AGRICULTURAL CROPS PRODUCTION

TECHNICAL-PROFESSIONAL

Grade 12

Three-Term Budget Of Work (BOW)
for Learning Competencies

TECHNICAL-PROFESSIONAL
AGRI-FISHERY BUSINESS AND FOOD INNOVATION
Grade 12

Three-Term Budget Of Work
For Learning Competencies

Please note that each Tech-Pro elective is completed in one term if delivered at Grade 12.

Elective	**Agricultural Crops Production**
Prerequisite	**None**

Performance Standard	The learners demonstrate an understanding of the overview of fish capture, legal bases in protecting the marine environment, tools, materials, and equipment in fish capture operations and safe navigation information.
Content Standard	The learners perform safe navigation applying the weather information in a simulated environment.

Week	Learning Competency	Suggested Activities
1	• Discuss the overview of Agro-Entrepreneurship	• **Introduction to Crop Production** - Discuss the meaning, importance, and scope of crop production. Learners share common crops found in their community. Brainstorm crops grown in the community. • **Types of Crops Activity** - Group learners according to crop categories (cereals, vegetables, fruits, root crops, industrial crops). Use pictures or actual samples.

Week	Learning Competency	Suggested Activities
		• **Short lecture on importance and types of crops-group activity.** • **Create a simple mind map of crop production.** • **Crop Production Cycle** - Learners arrange pictures/cards showing stages: land preparation, planting, cultivation, harvesting, and marketing. • **Importance of Soil Conduct soil observation activity. -** Learners identify characteristics of good soil for planting. • **Reflection and Quiz** - Short quiz and reflection writing: "Why is crop production important to our community?" • **Tools and Equipment Identification** - Show actual farm tools or pictures. Learners identify uses of each tool. • **Seed Selection Activity** - Compare healthy and unhealthy seeds. Discuss characteristics of quality planting materials.

Week	Learning Competency	Suggested Activities
	• Discuss the safety standards in agricultural crops production	• **Introduction to Safety Standards** - Discuss the meaning and importance of safety standards in agricultural crop production. Learners share possible hazards encountered in farming activities. • **Identifying Farm Hazards** - Learners identify physical, chemical, biological, and environmental hazards in crop production through pictures, videos, or group discussion. • **Personal Protective Equipment (PPE)** - Explain/Demonstrate proper use of PPE such as gloves, boots, masks, hats, and goggles. Learners practice proper wearing and handling of PPE. • **Safe Use of Tools and Chemicals** - Discuss proper handling, storage, and maintenance of farm tools, fertilizers, and pesticides. • **Emergency Preparedness and Assessment** - Discuss first aid, emergency procedures, and accident reporting in the farm. Conduct quiz, role-playing, poster-making, or safety demonstration.
	• Classify the different farm tools, implements, and equipment according to work requirements	• **Introduction to Farm Tools, Implements, and Equipment** - Discuss the definitions, importance, and differences among farm tools, implements, and

Week	Learning Competency	Suggested Activities
		equipment. Learners identify common farming materials used in their community. • **Classification of Hand Tools** - Learners classify hand tools according to work requirements such as digging, cutting, watering, cultivating, and harvesting. • **Uses and Functions of Farm Tools** - Conduct matching activities between tools and their functions. Learners explain proper use of each tool. • **Introduction to Farm Implements** - Discuss common farm implements such as plow, harrow, and cultivator. Learners identify their uses in land preparation and farming operations. • **Practical Identification Activity** - Learners identify actual tools and implements through demonstration, labeling, or group activities. Conduct short quiz or oral recitation. • **Introduction to Farm Equipment** - Discuss common farm equipment such as tractors, water pumps, sprayers, and threshers. Explain their functions and importance in crop production. • **Proper Handling and Maintenance** - Demonstrate

