HortiNigeria

BUILDING A SUSTAINABLE & INCLUSIVE HORTICULTURE SECTOR

FINANCIAL LITERACY
Training Manual for Horticulture Value Chain SMEs

IFDC Developing Agriculture from the Ground Up
EAST-WEST SEED KNOWLEDGE TRANSFER
WAGENINGEN UNIVERSITY & RESEARCH
KIT Royal Tropical Institute

Contents

1. Background Information on HortiNigeria

1.1. Program Context

In 2021, the Embassy of the Kingdom of the Netherlands in Nigeria (EKN) unveiled HortiNigeria, a four-year program aiming to boost the productivity and income of 60,000 smallholder farmers (50% youth and 40% women) through eco-efficient agronomic practices. The program is being implemented by the International Fertilizer Development Center (IFDC) and its consortium partners East-West Seed Knowledge Transfer (EWS-KT), Wageningen University & Research (WUR) and KIT Royal Institute.

HortiNigeria is being implemented in four states – Kaduna and Kano in the north-west and Ogun and Oyo in the south-west, for ensuring a horticulture sub-sector that is gender and youth inclusive and contributes to the nation's food and nutrition security. In addition, the program would sustainably expand cultivated land by 15,000 hectares, promote innovations and regional diversifications to reduce seasonal risks faced by 2,000 entrepreneurial farmers, increase access to finance for 50 agro-SMEs, enhance sector coordination and facilitate 200 business-to-business linkages in the four states.

HortiNigeria, which concentrates mainly on tomato, okra, onion, and pepper value chains in the domestic markets, is implemented through the following four components:

1. Increasing Productivity and Incomes in Kaduna and Kano States;
2. Piloting Production Systems Innovations and Regional Diversification in Ogun and Oyo States;
3. Increasing Access to Finance for SMEs and
4. Enhancing Sector Coordination and Business-to-Business Linkages.

1.2. The Relevance of Capacity Building

HortiNigeria recognizes access to finance is key, if smallholder farmers (SHF) and other value chain actors (VCAs) are to sustainably adopt eco-efficient practices and innovations and expand to wider markets. This demands for an upgrade in the managerial and financial investment skills of targeted VCAs.

Targeted actors must get into the formal financial network, as a pre-requisite to accessing finance; therefore, if VCAs are to comprehend finance and be financially included, they require enlightenment in financial literacy.

This is the second of three training manuals designed for capacity building under HortiNigeria's program implementation; the first is on basic record-keeping while the third is on development of business plans. The recommended sequence of treating the modules has been highlighted in Section 2.2.6 of the guide for trainers.

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2. Training on Basic Financial Literacy

2.1. Objectives of the Training

The following are the objectives of this module:

(a) To build participants' level of awareness in financial literacy
(b) To enlighten participants on key concepts of accounting
(c) To enhance the participants' knowledge in savings and loans and
(d) To show the participants key reasons why it is difficult for agro-SMEs to access formal credit

2.2. Expected Outcomes

After the training, the following outcomes are expected:

(a) Participants would appreciate the importance of separating personal finances and business finances
(b) Participants can see accounting concepts from view point of regular value chain activities
(c) Concepts of savings, loans, and budgeting understood by participants
(d) Participants are able to, not only acknowledge reasons why SMEs find it hard to access credit, but also begin to see aspects in which they could modify their business processes in order to be better qualified for formal credit.

2.3. Financial Literacy Defined

Guide for the Facilitator: Define/explain literacy; then, inform the participants that financial literacy is not just about being able to read & write	The starting point for defining financial literacy should be the definition of literacy itself, which is the ability to read, write, speak and listen in a way that allows us communicate effectively and make sense of the world.[1]
Financial literacy is the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and investing[2].	

1 https://literacytrust.org.uk/information/what-is-literacy/

2 https://www.investopedia.com/terms/f/financial-literacy.asp

Financial literacy involves being able to make informed judgments and taking effective actions on the current and future use and management of money. It includes the ability to understand financial choices, plan for the future, spend wisely, and manage the challenges associated with life events.

Illustration of liquidity

2.4. Needs Versus Wants

This is not really meant to be a lengthy discussion; the facilitator is just to emphasize the fact that needs are different from wants	• Needs are things that are of necessity; indispensable at a particular time in the life of an entity. On the other hand, wants are things or situations that one desires (or to which one sets their heart); something we wish for, or would like. • A need is something essential for survival while a want is something, which we would like, but is not necessary for survival. • For the business, the needs are resources or process flows, which are required for the enterprise to be able to reach its goals.

Comparing Needs and Wants		
Components	Needs	Wants
Necessity	Without these, survival is not possible	Not indispensable, but can make life more comfortable
Satisfaction	One can only get satisfied after fulfilling the needs	Satisfaction comes from thinking of one's wants or desires
Postponement	Cannot be postponed like healthcare would be needed when required	Can be postponed; if a person wants a car, he can buy it when he has money

2.5. Separating Personal Finances from Business

Separating Self from Business – Key Steps	One of the first steps towards realizing the separation of the two is to separate between the finances of the business from those of the business promoter. Therefore, you must have two different bank accounts. It is also important to register the business with the Corporate Affairs Commission (CAC). Note that a registered business is recognized as a separate legal entity.
Benefits of Separating Finances	(a) Business image is better enhanced when invoices and other items bear a corporate name (as opposed to individual's) (b) Possibility for loan application in the business name, because financial institutions prefer to deal with a registered business name, especially when the intended credit relationship (c) Helps to protect personal assets in the event of legal proceedings against the business (d) Cash flow is easier to track as the funds of the business are routed through a dedicated account (e) Expenses are better monitored: with better tracking of cash flow, so also are the expenses of the business (f) Easier for taxes to be computed for the business, because turnover is the starting point of income computation, on the basis of which taxation is calculated.

3. Accounting

Facilitator is required to pick some key words in this definition and explain to the participants. Also remind them about the link between the definition & record-keeping.	"The art of recording, classifying and summarising in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character and interpreting the result thereof". From this definition, we can see the importance of record-keeping, which is clearly the take-off point for accounting. Of course, the importance of accurate initial figures cannot be overemphasized.

