



Agro-Youth

Training and qualification for young people and women in The Gambia to strengthen entrepreneurial skills in the agricultural and food sector

– Learning Modules –



Landesstelle für
Entwicklungszusammenarbeit

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Disclaimer:

This is only for educational purposes and not an academic publication.

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Foreword

The AGRO-YOUTH project aims to improve the life skill training and productivity capacity of youth in agro-food business, promote innovation and value addition in agro-food, and improve entrepreneurial skills and internationalization of agro-food business.

The expected outcomes of the training using this training manual include:

- ❖ Increased productive capacity of youth in agro-food entrepreneurship in the selected area
- ❖ Improved innovation and value addition in agro-foods entrepreneurship in the selected area
- ❖ Promoted trade careers, decent jobs, and the improvement of the quality of work in agro-foods entrepreneurship

This VET curriculum will therefore guide and define the bases and foundation of the agro-foods Entrepreneurship skill training during the project cycle and further efforts will be made to ensure the dissemination and adaptation of the agro-food entrepreneurship VET curriculum in the Gambia by relevant stakeholders and institutions.

This module was developed through a multi stakeholder engagement and consultation between CASD, BGZ, Landesstelle and trainers from selected agricultural institutions and centres across The Gambia including The Gambia College-School of Agriculture, National Agricultural Research Institute, Chamen Agricultural Centre, Wellingara Horticultural Centre, Ballingho Horticultural Centre, Njawara Agricultural Centre, Rural Development Institute and Ministry of Agriculture (Sapu Agricultural Centre).

This was done through a five days intensive training and module development workshop held at CASD office from the 15th -19th August 2024.

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A special thank you to our partners in Germany, Berliner Gesellschaft für internationale Zusammenarbeit mbH (BGZ) (Berlin International Cooperation Agency), Landestelle für gewerbliche Berufsförderung in Entwicklungsländern (Regional Office for the Promotion of Industrial Occupations in Developing Countries) for their technical support towards the development of this module and other related activities. Our utmost thanks go to the State Office for Development Cooperation from the Berlin Senate for their financial grants to realize this project.

We are extremely grateful to the agricultural institutions and centres across The Gambia, including The Gambia College-School of Agriculture, National Agricultural Research Institute, Chamen Agricultural Centre, Wellingara Horticultural Centre, Ballingho Horticultural Centre, Njawara Agricultural Centre, Rural Development Institute and Ministry of Agriculture (Sapu Agricultural Centre) for sending their trainers to take part on a five(5) days intensive training of trainers(ToT) and module development workshop. They shared their expertise, and experiences which makes it possible to develop this module.

In addition, we wish to acknowledge the commitment and tireless efforts of the CASD secretariat for their effective coordination of the training of trainers and the module development process.

Finally, we acknowledge the data collectors and lead consultant for collecting and analyzing the data that dictated the topics for the module based on the training needs of the beneficiaries.

INTRODUCTION

Aspiring entrepreneurs face different challenges, which affect their decision to start or continue in business. Some of these are unique to smallholder business entrepreneurs. Entrepreneurs need to plan well for their business to flourish. They need to be aware of the implications of their good planning or lack of it, decisions, and actions they make to their well-being, their family, their society, the environment, and the global community at large. Their business, family and personal well-being and the environment form a tripod working together to achieve the business ambitions. All the three must be in a good balance. Entrepreneurs need to learn how to keep their ventures consistently competitive and sustainably operating, for their well-being, for the progress of the business and that of the environment; a value highly upheld by AGRO-YOUTH Project and is consistently emphasized in this training manual.

The focus of the training manual is to help improve the knowledge and skills of Agro-Food entrepreneurs towards a successful and sustainable entrepreneurial venture related to AGRO-FOOD BUSINESS. The training will present basic business skills to start and maintain a business. It is aimed at helping you to manage a business and approach your enterprise with confidence and enthusiasm. Training themes include general introduction to entrepreneurship, planning a business, identifying business opportunities, basic record keeping, agricultural marketing of products and services, planning, financing and managing a business, climate-smart agriculture, risk and mitigation, and so on.

Entrepreneurial skills and a well-written business plan provide a strong foundation for the business you hope to run. The business plan guides you to consider in advance all the relevant elements of running a profitable business and helps you to monitor your progress. The entrepreneurial skills, on the other hand, will be a great asset in the implementation of your plan. This training will address the skills you need as well as provide a business plan template for your planning.

MODULE ONE

AGRIBUSINESS

1.1. AN OVERVIEW OF AGRIBUSINESS

Our daily requirements of food and fibre products at the desired place in the required form and time come from the efficient and hard work of many business personnel in input, farm and food production, and also in marketing them. The entire system, in brief, is called Agribusiness.

2) Agribusiness, of late, is combining diverse commercial enterprises, using a heterogeneous combination of labour, materials, capital, and technology. It is a dynamic.

1.2 OBJECTIVES

By the end of this training module, the participants should be able to

- Explain the overview of the agribusiness in The Gambia

The agribusiness sector continuously meets the current demands of consumers in domestic and world markets.

Agri-business establishment leads to strengthening of infrastructural facilities in that area, expansion of credit, raw materials supply agencies, and adoption of modern technology in production and marketing of agricultural products.

Agri-business provides crucial forward and backward linkages (Backward linkage includes supply of inputs, credit, production technologies, farm services, etc. A forward linkage includes storage, processing, transportation, and marketing aspects.) Agri-business generates potential employment opportunities. It adds value to products and thereby increases the net profits.

- State the importance of agribusiness
- State the challenges in agribusiness

ACTIVITIES

ACTIVITY 1 OVERVIEW OF AGRIBUSINESS IN THE GAMBIA

Aim: trainees to know the overview of agribusiness in the Gambia

Duration of the activity 20 minutes

What to do:

- The facilitator with the trainees will brainstorm on the activity for the trainees to get the concepts

ACTIVITY 2 Definition and importance of agribusiness

Aim: trainees to know the definition of agribusiness and be able to list the importance of agribusiness

Duration of the activity 30 minutes

What to do:

- Facilitator will define agribusiness

- The trainees will list and take note
- The trainees will be divided in to groups and send to the nearby agribusiness shops to conduct a survey on the importance of agribusiness
- The trainees will present their work after the given time

ACTIVITY 3 Challenges of agribusiness

Aim: trainees to know the challenges in agribusiness

Duration of the activity 30 minutes

What to do:

- The participants will be divided in to groups and given 15 minutes to discuss on the challenges they know in agribusiness
- The trainees will present their work
- The facilitator will moderate the presentation and take note

MODULE TWO

AGRIBUSINESS ENTREPRENEURSHIP

OBJECTIVES: Participants will understand what entrepreneurship is and how to potentially use the concept to develop business ideas and innovative solutions to enhance an existing business or start a new business using problem-solving skills.

Introduction

An entrepreneur creates an enterprise. The process of creating such an enterprise is called “entrepreneurship”. Entrepreneurship is a process of actions of an entrepreneur who is a person always in search of something new and exploits such ideas into gainful opportunities by accepting the risk and uncertainty with the enterprise.

The capacity and willingness to develop, organize, and manage a business venture along with any of its risks to make a profit. It is an act of seeking investment and production opportunity, developing and managing a business venture, undertaking the production function, arranging inputs like land, labor, material, and capital, introducing new techniques and products.

Concept of Entrepreneurship

The word “entrepreneur” is derived from the French verb *entreprendre*, which means ‘to undertake’. This refers to those who “undertake” the risk of new enterprises. An entrepreneur is an initiator, a challenger, and a driver who creates new products/services or does normal things in a different way in the market, which includes his Innovations or Creativity. An entrepreneur, in order to carry out his business/ project, will start up and organize a venture/ enterprise to take advantage of an opportunity and, as the decision maker, decides what, where, when, and how much of the goods or services to be produced and distributed.

Entrepreneurship is the ability and readiness to develop, organize, and run a business enterprise, along with any of its uncertainties, to make a profit. A prominent example of entrepreneurship is the launch of new businesses.

An entrepreneur combines capital, land, and labor to manufacture goods or provide services through the formation of a firm. In a market full of uncertainty, it is the entrepreneur who can actually help clear up uncertainty, as he makes judgments or assumes the risk. Entrepreneurship is high-risk, but also can be high-reward as it serves to generate economic wealth, growth, and innovation.

Definition of Terms

According to economist Joseph Alois Schumpeter (1883-1950), “**Entrepreneurs** are not necessarily motivated by profit but regard it as a standard for measuring achievement or success”. According to Merriam Webster, Entrepreneur is a person “one who organizes, manages and assumes the risks of a business or enterprise”.

Entrepreneurship: the process by which individuals or a group of individuals (entrepreneurs) exploit a commercial opportunity, either by bringing a new product or process to the market, or by substantially improving an existing good, service, or method of production.

Entrepreneur: a person who organizes the means of production to engage in entrepreneurship, often under considerable uncertainty and financial risk.

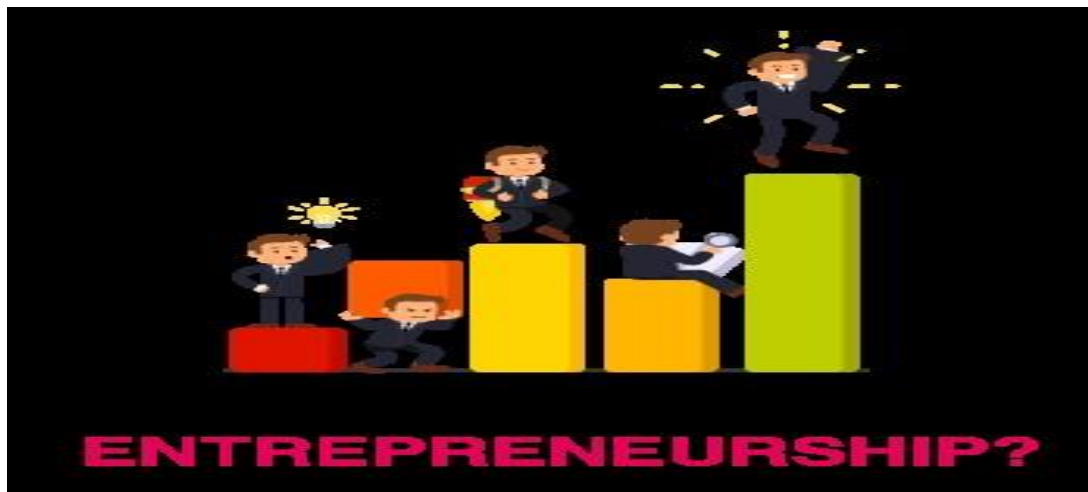


Figure 1: Iowa Agricultural Literacy Foundation

Types of Entrepreneurs

What are the 4 Types of Entrepreneurship? It is classified into the following types:

Small Business Entrepreneurship-These businesses are a hairdresser, grocery store, travel agent, consultant, carpenter, plumber, electrician, etc. These people run or own their own business and hire family members or local employees. For them, the profit would be able to feed their family and not making 100 million in business or taking over an industry. They fund their business by taking small business loans or loans from friends and family.

Scalable Startup Entrepreneurship-This start-up entrepreneur starts a business knowing that their vision can change the world. They attract investors who think and encourage people who think out of the box. The research focuses on a scalable business and experimental models, so, they hire the best and the brightest employees. They require more venture capital to fuel and back their project or business.

Large Company Entrepreneurship-These huge companies have a defined life cycle. Most of these companies grow and sustain by offering new and innovative products that revolve around their main products. The change in technology, customer preferences, new competition, etc., build pressure for large companies to create an innovative product and sell it to the new set of customers in the new market. To cope with the rapid technological changes, the existing organizations either buy innovative enterprises or attempt to construct the product internally.

Social Entrepreneurship-This type of entrepreneurship focuses on producing products and services that resolve social needs and problems. Their only motto and goal is to work for society and not make any profits.

Characteristics of Entrepreneurship:

Not all entrepreneurs are successful; there are definite characteristics that make entrepreneurship successful. A few of them are mentioned below:

- **Ability to take a risk-** Starting any new venture involves a considerable amount of failure risk. Therefore, an entrepreneur needs to be courageous and able to evaluate and take risks, which is an essential part of being an entrepreneur.
- **Innovation-** It should be highly innovative to generate new ideas, start a company and earn profits out of it. Change can be the launching of a new product that is new to the market or a process that does the same thing but in a more efficient and economical way.
- **Visionary and Leadership quality-** To be successful, the entrepreneur should have a clear vision of their new venture. However, to turn the idea into reality, a lot of resources and employees are required. Here, leadership quality is paramount because leaders impart and guide their employees towards the right path of success.
- **Open-Minded-** In a business, every circumstance can be an opportunity and used for the benefit of a company. For example, Paytm recognised the gravity of demonetization and acknowledged that the need for online transactions would increase, so it utilised the situation and expanded massively during this time.
- **Flexible-** An entrepreneur should be flexible and open to change according to the situation. To be on top, a businessperson should be equipped to embrace change in a product and service, as and when needed.
- **Know your Product-** A company owner should know the product offerings and also be aware of the latest trend in the market. It is essential to know if the available product or service meets the demands of the current market, or whether it is time to tweak it a little. Being able to be accountable and then alter as needed is a vital part of entrepreneurship.

Importance of Entrepreneurship:

- **Creation of Employment-** Entrepreneurship generates employment. It provides an entry-level job, required for gaining experience and training for unskilled workers.
- **Innovation-** It is the hub of innovation that provides new product ventures, market, technology, and quality of goods, etc., and increases the standard of living of people.
- **Impact on Society and Community Development-** A society becomes greater if the employment base is large and diversified. It brings about changes in society and promotes facilities like higher expenditure on education, better sanitation, fewer slums, and a higher level of homeownership. Therefore, entrepreneurship assists the organisation towards a more stable and higher quality of community life.
- **Increase Standard of Living-** Entrepreneurship helps to improve the standard of living of a person by increasing their income. The standard of living means an increase in the consumption of various goods and services by a household for a particular period.
- **Supports research and Development-** New products and services need to be researched and tested before launching in the market. Therefore, an entrepreneur also provides financial support for research and development to research institutions and universities. This promotes research, general construction, and development in the economy.

Business organization

Selecting the appropriate type of business ownership One of the most critical ingredients that leads to the success of a small business is the choosing of the right type of business ownership by the entrepreneur when preparing to launch their new business. This is due to the fact that each type of business ownership an entrepreneur chooses often helps to determine the following: (1) the various sources of capital the business will have at its disposal, (2) the management expertise it will need, (3) its decision-making effectiveness and so on.