Week	Learning Competency	Suggested Activities
		proper handling, cleaning, storage, and maintenance of tools, implements, and equipment. • **Safety Practices in Using Farm Tools and Equipment** - Discuss safety precautions, use of PPE, and prevention of farm accidents. Learners perform role-playing or safety demonstrations. • **Classification Workshop** - Learners classify tools, implements, and equipment according to work requirements through group activities, charts, or graphic organizers. • **Performance Task and Assessment** - Conduct practical demonstration, quiz bee, poster-making, or group presentation on proper classification and use of farm tools, implements, and equipment.
	• Perform pre-operative checking of tools, farm implements and equipment in accordance with the manufacturer's manual	• **Discuss the importance of pre-operative checking of farm tools, implements, and equipment** - Explain how proper inspection helps prevent accidents and equipment damage. • **Reading the Manufacturer's Manual-Introduce the parts and contents of a manufacturer's manual**. - Learners identify operating instructions, safety reminders,

Week	Learning Competency	Suggested Activities
		and maintenance procedures. • **Inspection of Farm Tools and Implements** - Demonstrate proper checking of hand tools and farm implements for defects, looseness, rust, cracks, and cleanliness. Learners perform guided inspection activities. • **Inspection of Farm Equipment and Safety Practices** - Discuss pre-operative inspection of farm equipment such as sprayers and water pumps. Emphasize safety precautions and proper use of PPE during inspection. • **Hands-on Demonstration and Assessment** - Learners perform actual pre-operative checking using inspection checklists and manufacturer's instructions. Conduct quiz, oral recitation, or practical test.

Performance Standard	The learners perform growing media preparation, nursery operation and planting of crops based on industry practices and Phil. Good Agricultural Practices.
Content Standard	The learners demonstrate understanding of kinds and varieties of planting materials and characteristics of good planting materials.

Week	Learning Competency	Suggested Activities
2	• Identify good quality planting materials according to kinds	• **Introduction to Planting Materials** - Discuss the meaning, importance, and uses of planting materials in crop production. Introduce different kinds such as seeds, seedlings, cuttings, tubers, bulbs, and grafted plants. • **Kinds of Planting Materials** - Learners identify and classify planting materials according to kinds using pictures, flashcards, or actual samples. • **Characteristics of Good Quality Seeds** - Discuss qualities of good seeds such as high germination rate, purity, vigor, and freedom from pests and diseases. Learners compare healthy and poor-quality seeds. • **Characteristics of Quality Seedlings and Vegetative Materials** - Discuss desirable characteristics of seedlings, cuttings, tubers, and bulbs. Learners observe actual samples or pictures. • **Classification and Identification Activity** - Learners perform group activities in identifying and classifying planting materials according to kinds and quality. Conduct short quiz or oral recitation. • **Proper Selection of Planting Materials** - Demonstrate proper selection techniques for seeds and vegetative

Week	Learning Competency	Suggested Activities
		planting materials. Discuss factors affecting planting material quality. • **Handling and Storage Practices** - Discuss proper storage, labeling, and handling practices to maintain seed viability and planting quality. • **Germination and Viability Testing** - Conduct simple germination tests using seeds. Learners record and interpret results. • **Practical Evaluation Activity** - Learners inspect and evaluate different planting materials using guide questions or evaluation checklists. • **Performance Task and Assessment** - Conduct practical demonstration, quiz, poster-making, or group presentation on selecting and identifying good quality planting materials.
	• Identify varieties of crops produced in their locality	• **Introduction to Local Crops** - Discuss the meaning and importance of crops produced in the locality. Learners share common crops found in their community or province. • **Types and Varieties of Crops** - Introduce different crop varieties such as rice, corn, vegetables, fruits, root crops, and legumes commonly grown in the locality.

Week	Learning Competency	Suggested Activities
		• **Crop Identification Activity** - Learners identify crops using pictures, actual samples, flashcards, or videos. Conduct matching and labeling activities. • **Characteristics of Local Crop Varieties** - Discuss the characteristics, uses, and growing conditions of common local crop varieties. • **Community-Based Survey Activity** - Learners conduct a simple survey or interview with family members, farmers, or community members regarding crops commonly produced in the locality. • **Reporting of Survey Results** - Learners present gathered information about local crop varieties through charts, posters, or oral reports. • **Importance of Crop Varieties in the Community** - Discuss the economic, nutritional, and environmental importance of crops produced in the locality. • **Crop Classification Activity** - Learners classify crops according to categories such as cereals, vegetables, fruits, root crops, industrial crops, and legumes.

Week	Learning Competency	Suggested Activities
		• **Field Observation or Virtual Farm Tour** - Conduct a school garden visit, field observation, or video presentation showing different crop varieties grown locally. • **Performance Task and Assessment** - Learners create posters, brochures, scrapbooks, or presentations featuring local crop varieties and their importance. Conduct quiz or oral recitation.

