



ECOWAS COMMISSION
COMMISSION DE LA CEDEAO
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IMPLEMENTATION OF THE REGIONAL STRATEGY TO SUPPORT YOUTH EMPLOYABILITY IN THE AGRO-SYLVO-PASTORAL AND FISHERIES SECTOR

TRAINING FORM

TITLE: CAPACITY BUILDING IN FARM MANAGER

1. Objective: To make participants farm managers having a profile of:

- An entrepreneur, a role model, a transformer for the people around him and his community;
- A "conductor" who leads on the ground a proximity management of whole production activities of his farm by developing leadership and dynamism;
- A manager who can guarantee the return on investment and the ever-increasing competitiveness of his farm.

2. Expected results:

- Participants acquired managerial and leadership skills and technical autonomy to make operational decisions on the functioning of an integrated agricultural production system;
- The participants, in addition to their field of specialisation, have become able to intervene technically and organisationally in agricultural production activities, maintenance of equipment and means of production;
- Participants are equipped as managers to perform functions of planning, programming, operationalisation, day-to-day monitoring of farm activities, organisation of activities from production to marketing and monitoring of their farm's financial flows;
- Participants acquired attitudes and skills to adequately fulfil the roles of versatile agricultural entrepreneurs.

3. Training content:

- Practical work in the fields of plant production (market gardening, food crops, agroforestry, etc.), biofertilizer techniques (Ramial Chipped Wood (RCW)/compost production, Bokashi, etc.), management in integrated biological pest control, implementation of irrigation systems, etc.
- Practical work in animal and fish production
- Practical work in food and non-food processing
- Field approaches for the realisation of diagnostic identification of the axes of improvement of a farm according to the forecast production plans.
- Technique for carrying out field/environmental studies for the establishment of a modern farm and for the choice of speculations
 - The implementation of agricultural developments / irrigation systems / implementation of layout and other livestock infrastructure
 - Planning/programming techniques

- Results oriented management from business plans
 - Marketing approaches for agricultural products and networking with producers
 - Technical and economic management tools for decision-making
- 4. The different areas of specialization offered by the training program with the modules be taken into account and their contents:**

No.	MODULES	ACTIVITIES	TECHNICAL CONTENT
1	CROP PRODUCTION	① Organic market gardening	<ul style="list-style-type: none"> ▪ The place of market gardening in a sustainable and integrated production; ▪ Basic notions on an intensive market gardening production: good agricultural practices / technical route; ▪ The production and use of bio fertilizers (compost, RCW, effluents, straw/ mulch); ▪ Effective Microorganisms (EM) in production; ▪ Phytosanitary protection in market gardening: biological control; ▪ Some authentic production technologies: soil aggradation techniques, water control and irrigation systems, etc.; ▪ Technical and economic standards for the profitability of a market gardening unit; <ul style="list-style-type: none"> ○ Influence of the environment on the speculations choice; ○ Location factors for a market gardening business; ○ Production monitoring and technical and economic assessment standards; ○ Production planning; ○ Production cost factors and strategy for good competitiveness: Financial and investment aspects.
		② Food crops: production of cereals, legumes and tubers	<ul style="list-style-type: none"> ▪ The place of food crops in sustainable integrated production; ▪ Basic concepts of intensive food production: good agricultural practices / technical routes for the production of cereals and tubers; ▪ The production and use of biofertilizers (compost, RCW, effluents, straw/ mulch); ▪ Effective Microorganisms (EM) in the production of cereals and tubers;

			<ul style="list-style-type: none"> ▪ Phytosanitary protection in intensive food crop: biological control; ▪ Some authentic production technologies: soil aggradation techniques, water control and irrigation systems, etc.; ▪ Counter-season production; ▪ Technical and economic standards for making an intensive food crop unit profitable; <ul style="list-style-type: none"> ○ Influence of the environment on the speculations choice; ○ Location factors of an intensive food crop business; ○ Production monitoring and technical and economic assessment standards; ○ Production planning; ○ Production cost factors and strategy for good competitiveness: Financial and investment aspects.
		③ Agroforestry: grafting, forest tree nursery, orchard establishment	<ul style="list-style-type: none"> ▪ The place of Agroforestry in sustainable integrated production; ▪ Basics of Agroforestry: good agricultural practices / technical routes in Agroforestry; ▪ The production and use of biofertilizers (compost, RCW, effluents, straw/mulch); ▪ Effective Microorganisms (EM) in Agroforestry; ▪ Phytosanitary protection in agroforestry: biological control; ▪ Some authentic production technologies: soil aggradation techniques, water control and irrigation systems, etc.; ▪ Technical and economic standards for the profitability of an intensive agroforestry unit; <ul style="list-style-type: none"> ○ Influence of the environment on the speculations choice; ○ Location factors for an intensive agroforestry business; ○ Production monitoring and technical and economic assessment standards;