It is, however, important for entrepreneurs to be fully knowledgeable of the fact that each type of business ownership can be changed over time as the business experiences growth in its operational activities. The different forms of business ownership include: sole proprietorships, partnerships, close corporations, private limited companies and corporations. All these types of business ownership have their advantages and disadvantages, legal requirements, size, and personal qualities. The forms of business ownership will be discussed in detail and they are depicted in Figure 2: below.

Types of business organization

- Business proposal development or plan

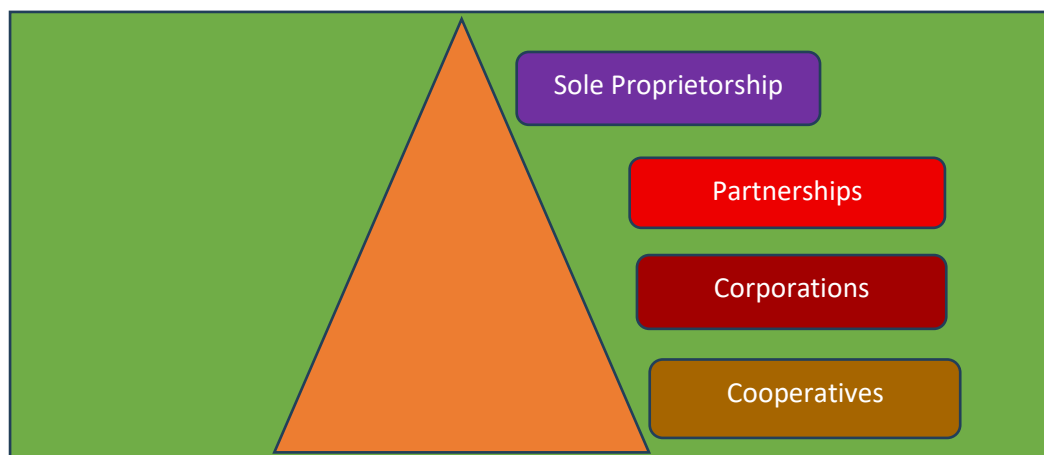


Figure 2: Source: Modified: (Government of Canada, 2018; Corporate Finance Institute, 2020)

Sole proprietorships

“With this type of business organization, you are the sole owner and fully responsible for all debts and obligations related to your business. All profits are yours to keep. Because you are personally liable, a creditor can claim your personal assets as well as your business assets in order to satisfy any debts”¹⁴⁹ (Government of Canada, 2018. “Reproduced with the permission of the Minister of Industry, 2018. The sole proprietorship is the most commonly used type of business ownership because it is easy and costs less to launch.

Advantages of sole proprietorships

Sole proprietorship businesses, due to their size and one owner they have many advantages.

- Easy and inexpensive to register,

- Regulatory burden is generally light,
- You have direct control of decision-making,
- Minimal working capital required for start-ups,
- Some tax advantages if your business is not doing well (for example, deducting your losses from your personal income, and a lower tax bracket when profits are low),
- All profits go to you

Disadvantages of a sole proprietorship

The disadvantages of sole proprietorships are many

- Unlimited liability (if you have business debts, claims can be made against your personal assets to pay them off)
- Income is taxable at your personal rate and, if your business is profitable, this could put you in a higher tax bracket
- Lack of continuity for your business if you are unavailable
- Can be difficult to raise capital on your own

Partnerships

Entrepreneurs who lack the necessary management skills, adequate capital, industry experience, and personal assets to use as collateral to access loans and fear the risk of losing their invested capital should find a business partner or partners to help them complement their weaknesses mentioned above. “A partnership is a non-incorporated business that is created between two or more people.

In a partnership, your financial resources are combined with those of your business partner(s), and put into the business. You and your partner(s) would then share in the profits of the business according to any legal agreement you have drawn up. In a general partnership, each partner is jointly liable for the debts of the partnership. In a limited partnership, a person can contribute to the business without being involved in its operations.

A limited liability partnership is usually only available to a group of professionals, such as lawyers, accountants, or doctors. When establishing a partnership, you should have a partnership agreement in place. This is important because it establishes the terms of the partnership and can help you avoid disputes in the future. Hiring a lawyer or other legal professionals to help you draw up a partnership agreement will save you time and protect your interests.”

Advantages of partnerships

The advantages of partnerships are many.

- Fairly easy and inexpensive to form a partnership
- Start-up costs are shared equally with you and your partner(s)
- Equal share in the management, profits and assets
- Tax advantage — if income from the partnership is low or loses money (you and your

partner(s) include your shares of the partnership in your individual tax returns)

Disadvantages of partnerships

Partnerships like any other small business have disadvantages.

- There is no legal difference between you and your business
- Unlimited liability (if you have business debts, personal assets can be used to pay off the debt)
- Can be difficult to find a suitable partner
- Possible development of conflict between you and your partner(s)
- You are held financially responsible for business decisions made by your partner(s); for example, contracts that are broken

Corporations

Large corporations dominate the global business environment nowadays. “What is a Corporation? A corporation is a legal entity created by individuals, stockholders, or shareholders to operate for profit.

The creation involves a legal process called incorporation, where legal documents containing the primary purpose of the business, name, location, and the number of shares and types of stock issued are drafted. The process of incorporation gives the business entity a distinct feature that protects its owners from being personally liable in the event of a lawsuit or legal claim.

A corporation can be created by issuing ownership shares and operating a business for profit, or by not issuing shares but with a membership structure instead, and operating as a non-profit business. Another type of business structure is a corporation. Incorporation can be done at the federal or provincial/territorial level.

When you incorporate your business, it is considered to be a legal entity that is separate from its shareholders. As a shareholder of a corporation, you will not be personally liable for the debts, obligations or acts of the corporation. It is always wise to seek legal advice before incorporating.

Corporations can draft legally binding contracts with other corporations or individuals and it can be sued or sue in court as a separate legal entity. There are six types of corporations, namely: private corporation, public corporation, subsidiary corporation, holding company, quasi-public corporation, and non-profit corporation.

“The private corporation definition is a type of corporation in which stock shares are only offered to specific individuals, such as employees or investors. While private corporations are quite similar to public corporations, they do have unique benefits and drawbacks.

Understanding this business entity can help you determine if it's the right choice for your company.

Private Corporation Overview: Like a public corporation, a private corporation issues stock and has shareholders. However, it does not issue an initial public offering (IPO) and shares are not traded on public exchanges. Instead, the private corporation is held only by a small investor group and is organized for the profit of these individuals. Private corporations must

satisfy the same legal requirements as public corporations. Furthermore, according to up counsel (2020) four main types of private companies include:

- Sole proprietorships, in which the company is owned by just one person
- Limited liability companies (LLCs), which can have one or more owners known as members
- S corporations
- C corporations

Each has to follow specific guidelines about members, shareholders, and finances and taxes.

Public corporation

What's a public corporation?

A public corporation is a legal entity that is separate and distinct from its owners. Public corporations enjoy most of the responsibilities and rights that an individual possesses. For example, a corporation has the right to loan and borrow money, enter into contracts, sue and be sued, own assets, hire employees, and pay taxes. A public corporation is often referred to as a "legal person"

Notably, public corporations also sell or trade their shares/stock on the stock exchange in order for the general public to buy or sell them. There are many commonly known public corporations as a result of their good performance and powerful corporate brands.

Subsidiary corporations

"What is a Subsidiary?"

A subsidiary (sub) is a business entity or corporation that is fully owned or partially controlled by another company, termed as the parent, or holding, company. Ownership is determined by the percentage of shares held by the parent company, and that ownership stake must at least be 51%. What are the Attributes of a Subsidiary? A subsidiary operates as a separate and distinct corporation from its parent company.

This benefits the company for the purposes of taxation, regulation, and liability. The sub can sue and be sued separately from its parent. Its obligations are also typically its own and are not usually a liability of the parent company.

Advantages.

Tax benefits - A parent company can substantially reduce tax liability through deductions allowed by the state. For parent companies with multiple subsidiaries, the income liability from gains made by one sub can often be offset by losses in another.

Risk reduction - The parent-subsidary framework mitigates risk because it creates a separation of legal entities. Losses incurred by a subsidiary do not readily transfer to the parent. In case of bankruptcy, however, the subsidiary's obligations may be assigned to the parent if it can be proven that the parent and subsidiary are legally or effectively one and the same."

A holding company

What is a holding company? A holding company is defined as an LLC, Parent Corporation, or limited partnership that has enough voting shares in a separate company to manage its operations. Holding companies are in place for the sole aim of operating a separate company. The company being controlled could be a corporation, LLC, etc. The aim of a holding company is not to produce services or goods, but to hold and bring value to an investment. Holding companies can exist for such endeavours as owning:

- Real Estate
- Patents
- Trademarks
- Stocks
- Miscellaneous assets
- Copyrights

A business that a holding company fully owns is called a wholly owned subsidiary. In essence, the company holds the assets and nothing more. Benefits of a Holding Company. A core benefit of holdings is that the holding is safeguarded from losses. For example, if a company enters bankruptcy, other companies under the umbrella of the main holding company is protected from creditor claims. Therefore, the various corporations that the holding company owns shares in have their own separate legal entities; they even have other shareholders and may not be entirely owned by the holding company or vice versa.

Quasi-public corporations

Typical examples of quasi-public corporations include the following: national postal office services, electricity power utility companies, water companies, cleaning services (refuse and sewerage) companies, and so on. "A quasi-public corporation, sometimes referred to as a public service corporation, is a private corporation that is backed by a government agency that has a public requirement to provide certain services. Most quasi-public corporations begin as government agencies, but thereafter branch off on their own, becoming a separate entity.

Such corporations, while quasi-public, can still offer shares to the public and have investors involved to help gain capital for the business. Such entities have greater flexibility and fewer restrictions than ordinary private corporations because of the public policy purpose."

Non-profit corporations

Generally, non-profit corporations are established to offer humanitarian assistance to the general population of a country or different countries across the world. On the other hand, other non-profit corporations specifically provide environmental protection and science development support without targeting profitability goals.

They are usually owned or founded by world governing bodies, national governments, large organizations, individuals with different specializations (doctors, social workers, scientists, engineers, entrepreneurs and so on) and civil society for a nation. Individual entrepreneurs with non-profit corporations that have gained worldwide recognition for their enormous contribution to global societal development and the welfare of people, for example, the Bill & Melinda Gates Foundation and the Carlos Slim Foundation.

The aims of non-profit organizations significantly differ, and they vary depending on the sector in which they provide their services. Non-profit organizations access their funding from private

family foundations, world bodies, conglomerates, companies, private individuals, national governments, trust foundations, religious organizations, sports associations, football clubs, and many other sources.

Advantages of corporations

The advantages of corporations are many due to their large size and ability to hire experienced management. Advantages are:

- Limited liability
- Ownership is transferable
- Continuous existence
- Separate legal entity
- Easier to raise capital than it might be with other business structures
- Possible tax advantage as taxes may be lower for an incorporated business¹⁶⁰

Disadvantages of corporations

Corporations have many disadvantages.

- A corporation is closely regulated
- More expensive to set up a corporation than other business forms
- Extensive corporate records required, including documentation filed annually with the government
- Possible conflict between shareholders and directors
- You may be required to prove the residency or citizenship of directors

Cooperatives

“A co-operative is owned and controlled by an association of members. It can be set up as a profit or a not-for-profit organization. This is the least common form of business, but can be appropriate in situations where a group of individuals or businesses decide to pool their resources and provide access to common needs, such as the delivery of products or services, the sale of products or services, employment, and more.” (Government of Canada, 2018. “Reproduced with the permission of the Minister of Industry, 2018”). In many developing and developed countries, rural areas are usually agriculture-based. Cooperatives are very popular in rural areas of many countries.

Advantages of cooperatives

Even though their aim is not to make profits, cooperatives still enjoy enormous advantages.

- Owned and controlled by its members
- Democratic control (one member, one vote)
- Limited liability
- Profit distribution

Disadvantages of cooperatives

The disadvantages of cooperatives are many. Disadvantages are:

- Longer decision-making process
- Participation of all members is required in order to succeed
- Possible conflict between members
- Extensive record keeping
- Less incentive to invest additional capital

BUSINESS PLAN

Definition: a business plan is a document that convincingly demonstrates that your business idea can sell enough of its products and services as to make a satisfactory profit and be attractive to potential financiers.

In other words, a business plan is a road map you can follow to start and manage a successful business. It shows step by step on how to start, fund, manage, monitor, and evaluate a successful business.

Why Prepare a Business Plan

1. To avoid silly mistakes
2. It defines and focuses on business objectives and goals
3. As a tool for fundraising, marketing, monitoring, evaluation, and staffing
4. To be realistic about our intentions
5. To clearly communicate your vision/ ideas to others within and outside.

Who should write a Business Plan?

1. Should be written by an entrepreneur since he/ she is the owner of the business idea and is the custodian of the vision
2. Can be written by consultants and employees.

What is a “good” Plan?

1. A good plan should be a dynamic document that should be available for reference for decision, evaluation and future plans
2. It should clearly communicate visions and ideas
3. Should show the evidence of understanding of target customers
4. Appealing to the potential financier.

Benefits of a good business plan

1. It forces entrepreneur to establish written goals and objectives for their proposed businesses.
2. It enables potential entrepreneur to assess the viability of their business opportunity on paper.

3. It assists in identifying the potential customers, marketing opportunities, pricing strategy, promotional activities, distribution strategy, and competitive conditions needed for business success.
4. It identifies the number of employees needed, the skills they should possess, the task they will perform and the methods of remuneration to be adopted.
5. It establishes the financial needs of a business and suggests the possible sources of financing
6. It helps to identify critical factors for the successful entry and growth of a business in a given marketplace.

Components of a business plan

Business plans include details under the following main sections;

1. Executive summary
2. Business description
3. Marketing plan
4. Competitor analysis
5. Management plan
6. Business operation (production/ service, delivery plan)
7. Financial plan
- 8 Appendices

Writing of a Business Plan

- The time of writing a business plan depends on the experience and knowledge of the writer (entrepreneur) as well as the purpose it intends to serve.
- It should be comprehensive enough to give any potential investor a complete picture and understanding of the new venture.
- The following is a simple outline of a business plan.

Executive Summary

- This section of the business plan is prepared after the total plan is written, normally to a maximum of two pages.
- It should stimulate the interest of the potential investor and therefore should not be taken lightly.
- The executive summary should be concise and convincing, addressing issues such as the business concept or model.
- Any supportive evidence that may give it strength is included
- The section is intended to highlight key factors and provide strong motivation to the reader of the plan.

Description of the Business

- The description of the venture should be detailed so as to enable the investor to ascertain the size and scope of the business
- This section should begin with the mission statement and vision of the business venture
- The statement describes the nature of the business and what the entrepreneur hopes to accomplish
- The definition will guide the firm through long-term decision making
- After the mission statement, a number of important factors that provide a clear description and understanding of the business venture should be discussed.
- Key elements are the Products or services
- The location and size of the business
- The history of the venture.