Suggested Performance Tasks	**Individual Task:** • Create a reflection essay, concept map, or infographic showing the importance and stages of crop production. • Demonstrate proper wearing of PPE and prepare a personal farm safety checklist. • Prepare a labeled drawing or photo portfolio of farm tools and classify them according to use. • Conduct actual inspection of farm tools using a checklist based on the manufacturer's manual. **Group Task:** • Create and present a group poster, skit, or multimedia presentation on the crop production process. • Discuss safety standards in agricultural crop production • Perform a role-play demonstrating proper farm safety practices and emergency response procedures. • Classify farm tools, implements, and equipment according to work requirements

	Organize a "Tool Classification Exhibit" where learners group and explain farm tools and equipment. • Prepare a comparative display of planting materials showing characteristics of quality seeds, seedlings, and cuttings. • Identify varieties of crops produced in the locality • Conduct a community crop survey and present findings through charts, posters, or PowerPoint presentations.

Performance Standard	The learners perform growing media preparation, nursery operation and planting of crops based on industry practices and Phil. Good Agricultural Practices.
Content Standard	The learners demonstrate an understanding of the concepts and principles of growing media, nursery operation and planting of crops, plant care management and irrigation system in accordance with good Agricultural Practices.

Week	Learning Competency	Suggested Activities
3	• Prepare growing media according to prescribed mixture and crop requirements	• **Discuss the meaning, importance, and functions of growing media in crop production** - Introduce common materials such as garden soil, sand, compost, rice hull, and coco peat. • **Types and Characteristics of Growing Media** - Discuss the characteristics of good growing media such as good drainage, aeration, water-holding capacity, and nutrient content. Learners observe and compare samples. • **Components of Growing Media Mixtures** - Explain prescribed mixtures for different crops. Learners identify

Week	Learning Competency	Suggested Activities
		proper proportions of soil, organic matter, and other components. • **Tools and Materials Preparation** - Demonstrate proper preparation of tools, containers, and materials used in mixing growing media. Emphasize cleanliness and safety practices. • **Hands-on Mixing Activity** - Learners prepare growing media mixtures following prescribed ratios for specific crops such as vegetables or ornamentals. • **Sterilization and Treatment of Growing Media** - Discuss methods of sterilizing and treating growing media to prevent pests and diseases. • **Matching Growing Media to Crop Requirements** - Learners identify suitable growing media for various crops based on moisture, nutrient, and root requirements. • **Container Filling and Seed Bed Preparation** - Demonstrate proper filling of seed trays, pots, and seed beds using prepared media. • **Evaluation of Prepared Growing Media** - Learners assess texture, moisture, drainage, and suitability of

Week	Learning Competency	Suggested Activities
		prepared growing media using guide questions or checklists. • **Performance Task and Assessment** - Conduct practical demonstration where learners prepare and present growing media appropriate for assigned crops.
4-5	• Perform nursery operations according to industry standards	• **Introduction to Nursery Operations** - Discuss the meaning, importance, and objectives of nursery operations in crop production. Introduce common nursery activities and industry standards. • **Types of Nurseries and Nursery Structures** - Discuss different types of nurseries and structures such as seed beds, seed boxes, trays, and greenhouses. Learners identify materials used in nursery establishment. • **Preparation of Nursery Area** - Demonstrate cleaning, leveling, and preparation of nursery beds and containers. Emphasize sanitation and proper layout. • **Seed Sowing and Transplanting Procedures** - Demonstrate proper sowing of seeds and transplanting techniques according to crop requirements and industry standards.

Week	Learning Competency	Suggested Activities
		• **Watering and Care of Seedlings** - Discuss proper watering, shading, thinning, and care practices to maintain healthy seedlings. Conduct hands-on activities. • **Fertilization and Pest Management** - Discuss proper fertilization and control of pests and diseases in the nursery. Introduce safe and sustainable practices. • **Use of Tools and Equipment in Nursery Operations** - Demonstrate proper use and maintenance of nursery tools, sprayers, watering cans, and seed trays. • **Record Keeping in Nursery Operations** - Introduce simple nursery records such as sowing dates, germination records, and watering schedules. • **Practical Nursery Operation Activity** - Learners perform complete nursery operations including sowing, watering, transplanting, and maintenance following industry standards. • **Performance Task and Assessment** - Conduct practical examination, group demonstration, or nursery project presentation. Learners evaluate nursery outputs using standard criteria.