3.1. Purposes of Accounting

Facilitator is required to link these purposes to the fact that record-keeping is important, as having been previously discussed.	• **Recording:** all pieces of accounting information, having emanated from the processing of data available in records, are also maintained as records • **Evaluating Performance:** accounting enables us to measure the progress of the business • **Stewardship/Accountability:** the leaders of the organization employ accounting to show what they have done and how • **Planning & Control:** the path of the enterprise is better mapped-out, with accounting • **Decision-making:** all decisions are better informed • **Communication:** any aspect of the business is easily communicated to any stakeholder using the appropriate accounting data.

3.2. Users of Accounting Information

Facilitator is required to highlight the usefulness of the information to these entities.	• **Owners:** focus is on financial performance expressed by profit numbers, and whether there's growth in comparison from prior period (e.g., last year, quarter, month etic) • **Employees:** they are concerned whether the business is thriving (how quickly produce turns to cash) and growth in profitability to ensure sustainable salary and other emoluments and bonus. • **Managers:** gauge their performance based on the financial performance of the business. • **Customers:** are interested in stability of the business in order for them to continue to provide the products she requires. • **Suppliers:** are concerned about the cash flow growth of the business with respect to the ability to meet maturing liabilities (unpaid supplies) • **Competitors:** are interested in comparison of costs and market share • **Government:** are interested in output, employment and taxes • **Investment Analysts:** seeking to find good business that's is lowly priced to make a short-term gain or long-term capital appreciation Businesses communicate accounting information to the public through a process known as ***financial reporting***.

4. Bookkeeping

Bookkeeping is the recording, on a day-to-day basis, of all the financial transactions and information pertaining to a business.

- It helps a small business to record all of its core transactions and events, like sales, purchases, inventory, tracking payments, cash requirements, expenses and net earnings.
- Bookkeeping builds organizational memory, keeping entrepreneurs well-informed of their progress.
- Consistent bookkeeping strengthens their decision making and thus makes a positive impact on their bottom line. However, the lack of a bookkeeping system at best stagnates – and at worst kills – a business.

These are the main source documents leading to all financial statements.

1. Invoice and Receipts
2. Bank statement and Cheque books

Source Documents	Journals	Ledger
Invoice	Sales Journal	Sales
	Purchases Journal	Purchases
Receipt	Cash Sales	Sales
Payment/Voucher	Cash Purchases/Inventory	Purchases
	Expenses	General
Bank Statement-deposit	Sales	Sales
	Loan/Capital contribution	General
Bank Statement-payment	Purchases/Inventory	Purchases
	Expenses journal (Salaries)	General
	Fixed Assets Register	General

5. Financial Statements

The central means of external financial reporting is a set of financial statements. The following are the four general-purpose financial statements:

1. Balance Sheet
2. Income Statement
3. Statement of Cash Flows

5.1. The Balance Sheet

Introduction to the Basic Accounting Equation.	An example that is always appreciated by, especially, female groups when a vendor sold dresses, each valued at N10,000.00 to women pepper farmers in a village after harvest. Four women purchased the dress, each under a different condition as follows: 1. One paid the full amount in cash 2. One deposited N6,000.00 with a promise to pay the balance on a later date 3. One deposited N3,000.00 and promised to pay the balance on a later date 4. One appealed that she had yet to harvest and make any sale and so, should be allowed to take the dress without any deposit. She would pay the full amount on a later date
In purchasing the dress, the transaction differs among the four women in the illustration.	The facilitator would involve the class in using each of the above transactions to gradually illustrate the basic accounting equation Each woman has in her possession, a dress worth N10,000.00 and there are differences in their financial positions as follows: 1. The woman who paid cash, owes nothing and owns N10,000.00 in the acquisition. 2. As for the woman who deposited N6,000.00 with a promise to pay in the future, she owes N4,000.00 while the amount she deposited is what she owns (her possession) in the acquisition. 3. In case of the farmer who deposited N3,000.00 with the promised of paying the balance in future, she owes N7,000.00 while her deposit represents her contribution into the acquisition. 4. For the last buyer who asked to be allowed to pick-up the dress without any deposit, she owes the full value of the dress. She has no contribution therein.

The facilitator would remind participants to take special note of some words related to this example of purchasing a dress.	Noteworthy Concepts: 1. Possession, specifically that to which monetary value can be objectively ascribed (most people recognize this value fairly uniformly). A 1986 football jersey was recently auctioned at $9.28 million (about NGN 6.867 billion); only a very few people would truly value this item. 2. What you owe (in other words what does not belong to you); what you must return to its owner 3. What you own; your contribution; what you put into the business.
The Balance Sheet is Premised on the Accounting Equation.	The basic accounting equation is the basis of the balance sheet. In definition, the balance sheet is: This arithmetic relationship amongst three items – assets, liabilities and equity. The Equation states that Total Assets = Total Liabilities + Equity The Balance Sheet, in definition, is: • A statement of the assets & liabilities of an entity at a given point in time. • A statement of financial condition. • A "snap shot" of the financial condition of an entity, taken at a given point in time. The Balance Sheet Must Always Balance

Facilitator is Required to Show a Picture, on the Fact that the Balance Sheet Must Always Balance

The picture is meant to be (and it usually is), an imprint in the minds of participants.

5.1.1 Assets

Assets are the items of value over which a business or individual lays claim; in other words, they are resources that have an economic value which can generate future cash flows. It is owned or controlled by individuals, corporation or a government. Asset can be a property, inventory, trademarks or patents.

Recall that when analyzing the transaction of women buying a N10,000.00 dress under different terms, we had mentioned possession, especially items to which monetary value can be universally ascribed.

Classification of Assets

On basis of convertibility:

- **Current assets** – Cash, cash equivalents such as treasury bills, certificates of deposit (they have a short maturity period and they are easily converted into cash), short term deposits, stocks, debtors, office supplies, etc.
- **Non-current assets** – Land, building, equipment, machinery, patents, trademarks, etc. They continue to be used in the business, beyond one calendar year.