			<ul style="list-style-type: none"> ○ Production planning; ○ Production cost factors and strategy for good competitiveness: Financial and investment aspects.
		④ Production and use of biofertilizers (compost, RCW, effluent, effective micro-organisms EM) and biopesticides, Production of super soil for soil aggradation	<ul style="list-style-type: none"> ▪ The place of biofertilizers and biopesticides in sustainable integrated production; ▪ Inventory of biofertilizers; ▪ The different types of raw materials for the production of biofertilizers and biopesticides; ▪ Production process of biofertilizers and biopesticides; ▪ The use of biofertilizers and biopesticides; ▪ Packaging of biofertilizers and biopesticides; ▪ EM and their derivatives: production and use; ▪ Technical and economic standards for the profitability of a biofertilizer and biopesticide unit; <ul style="list-style-type: none"> ○ Influence of the environment on the speculations choice; ○ Location factors of a biofertilizer and biopesticide production business; ○ Production monitoring and technical and economic assessment standards; ○ Production planning; ○ Production cost factors and strategy for good competitiveness: Financial and investment aspects.
		⑤ Installation and maintenance of agricultural irrigation systems	<ul style="list-style-type: none"> ▪ The place of irrigation and water control in sustainable integrated production; ▪ California networks; ▪ Principle and constituents elements of the Californian network; ▪ Estimation of water requirements; ▪ Calculation of flow rates and choice of diameters; ▪ California network diagram and its implementation; ▪ Establishment of a quote;

			<ul style="list-style-type: none"> ▪ Installation and maintenance of the Californian network; ▪ Implementation of a California network system; ▪ Drip irrigation; ▪ Golden rule in irrigation; ▪ The principles of drip irrigation; ▪ Benefits and limitations of drip system; ▪ Description of the drip system; ▪ Types, structure, operation and properties of drippers; ▪ Sizing a drip network; ▪ Installation of a low pressure drip irrigation system; ▪ Cost of installing a low pressure drip system; ▪ Irrigation management and control; ▪ Installation of a drip irrigation system.
		⑥ Edible mushroom cultivation	<ul style="list-style-type: none"> ▪ The place of mushroom production in sustainable integrated production; ▪ Some important mushroom species suitable for cultivation in West Africa <ul style="list-style-type: none"> ○ Nutritional value of mushrooms ○ Choosing a site for mushrooms cultivation ○ The different stages of growing edible mushrooms ○ Environmental conditions necessary for mushroom cultivation ○ Raw materials that can be used as a substrate for mushroom cultivation ○ List of equipment for mushrooms production ○ Mushroom cultivation methods ○ Buildings needed for mushroom cultivation ▪ Preparing the mushroom spawn ▪ Preparation of mushroom substrate ▪ Development, harvesting, preservation and marketing of mushrooms

2	POULTRY FARMING	<p>Breeding of:</p> <ul style="list-style-type: none"> ❶ Improved chickens, ❷ quails ❸ Broiler chickens ❹ Laying hens ❺ Turkey & Guinea Fowl ❻ Ducks and Geese 	<ul style="list-style-type: none"> ■ The place of poultry farming in an integrated production system; ■ Setting up a poultry farming unit: choice of site, orientation, necessary equipment; ■ Livestock infrastructure: standards and management; ■ Authentic techniques and technologies of profitable integrated poultry farming: <ul style="list-style-type: none"> ○ Identification of different species/strains and characteristics; ○ The different stages of breeding, technical norms and standards; ○ Feeding: nutritional needs, composition, ration, services; ○ Different types of diseases and prophylaxis; ○ Reproduction: choice of breeders, breeding standards, management of young and growth management; ■ Technical and economic standards: <ul style="list-style-type: none"> ○ Influence of the environment on the species choice ○ Factors for locating a poultry farming business ○ Production monitoring and technical and economic assessment standards ○ Production planning ○ Production cost factors and strategy for good competitiveness: Financial and investment aspects.
3	MAMMAL BREEDING	<ul style="list-style-type: none"> ❶ Cattle, sheep, goats ❷ Rabbits ❸ Pigs ❹ Grasscutter 	<ul style="list-style-type: none"> ■ The place of mammal breeding in an integrated production system; ■ Setting up a mammal breeding unit: choice of site, orientation, necessary equipment; ■ Livestock infrastructure: standards and management; ■ Authentic techniques and technologies for profitable integrated mammal husbandry: <ul style="list-style-type: none"> ○ Identification of different species/strains and characteristics; ○ The different stages of breeding, technical norms and standards; ○ Feeding: nutritional needs, composition, ration, services; ○ Different types of diseases and prophylaxis; ○ Reproduction: choice of breeders, breeding standards, management of young and growth management;

