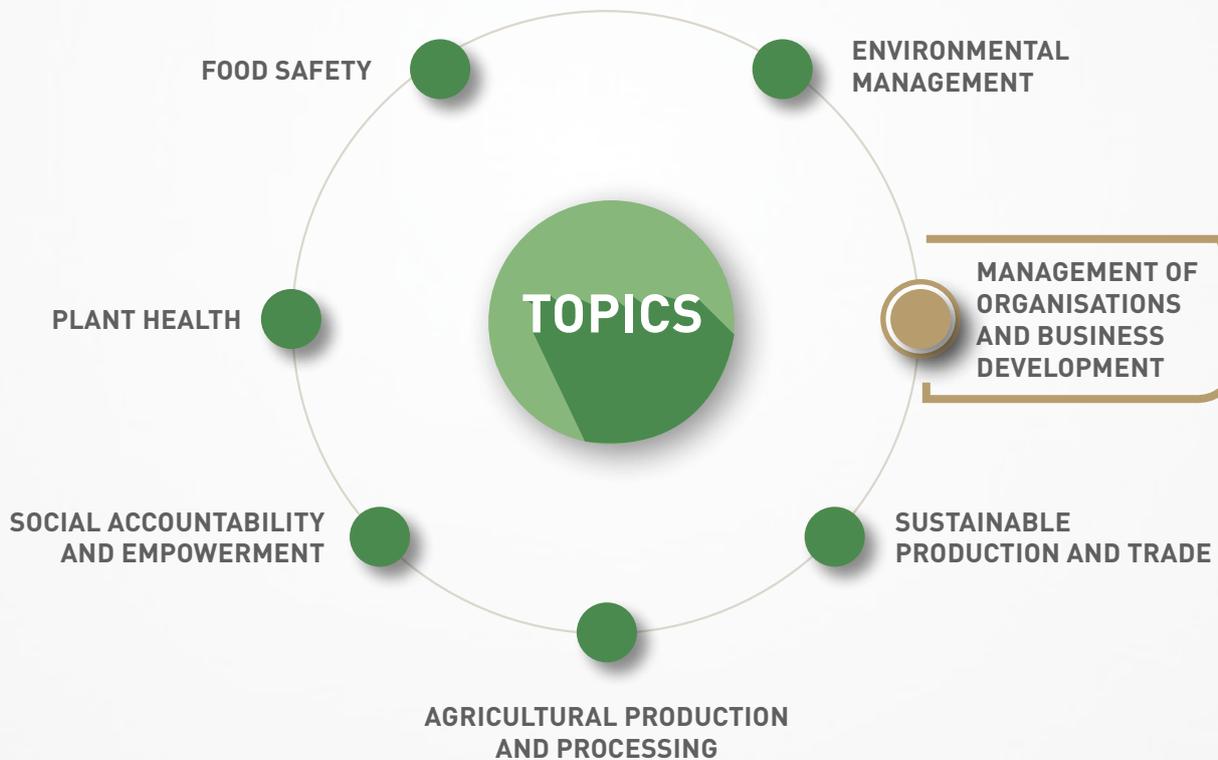
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