Production Plan

- The plan should describe the complete product. If some or all of the manufacturing process is to be subcontracted
- The plan should describe the subcontractors, including location, reasons for selection, costs, and any contracts competed.
- Others include – manufacturing operations and layout, the raw materials, the suppliers, costs, capital equipment, etc.

Operation Plan

- This section goes beyond the manufacturing process and describes the flow of goods and services from production to the customer
- It includes storage, shipping, control procedures, customer support services
- Others include renovations, product service, machinery and tools etc.

Marketing Plan

- The marketing plan- is an important part of the business plan since it describes how the product or service will be distributed, priced and promoted.
- Marketing plan – is an important part of the business plan since it describes how the product or service will be distributed, priced and promoted
- Marketing research evidence to support any critical marketing decisions as well as forecasting sales should be described in this section.

Organization Plan

- The organizational plan in part of the business plan that describes the ventures form of ownership - that is, proprietorship, partnership or corporation
- The details the shares of stock authorized, share options as well as names and resume of directors - It details the organizational structure.

Financial Plan

- Is an important part of business plan since it determines the potential investment commitment needed for the new business venture and indicate its economic feasibilities?

Appendix

- The appendix of a business plan generally contains any back-up materials that are necessary in the text of the document. Reference to any documents in the appendix should be made in the plan itself.

How does Potential Lenders and Investors Evaluate the Plan

- Potential readers or evaluators should reflect on the strengths of management and personnel, the product or service and the available resources.

- Suppliers who may want to see a business plan before signing a contract together with customers who may want to see the business plan before buying the product or service and the available resources

- Suppliers who may want to see a business plan before signing a contract together with customers who may want to see the business plan before buying the products pay more attention to the (i) experience of the entrepreneur (ii) Market projections

- Lenders will primarily be interested in the ability of the new venture to pay back the debt together with the interest within a designated period of time.

- Banks want facts with an objective analysis of the business opportunity and all the potential risks associated with a business.

- Lenders focus on the 4Cs of credit, i.e., (i). Cash flow (ii). Collateral (iii). Character (iv). Contribution of equity

- The business plan must therefore reflect the entrepreneur's credit history, the ability of the entrepreneur to meet the debt and the interest payable (cash flow), the collateral or tangible assets being secured for the loan, and the amount of personal equity the entrepreneur has invested in the business.

- Investors on the other hand place more emphasis on the entrepreneur's character than lenders.

- Investors want to make sure that the entrepreneur is compliant and willing to accept this involvement.

- They also demand a high rate of returns and will therefore focus on the market and financial projections

- In preparing a business plan it is important for the entrepreneurs to consider the needs of external sources and not merely provide their own perspective.

Presenting the Business Plan

- It is often necessary for an entrepreneur to orally present the business plan before an audience of potential investors – in this case, the entrepreneur is expected to provide a short presentation of the business plan.

- The entrepreneurs are expected to sell their business concept in this short period – try and persuade potential investors that this is a good investment
- The focus of such a presentation is why this is a good opportunity – an overview of the marketing program.
- Concluding remarks might reflect the recognized risks and how the entrepreneur plans to address them.
- Unlike oral presentation, written presentation requires the entrepreneur to consult, where necessary, the services of lawyers, accountants, marketing consultants, and engineers in preparation of the business plan.
- The plan must give a detailed account of the needs of the expected readers.

Information Needs

- Before committing time and energy to preparing a business plan, the entrepreneur should do quick feasibility study of the business concept to see whether there are possible barriers to success.

- The information obtainable from the many sources should focus on

i. Marketing

ii. Goals and objectives

iii. Finance

iv. Production

Goals and Objectives

- Before beginning the feasibility study, the entrepreneur should clearly define the goals and objectives and also provide a framework for the business plan, marketing plan, and financial plan.

- Goals and objects that are too general or that are not feasible make the business plan difficult to control and implement.

Market Information Needs

- One of the initial and important elements of information needed by the entrepreneur is the market potential for the product or service

- In order to ascertain the size of the market, it is important for the entrepreneur to define the market, e.g., the consumer group, men, women, youths, etc.

- The consumers income – high or low- are they rural or urban deadlier. - The education level is another important aspect of consideration

- A well-defined target market will make it easier to project the market size and subsequent market goals.

- In order to build a strong marketing plan with reasonable and measurable market goals and objectives the entrepreneur will need to gather information on the industry and market.

- Most entrepreneurs have difficulty with this stage and do not of tern known where to begin. The best way to start is to first visualize the following process of gathering market information.

MODULE THREE

AGRI-BUSINESS FINANCIAL MANAGEMENT

Overview of the Agri-Business Management module:

This module provides an in-depth understanding of finance in Agribusiness and the importance of finance in Agribusiness. This training module explores the various aspects of farm business budget, uses of budget, components of budget, common types of farm budget, and steps in preparing a farm budget. This module is designed to equip youths and women with the knowledge and skills necessary to be successful in their Agribusiness enterprises.

LEARNING OUTCOMES:

Upon completion of the training, the youths and women involved in the training will be able to:

1. Define finance and explain the importance of finance in Agribusiness
2. Develop a farm business budget
3. Understand the uses of a farm business budget
4. Identify the components of the budget in Agribusiness
5. Explain the steps in preparing a farm budget
6. Understand the common types of farm budgets

COURSE CONTENT

- 1.0 Definition
- 2.0 Importance of finance in agribusiness
- 3.0 Farm business budget
- 4.0 Uses of farm budget
- 5.0 Components of a budget
- 6.0 Steps in preparation of farm budgets
- 7.0 Common types of farm budget

1.0 DEFINITION OF AGRICULTURAL FINANCE:

Murray (1953) defined agricultural finance as “an economic study of borrowing funds by farmers, the organization and operation of farm lending agencies, and of society’s interest in credit for agriculture.”

Penson and Lins (1990) defined agricultural finance as the study of financial intermediaries that provide loanable funds for agricultural production and the financial markets in which these intermediaries obtain their loanable funds.

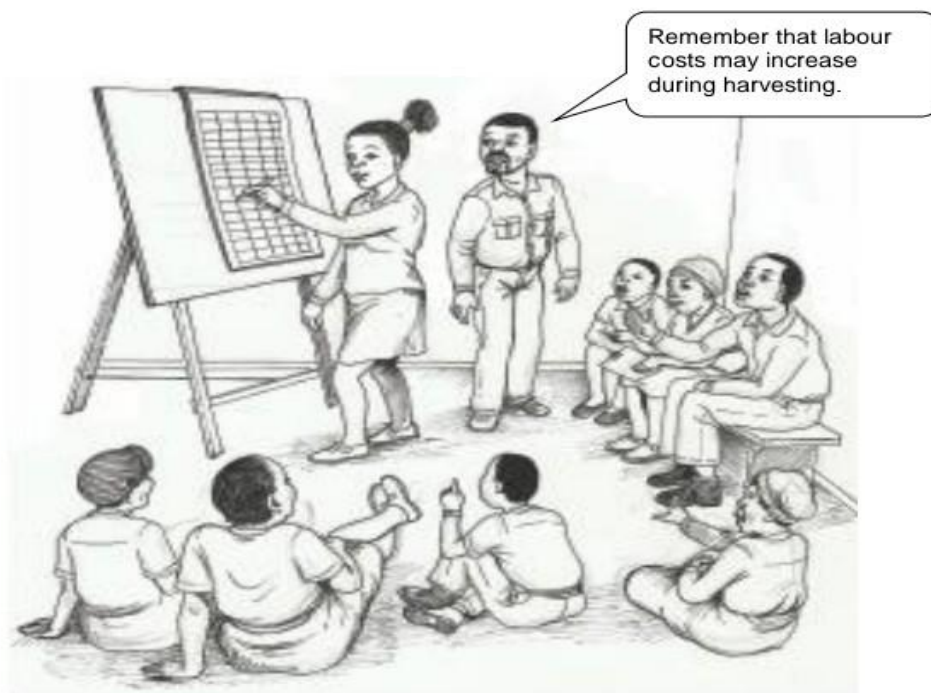
2.0 IMPORTANCE OF FINANCE IN AGRIBUSINESS

1. Agricultural finance assumes vital and significant importance in the agro-socio-economic development of the country, both at the macro and micro levels.

2. It plays a catalytic role in strengthening the farm business and augmenting the productivity of scarce resources. When newly developed potential seeds are combined with purchased inputs like fertilizers & plant protection chemicals in appropriate / requisite proportions, it will result in higher productivity.
3. Use of new technological inputs purchased through farm finance helps to increase agricultural productivity.
4. Farm finance can also help reduce regional economic imbalances and is equally effective in reducing inter-farm asset and wealth variations.
5. Farm finance is like a lever with both forward and backward linkages to the economic development at the micro and macro levels.
6. As Gambian agriculture remains traditional and subsistence in nature, agricultural finance is necessary to establish the supporting infrastructure for the adoption of new technologies.

3.0 WHAT IS FARM BUDGETING?

A budget is a formal plan for carrying out business activities in the future. It illustrates the process of completing an activity and the resulting outcome. Budgeting is the planning process or the development of a plan of action (budget). Families involved with farm businesses should budget together and share responsibilities in the budgeting process.



4.0 USES OF FARM BUDGETS

Budgets are normally used to:

Decide what to produce, how much to produce, and the resources needed.
Itemize the financial aspects of the farming business.

List the inputs and production practices required by an enterprise.

Evaluate the performance of different farm enterprises.

Estimate benefits and costs of changes in production practices.

Provide the basis for a total farm plan.

Show the capacity of the farming business to carry risk.
Support applications for credit (show the ability of the business to pay debt).
Inform all interested parties of the costs incurred in producing an agricultural product.

5.0 COMPONENTS OF A BUDGET

A farm budget has the following two parts:

Physical input and output coefficients: These show the physical relationships of transforming farm resources into outputs (for example, 100kg of soya bean seed/ha yielding 3mt/ha of output).

Financial relationships: These show the monetary value of inputs and outputs. Financial relationships allow specification of costs of production and income from production.

6.0 STEPS IN PREPARATION OF A FARM BUDGET

The process of creating a farm budget begins with an assessment of individual enterprises on the farm. These are then combined to create a comprehensive farm budget. The steps that are required to come up with an effective budget are discussed below.

Step 1. Defining a Production Program

At this stage, the person should define the production program (livestock or cropping). This step is influenced by factors such as:

The person farming experience and preference.

Market availability.

Climatic potential of the farming area.

Resources available to the person.

Step 2. Estimating and Specifying Input Requirements

At this stage, the person needs to specify and estimate the inputs required for the production program, as defined in Step 1. This is achieved by estimating input requirements for each operation and estimating the cost of inputs.

Step 3. Estimating Cost of Production

This stage involves the estimation of all production processes anticipated. Each process or activity has to be priced realistically. Examples of production processes for a maize project are land preparation, planting, weeding, harvesting and marketing.

Step 4. Estimating Quantity and Value of Output

This stage involves estimating the anticipated quantity and value of output. This should be based on facts rather than wishful thinking. The most critical parameters to consider in this process are average yields and prices.

Step 5. Comparing Costs and Returns to Determine Net Returns

This stage involves comparing anticipated costs and returns to determine net returns.

7.0 COMMON TYPES OF FARM BUDGETS

A farm budget includes an enterprise budget, a whole farm budget, a partial budget, and cash flow projections. In deciding among alternatives, the farmer should look at the future outcomes of the different possible choices to come up with a plan that will increase profits. The most common types of budgets that are useful for a farming business are whole farm budget, gross margin (GM) budget, partial budget, and cash flow budget.

WHOLE FARM BUDGET

The whole farm budget combines all the enterprises and resources of the farm to provide an overall picture of the expected net returns for the period. The budget provides a basis for the preparation of net worth statements and cash flow statements in the absence of farm records. This budget summarizes the total farm business and determines the relationships among different parts of the farm.

Whole Farm Budgeting Process

To develop a whole farm budget:

1. List the goals and objectives of the farm business.
2. Inventory the resources available for use in the business.
3. Determine the physical production data that will be used.
4. Identify reliable input and output prices.
5. Cultivate the expected variable, fixed costs, and all returns.

Role and Applicability of the Whole Farm Budget

A whole farm budget is used in planning the costs and returns of a whole farm business. It tests the feasibility of undertaking the farm business. Whole farm budgets are produced in the following situations:

When setting up a new farm.

When planned changes are likely to have an impact on several enterprises on the farm.

When intended changes are likely to alter the existing inter-relationships among farm enterprises.

When adding or expanding existing crop or livestock enterprises.

When there is a major shift in supply and demand, it affects prices and markets.

When there is a substantial change in farm goals (for example, a change in focus from cattle ranching to cropping). The following is an example of a whole farm budget:

EXAMPLE: Whole farm budget

Enterprise	Land size (ha)	Cost D	Returns D	Gross Margin	Total GMD
Maize	10	800	1400	600	6000
Beans	20	500	1000	500	10000
Poultry (10000 birds)	-	27600	32600	5400	5400
Whole Farm GM	-	-	-	-	21400

Fixed cost (rental, elect)	-	-	-	-	1000
Net farm income	-	-	-	-	20400

GROSS MARGIN/ENTERPRISE BUDGET

GM budgeting is the estimation of costs and returns expected on each enterprise and the comparison of the two. This is achieved by doing the following activities for each enterprise:

List all operations to be carried out.

Estimate input requirements for each operation.

Estimate the cost of inputs and the price of output.

Prepare the enterprise GM budget.

Uses of the GM Budget

Enterprise budgets are the basis for constructing whole farm and partial budgets. Enterprise budgets are also useful in assessing:

The structure of the business in terms of costs and returns.

The relative size and importance of each enterprise.

Varying degrees of profitability.

The level of unproductive overhead (fixed) costs.

Results from previous years.

Key Terms Used in Enterprise GM Analysis

Gross Income — is the total value of production from an enterprise. It includes sales, value of produce consumed at home, and value of retained produce.

Variable Costs — are production costs that can be directly allocated to a particular enterprise in a production season, and they change with the size and scale of production. Variable costs are costs that can be avoided (for example, by not harvesting a crop, one avoids harvesting labour costs and fuel costs).

Gross Margin — this is gross income less variable costs. It is a measure of enterprise viability.