			<ul style="list-style-type: none"> ■ Technical and economic standards: <ul style="list-style-type: none"> ○ Influence of the environment on the species choice ○ Location Factors for a Mammal Breeding Business ○ Standards for monitoring and technical and economic assessment of production ○ Production planning ○ Production cost factors and strategy for good competitiveness: Financial and investment aspects.
4	FISH FARMING	<p>❶ Production of Tilapia and Catfish in earthen pond, concrete pond and Tanks</p> <p>❷ Artificial insemination for fish reproduction</p>	<ul style="list-style-type: none"> ■ The place of fish farming in sustainable integrated production; ■ Production infrastructure: earthen pond, concrete pond, hatchery, floating cages, etc.; ■ The basics of setting up a fish farming unit: choice of site, necessary equipment; ■ Identification of different fish species and characteristics; ■ Fish management techniques following the different stages of breeding; ■ Feeding: feed requirement, composition, ration, service, production and use of natural products; ■ Management of fish farming waters; ■ Reproduction: identification of male and female, breeding management and larval management; ■ Technical and economic standards: <ul style="list-style-type: none"> ○ Influence of the environment on the species choice ○ Location factors of a fish farming business; ○ Production monitoring and technical and economic assessment standards; ○ Production planning; ■ Production cost factors and strategy for good competitiveness: Financial and investment aspects.
5	SMALL BREEDING	Snail farming	<ul style="list-style-type: none"> ■ Description of external characteristics; ■ The role of the snail in sustainable development;

			<ul style="list-style-type: none"> ▪ Setting up a breeding unit: housing, necessary equipment; ▪ Identification of different species and their characteristics; ▪ Reproduction; ▪ association of earthworm and snail; ▪ Major challenges during production; ▪ The different types of feeds and services; ▪ Technical and economic standards for breeding: <ul style="list-style-type: none"> ○ Influence of the environment on the choice of species ○ Location factors of a snail farming business; ○ Production monitoring and technical and economic assessment standards; ○ Production planning; ○ Production cost factors and strategy for good competitiveness: Financial and investment aspects.
6	ANIMAL NUTRITION	<p>❶ Design a feed formula for livestock</p> <p>❷ Production of feed for livestock</p>	<ul style="list-style-type: none"> ▪ Importance of a feed mill in sustainable integrated agricultural production ▪ Identification of a feed mill site setting up and characteristics ▪ Materials and equipment ▪ Feed formulation parameters ▪ Application of feed formulas ▪ Practical storage conditions ▪ Planning the supply of raw materials, importance of storage ▪ Cost of production of manufactured feed ▪ Data recording
7		<p>❶ Processing of cereals (corn, soybeans, etc.) and tubers (sweet potatoes, cassava, etc.)</p> <p>❷ Fruits and vegetables processing</p>	<ul style="list-style-type: none"> ▪ Role and importance in integrated agricultural production; ▪ Basic infrastructure and equipment required: identification, installation, upkeep and maintenance; ▪ Processing concept : raw materials, processes, technical standards; ▪ Various products and their manufacturing diagram; ▪ Packaging and conditioning storage/preservation of finished products;