Electricity generator – a fixed asset acquired by a women's cooperative in Kano State; photo by Yusuf Haliru & Associates

5.1.2 Liabilities

- The claims that outsiders have over the business
- What you are under obligation to refund, return or pay for, after a certain time lag, which may be short or long

Current Liabilities

- Bank loans and overdrafts: these are cash borrowings whose duration is between a few weeks and one calendar year.
- Payments received on account: Advance payment that would be subsequently allocated to invoice. An example is paying for a 2-year rent on a farm. The payment will be allocated over the period. For accounting purpose, the portion that's un-used for the period the account is prepared must be shown as an asset to the business.
- Trade creditors: Suppliers of planting material, animal feeds, fertilizers, transportation, machinery etc. on a recurring basis for which payments are not made immediately, but subsequently. They are a source of non-cash credit to the business.
- Provision for taxation: are allocation of taxes against residual profit and losses for the period. If at the end of the accounting period the business posts a loss, no tax is allocated for payment and vice versa.
- Provision for dividends: are allocation of portion of profit to be shared by owners of the business. Dividend is set aside from Net income after all stakeholders have been settled (trade creditors, employees, wear and tear of business assets, bankers and government).
- Due to group and/or related companies: unpaid commitments to the holding company and associated companies. For instance, a grower of tomato, may invest in a mini tomato processing plant and a haulage company, to reduce costs of adding value to its tomato harvest and transporting the product to the market. The motive of these related companies is to reduce overall costs, raise profitability and turnaround. The owners can set up a fourth company to "hold" these three businesses each a separate entity. That holding company also produce group accounts by consolidating the financial statements of all the entities. Each of the entities reports outstanding commitments to the group (holding entity) such commitment can include; seed research, marketing research and trade negotiations, etc. These are current liabilities that must be accounted for by the reporting business.
- Accruals and deferred expenses: these are unpaid services to internal suppliers (mainly staff) such as unpaid emoluments (salary), travelling expenses yet to be approved and paid, payments for services deferred.

Long-Term Liabilities

- Un-matured debentures: debentures are long term loans to a corporation. The loan periods are usually beyond 3 to 5 years. Debentures a legal debt instruments offered by company to individuals but guaranteed or certified by a third party. The third party can be a financial institution or stock exchange. The attraction is buyers of the debenture stock can sell before expiry to the intermediary. For the borrower the portion of the debenture that is not matured for settlement (paying off) must be accounted for in the books as long-term liabilities unpaid.

- Term loans: These are fixed term loans beyond one year but are not debentures.
- Loans with moratorium periods exceeding one year: these are long term loans whose repayment (principal portion) is deferred beyond one year. Typically, all loans have repayment schedule for interest and principal. Interest is rarely deferred unless it's a public company whose shares are quoted on the stock market, but principal repayment can be deferred to give the borrower room to cope with costs at early stage of a project.
- Directors' loans: Loans to directors of a company must be accounted for because they are legally distinct entities from the business.

5.1.3 Equity

The owners' total investment into the business.

- Paid-up capital: this is actual capital invested in the company at commencement. It represents the portion of the authorized share capital for which payment has been made and the shares allotted to the payers.
- Deposit for shares: new subscribers to a company's unallotted shares, when they make payments, the amounts are credited into a deposit for shares account. It's a warehouse account for shares yet to be allotted to subscribers.
- Share premium/discount: the difference between the selling price and actual price of a company or its stock is share premium. Usually, a buyer pays above the actual price of the company shares when it is perceived to be more valuable. A discount is a price below the quoted price. For share related transactions accounting, the share premium and discount account is the appropriate place
- Statutory reserves: companies are authorized by law to keep reserve. A bank for instance is expected to maintain certain level of liquidity, usually a percentage of its capital to cushion against risky transactions.
- Other reserves: two are prominent. Revenue reserve accounts for company's profit and loss account consolidation while capital reserves accounts for asset revaluations. For instance, farming land and greenhouses can be revalued. Assets are recorded in the books at their historical prices. During a period of rising inflation as has been observed since 2021 in

most parts of the world, these assets must reflect current prices less the depreciation. Asset valuations are necessary for credit.

Special note to the facilitator in the discussions on liabilities and equity Continuously remind the participants that an asset is always accounted for by liability and/or equity.	Though some of the items described above may not currently exist on the balance sheet of a typical SME, the approach to knowledge dissemination should significantly put the participants in a position of recognizing every item under its category in the balance sheet. Horticulture VCAs that are registered cooperative societies could make use of the accounting sub-classes of equity to account for share ownership and allotment as members periodically make deposits for the cooperative's shares.

5.2 Income Statement

Many VCAs do not know whether their business is profitable.

This sub-section opens with a simple demonstration of profit, whereby the facilitator uses a simple arithmetic relationship show the connection between profit on the one hand, and revenue and cost on the other as:

Profit = Revenue minus Cost

Definition:

- Profit and loss statement for a period.
- The statement shows the following distinctive parts of business operations:
  - Gross margin or loss
  - Selling and administrative expenses
  - Depreciation
  - Financial charges
  - Taxes
  - Appropriations (how profit or losses is shared)

Components of Income Statement

	To-do	Period 1	Period 2
Revenue:Total Net Sales/Revenue	Balance		
Cost of Goods Sold (COGS)	Subtract		
Gross Margin/Profit	Balance		

	To-do	Period 1	Period 2
Operating Costs: Salaries and General Administration expenses Selling expenses Depreciation Finance charges: bank charges/Interest Total Operating Costs	Add Add Add Add Add		
Profit before Taxes			
Taxes	subtract		
Net profit/Losses	Balance		
Appropriations: Retained profits opening balance Retained profit for the year Dividend/drawings Retained Profit closing balance	Add Subtract		

Description of Terms

Revenue:

Summation of the Cash and Credit Sales less Sales discounts

COGS:

Cost of Goods available for sale includes the cost of the goods and for manufactured goods, it includes cost of raw materials, manufacturing wages and other manufacturing costs. This is beginning inventory + purcahses made in the period less ending inventory.

Margin/Gross Profit

The difference between Revenue and Cost of Goods Sold (COGS)

Operating Expenses:

Includes SGA, Depreciation, Financial Charges

SGA:

Is basically a short form denoting Selling and General Administrative Expenses. It is a commonly used to describe various fixed operating costs associated with day-to-day running of a business.