GROSS MARGIN = GROSS INCOME – VARIABLE COSTS

EXAMPLE: Gross Margin Budget

Description	Unit	Quantity	Price/ Unit	Total
Income (yield x selling price)	tonnes	6	250	1500
Less Expenditure				
Land preparation				
Plough (ox ploughing)	labour day	1	45	45
Discing	Labour day	0.5	40	20
Marking	Labour day	4	5	20
Total cost for land preparation				85
Planting costs				
Seeds	10kg	2.5	20	50
NPK Fertiliser	50kg	4	30	120

Labour	labour days	4	5	20
Total planting costs				190
Crop maintenance costs				
Top dressing	50kg	4	35	132
Insecticide	kg	4	5	20
Herbicide : gramoxone	Litters	20.5	37	58
Total crop maintenance costs				209
Harvesting and marketing costs				
Labour	Labour day	16	5	80
Packaging	units	120	0.2	24
Transportation	units	100	1	120
Total Harvesting and marketing costs				224
Miscellaneous costs (10%)				71
Total costs				780
Gross Margin				720
Return per Dallas invested				
RPDI = 720/780				
RPDI = 0.92				

PARTIAL BUDGET

Partial budget is an analysis focusing on changes that occur in costs and incomes as a result of small changes in a farm program. It is used to calculate the expected change in profit for a proposed change in the farming business. Partial budgeting is a planning tool adopted to analyse relatively small changes in the whole farm by looking at only income and expense items that will change and not total values. Partial budgeting is also a systematic process of choosing alternatives. Four key questions are answered by a partial budget:

What new or additional costs will be incurred?

What current income will be lost or reduced?

What current costs will be reduced or eliminated?

What new income will arise?

Partial budgeting is applicable for decision making when there is:

A change in the combination of enterprises.

A change in production methods or management practices.

When a new technology (for example, herbicide) is adopted.

By comparing total reduction in profit with total increase in profit, the net change in profit can then be worked out. If:

AI = Additional Income; RI = Reduction on income; RC = Reduction on cost; AC = Addition on cost, then:

Total Gain (A) = AI + RC and Total Loss (B) = RI + AC

Therefore, Net change in profit = A - B

For Net Gain: (AI+RC) > (RI+AC)

EXAMPLE: Partial budget

Reduced cost (D) Weeding labour = 80 Depreciation of hoes = 20	Additional cost (D) Depreciation of sprayer = 30 Purchase of chemical = 20
--	--

	Protective clothing = 10
Additional income = Nil	Reduced income = Nil
Total = D100 Net change = D100 - D100 = D40	Total = 60

CASH FLOW BUDGETING

Cash flow budgeting is a forecast of the movement of money into (cash inflows) and out of (cash outflows) the farming business over a given period of time. A cash flow budget can be used to assess the timing, amount, and predictability of future cash flows, and it can be the basis for resource utilization over time. It gives a forecast of the cash (liquidity) position of the farming business for the period ahead. It seeks to answer the following questions:

Is the plan financially feasible?

Will there be sufficient capital, and if not would the plan sustain a loan?

How much will need to be borrowed?

When does the business get peak financial inflows and outflows?

Characteristics of a cash flow budget:

It measures cash income and expenditure only.

All personal expenses and income are included as these have an impact on the budget.

It contains estimates or projections for a future time.

A cash flow budget indicates the timing, amount, and duration of peak cash requirements or indebtedness.

It reveals opportunities for the manipulation of purchases and sales to best advantage and assists in keeping peak cash requirements to a minimum.

Purchases and debt repayments can be rearranged and placed in months of highest cash inflows.

A cash flow budget identifies sources and uses of cash.

EXAMPLE: Cash Flow Budget

Item Distribution	Months			Cumulative Total
Income	Dec 2021	Jan 2022	Feb2023	
Balance brought forward	200	1200	-100	200
Loan	3000	-	-	3000
Maize sales	-	-	6000	6000
Total income	3200	1200	5900	9200
Expenditure				
Seed	500	-	-	500
Fertiliser	1000	500	-	1500
Chemical	200	100	100	400
Labour	300	700	500	1500
Loan repayment (+intrest)	-	-	3300	3300
Total expenditure	2000	1300	3900	7200
Net cast flow	1200	-100	2000	2000

MODULE FOUR

CLIMATE SMART AGRICULTURE

An Overview of Climate Change in The Gambia

The Gambia's geographical features make it vulnerable to the effects of climate change. Over the past sixty years, the average temperature has risen by 1.0°C, an average rate of 0.19°C per decade. 2 The IPCC (2022) has estimated that in West Africa, temperature may rise by 3–6 °C by the end of the 21st century and sea levels are anticipated to increase by 0.26–0.55 m even under low-emission scenario. The Gambia's coastal zone, consisting of 80 km of open ocean coast and 200 km sheltered coast, is prone to flooding and erosion.

Temperature and sea-level rise will also pose higher risks of flooding, droughts, coastal erosion, food insecurity, damage to infrastructures, and losses to tourism and fishing. The Gambia is ranked 106th out of 191 countries with the middle-ranged risk according to Climate-driven Information Risk Indicator 2022.3

As a small state, The Gambia is facing frequent natural disasters of flooding, storm, and droughts. Over the past three decades, there has been at least one such disaster that struck the country approximately every two years. Flooding accounts for more than half of the events. Across the western African region, the Gambia is in the middle of the national disaster risks. Although droughts were much less frequent than flooding and storms, the affected population is much larger due to a broader scale of impact. The drought in the country in 2012 has affected 428,000 people; one out of five of the total population, while the storm in 2021 affected 16,849 people and the flood in 2022 affected 17,201 people (EM-DAT database, 2023).

INTRODUCTION

The Gambia is highly vulnerable to the impacts of climate change, including flooding, storm, droughts, and coastal erosion, which can trigger food insecurity and losses of tourism and fishing. The authorities have developed several strategies, including The National Climate Change Policy (NCCP), The Gambia 2050 Climate Vision, and The Gambia's Long-Term Climate-Neutral Development Strategy 2050 (LTS), aiming for net-zero carbon emissions by 2050. Although The Gambia is a small contributor to global emissions, mitigation policies to expand renewable energy have also co-benefits for energy security and development. Strengthening adaptive capacity require improvements in land management, crop diversification, and irrigation systems to enhance resilience and ensure food security.

MODULE OBJECTIVES

By the end of the training the participants should be able to

- Give a brief overview of climate change in the Gambia
- Explain what climate change is all about
- State the cause of climate change
- State the effects of climate change on agriculture
- State the ways to mitigate and adapt on climate change
- Define soil
- State the importance of soil in agriculture
- Explain the composition of soil

- Define soil fertility
- Definition of soil fertility
- Importance of soil fertility
- Causes of soil fertility
- Causes of depletion of soil fertility

ACTIVITIES

ACTIVITY 1 Content: An overview of Climate Change in the Gambia.

Aim: for the trainees to get the concepts of climate change in the Gambia

Duration of the Activity: 20 minutes

What to do:

- The facilitator will briefly explain climate change in the Gambia for the participants to get the concept of climate change

ACTIVITY2. Definition of the causes and effects of climate change

Aim: This activity aims to inform the participants of the definition of climate change it causes and the effects it causes

Duration of this activity: 60 minutes

What to do:

- The participants will be put in groups and will be given 20 minutes to discuss among themselves on the definition of climate change, its causes, and how it affects them.
- The facilitator provides the necessary materials for the trainees
- The trainees will choose someone to present their works
- Facilitator will take note of the trainee's contribution and later share his /her taught

ACTIVITY 3 Climate change mitigation and adaptation

Duration of the activity: 40 minutes

What to do:

- The facilitator will present to the participants on the mitigation and adaptation ways of climate change.
- Participants will take notes and ask questions

ACTIVITY 4 Definition of soil and it uses

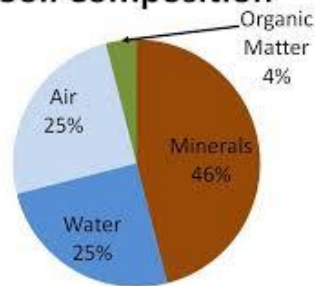
Aim: For the trainees to understand what soil is and it uses

Duration; 40 Minutes

What to do:

- The participants with their facilitator will brainstorm on the concept of soil
- The participants will be divided in to groups and asked to discussed on it uses .After the given time the participants will present their work. The facilitator will moderate the presentation.

Soil Composition



ACTIVITY 5. Soil Composition

Aim: For the trainees to know the composition of the soil and their importance in agriculture

Duration of the activity: 40 minutes

What to do:

- The participants will be led by their facilitator to conduct a practical session on soil composition at the garden
- *Trainees will be grouped in to groups and given 20 minutes to discuss on the activities
- *The trainees will present their work while the facilitator will serve as moderator

MODULE FIVE

PRODUCTION

INTRODUCTION TO VEGETABLE PRODUCTION

Chapter description:

This chapter is designed to benefit beginners in vegetable production with no or little growing experience. The participants will learn how to prepare vegetable farm, and how to grow warm and cool-season vegetable crops. And also learn how to keep them safe

Objectives: After going through this chapter, the trainees should be able to:

Understand when to produce vegetables for a higher price

Explain the importance of vegetable production

State the factors to consider in vegetable production

Identify the problem affecting vegetable production

Classify vegetables based on their use

Understand the production practices of vegetables.

Learning resources: Projector, Laptop, different vegetables, fertilizer, manure and a vegetable farm

Course delivery mode: PowerPoint presentation, Demonstration, Lecture, Field visit.

Practical Activities: raising of assorted vegetables from seed using the appropriate techniques.

ACTIVITIES

ACTIVITY 1 Setting of training ground rules

Aim: To have a smooth training with fewer disturbances

Duration: 15 minutes

What to do:

1. The facilitator will divide the participants in to groups and will ask them to discuss and come up with rules that will govern the participants to have a successful training.
2. After ten minutes the groups will be call to share their ideas with the rest of the participants.
3. Facilitator will take notes of the groups' contribution and finally compile and share with participants

ACTIVITY 2 Definition and types of vegetables

Aim: For the trainers to understand what vegetables are and know the different types of vegetables grown in the Gambia

Duration: 20 minutes

What to do:

1. Participants will be ask in their groups to use 10 minutes and define vegetables and list the vegetables grown in the Gambia
2. Facilitator will go round to monitor the groups and help if the need b
3. After the 10 minutes the groups will present their work, while the facilitator will take the bullet points

ACTIVITY 3 Importance of vegetable production

Aim: For participants to know the importance of vegetable production

Duration: 15 minutes

What to do:

1. Facilitator will brainstorm participants on the importance of vegetable production
2. Facilitator will list the answers on the flip chart or board
3. Facilitator and the trainers will explain how they are important

ACTIVITY 4 Factors affecting vegetable production

Aim: For trainers to understand the factors that affect vegetable production

Duration: 20 minutes

What to do.

1. Recap of activity three
2. Participants in their groups will be asked to use 10 minutes and discuss the factors they know that affect vegetable production
3. After the time, the groups will be called to share their findings
4. Facilitator takes note and helps when necessary

ACTIVITY 5 Oral test

Aim: To test the understanding of the participants of the activities treated.

Duration 30 minutes

What to do:

1. Participants will be selected randomly and will come forward and answer the questions asked
2. They will be asked oral questions on the activities treated
3. The topics will be
 - a. definition of vegetable and types
 - b. importance of vegetable production

c. problems affecting vegetable production

4. Facilitator will take notes of the responses of those chosen

ACTIVITY 6 Factors to consider in vegetable production

Aim: Trainers to know the factors to consider in vegetable production

Duration 30 minutes

What to do:

1. Recap on the performance of the oral test
2. Group work on activity six
3. After 15 minutes groups will be asked to present their
4. Facilitator moderates the presentation and takes note

ACTIVITY 7: Classification of vegetables

Aim: for trainers to know the different groups of vegetables

Duration: 30 minutes

What to do:

1. Facilitator will bring different vegetables in the training room
2. Trainee in their groups will be ask to group the vegetables base on their use
3. Groups will present their work
4. Facilitator will moderate the presentation and help whenever necessary

ACTIVITY 8 Production practices of vegetables

Aims: For participants to understand the pre planting activities of vegetable

Duration: 30 minutes

What to do:

1. Facilitator with trainee will theoretical discuss the pre planting activities in class for trainees to understand what it means

2. Facilitator and the trainee will go to the garden to conduct practical activities on the activities listed below:

- Clearing,
- Stumping,
- Demarcation,
- Ploughing,
- . Manuring and harrowing

ACTIVITY 9 Planting activities

Aim: for trainees to understand the definition of planting activities and list the activities involved in planting

Duration: 30 minutes

What to do:

1. Recap on pre planting activities
2. Definition of planting activities
3. Group discussion on the planting activities
4. The groups will present after the given time and the facilitator will moderate the presentation
5. Facilitator and the trainees will go to the garden and conduct practical on nursery preparation

ACTIVITY 10 Post planting activity

Aim: Trainees to know the definition of post planting activities and the post planting activities

Duration: 30 minutes

What to do

1. Brainstorming on the definition of post planting activities and the activities
2. Group activities on the post planting activities
3. Presentation on the group findings
4. Practical session on the post planting activities eg

Pruning

Staking

Fertilizer application

Weeding

Pest and Diseases

Harvesting, methods, equipment's and storage

REFERENCES

Abby (2020) Vegetable production certificate course for beginners. News.extension.uconn.edu was first indexed by Google in September 2020.

Dr. Carl Motsen bocker (2017). Field Vegetable Production Essentials certificate School of Plant, Environmental, and Soil Sciences. Louisiana State University 239 Julian Miller Hall Baton Rouge, LA 70803.

CHAPTER TITLE: POULTRY PRODUCTION

Overview: Poultry production involves raising domesticated birds such as chickens, ducks, turkeys, and geese for meat or eggs.

Objectives: Equip participants with knowledge and skills to start and manage a successful poultry farm.

ACTIVITIES

ACTIVITY1: Definition and importance of poultry

Aim: trainees to understand the meaning of poultry and the benefits of keeping them

Duration: 30 minutes

What to do:

1. Participants will be divided in groups and will be ask to discuss in their groups for 15 minutes
2. The facilitator will go round to see the groups and provide support if the need be.
3. The groups present their work after 10 minutes of discussion
4. Facilitator writes the contribution of the groups on the board

ACTIVITY 2 Definition of terms and the breeds of poultry

Aim: Trainees to know the terms used in poultry and the three types of breeds

Duration: 30 minutes

What to do:

1. Facilitator with the trainees will brain storm on the poultry terms
2. Trainees will be given the opportunity to share their knowledge on the terms
3. Participants will be asked to tell the type of breed they are rearing and explain why they are keeping them

ACTIVITY 3 Characteristics of the breeds

Aim: For the trainees to know the features of each of the breeds

Duration: 30 minutes

What to do.