		③ Production of palm oil, soybeans oil, etc. ④ The different types of soaps and cosmetics	<ul style="list-style-type: none"> ▪ Hygiene in a processing unit; ▪ Marketing of products; ▪ Concept of profitability: technical and economic management of the unit; ▪ Influence of the environment on the choice of products ▪ Location factors of a processing business; ▪ Production monitoring and technical and economic assessment standards; ▪ Production planning; ▪ Production cost factors and strategy for good competitiveness: Financial and investment aspects.
8	RENEWABLE ENERGY WITH BIOMASS MANAGEMENT	① Production and use of biogas ② Photovoltaic solar energy ③ The green purification system / wastewater treatment,	<ul style="list-style-type: none"> ▪ Role and importance in an integrated system; ▪ Biogas: definitions, infrastructure and equipment; necessary, production, treatment, possible uses; ▪ Possible organic materials for production; ▪ Valorization of by-products in the integrated system; ▪ The sizing for installing a photovoltaic solar production unit; ▪ Installation and monitoring of a solar PV unit; ▪ Biochar production : raw materials and equipment; production process.
9	MARKETING AGRICULTURAL PRODUCTS AND MARKETS FOR MANAGING AGRICULTURE AS A BUSINESS FOR SUSTAINABLE DEVELOPMENT	① Steps to enter Markets and develop Sustainable Agribusiness: Marketing and Markets ② The key functions and skills that farmers need to acquire to successfully engage in markets in a sustainable manner	<ul style="list-style-type: none"> ▪ The concept of marketing; ▪ Marketing of agricultural products; ▪ Characteristics of basic agricultural products; ▪ The role of marketing; ▪ Types of markets: Farm sales, Assembly markets, Wholesale markets, Retail markets; ▪ Elements of Marketing (Marketing Research Issues); ▪ Marketing constraints and solutions; ▪ The different stages of product marketing;

		③ Skills for solid cooperative organization and management and experience with internal savings and credit	<ul style="list-style-type: none"> ▪ Evaluation of group sales/purchases; ▪ Market research questionnaire: Market/end customer, Retailers, Competitors, transport, an action plan, etc. ▪ The key functions and skills of an agricultural entrepreneur producer; ▪ The organization and management of a successful agricultural producers' cooperative; ▪ The contractual system for the development of sustainable markets for agricultural products; ▪ Mobilization of financial resources in an agricultural production cooperative; ▪ The savings and credit system: a lever for the activities of a sustainable agricultural cooperative. ▪ Influence of the environment on the species and speculations choice ▪ Factors for locating a business ▪ Factors influencing the location factors of the business ▪ Standards for monitoring and technical and economic assessment of production ▪ Production planning ▪ Production cost factor and strategy for good competitiveness: Production cost factor / Strategy for good competitiveness / Financial and investment aspects
10	AGRICULTURAL ACCOUNTING AND BUSINESS CREATION	① Agricultural accounting ② Business plan	<ul style="list-style-type: none"> ▪ The various logs for monitoring the farm's financial flows (cash book, general ledger, etc.) ▪ Calculation of production costs for different activities ▪ Farm inventory management tools ▪ Development of a farm business plan
11	TECHNICAL AND ECONOMIC MANAGEMENT OF	The technical and economic management of an agricultural and para-	<ul style="list-style-type: none"> ▪ Influence of the environment on the species and speculations choice ▪ Factors for locating a business ▪ Influencing elements on the location factors of a business

	AGRICULTURAL MICRO ENTERPRISES	agricultural production unit	<ul style="list-style-type: none"> ■ Production monitoring and technical and economic assessment standards ■ Production planning ■ Production cost factor and strategy for good competitiveness: Production cost factor / Strategy for good competitiveness / Financial and investment aspects
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5. Prerequisites (profile and criteria eligibility):

- a. Be a young man or woman aged 18 to 35;
- b. Be a national and resident of one of the ECOWAS countries and demonstrate a firm desire to settle in their country of origin to develop activities in the value chains and domains of activity learned;
- c. Be an active agricultural entrepreneur in search of developing his business to bring it to a higher level of management and performance;
- d. Have an exceptional passion for agricultural entrepreneurship;
- e. Have endurance for agricultural work;
- f. Have creativity and adaptation capacities to research and development approaches;
- g. Have the skills to develop versatility to drive synergy between the three production sectors in the logic of the added value chain;
- h. Have communication capacity for participatory management and accountability;
- i. Have a work ethic and discipline to serve as role model for dependants and community;
- j. Be fully available and free from any commitment (academic or professional) for the duration of the training;
- k. Comply with the internal regulations governing the training.

6. Training venue:

- i) Songhai Centre of Porto-Novo (Benin)
- ii) Songhai Centre in Parakou (Benin)
- iii) Songhai Savalou Centre (Benin)
- iv) Songhai-IGRC: Songhai Imo Green Community (Nigeria)
- v) Songhai – Moniya (Nigeria)
- vi) Songhai – MOF: Songhai Mbara Oziona Foundation (Nigeria)

7. Training duration: 1 month