We can further disaggregate the SGA as:

- Selling Expenses which include marketing and distribution costs and all related expenses incurred to deliver the product or service to customers. Also includes, cost of warehousing for business that supplies far-off customers, cost of logistics, security and insurance.
- Marketing cost may include direct selling expenses, advertising etc.
- General Expenses include costs such as utilities, insurance to assets and staff, electricity, fuel, transportation, security, rent, festivity gifts to customers and staff etc. Expenses incurred on the entire business as a whole. Typically, bulk sums paid over several periods must be shared to each appropriate period. For instance, if you pay 5 years' rent in advance, the expenses shall be prorated into 5 periods, and each period shall have its exact share.
- Administration Expenses include Salaries and benefits to staff and management, bonuses, office stationery and computer repairs and maintenance, other fixed assets repairs and maintenance, entertainment, local travels, audits and other professional charges-e.g., hiring a lawyer, accountant, a soil scientist or consultants. All expenses directly relating to administration is included here. The caveat shall be, the expense shall be related to the business undertaking
- SGA Expenses give business owners and managers considerable discretion, but the amount that is recorded in the books must be valid, i.e., receipted, and it must be related to the business and not owners. You cannot for instance, add owners' cash drawings here, or monies paid as tithes or pilgrimage. Tax Auditors review these expenses and those inflated are recomputed for the purpose of determining tax unpaid which is a crime.

Depreciation:
Is an allocation of costs due to wear and tear of fixed assets. It is done at the end of a period. The amount is derived by totaling all fixed assets (items used in the production of income) and dividing by their estimated useful years.

There are many depreciation methods, to allow for uniformity in application of depreciation rules. Your Accountant will advise on the appropriate rate as guided by extant tax laws.

For large businesses, assets to be depreciated must be approved by federal ministry of trade and industry.

Financing Charges:
These are external to the business and normally extracted from the business bank statements during periodic bank reconciliations.

Profit Before Tax:
This is Gross Margin minus Total Operating Cost/Expenses. It is the amount applied to the prevailing tax rate.

Tax:
The tax rate for businesses from our cluster (Horticulture Value chains) are as follows:

Registered Entities

- Small company tax rate is 0% for turnover less than N25million
- Medium company tax rate is 20% for turnover greater than N25 million but less than N100 million
- Tertiary Education Tax rate is 2.5%
- Minimum Tax rate is 0.5%

If you are unsure of where your business falls, instead of opting for small company rate and paying Zero percent, settle for Minimum Tax rate because there are conditions attached to each class of Tax. So, we advise using a tax professional early.

We shall adopt a tax rate of 20% to be applied on the Profit before Tax if the amount is positive which signifies a profit is realized after Taxes. But for Negative Profit Before Tax (signifying a loss), no tax is paid for the purpose of Income Statement computation.

Net Income/Profit:
Is Profit before Tax minus Tax amount

Appropriations:
Is the distribution of profit realized in a period? All registered companies are expected to pay out profits to equity shareholders because of their corporate status. In the eyes of the law, they are separate from their owners.

Appropriation rules compels a firm to state how it shared its profits and what is retained for continued business operations. Again, to protect shareholders who might not be part of management.

Why the Income Statement is Necessary

- It's a planning tool, so a business knows how well it is doing
- It aids efficiency measurement as key items are compared period to period
- It shows the volume of operations achieved per period
- It allows a business forecast its future profit and losses

Group Work
Participants are given a set of business records and they are to prepare an income statement.

Similarity Across Value Chain Activities

Please note that be you a farmer, processor, inputs dealer or any other VCA, income statement is the same and so is cash flow. Differences only exist in the content of each component. For instance, a tomato farmer's expenses are on fertilizers, seeds, pest control chemicals, stakes and other items used in cultivating tomato. S/he also spends on carriage, land clearing, tillage, nursery activities, transplanting, staking, fertilizer application, pesticide application, staking, weeding, irrigation, fueling etc

A processor's outflow goes to acquisition of raw materials (principally, raw fruits for instance). Labor costs are incurred on preliminary cleaning of the line, receipt, carriage, sorting & grading of produce, handling of rejected deliveries, cleaning and re-cleaning of fruits, feeding the line, operating the line etc. Expenses are on labor, all through the processing till packaging.

For a seller of inputs, cash outflow is mainly for acquiring inventory. Payment for labour is on carriage, store maintenance, sales, etc.

From the above, it is clear that there is no difference; cash flow is essentially cash accounting. The only reason we separate them into operating, investing and financing is to establish if current operation is viable or not. Secondly, to enable us see in clear terms, how the cash is spent.

5.3 Cash Flow Statement

Definition

- A cash flow statement is an important statement useful to show if your business has cash or is illiquid (has cash difficulties).
- If it has cash, you won't need to borrow, however if it doesn't, it tells you how much exactly to borrow.
- It is the equivalent of a cash book for a period. It can be monthly, quarterly (every three months), semi-annually (every six month) or yearly.
- It allows a business forecast its future cash cashbook per period. Also known as cash budget.
- It is a cash book record that split the business periodic cash into 3 statements:
    - operating cash,
    - investing cash (cash to buy additional assets) and
    - financing cash (cash

Why is a Cash Flow Statement necessary?
it explains your business plan or summarize your business plan (a proof your business plan is correct)

- it is the future financial plan of the business for a future period

- it shows the business financing need (the exact amount you must borrow)
- It shows the business ability to meet future repayment obligation
- it guides creditors on extending credit to the business
- it's a proof your business plan is attractive (bankable) or not attractive (high default risk)

How to make a Cash flow statement for a Simple Business

- Prerequisites:
    - Income Statement- describes the business profit and loss position for a period.
    - Income statement is described as follows:

	Year1	Year2	Year3
Revenue:			
Includes cash and credit sales			
Cost of Sales:			
Includes purchases			
Gross Profit			
Expenses: Salaries and administration (rent, electricity, petrol etc.) Distribution and logistics Depreciation (cost of wear and tear of assets used to produce output sold) Bank charges and Interest			
Profit before Tax			
Taxes – most simple businesses have tax waivers			
Net Profit or Net Income			

- To construct your Cash Flow Statement, you need:
    - current year Profit and loss Statement or cash balance today
    - List of items you want to acquire (capital expenditure)
    - Sources of capital
        - Equity (owners' capital) or Investors' capital
        - Loans from Individuals
        - Loans from Banks.
- A spreadsheet paper or use equivalent electronic one (Microsoft Excel) or other spreadsheets.
- The spreadsheet allows uniform recording of cash flow items into appropriate periods like the diagram below:

Item	To do/ action	Year1	Year2
Revenue:			
Cash sales	add		
Operating Expenditure: Purchases Salary/Overhead Distribution costs Other processing costs-e.g., taxes paid, Total Operating Expenditure (-)	Subtract		
Cash FLOW FROM OPERATION (a)			
Capital Expenditure: Asset procured or plants, land acquired etc. Proceeds from Asset Sales	Subtract Add		
Cash Flow from Investing (b)			
Equity/Investors Capital	Add		
Loans Required	Add		
Loan Interest Paid	Subtract		
Loan Principal Repaid	Subtract		
Cash Flow from Financing (c)			
Cash Position			
Beginning Cash			
Ending Cash (a+b+c)			
Cash at Balance Sheet	Proof		

Clarification of Terms

A farm at Birnin Yero, Kaduna State, into which cash is committed continuously; photo by Yusuf Haliru & Associates

- Year2 Beginning Cash is Year 1 ending Cash
- Cash Balance is Beginning Cash plus Ending Cash
- Ending Cash is the summation of Cash Flow from Operation, Cash flow from Investing and Cash Flow from Financing
- Cash Flow from Operation is summation of all Cash Revenue and Total Operating Cash Expenses or Total Operating Expenditure
- Cash Flow from Investing is summation of Assets to be procured (Capital expenditure) and cash received from Assets retired (or disposed of)
- Cash Flow from Financing is summation of equity, debts and repayments of interest and principal

Business Records Used in the Preparation of the Cash Flow Statements

- Cash Book records
- Fixed Asset List to extract asset disposal (if any)
- Sales records to determine cash sales percentage from total Sales
- Purchases records to determine unpaid purchases and determine quantity of next year's sales
- Bank statement to extract all charges applied to the business account and loan proceeds, if there is.
- Starting Equity or Investors' money (used to construct the starting balance sheet

Group work

- Provide participants with a sample of the records listed above to enable them determine:
    - projected sales for each year based on:

    - estimated likely average price –use current price
    - planned output
    - target cash sales bearing in mind the competition
    - cash collection incentives
- Projected operating expenses based on:
    - sales capacity
    - and estimated input cost
    - if you think inflation is rising, add an inflation adjusted figure uniformly state reason
- Capital expenditure and estimate of operating cash unmet by projected sales in Year1 to determine actual loan required
- Determine the tenor of loans and compute repayments for annual interest and principal

Group Exercise

1. This exercise would help participants to imbibe (and apply) knowledge from previous group exercises in the HortiNigeria training activities.

An individual or a business would always have activities or projects in which they are interested. Not everyone has all the funds they require for their project. Accordingly, it happens that from time to time, additional funding is required in a business venture. The groups are to discuss:

(a) Sources of funds for business
(b) Uses of funds in business

6. Saving

Savings Defined: simply put, this is the pool of money that is set aside for use in the future

Why save?

- To compensate for uneven income streams
- To build funding towards a specific activity or acquisition
- To serve as insurance for future consumption
- To serve as fallback during unforeseen circumstances

6.1. Informal Approaches of Saving

- In-cash (under the mattress or buried in the soil or in piggy banks)
- In-kind (animals, jewelry, farm produce, land, raw materials etc.); many rural entrepreneurs save by investing surplus sums into such assets
- Rotating savings and credit associations – these are very reliable arrangements that facilitate easy access to liquidity

- Deposit with informal money lenders – they have been participating in financial intermediation within rural communities of developing countries.

Risks Associated with Informal Saving Outlets:

- Cash can be stolen, animals can get sick, and neighbors can run off. The debtor may also become illiquid.
- Despite the risks, poor entrepreneurs want secure, convenient deposit services that accept small balances and allow easy access to funds.

6.2 Benefits of Saving

When small clients save with F/Is having appropriate products and services, they stand to reap the following benefits:

(a) Their funds are secure
(b) Convenient account relationship, given the good service
(c) Building liquidity for the future (some MFIs encourage saving while farmers are receiving their sales proceeds)
(d) The poor entrepreneurs could better organize their financial lives and deal with emergencies
(e) The accumulation of assets from savings helps improve quality of life.
(f) Confidentiality
(g) Earn returns on their investment
(h) A potential access to loans

Benefits of Saving Deposits – To the financial institution

Banking business depends on the substantial use of other people's money; this, being a major source of working capital makes deposit mobilization very important to the bank as follows:

(a) Reduced incidences of illiquidity, especially if sound strategies are adopted.
(b) Ensure the sustainability and growth of banks, through sustained liquidity and effective financial intermediation

Traditional savings bag illustrated

6.3. Challenges Facing Saving Mobilization at Micro-Level

(a) Proliferation of savings societies, many of which are fraudulent and have duped unsuspecting depositors

(b) Poor management, leads to MFBs collapse; many clients are scared-off and eventually return to the old ways of saving at home

(c) Competition from other deposit takers, both formal and non-formal

(d) Inability to develop and implement good savings mobilization strategies

(e) Wrong perception held by some MFI staff that poor people do not save.

Group Discussion: When & How to Save

Facilitator is required to explain the concepts of timing and then approach to saving; as usual, there is no rule on group formation.	Timing the Act of Saving: Timing is at the discretion of the person making the saving; however, the earlier one sets the sum aside the better, as this is also an indication of financial discipline. In some MFBs, as borrowers sell their farm produce to repay credit, they are advised to immediately begin to save from their sales proceeds and in this way, the farmers are able to build equity contribution towards the next season's loan transaction.
Facilitator should first allow participants to try responding before commenting	How to Save: Since saving is income that unspent or consumption that is deferred, some of the ways through which a business could save include: Putting aside specific sums and depositing in the bank Using some money to purchase assets such as farm inputs Making part or full advance payments for goods Granting loans to qualified staff Investing savings (reduced costs) in any of the above outlets

7. Banking Relationship

A bank is related to its customer under five (5) headings as follows:

(i). Debtor-Creditor

When a bank accepts a deposit from a customer and same is placed to the credit of the said customer, the bank becomes the debtor to the customer who is in turn a creditor of the bank

(ii). Creditor-Debtor

This is the converse of the debtor-creditor relationship. Here, the bank lends money to the customer who thus owes the former. The bank is therefore the creditor to the customer who is in turn the debtor.

(iii).Principal-Agent

A bank may act on behalf of the customer, such as when collecting cheques or honoring bills of exchange. In this relationship, the bank acts as the agent of the customer, who gives instructions.