1. Recap on the breed types
2. Trainees will be put in three groups and ask to discuss the features of only one breed for ten minutes
3. Participants will present their work after the fifteen minutes
4. Facilitator take note and letter give correction

ACTIVITY 4

Aim: for trainees to know the site to consider in poultry production

Duration: 30 minutes

What to do:

1. The trainees will be divided in to groups and given 15 minutes to discuss on the things to consider in poultry site selection
2. Facilitator will go round to monitor the groups

3. The groups will present their work after the 15 minutes
4. Facilitator will take notes on the board the contribution of the groups
5. The facilitator will further elaborate on the points raise by the trainees

ACTIVITY 5 Housing and equipment

Aim: for trainees to know the types of poultry houses with their materials they are made with

Duration 30 minutes

What to do:

1. Brainstorming on the types of poultry house they know with the materials they are made with
2. After the brainstorming the facilitator will explain to the trainee's design, types and the materials used to make poultry house
3. Trainees with their facilitator will visit different poultry houses to see the design, type and the materials used in making poultry house
4. Trainees will be provided with local materials and asked to design a poultry house using the materials.

ACTIVITY 6 EQUIPMENT FOUND IN THE POULTRY HOUSE

Aim: for trainees to know the equipment found in site the poultry house

Duration: 30 minutes

What to do:

1. Repa on the design, type and material used to make a poultry house
2. Trainees will be divided in groups and given 10 minutes to discuss on the materials found in site a poultry house
3. The trainees after the given time will be given five minutes to present their work
4. Facilitator will moderate the presentation and take note
5. After the presentation the moderator will visit a poultry house with the trainees to see the equipment's

ACTIVITY 8 Oral Test

Aim: to test the understanding of the trainees on the activities learned

Duration: 20 Minutes

What to do:

1. Trainees will be randomly chosen and ask question on the activities done by the facilitator.
2. After the oral test the facilitator will give correction on areas the trainees had difficulties.

ACTIVITY 9 Management systems

Aim: Trainees to know the different management system of poultry

Duration: 30 minutes

What to do:

1. Facilitator will brainstorm the trainees on the types of management system they know
2. He/she takes notes of the contribution of the participants
3. The facilitator will further explain the different management system to the trainees with their advantages and disadvantages

ACTIVITY 10

Aim: Trainees to know the health management needed in poultry production

Duration 30 minutes

What to do:

1. Facilitator with the trainees will discuss the following health management concepts
 - a. Vaccination
 - b. Disease monitoring
 - c. pest and rodent control
 - d. Feed and water softy
 - e. visitor and staff management

ACTIVITY 11 Temperature in the poultry house

Aim: to understand the effects of temperature on birds

Duration: 40 MINUTES

What to do:

1. Definition of temperature
2. Effects of temperature on birds
3. Ways to control high temperature
 - a. the participant will be brainstorm on what temperature is
 - b. participants will be divided in groups and given 20 minutes to discussed the effects of temperature on birds
 - c. they will present their work after the given time
 - d. the facilitator will take note of the participants contribution and letter explain temperature and it effects to the birds and their ways of control

ACTIVITY 12 Management practices of chicks

Aim: for the trainee to know the management practices of chicks

Duration: 40 minutes

What to do:

1. Definition of brooding
2. Types of brooding

3. Objectives of brooding

*The facilitator will lead the discussion by defining brooding and explaining the types of brooding with objectives of brooding

*the trainees will listen and asked question

CHAPTER TITLE:

INTRODUCTION TO SMALL RUMINANTS PRODUCTION

Chapter description:

This module is designed to benefit beginner in small ruminant production with little or no experience in the management system. Sheep and goat meat are part of the highly consumed meat in the Gambia especially during the Muslim feast called "Tobaski". The module is intended to guide trainees on the key management practices to enable them have a profitable business in goat and sheep production.

Objective: After taking the module the trainees are expected to be able to master the management practices in small ruminant production to have a profitable business.

Introduction

Small ruminants (sheep and goat) play an important role in food production system especially in developing countries. The Gambia is not an exception. Sheep and goat are very important as use them in traditional and religious purposed. Therefore it is a prospective business that you can venture in to have a profitable business.

ACTIVITY 1

Aim: for trainees to understand the importance of small ruminant production

Duration: 40 minutes

What to do:

1. Trainees will be divided in to groups and will be given 40 minutes to discussed the importance of small ruminant production
2. after the given time the groups will present their work
3. The Facilitator will moderate the presentation and later give his contribution

ACTIVITY 2 Problem affecting small ruminant production in the Gambia

Aim: trainees to know the problems affecting small ruminant production

Duration: 40 minutes

What to do:

1. Trainees will be divided in to groups and will be given 40 minutes to discussed the importance of small ruminant production
2. after the given time the groups will present their work
3. The Facilitator will moderate the presentation and later give his contribution

ACTIVITY 3 Solution to the problems

Aim: trainees to know the solution to the problems affecting small ruminant production

Duration: 40 minutes

What to do:

1. Trainees will be divided in to groups and will be given 40 minutes to discussed the importance of small ruminant production
2. after the given time the groups will present their work
3. The Facilitator will moderate the presentation and later give his contribution

ACTIVITY 4 Systems of Livestock Management

Aim: trainees to know the different systems of livestock management with their advantages and disadvantages

Duration: 40 minutes

What to do:

1. Brainstorming on the systems by the trainees
2. After the activity the facilitator will explain the different systems of management with their advantages and disadvantages for better understanding by the trainees

ACTIVITY 5 Breeding and Animal selection

Aim: Trainees to understand the definition and breed selection. Types of breeding

Duration; 40 Minutes

What to do:

1. Definition of breeding and breed selection
2. Types of breeding
3. Housing
3. Feeding

*The trainees with facilitator will brainstorm on the activities

ACTIVITY 6 Signs of heat in goat and sheep

Aim: trainees to know the sign of heat in sheep and goat

Duration: 30 minutes

What to do:

1. Trainee will be put in groups and given 20 minutes to discuss on the activity
2. After the given time they will be asked to present their work
3. The facilitator will take note and help if the need be.

ACTIVITY 7 Criteria to consider in purchasing a goat or sheep

Aim: trainees to know what to consider in purchasing goat or sheep

Duration: 30 minutes

What to do:

1. Trainees will brainstorm on the activity
2. The facilitator will take note on the board and further explain the criteria

- strong rumination
- agile movement
- straight back no pain
- firm excrement
- clear eyes
- good behaviour
- wet nose

Good hygienic measures to ensure the good health of your animals

- Clean the pen frequently
- Wash the sheep regularly
- Follow vaccination procedures
- Treat animals at the right time
- Give clean feed and clean water

Treatment: in the treatment of sheep and goat use antibiotic, deworming, vitamins vaccines, anti-infections, etc. all these requires technical knowhow which will be explained by the trainer.

References:

Agromisa foundation Wageningen, 2004.

Holistic agribusiness solutions, rural development organizations

Mr Gibba rural development organisation lecture notes

MODULE SIX

POST HARVEST VALUE CHAIN DEVELOPMENT

Scope

The series of fact sheets contained in this module provide the foundation for understanding the concepts and practices related to post harvest technology of agricultural produce. This module is designed to allow facilitators to develop a library of information on this topic, and other fact sheets can be added over time.

General Instructions

- Sometimes people feel uncomfortable with the use of exercises as teaching tools, particularly when the exercise might be a game. Be sure to explain clearly to the group the intent of the exercise and what will be accomplished. Then give the participants an opportunity to reflect on what has happened.
- This module can be broken apart in a number of ways. Most of the sections can stand alone or the different parts can be spread over a couple of days.
- The outline for this module assumes that the facilitator has had sufficient experience to change or modify the exercise to suit the nature of the group.
- The time limits will depend on the number of participants. It would be difficult to accomplish the objectives outlined with more than 20 people.

How to use module four in this manual

Each component in this module can be used in the following ways:

- A lecture based upon each fact sheet, followed by the corresponding interactions and participation, which would serve to reinforce the concepts discussed in the lecture. Timelines will be helpful for effectiveness.
- The fact sheets can also be used as background information for facilitators, and not presented in a lecture format. With this method, facilitators would conduct each training with participants, and impart the information from the fact sheets as needed for the participants to complete each exercise.
- The fact sheets are intended to provide stand-alone information for use as reference materials. The trainings, however, are not intended for use without the support of the fact sheets.
- This manual has been designed to facilitate learning with both literate and illiterate learners. The facilitator may decide what print materials are appropriate for dissemination to participants.
- It is expected that facilitators will have some prior knowledge of the concepts and practices being taught in each component.

Number of Participants

- A group should preferably include 10 to 15 persons but it should definitely not exceed 20 participants. Larger groups make it very difficult for the facilitator to follow the progress of individuals.

Preparation

Post-harvest technology system general training guidelines

- Prepare yourself before each meeting. Read the Fact Sheets and prepare the exercises. This will make it easier for you to lead the discussion and it will save time during the workshop.

General Materials

- Flip chart or newsprint and markers or chalkboard, chalk and a cleaner
- Exercise books for all participants if needed
- Vehicle to transport participants to the farm (if necessary)
- Laboratory and items associated with lab proceedings
- Sizers and scales
- Processing company, equipment and other value addition items
- Packaging materials- wood, plastic films, fibres/paper boards, straw, dried leaves.

Note: some of these materials are to be used as visual aids throughout the sessions of this module and others can be identified when require to help participants understand the concepts being taught in real life.

Mode of delivery

- Discussions
- Demonstrations
- Digitized and audio-visual sessions
- Group interactions
- Case studies
- Field visits
- experiments

Practical activities

- Presentations of personnel-participant interaction
- Practical demonstration of inventory management and record keeping
- Identification of parameters, indexes and causative organisms of postharvest losses
- Identification of signs of maturity of various crops
- Construction and operation of storage facilities for produce
- Demonstration of loading techniques of produce and process goods
- Assessment of food quality
- Identification of processing equipment
- Demonstration of processing methods and packaging
- Processing of selected crops-cereals, vegetables, fruits
- Environmental implications of processing
- Practical demonstration of marketing strategies
- Assessment risks and mitigation measures

Process activities

- Take all participants to a field nearby to identify the proper postharvest handling activities
- If possible, visit a small farm or garden, collect samples of the topic for the session and prepare them for the participants to interact with the sample along with the facilitator.
- Farm and market visits for the identification and demonstration of proper value addition and marketing
- Field visit a a processing company for practical demonstration of unit operations

General Workshop Programme

- 5 minutes of introductions and explanation of the purpose of the workshop.
- Discussion to make each participant think about the problems and objectives of the workshop and to relate the topic to their own experience and knowledge. In some cases, questions are provided with possible answers to help guide the discussion. The answers are given to help guide the discussion but they should not be considered as the only correct answer.
- Explanation of the workshop topic including issues raised during the discussion. The explanation should give the participants a clear understanding of what they will learn during this workshop.
- Give break times if appropriate.
- Present examples, which illustrate the topic and relate it to participants' daily situations.
- Practise the lesson to be learned through group exercises, role-playing, discussion or individual
- Exercises, field visits and homework. The objective is to ensure that the principles and concepts are understood and that the participants will feel confident in practising their new knowledge in their own work and life. Groups of 2 to 3 persons provide an effective learning environment. Try to change the composition of the group so that slow learners can benefit from the help of fast learners and the fast learners avoid getting bored.
- Summarize the workshop to make sure that everybody has understood the lesson. If you find that the participants have problems with some of the issues, you may have to do more exercises and try to explain it in a different way. You may have to provide some individual assistance or you could ask some of the fast learners to spend some time helping the slow learners.
- Require participants to go home and practise their new knowledge. All homework exercises should be related to the personal situation of the participant so you must be discreet when discussing the homework in the workshop.

Workshop Follow-up

- It is important to follow-up on each participant's business site or at each participant's community organization as soon as possible to correct mistakes, answer additional questions, and discuss suggestions for improvement.

Purpose

- To welcome participants and help them feel at ease, and to discuss with participants both the learning objectives and the format of the course.

Expected Outcomes

- After participating in this session, participants will:
- Have become familiar with the other participants in the course
- Understand the topics to be covered and the process of the course
- Understand what the objectives are for the course
- Understand what the learning outcomes are for the course

Warm Up

To help participants feel at ease, start off with a get-to-know-you exercise. This is particularly useful if the group members are not familiar with each other or with you. Discuss with the group why it is important to address these issues before beginning to work together:

- Helps reduce potential conflicts
- Members know exactly what they are supposed to do
- People have a better understanding of the characteristics of the other members of the group

Exercise

- Ask each member of the group to introduce himself or herself and to briefly describe a hope, fear, or expectation for this workshop.
- Write down on a flipchart (or blackboard) the participants' hopes and fears.
- Depending on the size of the group, this exercise may take longer than 20 minutes.

Outline

Present the outline of the activities for the workshop and indicate to the group what you hope to accomplish. Be sure to invite questions or comments (10 minutes).

- Introduction
- Postharvest Value addition development
- Postharvest handling
- Food processing and preservation
- Small scale food enterprise
- Gender and postharvest technology

The sessions in this module can be mixed and matched as desired, and even spread out over a period of days or weekly meetings.

Objectives

After taking this module, participants should be able to;

- Determine harvest maturity, indices, and practices
- Normalise when and how to harvest
- Identify who should harvest
- Standardise containers that should be used
- Grading practices and methods
- Elucidate the principles and apply the techniques of agricultural produce preservation that maintains the quality and extends the shelf life of perishable and non-perishable products safely.
- Apply techniques for packaging, methods, labelling, branding, handling, transportation, and distribution channels in marketing of agricultural produce.
- Describe national and international regulations governing agricultural processing and marketing.

Value chain definitions

A value chain in agriculture identifies the set of actors and activities that bring a basic agricultural product from production in the field to final use where at each stage value is added to the product

A value chain is an alliance of stakeholders and enterprises collaborating to various degrees along the range of activities required to bring a product from initial input supply stage, through the various stages of production, to its final market destination.

Value chain development definition

Is a market driven approach for creating sustainable, inclusive and economically viable supply chains. It supports smallholder farmers to meet quality, volumes and compliance requirements of global brands, retailers and traders. An approach which takes a product, service or community as the basis for analysis.