Week	Learning Competency	Suggested Activities
	• Perform planting of crops based on enterprise protocols	• **Introduction to Crop Planting** - Discuss the importance of proper planting practices and enterprise protocols in crop production. Introduce different planting methods and procedures. • **Understanding Enterprise Protocols** - Discuss standard operating procedures (SOPs), farm protocols, and safety practices followed in crop planting. Learners identify proper planting guidelines. • **Preparation of Planting Area** - Demonstrate land preparation activities such as clearing, plowing, harrowing, and layouting according to crop requirements. • **Preparation of Planting Materials** - Discuss proper selection and preparation of seeds, seedlings, and vegetative planting materials before planting. • **Planting Methods and Techniques** - Demonstrate direct seeding, transplanting, and vegetative planting methods. Learners practice proper spacing and depth of planting. • **Use of Tools and Equipment in Planting** - Demonstrate proper use and maintenance of planting tools and equipment such as dibblers, hand trowels, and seeders.

Week	Learning Competency	Suggested Activities
		• **Application of Safety Practices** - Discuss safety measures and proper use of PPE during planting operations. Conduct role-playing or safety demonstrations. • **Hands-on Planting Activity** - Learners perform actual planting of crops following enterprise protocols and prescribed procedures. • **Monitoring and Maintenance After Planting** - Discuss watering, replanting, thinning, and monitoring of newly planted crops. Introduce proper record keeping. • **Performance Task and Assessment** - Conduct practical demonstration, planting project presentation, or evaluation of planted crops using enterprise standards.
	• Perform plant care management practices	• **Introduction to Plant Care Management** - Discuss the importance of plant care management in maintaining healthy crops and improving productivity. Introduce common plant care practices. • **Watering and Irrigation Practices** - Demonstrate proper watering techniques and irrigation methods according to crop needs. Learners practice proper watering schedules.

Week	Learning Competency	Suggested Activities
		• **Weeding and Cultivation** - Discuss the importance of weed control and soil cultivation. Learners perform weeding and loosening of soil around plants. • **Fertilizer Application** - Discuss types of fertilizers and proper methods of fertilizer application. Demonstrate safe handling and application practices. • **Mulching and Plant Support** - Demonstrate mulching techniques and installation of plant supports such as stakes and trellises. Learners perform hands-on activities. • **Pest and Disease Management** - Identify common pests and diseases affecting crops. Discuss prevention and control measures following safe agricultural practices. • **Pruning and Thinning Practices** - Demonstrate proper pruning and thinning techniques to promote healthy plant growth and productivity. • **Monitoring Plant Growth** -Learners observe and record plant growth, signs of nutrient deficiency, pests, or diseases using observation sheets. • **Integrated Plant Care Activity** - Learners perform complete plant care management practices such as watering, weeding, fertilizing, and pest monitoring.

Week	Learning Competency	Suggested Activities
		• **Performance Task and Assessment** - Conduct practical demonstration, garden maintenance activity, or group presentation on proper plant care management practices.

Performance Standard	The learners perform fertilization and pest control in crops production based on Good Agricultural Practices (GAP).
Content Standard	The learners demonstrate understanding on irrigation system, fertilizer application and pest and diseases management in crops production.

Week	Learning Competency	Suggested Activities
6	• Discuss irrigation system in crops production	• **Introduction to Irrigation Systems** - Discuss the meaning, importance, and objectives of irrigation in crop production. Learners share observations on irrigation practices in their community. • **Sources of Water for Irrigation** - Discuss different water sources such as rivers, wells, rainwater, dams, and reservoirs. Learners identify available water sources in the locality. • **Types of Irrigation Systems** - Introduce common irrigation systems such as surface irrigation, sprinkler irrigation, drip irrigation, and furrow irrigation.