(iv).Bailor-Bailee

In this relationship a customer deposits documents or other valuable items (other than cash) for safe-keeping by the banker who is the bailee.

(v). Mortgagor-Mortgagee

A customer uses his property to secure a loan obtained from the bank. By so-doing, customer mortgages his property and is called the mortgagor.

7.1. Duties of the Parties

The relationship between a financial institution and its customer, has embedded with it, certain duties of one party to the other.

Duties of a bank to its customer	In the entire financial services sector, the banks are arguably the most profound in effects, presumably because every player in the economy is a customer of the banking industry (whether directly or indirectly). **Duties of the Bank to its Customer** • To pay without delay, the customer's money on demand, provided the customer has sufficient funds or demand is within overdraft limit. • To receive cash and collect the proceeds of cheques and other instruments for the customer's account • Care & Skill: to exercise reasonable skill and care in carrying out its customer's instructions. • Draw customer's attention to forgery of his/her signature. • Ensure that e-transactions are efficient, and that errors, when they do occur, are promptly and securely addressed • Give reasonable notice before closing the customer's account. • Secrecy: the bank has a duty to keep its customer's transactions secret. This duty continues to exist even after the customer's account is closed. Conditions under which a bank may disclose the customer's affairs: • Under compulsion of the law • Where it is a duty to the public (BVN, Credit Risk Management System) • Where it is made with customer's consent • Where it is in the bank's interest, for instance, in a debt recovery suit.

Example to be discussed by facilitator: Someone wanted to know the status of his wife's bank account	Decades ago, a woman, who is a trader in fresh as well as packaged vegetables, gave her husband a cheque to cash at her bank. The husband arrived, presented the cheque and after some minutes, the teller returned the cheque, saying: 'I am sorry, this cheque cannot be honored; kindly take it back to the drawer'. The husband was surprised and asked for explanation on why the instrument could not be honored. He specifically asked if there were funds in the account, to which the teller replied: "Sir, I'm sorry I am unable to discuss any details of this account with you". The husband retorted: 'but she is my wife and I have all rights over her!'. The teller still apologized. The matter was referred to the Branch Manager and he too had a similar feedback as the teller had given. The man had no choice than to go back to his wife, who eventually cleared the transaction with her bankers, before the husband was eventually paid.
Learning Points	(i). The relationship between a financial institution and its customer is a strictly two-way affair (ii). No third party can have any information on the transactions in an account unless with the express permission of the account owner (iii). A husband has no access to his wife's bank account. Similarly, a wife has no access to her husband's account, unless either person permits.
Duties of a customer to his/her bank	• To be sufficiently careful with his/her cheques and other drawing instruments in order to prevent fraud or forgery • Report immediately, any fraud discovered in the account • Issue cheques (or instructions to debit their account), only to the limit of available funds or credit facility approved • Pay charges & commissions • Grant the bank a right of lien over assets pledged to the bank

7.2. Bank Credit

Loans are the bank's assets and they constitute the biggest source of income for the bank; they are also a potential source of major problems leading to losses, illiquidity and in extreme cases, closure of the financial institution.

Therefore, in granting credit, the bank specifies terms and conditions, which the borrower is expected to peruse and understand clearly.

Facilitator to admonish participants about the importance of reading & understanding loan terms & conditions	Every credit relationship between the bank and customer is built on certain rules, which are known as terms & conditions, which are contained in the offer letter. In many instances, due to the urge to drawdown, the customers did not peruse the offer letter and understand its contents. S/he is also at liberty (in fact, urged) to get a trusted third party to explain any areas that are unclear. This helps the customer to properly adhere to the rules.
Understanding loan terms & conditions	1. Amount: total figure approved for the customer to utilize 2. Tenor: time period over which the customer is allowed access to the funds 3. Equity Contribution: commitment of the customer to the loan transaction. Cushions a portion of the bank's exposure while making the borrower more committed to the project 4. Interest Rate (Single digit; double digit; annual; monthly) 5. Facility fees attached to the loan; the rate and frequency of charge would be stated 6. Drawdown date 7. Interest Payment (annual rate on reducing balance; flat rate; monthly rate on reducing balance) 8. Moratorium; grace period before repayment begins. Usually, a period given for the business activity to start yielding. Then it would be sold to generate proceeds for loan repayment. 9. Repayment (Instalment vs Bullet) 10. Collateral – what the customer must pledge; it serves as second way-out in the event that the loan is not repaid 11. Conditions precedent to loan utilization: all what the customer must do before s/he can start making use of the credit facility. 12. Useful when applying for loans; the potential lenders wish to see the asset conversion cycle as reflected in the payments out of and receipts into the bank account of the enterprise. The flow of cash should be traceable and evident in the business activities.

8. Asset-Liability Management (ALMA)

This refers to the management of the assets and liabilities of the business to ensure continuation of business operations in a sustainable way.

8.1. Selling on Credit

As you have buyers paying almost immediately, they receive goods within the market space, there are also buyers and users, who have a huge appetite for credit.

Credit implies goods delivered today with expectation of payment some other time in the future. In other words, payment is not immediate (i.e., within 24 - 48 hours post-delivery).

In a credit relationship, the giver (owner of the consignment) is called the creditor while the recipient is called the debtor because he owes the owner). This means that in a credit transaction involving more than one party in a chain, there are many debtors and creditors along the chain.

Why people want to take credit from you	1. Their capacity could be small right now but they are looking to expand 2. Their funds are outside and therefore they are currently unable to acquire the raw material 3. They have only recently started and they need materials for production 4. They were never really interested in the concerned activity but on learning that suppliers do give credit, they resolved to start the business of processing 5. They are big suppliers with links to processors and therefore other suppliers or even farmers like to go through you 6. Seasonality and its effect on market forces (there is a glut during harvest and the buyers specify they can only buy on credit)

Young female retailers at Awala Market, Makoda LGA, Kano State; they sell on credit, provided wholesalers also extend credit to them. Photo by Yusuf Haliru & Associates

Advantages of Selling on Credit	(i). Through credit, a trader can attain a huge level of turnover (because it is easier to accept than to give credit). (ii). Credit can be used to penetrate a new market (since most people can be easily convinced with a credit offer) (iii). Credit can be used to challenge a competitor, for market share (iv). It can facilitate the building of customer loyalty; people are likely to keep buying from someone who sold to them on credit.