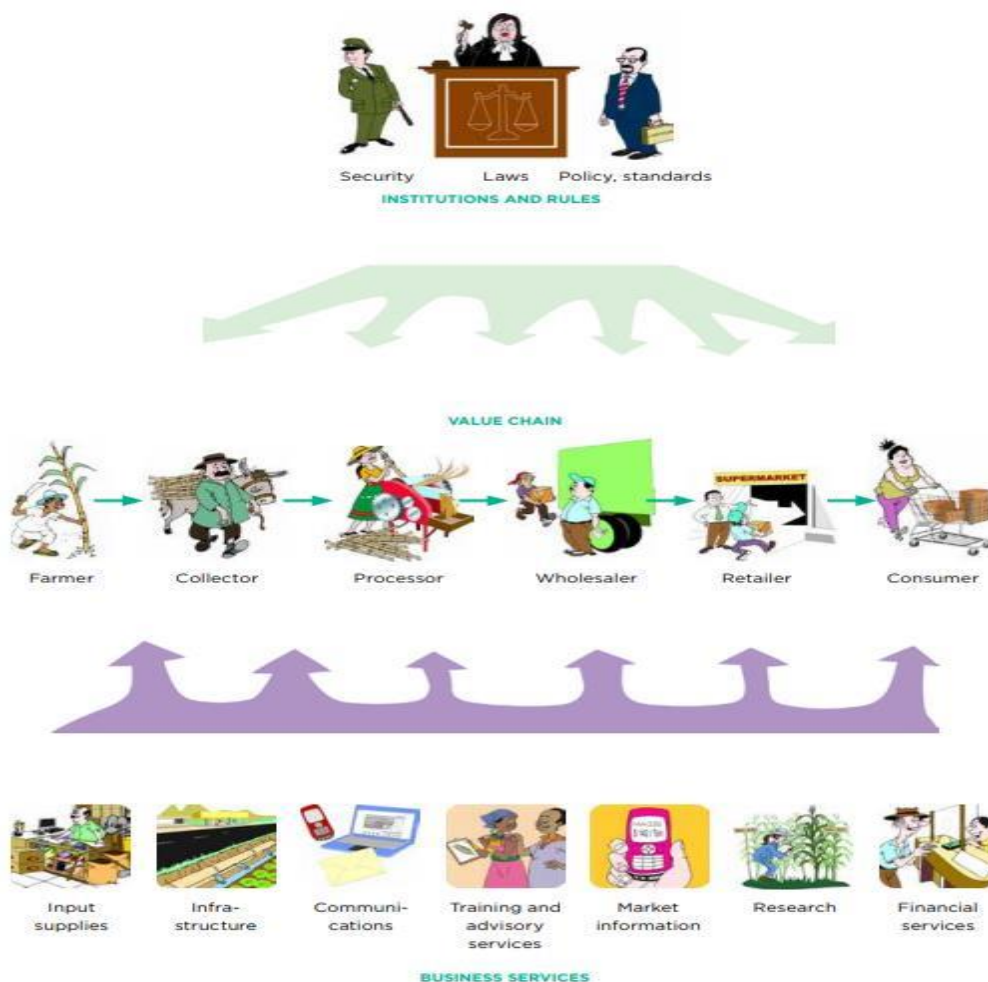
Importance of value chains

Understanding value chains helps development practitioners identify those chains which are able to generate growth, job creation and poverty reduction. It also aims to identify constraints, opportunities for increasing value chain performance so that interventions can be designed and documented to address constraints and improve outcomes. Below is a summary of the importance of value chains;

- Creation of new jobs
- Supports smallholder farmers to meet quality, volumes and compliance requirements of
- global brands, retailers and traders
- Import substitution
- Contributes to food security
- Increases range of processed products in the country
- Promotes financial inclusion
- Promotes and improves specialization

Value chain players, their functions and agribusiness opportunities

Many people are involved in getting agricultural products from the producer to the consumer. A value chain analysis maps out and characterizes all these actors, services, and institutions. A number of opportunities exist in the agribusiness value chain. In each level, ventures can be explored and ventured into in order to improve the value chain as shown below.



Introduction post-harvest technology

Definition

Importance

Postharvest Loses

Over view of production practices and their implication on food loses

- Soil
- Water
- Temperature
- Fertility
- Cropping system
- Pest and diseases

Post-harvest handling

- Maturity
- Maturity index
- Signs of maturity
- Harvesting of produce

Preparing fresh produce for the market

- Sorting
- Grading
- Field packaging
- Field storage
- Transportation (to warehouse market)

Existing business Opportunities for:

Farmers; niche products (e.g., baby vegetables, rabbits, Goats, Indigenous poultry, organic products), feeder stock producers for beef, dairy, & imported products. Producing raw materials for feed manufacturing (e.g., sunflower etc). Specialised Equipment hires (e.g., grain harvesters and sorters, vegetable planters.)

Traders; transport businesses (refrigerated trucks for carcasses and perishables), cold storage facilities/pack house operators, feeder stock traders, rural yards,

Processors; vegetable juice, ham, bacon, tomato sauce, frozen vegetables, abattoirs, etc.

Wholesalers; providing and operating storage facilities e.g., grains, potato wholesaling, etc.

Retailers; Niche markets (Traditional cuisine Restaurants, organic foods), online marketing platforms/shops.

Input Suppliers; decentralized farm input supply, manufacturing of inputs/products, seed production, etc.

Infrastructure; renewable energy production, fuel supply to remote areas

Communications; developing information sharing platforms and systems

Training and Extension Services; consulting (business development etc.), coaching, and mentorships, etc.

Market Information; creation of marketing data platforms.

Financial Services; insurance, more services (e.g., mobile financial services)

Research; laboratories, basic seed multiplication

Other opportunities

Waste management (food waste, recycling of packaging material, feathers, hide treatment etc.)

Institutions and Rules

These provide policy and regulatory frameworks that govern the value chains.

Laws & policies: Governments set laws and policies to regulate the flow of goods and services. They may impose taxes and levies, offer subsidies, or control prices. They may restrict or encourage the production of certain crops, or limit the movement of plants and animals to prevent diseases from spreading. They promote land reform and encourage soil and water conservation. They may provide certain types of business services, such as extension and market information.

Standards: Standards may be formal or informal. They may be imposed by the government, by individual traders, or by an industry association. Farmers need to know these standards so they can comply with them. Farmers can have access to standards information at institutions like SWASA and the markets they intend to supply.

Certification: farmers who want to sell into higher value markets often must produce according to the rules of certification organizations e.g., GLOBAL GAP, ISO standards, HACCP, etc. In other cases, farmers can access higher value markets by using specific farming methods such as organic farming.

Food safety standards: Many standards aim to ensure that food that we eat is safe such as. The type of pesticides that may be used

- The level of toxins (poisonous substances, persistent organic pollutants (POPs),
- Organo-phosphates.

Special organizations test products and check farms to make sure that they comply with such standards.

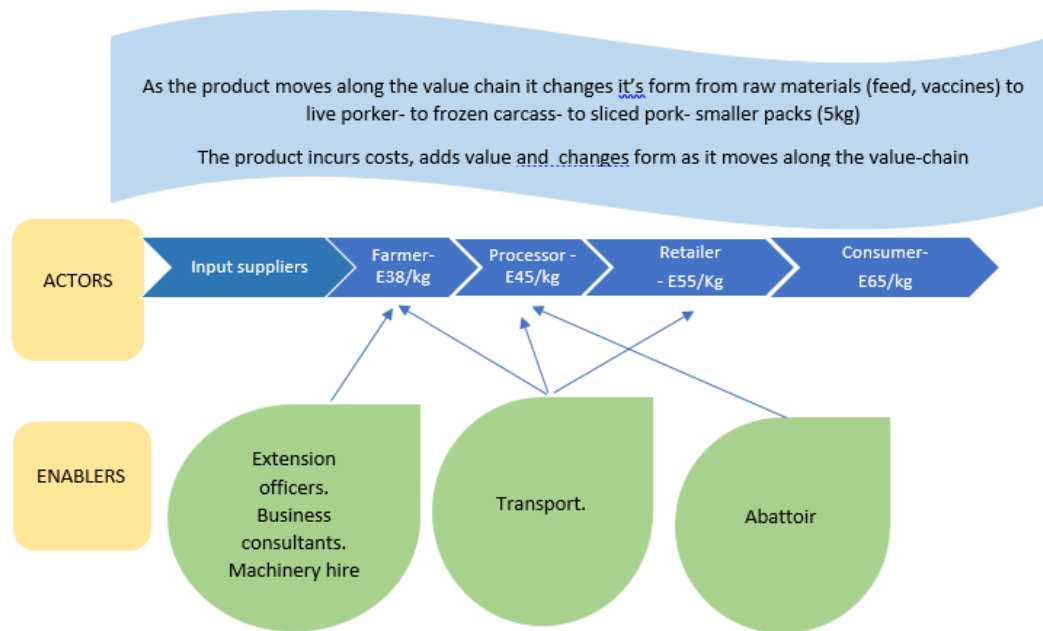
- Safety and Quality Control
- Introduction to CODEX Alimentarius and national regulations
- Fresh produce standards;
- Processing standards;
- Nutritional changes;
- Changes in sensory attributes and acceptability (oxidative & hydrolytic enzymes);
- Recommended microbial tests
- Public and environmental health.

Security: The police, lawyers, and judges maintain order, and ensure that people in the chain comply with contracts and do not break the law. Corruption and lawlessness may be a problem in many areas. A value chain will break down if, for example, armed robbers attack trucks carrying the produce.

Value chain mapping

- Determining the end product
- Identifying and segmenting markets
- Defining the sequence of stages of the value chain
- Depicting operators and business models
- Mapping business linkages
- Differentiating the chain into several channels
- Mapping operational and support providers
- Mapping government institutions and “rules” (framework)

Piggery Value- Chain Diagram



The monetary value of the product (price) changes as it moves from one player to another. The above illustration shows that a farmer may sell meat to the processor at E38/kg and as the meat moves along the value chain it acquires a new larger price. Value may be added in the different stages of the value chain to warrant a new price. It does however, happens that a product may be sold at a higher price not because it has changed in form but because the seller has brought it to another place and closer to customers and incurs additional costs to bring it closer to the consumer.

Another example explaining the above price change analogue is seen in vegetables. Farmers may sell a cabbage to a retail outlet at E10 and the retail outlet may sell it at E20. The cabbage may not have changed its form but now sold at a larger price. This is usually caused by the fact that the cabbage will incur storage costs, handling costs and refrigeration costs as it awaits the customer. These costs are added to the sales value of the cabbage together with a positive mark-up. Farmers should also note that, if the cabbage is not bought at the retail outlet, the manager may have to lower its price a bit as it loses its freshness to recoup his money.

Introduction to Food Processing:

- Importance
 - principles
 - concepts and definitions
 - Types of processing
 - primary
 - secondary
 - tertiary
- Processing methods and equipment
 - Study of common processes of food-drying or dehydration, refrigeration and freezing,

fermentation and pickling, chemical additives, canning and tanning;

- Traditional methods for short- and long-term food preservation;

- Steps in processing of food

- Raw material selection

- washing
- peeling
- slicing
- blanching
- drying
- filling
- cooling
- packaging
- labelling
- sanitation

- Processing of selected produce

- Cereals
- Fruits and vegetables
- Grains
- Oilseeds
- Legumes and pulse
- Livestock and poultry
- Fish
- Wild produces in agriculture from the Gambia

Quality and Safety Factors

- Components of quality; appearance, Texture, flavour, nutritional, safety;
- Factors influencing quality; climatic conditions, cultural practices, maturity at harvest, harvesting method, post-harvest handling procedures;
- Methods for evaluating quality; appearance, texture, sensory flavour, nutritional value, contaminants, environmental contaminants.

- Environmental implication of processing.

- Waste Management

- Public health issues;
- Environmental implication of processing.

Storage

- Methods of storage of durables and perishable;
- Management of stored produce;
- Storage requirements for selected crops;
- Construction and operations of storage facilities for produce e.g. cribs, other improved traditional systems, etc.

Transportation

- Importance;

- Types of transportations;
- Food losses during transportation
- Display of produce.

Marketing

- Storage and Sales handling
- Wholesale and retail management

Marketing Standard

The market has different marketing standards and it is therefore essential for farmers to adopt these standards to unlock profitable market segments to receive high returns for maximum revenue generation. There are various marketing standards that farmers can adopt to maximize returns which include:

- Global GAP,
 - HACCP,
 - ISO certification,
 - Organic certification systems, etc.
- Gender issues in the different stages postharvest technology
 - Development of Small-scale Food Processing Enterprises

References

Codex Alimentarius

Food Hygiene – Basic Text Fourth Edition

Kader, A.A. (ed.) 1992. Post-harvest technology of horticultural crops (2nd ed.), University of California, Berkeley, CA. Publication no. 3311.

Farm Business School: Training of Farmers Programme South Asia, Handbook, Food and Agriculture Organization of the United Nations, Regional office for Asia and the Pacific, Bangkok 201. <http://www.fao.org/3/i2137e/i2137e00.htm>

Lisa, K., and Adel, A. K. (2003). Small-Scale Postharvest Handling Practices: A Manual for Horticultural Crops (4th Edition). University of California, Davis Postharvest Technology Research and Information Center

MODULE SEVEN

RECORD KEEPING

CONTENT

- 1.0 Definition
- 2.0 Why should record be kept in an Agribusiness Farm?
- 3.0 General principles for record keeping
- 4.0 Classification of record keeping
 - 4.1 Livestock records
 - 4.2 Cropping records
 - 4.3 Enterprise record

LEARNING OBJECTIVES:

- Upon completion of the training, the youths and women involved into the training will be able to:
- Understand the importance of record keeping in an Agribusiness
- Understand the common types of records required in an Agribusiness
- Appreciate the dangers of not keeping records for an Agribusiness
- Appreciate some tips for improving record keeping for an Agribusiness
- Make decisions based on records.
- Demonstrate competence in the design and use of appropriate farm records.

ACTIVITY 1: Definition of Record Keeping

Aim: To Define Record Keeping

Duration: 5 minutes

Define Record Keeping

Record keeping is the art of collecting useful pieces of data or information on the happenings of a particular undertaking, with the view of processing it in the future (for example, analysing sales and costs and calculating profits). Although record keeping is an important aspect of the farm business, many farmers do not keep records. This makes it difficult for them to know how much they spent and how much income was earned from their farm business enterprises. Without good farm records, it becomes difficult for farmers to identify problem areas and know whether their businesses are generating profit or not. Therefore, record-keeping is an essential activity necessary for operating farm businesses successfully.

Agribusiness farms should keep records and this responsibility should be shared by all their members. Responsibility for any type of record should be allocated to any staff who is most capable, regardless of their sex.

ACTIVITY 2: Why Should Records be kept in a Farm Business?

Aim: To Understand Why records should be kept in a Farm Business.

Duration: 5 minutes

Why Should Records be kept in a Farm Business?

1. To track individual enterprise performance.
2. To evaluate farm/enterprise profitability.
3. To establish a basis for pricing.
4. To facilitate access to loans.
5. Records are helpful when farmers seek advice from extension agents.
6. Records are a good management tool because they provide figures for planning and budgeting.

ACTIVITY 3: General Principles for Record Keeping

Aim: To understand the General Principle for Record Keeping

Duration: 5 minutes

General Principles for Record Keeping

Records should be kept and used to benefit those that keep them.