Week	Learning Competency	Suggested Activities
		• **Advantages and Disadvantages of Irrigation Systems** - Learners compare irrigation systems based on water efficiency, cost, labor, and suitability for crops. • **Demonstration of Simple Irrigation Methods** - Conduct a hands-on activity or demonstration of simple irrigation techniques using available materials. • **Tools and Equipment Used in Irrigation** - Discuss common irrigation tools and equipment such as hoses, sprinklers, pumps, and drip lines. Demonstrate proper handling and maintenance. • **Scheduling and Water Management** - Discuss proper irrigation schedules, water conservation, and factors affecting plant water requirements. • **Safety Practices in Irrigation Operations** - Discuss safety precautions in operating irrigation systems and handling water pumps and electrical equipment. • **Field Observation or Irrigation Setup Activity** - Learners observe an irrigation system in the school garden/community or create a simple irrigation setup model.

Week	Learning Competency	Suggested Activities
		• **Performance Task and Assessment** - Conduct practical demonstration, quiz, poster-making, or group presentation on irrigation systems and water management practices.
	• Design irrigation system based on plant requirements	• **Introduction to Irrigation System Design** - Discuss the importance of irrigation system design in crop production. Explain how plant water requirements affect irrigation planning. • **Plant Water Requirements** - Discuss factors affecting water needs such as crop type, soil condition, climate, and stage of plant growth. Learners identify water needs of common crops. • **Types of Irrigation Systems** - Review different irrigation systems such as drip, sprinkler, furrow, and surface irrigation. Discuss their suitability for different crops. • **Components of an Irrigation System** - Identify parts of irrigation systems including pipes, hoses, pumps, valves, sprinklers, and drip lines. Learners label irrigation system diagrams. • **Planning an Irrigation Layout** - Demonstrate how to create a simple irrigation layout considering plant spacing,

Week	Learning Competency	Suggested Activities
		water source, and field size. Learners sketch sample layouts. • **Computing Water Requirements and Irrigation-Schedule** - Discuss simple computation of watering frequency and duration based on plant requirements and weather conditions. • **Designing a Simple Irrigation System** - Learners design a simple irrigation system for a vegetable garden, nursery, or crop field using charts or graph paper. • **Materials and Cost Estimation** - Learners identify materials needed and prepare a simple cost estimate for the irrigation design. • **Presentation and Demonstration of Irrigation Design** - Learners present and explain their irrigation system designs and justify suitability for specific crops. • **Performance Task and Assessment** - Conduct evaluation of irrigation designs through practical presentation, model-making, or oral defense.

Suggested Performance Tasks	**Individual Task:** • Demonstrate integrated plant care management practices. • Create a poster or infographic on proper plant care. • Plant Water Requirement Chart • Parts Identification Activity • Reflection Journal • Cost Estimation Activity • Model Sketching Activity **Group Task:** • Irrigation System Model Making • Demonstration of Irrigation Setup • Community Garden Irrigation

Performance Standard	The learners perform fertilization and pest control in crops production based on Good Agricultural Practices (GAP).
Content Standard	The learners demonstrate understanding on fertilizer application, pest and diseases management in crops production.

Week	Learning Competency	Suggested Activities

7	• Perform fertilizer application based on needed nutrients in crops production practicing Occupational Safety and Health Standards (OSHS) and Good Agricultural Practices (GAP)	**Introduction to Fertilizers and Plant Nutrients**
		• Discuss the importance of fertilizers in crop production.
		• Identify the primary nutrients needed by plants:
		  ○ Nitrogen (N)
		  ○ Phosphorus (P)
		  ○ Potassium (K)

Week	Learning Competency	Suggested Activities

		• Differentiate organic and inorganic fertilizers.
		
		Types and Methods of Fertilizer Application
		• Discuss methods of fertilizer application:
		  ○ Basal application
		  ○ Side dressing
		  ○ Foliar application
		  ○ Broadcasting
		• Demonstration of proper measuring and mixing of fertilizers.
		Individual Task
		• Identify appropriate fertilizer methods for selected crops.
		Group Task
		• Create a poster illustrating correct fertilizer application methods.
		