Freshly harvested hot peppers (Capsicum frutescens L.) in Birnin Yero, Kaduna State. The product is being prepared for bagging and transportation to Lagos.

A long-established relationship exists between major dealers in both locations (Kaduna and Lagos), whereby 40% - 50% of the consignments are shipped on short-term credit.

Photo by Yusuf Haliru & Associates

Challenges of Selling on Credit	(a) Impact on Liquidity: for as long as the sales proceeds have not been collected, that equivalent of cash is outside of the business (b) Opportunity Cost of Selling on Credit: the next best alternative transaction remains unattained when goods are sold on credit (c) Cost of Follow-Up: the process of ensuring that sales proceeds are collected could consume time, energy and other resources (d) Risk of Loss: it is possible that sales may not be collected for a long time or not at all. This results in a loss What is Risk? This is the Probability of Decrease in Economic Benefit due to a Monetary Loss or an Unexpected Expense or Loss that Occurred Concerning a Transaction Synonyms of RISK: Danger, Hazard, Jeopardy, Menace, Threat, Peril.

Every credit transaction has an inherent risk, which is the probability that a portion (or the entire value) of what was delivered will not be collected. Therefore, credit can (and does) ruin businesses completely.

It is the crystallization of credit risk and its subsequent negative impact on businesses, which makes many entrepreneurs decide to stay-off selling on credit.

Red Flags in Credit Relationships	These are warning signals: • No prior check of prospective debtor to determine character • Not knowing how much quantity the buyer can truly accommodate • Inadequate financial analysis to ascertain progress of payment by the buyer • Ill-conceived sales transactions • Excessive sale to a buyer who has yet to pay for previous supplies • Officers easily persuaded by customers • The desire of sales officers to "sell more and more" • Diversion of sales proceeds (for instance, a trader, having sold most of what was delivered to them on credit, still refuses to pay the supplier) • Continuous inability to meet obligations to creditors • Reluctance of seller to act on time when there is need to do so • Regular staff or labor unrest at the factory of the buyer; this could mean a general inability to run the business creditably

8.2. Managing Accounts Receivables

Recall that receivables are expected inflows, from the credit sales earlier made by the business. In managing these items, the entrepreneur must take cognizance of the following:

- Shouldn't there be a limit to credit sales? This is a poser for the entrepreneur. Remember that credit sale impacts on liquidity since cash remains outside the business until the credit sale is fully repaid
- Check the credit status of new customers to at least gauge the willingness of the customers to meet their obligations.
- Prepare an accounts receivable ageing schedule every month and monitor past-due accounts; this is simply a schedule showing amounts owed by each debtor and the time period over which repayment has been outstanding
- Put habitually late payers on cash-on-delivery terms
- Consider discounts for early payments
- Hire a collection agency to pursue delinquent accounts.

8.3. Managing Accounts Payables

When goods are supplied to an enterprise on credit, the receiver is owing and therefore this liability needs to be carefully and properly managed.

- Try to delay payment, where possible
- Avoid creating the image of a bad debtor.
- When treating accounts payable, be sure to verify for accuracy before paying

(a) Does each invoice reflect exactly what was ordered in terms of quality and quantity?
(b) Were the goods delivered and certified, okay?
(c) Are the unit costs and calculations, correct?
(d) Have statutory taxes been recognized?

Mile 12 Commodities Market, Lagos State – the biggest market for vegetables in Nigeria; it links producers & traders in the north to traders in the south-west. Photo by Yusuf Haliru & Associates

9. Budgeting

The Concept	"Budget" generally refers to a list of all planned expenses and revenues. It is a plan for saving and spending money. In other terms, a budget is simply an organizational plan stated in monetary terms
Kinds of Budget	• Revenue budget: The Revenue Budget consists of revenue receipts of government and the expenditure met from these revenues. Revenues come from taxes, duties accruing to the government levies • Sales budget: An estimate of future sales • Production budget: estimates number of units that must be manufactured to meet the sales goals. Also estimates the various costs involved with manufacturing those units.

	• Cash Flow/Cash budget: A prediction of future cash receipts and expenditures for a particular time period. It usually covers a period in the short-term future. • Marketing budget: The marketing budget is an estimate of the funds needed for promotion, advertising, and public relations in order to market the product or service. • Expenditure budget: A budget type which include of spending data items.
Basis of Budgeting	• Future Intentions of the Business • Facts • Credible Assumptions • Historical Performance

10. Why SMEs Find it Hard to Get Loans

Despite the millions of small and medium VCAs in the economy, coupled with the fact that funding from commercial sources remains the most sustainable requirement for their survival and expansion, this category of VCAs still find it very difficult to access credit, especially from the formal financial industry.

In this section of this training manual, are contained the key factors that make it difficult for SMEs to access loans from financial institutions.

10.1. SME-Related Factors

This subsection concerns the features of SMEs, which make them unattractive to formal financial institutions, to which the VCAs have consistently approached for credit and failed.

Facilitator is expected to periodically ask the participants if they have noticed some of the characteristics highlighted in the sub-section.	• Poor records • Poor business structure and lack of ethics • Mixing personal funds with those of the business • Inability to understand how lenders operate • Small-scale farmers consider every window as their 'share of national cake' • Inconsistency in components of requested amount • Unclear loan purpose • Lack of equity contribution (in application for loan); many applicants actually want the financial institution to fund the project 100% • Lack of (or improper targeting) of market • Poor accounting records and where available, they are unaudited

10.2. Contemporary Example

Facilitator is required to use the poor repayment of credit under the well-intended	To many farmers, the Anchor Borrower's' Programme, which is Central Bank of Nigeria's (CBN) low-interest credit scheme to farmers is merely 'Buhari Bonanza'[1]. Their impression is that the ABP – though its objectives were clearly highlighted from inception – is one of the so-called free 'national cakes' ...
Anchor Borrowers' Programme (ABP) as a reason why many banks are avoiding small-holders. The example is not meant to generate arguments about who is wrong. It is just to show the loss of a major window	The Minister of Agriculture and Rural Development, was quoted in December 2022 at the Feed Nigeria Summit in Abuja that four million farmers cultivating a variety of commodities on over five million hectares received N800 billion under the ABP in seven years. Investigations revealed that recovery has been very poor for many reasons including unwillingness of the farmers to repay. Meanwhile, tomato is among the commodities captured under the ABP loans. But tomato farmers in Kano have been suspended from the scheme since 2021, due to the alleged poor loan recovery, lack of storage facilities, and sustainable mechanisms.