To be useful

Records must be accurate

Neat and written clearly

Be complete

Be easy to record

Be easy to keep and retrieve

Provide necessary information for management

Be easy to analyse and analysed regularly

ACTIVITY 4: Classification of Records Keeping

Aim: To Understand the Classification of Record Keeping

Duration: 25 minutes

Classification of Records Keeping

Farm business records are often classified into livestock and cropping.

4.1 LIVESTOCK RECORDS

EXAMPLE: COMMON RECORDS FOR LIVESTOCK ENTERPRISES

RECORD TYPE	DESCRIPTION
Mating Records	Taking note of female number, male number, when mated, and whether aborted or not.

Farm Diary	Record of every transaction on the farm, recorded daily.
Birth Records	The date, sex, and weight of offspring.
Financial Records	Record of income and expenditure.
Weather Records	Record of rainfall, temperature, humidity, etc.
Death Records	Date and cause of death, if known.
Sales Records	Quantity of sale, value, and name of buyer.
Health Records	Record of vaccination, dosing, and treatment
Stock Records	Record of all animals by age and gender.

4.2 CROPPING RECORDS

EXAMPLE: COMMON RECORDS FOR CROP ENTERPRISES

RECORD TYPE	DESCRIPTION
Planting Records	Planting dates, inputs used (for example, quantity and type of seed and fertilizer), and labour requirements.
Farm Diary	Daily record of every transaction on the farm.
Financial Records	Record of all financial transactions (income and expenditure).
Land Use Records	Record of land preparation, conservation, and other land uses.
Weather Records	Record of rainfall, temperature, humidity, etc.
Maintenance Records	Record of operations such as planting, weeding, fertilizer application, etc.
Sales Records	Quantity of sale, value, and name of buyer.

EXAMPLES OF FARM RECORDS

Records needed by farmers are determined by the uses to be made of them. Below are some examples of common farming business records:

INCOME AND EXPENSE RECORD

This is a record of all income and expenditure incurred during a given accounting period. It is necessary for every family business to keep this record. In the record, efforts must be made to specify quantities, prices, dates, and payment schedules.

EXAMPLE: INCOME AND EXPENSE RECORD

		INCOME		EXPENSES		
Date	Description	Chicken	Maize	Feed	Seed	Fertilizer

1/01/24	Sold 1000 birds @ D50/bird	50,000				
5/01/24	Purchased 50 bags of fertilizer @ D100/bags					5,000
10/01/24	Sold 10mt of maize @ D300	3,000				
30/01/24	Purchased maize seed @ D2000				1,700	

FARM SALES RECORD BOOK

This is a record of sales on the farm over a given period.

EXAMPL: SALES RECORD OF A MAIZE ENTREPRISE

Harvest Date	Quantity	Sale Date	Quantity Sold	Price(D)	Value(D)	Buyer	Notes
5/10/2024	20.0	5/10/2024	18.0	500	9,000	Dr. Ceesay	Cash
10/10/2024	30.0	11/10/2024	29.0	350	10,150	Mr. Bah	Wave
Total	50.0		47.0		19,150		

MODULE EIGHT

AGRICULTURAL MARKETING

Objectives:

- Customer understanding: To gain deeper insights into the needs, preferences, and behaviours of target customers.
- Segmentation and targeting: To identify and prioritize the most promising customer segments to focus marketing efforts on.
- Marketing strategy development: To inform the development of effective marketing strategies, including product, pricing, distribution, and promotion decisions.
- Forecasting and planning: To enable more accurate forecasting of market demand and better planning of marketing activities and resource allocation.
- Competitive analysis: To assess the competitive landscape and identify opportunities for differentiation and competitive advantage.

Expected Outcomes:

- Improved customer acquisition and retention: By better understanding and serving customer needs, farmers can attract new customers and retain existing ones more effectively.
- Enhanced marketing efficiency and effectiveness: Marketing models can help optimize the use of marketing resources and improve the impact of marketing activities.
- Increased sales and revenue: Improved customer understanding and more effective marketing strategies can lead to increased sales and revenue for the farmer.
- Stronger brand positioning and loyalty: Marketing models can help farmers develop a stronger, more differentiated brand identity and build stronger customer loyalty.
- Reduced costs and risks: Marketing models can help farmers avoid costly mistakes and mitigate risks associated with marketing decisions.

2.0 Definition of Market and Marketing

MARKET.

A market is defined as a space or environment—physically or virtually—where buyers and sellers meet to exchange goods and services. According to (Kotler & Keller, 2016), A market is a group of potential buyers and sellers of a particular product or service (Kotler & Keller, 2016).

MARKETING.

Marketing is the process of creating, communicating, and delivering value to customers in exchange for profit.(American Marketing Association, 2017), cited that Marketing involves a series of processes aimed at promoting, selling, and distributing products. It includes research, advertising, sales strategies, and post-sale service (American Marketing Association, 2017)



DISTINCTION.

Market vs. Marketing: A market is the venue for transactions, while marketing encompasses the strategies to facilitate those transactions.

3.0 Types of Markets

According to (Perreault et al., 2019), Understanding the different types of markets is crucial for farmers.

- Product Markets:
 - A. Focused on the exchange of agricultural products (e.g., fruits, vegetables).
 - B. Involves direct consumer sales, wholesalers, and retailers.
- Tele-marketing: Is a specific type of direct marketing where businesses use telephone calls to communicate with customers or potential customers. The main characteristics of telemarketing include:
 - A. Outbound calling: Telemarketing involves making outbound calls to customers, rather than receiving inbound calls.
 - B. Sales or lead generation: The primary goals of telemarketing are to make sales, generate leads, or promote products and services directly to the customer over the phone.
 - C. Personalized interaction: Telemarketing allows for a more personalized interaction with the customer compared to other marketing channels.

- Indirect marketing: refers to marketing strategies that do not directly promote a product or service. Example
 - A. Networking and community building: Actively participating in industry events, online forums, and social media communities to build relationships and increase brand visibility.

4.0 Marketing Mix

According to (McCarthy, 1960), The marketing mix consists of four key elements that help farmers effectively market their products. However, (Borden, 1964), also cited that the marketing mix is a set of controllable variables that a company uses to influence the target market. It consists of four key elements: product, price, place, and promotion.

1. Product:

- A. Types of agricultural products offered (e.g., organic, seasonal).
- B. Quality and attributes that appeal to consumers.

2. Price:

- A. Strategies for pricing based on costs, competition, and perceived value.
- B. Importance of price setting to balance profitability and competitiveness.

3. Place:

- A. Locations and methods for selling products (farmers' markets, online sales).
- B. Importance of accessibility for consumers.

4. Promotion:

- A. Advertising methods (social media, local flyers).
- B. Educational outreach about the benefits of products.

5.0 The Concept of Utility

According to (Samuelson & Nordhaus, 2010), Utility in agricultural marketing refers to the value and usefulness that agricultural products provide to consumers and producers throughout the marketing process. Utility refers to the satisfaction or value that a consumer derives from a product or service.

- Form Utility:
This involves transforming raw agricultural products into forms that are more desirable for consumers. For example, milling wheat into flour or processing fruits into jams.

- **Time Utility:**
Time utility ensures that products are available when consumers want them. This includes proper timing of planting, harvesting, and marketing to meet seasonal demand.
- **Place Utility:**
This refers to making agricultural products available in locations convenient for consumers. Effective supply chain management and logistics help deliver products from farms to markets efficiently.
- **Possession Utility:**
Possession utility is about facilitating the transfer of ownership from producers to consumers. This includes methods of payment, promotions, and providing consumers with options that enhance their ability to purchase.

6.0 Problems of Marketing

However, (Ceesay, 2018), discuss the Problems of marketing agricultural products in the Gambia. The Gambia agricultural sector faces several challenges in marketing its products, including limited infrastructure, lack of market information, inefficient distribution channels, and the seasonal nature of agricultural production. These problems can lead to high post-harvest losses and low prices for farmers and the following.

- **Limited Access to Markets:**
 - A. Poor infrastructure can restrict farmers from reaching potential customers.
 - B. Solutions include improving transportation and establishing local market centers.
- **Price Fluctuations:**
 - A. Prices can vary dramatically based on seasonality and market dynamics.
 - B. Farmers need strategies to manage price risks.
- **Competition:**
 - A. Local and imported products can saturate markets, making it difficult for farmers to compete.

7.0 Channels of Distribution in Agricultural Marketing

According to, (Joof, 2020), Channels of distribution in agricultural marketing: Agricultural products in the Gambia are typically distributed through various channels, including direct sales to consumers, sales to intermediaries (such as wholesalers and retailers), and cooperative marketing. The choice of distribution channel can affect the price received by farmers and the availability of products to consumers.

- Direct Sales:
 - A. Selling directly at farmers' markets or through programs.
 - B. Benefits include higher profit margins and direct customer relationships.
- Indirect Sales:
 - A. Utilizing wholesalers and retailers to reach larger audiences.
 - B. Considerations of costs and pricing strategies involved.
- Online Sales:
 - A. Leveraging e-commerce platforms to market products beyond local boundaries.
 - B. Importance of digital literacy and access to technology.

8.0 Gender in Marketing Agricultural Products in The Gambia

Accounting to, (Gaye, 2017). Gender in marketing agricultural products in the Gambia.

- Women play a significant role in the Gambia agricultural sector, particularly in the production and marketing of certain crops. However, (Sanneh, 2021), they often face challenges in accessing resources, information, and decision-making power, which can limit their ability to effectively market their products.

Role of Women:

- Women often play crucial roles in farming and marketing processes.
- Empowering women can enhance productivity and marketing effectiveness.

Challenges:

- Cultural barriers may restrict women's participation in markets.
- Addressing gender disparities through training and access to resources is essential.

Strategies for Empowerment:

- Providing training programs and access to micro-financing for women farmers.
- Promoting women-led initiatives in agricultural marketing

MODULE NINE

GROUP MANAGEMENT FOR FARMER ORGANIZATION

Objective: To make the participants understand the importance of forming themselves and others in to a Group in order to address their own socio-Economic development on a sustainable basis

Introduction

In the beginning Farmer Groups were more focus on horticultural best practices such as reduction on the use of pesticides and various farming techniques that increase in productivity as well as marketing

However, in order to cater for the multi-faceted needs of the community groups and the individual farmer groups and its members there is therefore need to pay more attention on the group dynamics of these farmer groups alongside their Key engagements such as agriculture, health, community development, disaster management and education.

We are now in the era where Farmer Groups are no longer only horticulture-centred but rather taking an integrated approach (all sectors of our economy, socio-cultural, environmental etc.) The Farmer Groups are mainly people centered and hence the need for more organized, functional and productive groups to serve as the conduit for change/development.

Definition of a Group

A social unit of two or more individuals, who have in common a set of beliefs and values, follow the same norms and works for an established common aim. The members of the group share a set of common purpose, tasks or goals. In summary a group is a collection of individuals sharing common interest

Group dynamics

The social process by which people interact face-to-face in groups is called group dynamics. Group dynamics involves the influence of personality, power, and behaviour on the group process.

Groups generally produce fewer ideas than individuals working separately. However, they do produce better ideas as they are discussed more carefully and thought through more deeply. Therefore, groups are also more likely to identify errors of judgment before action is taken. Rather surprisingly, groups take riskier decisions than the individual members would have done if acting independently. A group therefore also tends to act more adventurously as members take courage from each other. Groups could be natural or induced

Types of Groups

Natural – These are not formed but come about through relationships between people, e.g., family unit, “Kabilo”, peer group, etc.

Induced – two or more people coming together to address a problem or need common to all of them, e.g., Village Farmer Associations, women’s Kafo, beekeepers’ association, development groups, interest groups, theatre groups, “ KANYELENG “ group, “ASOBI” groups, etc.

Stages or life cycle of a group formation

These have been characterized by Tuckman (1965) and Charles Handy (1985) as:

- Forming
- Storming
- Norming
- Performing
- Adjourning

Forming

- Group is not yet a group but a set of individuals
- Individuals want to establish personal identity within the group and make an impression
- Participation is limited as individuals get familiar with the setting, the trainer and each other
- Individuals begin to focus on task at hand and discuss its purpose
- The group is essentially evolving ground rules on which future discussions and actions will be based.

Storming

- Characterized by intra-group conflict and lack of unity
- Preliminary ground rules on purpose, leadership and behaviour are damaged
- Individuals can become hostile toward each other, and express their individuality by pursuing or revealing personal agendas.
- Friction increases, rules are broken, arguments can happen
- But if successfully handled, the stage leads to new and more realistic setting of objectives, procedures and norms

Norming

- Characterized by overcoming tensions and by developing group cohesion in which norms and practices are established
- Group members accept the group and accept each other's *idiosyncrasies*
- Group allegiance develops, and the group strives to maintain it.
- Development of group spirit, harmony becomes important

Performing

- Characterized by full maturity and maximum productivity
- Can only be reached by completing the previous three stages
- Members take on roles to fulfil the group activities since they have now learnt to relate to one another
- Roles become flexible and functional
- Group energy channelled into identified tasks
- New insights and solutions begin to emerge

Adjourning

- The group has achieved its objectives
- Members start withdrawing from the group
- The group disintegrates and may decide to come together again to address a common need.

Importance of forming a group

The people often join groups since the groups give the members stability and enhance their achievement capacity. They can be powerful and productive when they function well. As they

facilitate and coordinate the actions of their members and to some extent the entire village. The performance and output of the team are likely greater than the sum of its members.

The main reasons to join a group are:

- Have a sense of security
- Have a status
- Develop Self-esteem
- Power
- Goal achievement

The reason for forming a Group

Certain tasks can be performed only through the combined efforts of individuals working together

- Membership of a group provides the individual with a sense of belonging
- The group provides guidelines on generally acceptable behaviour
- Group membership can be an efficient means for getting access to others' knowledge
- Group membership may be required (according to institutional or other regulations) to perform certain tasks
- Some tasks may be executed more efficiently and at a higher quality level than if performed individually

Group Structure

The structure should have some key attributes to enhance its operations and effectiveness. For a group to be effective it has to have certain structures in place. These enable the members to share responsibilities, monitor and support each other, be accountable to the entire village and carry out their individual and collective roles smoothly. The structure may defer from one community to another, however for effective functioning of a group it should have positions holders (executives) and may have sub committees or task forces members.

Causes of Poor Group Dynamics and the tools to address them

Groups can make a significant difference to team performance; however, the following are examples of factors that can lead to poor performance:

- Weak Leadership
- Unconditional deference to the loudest voice
- Blocking
- Loss of skilled members
- Loss of revenue

Weak leadership: when a team fails to recognize and appoint a strong leader, there is a lack of direction and poor focus as individual team members vie for position and oppose one another's ideas.

Unconditional deference to the loudest voice: when people agree to self-proclaimed authority without question, then they will probably, in turn, hold back from expressing their own opinions

Blocking: when team members deliberately stop the free flow of information in the group.

Tools to address with Poor Group Dynamics

- **Quick Identification of Group Problems:** Be on the lookout for individual behavior that is having a negative effect on the group. Then find out why it is happening.
- **Get to know your team:** Find out what their strengths and weakness are in order to value each person's contribution openly in front of the whole group.
- **Communicate:** Open and clear communication is the key to achieving highly efficient team dynamics. All members need to be adept at sharing information and knowledge. Above all, remember to be a good listener.
- **Define roles and responsibilities:** Make sure that the team is correctly aware of its brief and accountability. Each person should be personally accountable within the group for their own actions and contributions.
- Every leader should regularly monitor the efficiency of his/her group interaction and to identify and rectify any poor behaviour. Group dynamics means hunting and living like a pride of lions, not like a solitary elephant agenda.

1. Different Characteristics and Behaviours of Group Members

Types of group members	Different Characteristics and behaviours of group members
Dominating	Having control of, or a very strong influence on people, events (dominates meeting by sheer force of character)
Aggressive	Apt, or ready to attack, offensive, quarrelsome
Bitchy	Spiteful or bad-tempered
Positive	Confidentiality holding an opinion, convinced
Understanding	Ability to show insight or tolerance, sympathetic awareness
Mature	Able to accommodate and also tolerate and understand the view point of others
Judgment	Careful and through option about issues
Know-all	Person who believes as if he /she knows everything
Traditionalist	A person who follows or support tradition
Point of order	Matter of correct procedure according to the rules
Anecdotal	Short, interesting or amusing story about a real person or event
Garrulous	Talking too much especially about unimportant things
Cliché maker	A person who uses phrase or idea which is used often that it has become stale or meaningless
Withdrawn	Uncommunicative or unsociable

Shy	Timid and nervous in the presence of others, reserved
Hyper-sensitive	Extremely sensitive emotionally
Touchy	Easily offended
Readily bored	Feel tired and uninterested by being dull or tedious
Smug	Too pleased with or proud of oneself, one's achievements, self-satisfied
Paternalistic	Way of controlling people by providing them with what they need but giving them no responsibility
Tick-skinned	Not sensitive to criticisms or insults

Constitution

The constitution of a group is the governance tool used by the group to ensure effectiveness, transparency, accountability and participation among group members and the entire community in conducting its functions. It is a document that outlines the rules, procedures, and processes governing operations and activities for the general reference of the group committee members and the entire membership. All groups should develop a constitution to guide their operations in a fair, transparent, and effective manner. The constitution of a group should not be imposed on the members, meaning it should be a collective product of all the group members, including the executive and ordinary members.

Key importance of a constitution

- Enhance the smooth operation and running of the group by members individually and as a whole.
- Promote transparency, rule of law and equality among members and the entire group
- Serves as source of direction for the group members
- It serves as reference material for entire group and also for resolving conflict within its members and the entire village.
- Enhances the association to be registered with Attorney General Chambers' as legal entity
- It enables outsiders to have some knowledge of the working procedures and rules that the group have and general state of governance within the group

Administrative procedures and the differences Roles and responsibility involved in the Group administrative

Administrative procedures are set rules or guidelines that govern the day to day affairs and management of the group

Group leadership

A leader is a person who has the ability to guide and lead the group, with the vision and the know-how required at a particular point in the group's development and who uses that know-how to help and direct the group to achieve its objectives

Different types of leaders

AUTHORITARIAN	DEMOCRATIC	LAISSEZ-FAIRE
Dominates and make all decisions	Offers choice situation	Avoids reaching formal decision
Allows little group initiative	Encourages group initiatives and discussion	Allows for complete freedom
Performs all responsibilities or orders others around him or her only	Delegates responsibility but also leads	Does not attempt to control
Makes and enforces rules	Encourages group to formulate guides for conduct	Does not make nor enforce rules and hopes problems will get solved by themselves
Demands respect from members	Encourages mutual respect for each other	Does not care about mutual respect
Evaluates group activities alone	Involves other and seek their participation in the evaluation	Is not concerned about evaluation

Qualities of a Good Leader

- Identify problems early
- Be able to identify solutions and lead the group to solve them
- Values the importance of democratic decision making and enhancing everyone participating in the group's activities
- Transparent and fair/honest in his/her dealing with fellow group members and outsiders
- Capable of leading the problem-solving process
- Flexible/humble
- Trust worthy
- Innovative
- Supportive
- Skillful

The Executive committee

- The executive committee is directly charged with the day-to-day affairs of the group
- Enforce the constituent and other by laws
- Carryout policies and programs of the group
- Engage in advocacy

Function of the leader

- Guide group in decision making.

- Facilitate group work and provide direction to the group (problem identification, analysis, planning, implementation and M&E).
- Assist group to achieve its goals and objectives.
- Motivation all group members to get the best out of them.
- Resolve Conflict within the group.
- Serve as the mouth piece of the group

Function of the secretary

- Keeping accurate records such as minutes, membership registration, loan registers, action plan and files.
- Sending and receiving all correspondence
- Draw announce the agenda of meeting
- Liaises with extension officers for possible support on group proposal development
- Be a second signatory to the accounts of the group

Function of the treasurer

- Keep safe all cash (funds) held in hand and bank account
- Keep records and proofs of all financial transaction
- Ensure that the group funds are used on the purpose for which they are requested.
- Keep all physical assets of the group
- Report in any forum the financial status of the group
- Serve as the third signatory to the accounts

Function of the Auditor

- Audit all books of accounts of the group
- Report directly to the general body the outcomes of any audit exercise carried out
- Ensure frequent audit and report accordingly

Function of the adviser

- Giving advice to both the executive and the General Assembly on the ideas and aspiration of the “kaffo”
- Guiding the group not to go astray
- Reminds the group to ensure best practices in its operation
- Suggest to the group members the best possible way forward towards achieving its aims and objective

Function of the PRO

- Disseminate of all essential information to group members
- Dispatching all correspondents accordingly

Function of the Organizer

- Initiate and spear head funds raising events
- Mobilize people on group function e.g. meetings, communal work, fund raising events etc.

Meetings

Meetings are important tools for entire operations and effectiveness of women groups. It is in meetings that group members plan, assign responsibilities, evaluate one self and create awareness among them.

Some key pointers for a good and effective meeting

- To achieve an orderly meeting, the meeting should have a chairperson who should chair all meetings.
- The agenda **of the meeting** should be reflective of the meeting **objectives**. Before the meeting starts, everyone should know the specific objectives of the meeting.
- It is important for an agenda to be developed to keep the meeting focused on the issues to be addressed.
- Do not be too ambitious at the first meeting.
- Try to address one agenda at a time to ensure that each is adequately discussed before going to the next one.
- Before the meeting closes, agreement should also be reached on the next steps to be taken/action points by whom and when.
- Decide on the time, place and agenda for the next meeting.

Importance of holding a meeting

- To provide and share essential information amongst members
- To provide a forum for group members to express their desires or grievances to the group
- To constantly update members on development and constraints faced by group
- To ensure monitoring and quality control
- To plan for the future

Planning

Planning is the process of assessing the group to identify constraints/ challenges and establishing realistic objectives, and also determining how best to achieve them. Planning is a very important function of a group, because planning is the base for other management functions – organizing, leading, and controlling- it is often referred to as the primary management function of a group.

Sustainability

- Promotion of member's ownership.
- Accountability and transparency in handling the affairs of the group.
- Respect for the by-laws of the society.
- Fundraising activities to increase the financial level of the group.
- Support from Donor agencies

Development of sustainability plans

Key issues that groups or subcommittees of groups should ask themselves when developing a sustainability plan are:

- What activities are required to ensure the continuity/ sustainability of the project?
- Are the skills, resources, and time required to implement the activity available?
- What are some of the likely threats that could affect the sustainability of the project?

- Who are the people to be responsible, and how will they embark on the activities?

Monitoring and evaluation

Monitoring

The follow-up or surveillance of the implementation of an activity is to ensure that inputs, work schedules, targeted output, and other required actions are proceeding according to plans. This should actively involve all stakeholders at all stages and address all relevant issues. Monitoring refers to the routine exercise of making sure project activities are on track.

Evaluation is a process for determining, at a certain point in time and objectively, the relevance, efficiency, effectiveness, and impact of activities in light of the objectives. It is an organizational process for improving activities still in progress and for aiding management in future planning, programming, and decision making. Evaluation is conducted intentionally to measure the achievement of objectives (results), strengths, and weaknesses against set targets.

The importance of monitoring and evaluation

- Provides valuable information for future project planning
- Helps decision-makers to correct mistakes and oversights in initial design
- Helps keep implementation on course in accordance with plans
- Ensures timely implementation of group activities

MODULE TEN

RISK AND MITIGATION

Definition of risk management

Refers to the process of identifying, assessing, and controlling threats to enterprise capital and earnings. Uncertainties such as weather, reduced yields, prices, government policies, global markets, and other factors that impact farming can cause significant fluctuations in farm income. Risk management involves choosing solutions that reduce the financial effects that can result from such uncertainties.

Farmers make decisions every day that affect farming operations. Many of the factors that affect the decisions cannot be predicted with complete accuracy. Farming has become increasingly risky as farmers become more commercial. Farmers need to understand risk and have risk management skills to anticipate problems better and reduce consequences.

Decision-making is the principal activity of management. All decisions have positive or negative outcome. However, in most situations the outcome of a decision cannot be predicted. The more complex the risk, the more difficult it becomes for farmers to make an informed decision. For effective decisions to be taken, farmers need information on many aspects of farming and business operations.

Good risk management decisions depend on accurate information which requires reliable data. Good information can help a farmer make rational risk management decisions. The sources of information available include:

- Farm records
- Off-farm statistics
- Information from input dealers
- Traders
- Extension workers
- Weather data
- Other farmers and
- Market price data.
- Estimating Risk

When the chance or probability of an outcome is known in advance, this is called risk. When the chance of an outcome is not known in advance, this is called uncertainty. Risk is equal to hazard multiplied by vulnerability and divided by exposure ($H \times V/E$).

Sources and different Types of risk

Five basic areas constitute sources of agricultural risk that should be addressed.

Production Risk

Crop and livestock performance depend on biological processes that are affected by weather, pests, and diseases. Low rainfall or drought may lead to low yields. Hail or heavy rains could damage or even wipe out crops. Outbreaks of pests or diseases could also cause major yield losses in crops and livestock. Breakdown of equipment during the production season may result to delayed ploughing and harvesting, thus affecting yields.

Marketing Risk

Changes in prices are beyond the control of an individual farmer. The price of farm products is affected by the supply of a product, demand for the product, and the cost of production.

- Supply of a product is affected by a combination of production decisions made by farmers as a group and by the weather and other factors that influence yields.
- Demand for a product is affected by consumer preference, consumers' level of income, the strength of the general economy, and the supply and price of competing products.
- Cost of production is dependent on both input costs and yield. This makes it highly variable. Although input costs tend to be less variable than output prices, when combined with yield variations, the cost of production becomes a serious source of risk.

Financial Risk

Financial risk occurs when money is borrowed to finance the farm business. This risk can be caused by uncertainty about future interest rates, a lender's willingness and ability to continue to provide funds when needed, and the ability of the farmer to generate the income necessary for loan repayment. Smallholder farmers who borrow money at high interest rates may have difficulty with debt repayments. Lower than expected prices, combined with low yields, can make debt repayment difficult and even lead to insolvency.

Institutional and Legal Risk

Institutional and legal risk refers to unpredictable changes in the provision of services from institutions that support farming. Such institutions can be both formal and informal and include banks, cooperatives, marketing organizations, input dealers and government extension services. Part of institutional risk is the uncertainty of government policy affecting farming, such as price support and subsidies. The risks farmers face are often a result of decisions taken by policy-makers. Subsidies, food quality regulations for export crops, rules for animal waste disposal and the level of price or income support payments are examples of decisions taken by government that can have a major impact on the farm business.

Human Resources Risk

This refers to the risks to the farm business caused by illness or death and the personal situation of the farm family/employees. Absenteeism, accidents, illness and death can disrupt farm performance. Rural-urban diaspora can cause labour shortages for the farm. Political and social unrest can also limit labour availability. When farmers plant their crop or commit resources to raise livestock, they cannot be certain whether they will have enough labour to manage the farm enterprises.

Risk and Risk Management/Mitigation

Production Risk:

- Weather/climate
- Pest & diseases for crops
- Diseases outbreak for livestock
- Interaction with new technology
- Breakdown of equipment

Managing Production Risk

- Crop diversification
- Integration of crops and livestock

- Growing different varieties/cultivar/breeds of the
- same crop/livestock
- Selection of pests and diseases tolerant seeds
- Breeding of diseases tolerant livestock
- Using climate information for decision-making
- Adopting risk reduction technology, e.g. tunnel production, improved animal housing, and so on
- Purchasing business insurance (including climate index insurance)
- Improving feed supplements

Marketing Risk

- Price and market uncertainty
- Marketing cost uncertainties
- External forces such weather/climate, trade-tariffs

Managing Marketing Risk

- Reduce risk & avoid higher risk ventures;
- Risk analysis and transfer through business insurance, joining cooperatives, contract farming,
- Using current marketing information
- Develop and follow a business plan
- Pooling of produce through clustering for collective marketing
- Maintain flexibility in case of targeting informal markets

Financial Risk

- Cost of capital fund
- Cash flow
- Price shock
- Not able to generate additional equity
- Poor planning in farm operations
- Lack of financial understanding

Managing Financial Risk

- Budgeting cash flows
- Maintaining accurate and up-to-date financial records
- Conducting a basic financial analysis
- Developing annual financial statements

Institutional and Legal Risk

- Business formation
- Contractual agreements (financial agreements, insurances, labour, etc)
- Statutory compliance
- Government policies

Managing Legal Risk

- Obtaining professional legal assistance (Lawyers-farmers legal rights)
- Farmers must have all compliance and statutory documentation (Tax clearance, ENPF, VAT compliance, Trading License, Intellectual Property Rights)

Human Resource Risk

- Production unit inefficiency
- Unavailability of labour
- High labour costs
- Potential conflict with employees
- Laws and regulations
- Absenteeism, accidents, illnesses

Managing Human Resource Risk

- Hiring skilled labour
- Training the personnel on OHS
- Introduce wellness programs
- Labour incentives (staff motivation and cohesion)
- Compliance to labour laws

References

Bhutan Agriculture and Food Regulatory Authority (BAFRA) Ministry of Agriculture and Forests; Food Handlers' Training Manual for Food Processing Units

Guidelines for the Design of Control Measures for Street Vended Foods (Africa)