10.3. Factors Related to the Financial Institutions

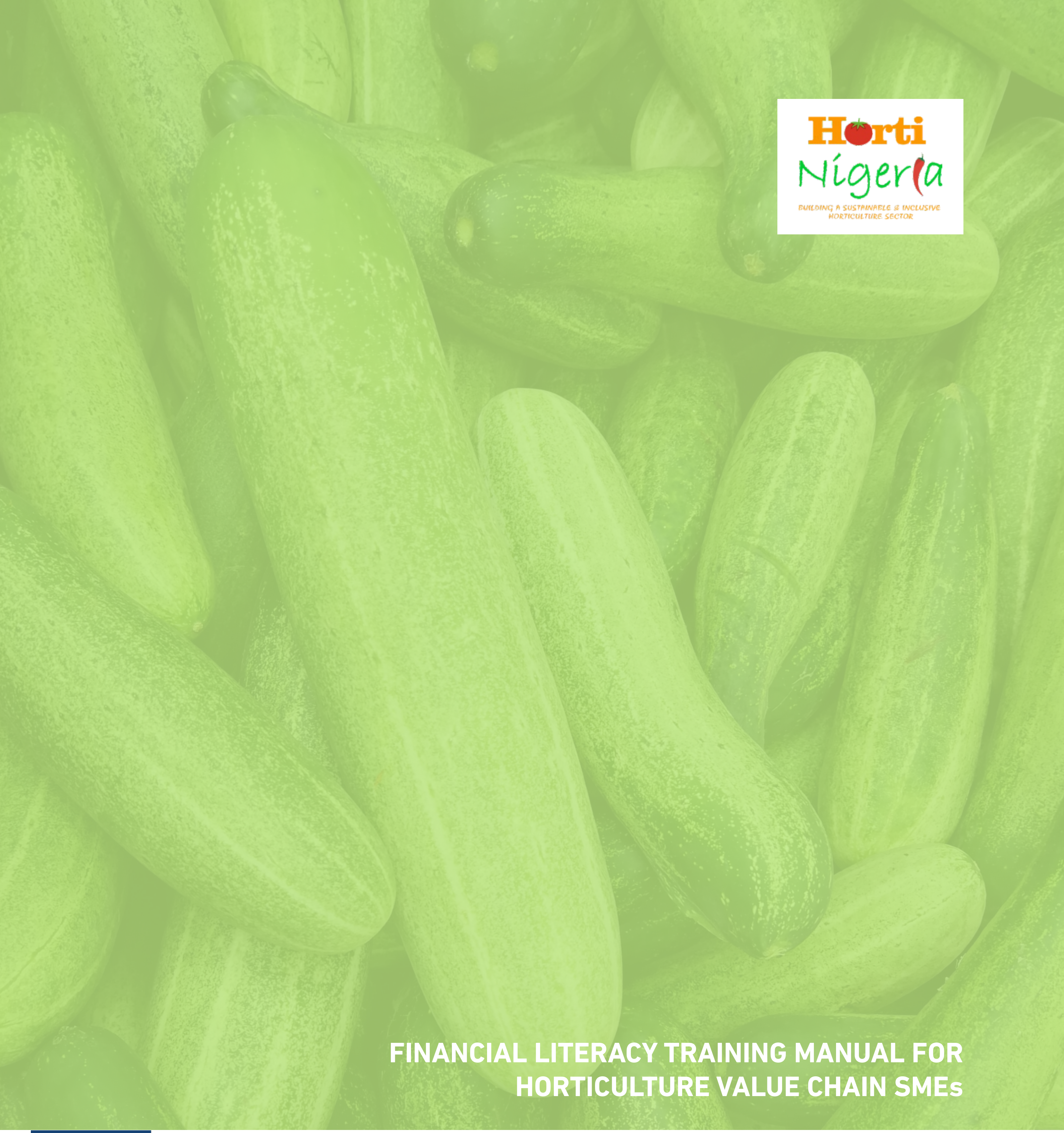
These factors are connected with the internal procedures of financial institutions	• No (or unsuitable) collateral • Riskiness of Agricultural Credit • Unavailability and/or insufficiency of collateral • Cash flow not passed through bank account therefore the asset conversion cycle is not evident • Business model unsuitable for bank credit • Bad experience from past relationships in which borrowers simply refused to repay; financial institutions lost their assets (recovery rate as low as 5%) • Applicants thinking their bad credit history will not be discovered by a new potential lender; (within the same institution or based on credit bureau report) • Lack of business plan • Poor debt service coverage ratio (ratio of historical cash from the business to debt & interest payments); 2 x would be good • No growth in equity (continued borrowing and refusal to be 'weaned')
Anchor Borrowers' Programme (ABP) as a reason why many banks are avoiding small-holders.	The Minister of Agriculture and Rural Development, was quoted in December 2022 at the Feed Nigeria Summit in Abuja that four million farmers cultivating a variety of commodities on over five million hectares received N800 billion under the ABP in seven years. Investigations revealed that recovery has been very poor for many reasons including unwillingness of the farmers to repay.

11. Way Forward

Each participant to review his/her previous application for formal credit and start to work-out specific areas in which their business could be better positioned and worthy of being considered by a financial institution.

Some suggestions by financial institutions:

1. Most should come into the financial sector, where their cash flow can be evident.
2. Ensure that all the members of your group are actual farmers
3. Work on providing collateral
4. Work in groups with cross guarantees
5. Village Heads willing to guarantees are also to be approached and co-opted into the credit application process
6. Since a few aggregators meet the bank's collateral requirement, consider working with and through aggregators
7. Work in viable groups; the banks find it easier to work with groups of VCAs
8. Agriculture VCAs must erase the notion of unwillingness to repay; some banks have had their fingers burnt in the past (in some cases, recovery has been less than 5%)
9. Small-scale producers should form self-identified savings and loans groups (with bank accounts). Their savings and loans activities would be a worthy evidence to the banks in which they operate accounts.



FINANCIAL LITERACY TRAINING MANUAL FOR HORTICULTURE VALUE CHAIN SMEs

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