		Occupational Safety and Health Standards (OSHS)
		• Discuss safety precautions in handling fertilizers.
		• Demonstrate proper use of Personal Protective Equipment (PPE):
		  ○ Gloves
		  ○ Boots
		  ○ Face mask
		  ○ Apron
		
		Good Agricultural Practices (GAP)

Week	Learning Competency	Suggested Activities
		• Discuss environmental-friendly fertilizer application. • Explain proper storage and disposal of fertilizer containers. **Practical Demonstration** • Actual fertilizer application in school garden/demo farm. **Identifying Nutrient Requirements of Crops** • Discuss nutrient requirements of common crops in the locality. • Interpret simple fertilizer labels and recommendations. **Computing Fertilizer Requirements** • Demonstrate simple computation of fertilizer rates. **Monitoring and Evaluating Fertilizer Application** • Observe crop response after fertilizer application. • Identify signs of overfertilization and underfertilization.

	• Analyze plant pests and diseases in crops production	**Introduction to Plant Pests and Diseases**
		• Discuss the meaning and importance of pest and disease management in crop production.
		• Differentiate pests from diseases.
		• Identify common causes of plant diseases:
		  ○ Fungi
		  ○ Bacteria
		  ○ Viruses
		• Nutrient deficiencies

Week	Learning Competency	Suggested Activities

		Common Plant Pests in Crop Production
		• Discuss common crop pests:
		  ○ Aphids
		  ○ Caterpillars
		  ○ Rice bugs
		  ○ Fruit flies
		  ○ Snails
		• Identify signs of pest infestation.
		• Common Plant Diseases
		• Discuss common plant diseases:
		  ○ Leaf spot
		  ○ Wilt disease
		  ○ Blight
		  ○ Mosaic virus
		  ○ Root rot
		• Identify symptoms of infected plants.
		• Causes and Spread of Pests and Diseases
		• Discuss factors affecting the spread of pests and diseases:
		  ○ Weather conditions
		  ○ Poor sanitation
		  ○ Improper watering
		  ○ Infected planting material
		• Analyzing Pest and Disease Damage

8	• Apply prevention and control of pests and diseases in crops	**Methods of Pest and Disease Control** • Discuss different control methods: ○ Cultural control

Week	Learning Competency	Suggested Activities
	production	○ Biological control ○ Mechanical control ○ Chemical control **Safe Use of Pesticides** ● Discuss proper handling and storage of pesticides. ● Demonstrate the use of Personal Protective Equipment (PPE). **Good Agricultural Practices (GAP) in Pest Management** ● Discuss environmentally friendly pest management practices. ● Explain the importance of sanitation and crop rotation. ○ Examine affected plants and determine possible causes of damage.

Performance Standard	The learners perform harvesting and post-harvesting operation according to industry practices and selling of produced crops in the locality.
Content Standard	The learners demonstrate understanding of the principles in harvesting crops according to industry practices.

Week	Learning Competency	Suggested Activities
8	● Perform harvesting operations	**Introduction to Harvesting Operations** ● Discuss importance of proper harvesting

Week	Learning Competency	Suggested Activities

	in crop production	• Explain effects of improper harvesting
		• Identify manual and mechanical harvesting methods
		• List common crops in the locality and their harvesting methods
		• Prepare a chart showing crops and their proper harvesting stage
		
		Determining Harvest Maturity
		• Discuss indicators of crop maturity (color, size, texture, crop age)
		• Identify signs of maturity in fruits, vegetables, and grains
		• Observe and record maturity indicators of selected cropsPresent samples/pictures of mature and immature crops
		
		Tools and Equipment Used in Harvesting
		• Identify harvesting tools and equipment
		• Demonstrate proper handling and maintenance
		  ○ Label harvesting tools and describe their uses
		  ○ Demonstrate proper cleaning and storage of harvesting tools
		
		Occupational Safety and Health Standards (OSHS)
		• Discuss safety precautions during harvesting
		• Demonstrate proper use of PPE
		• Enumerate safety practices during harvesting
		• Role-play safe and unsafe harvesting practices

Week	Learning Competency	Suggested Activities
		Harvesting Schedule and Timing ● Discuss proper harvesting time ● Explain factors affecting harvesting schedules ○ Prepare a harvesting schedule for selected crops ○ Develop a crop harvesting calendar **Good Agricultural Practices (GAP) in Harvesting** ● Discuss GAP in harvesting ● Prepare a harvesting operation plan following GAP ● Make a checklist of GAP practices in harvesting **Practical Harvesting Activity** ● Conduct actual harvesting activity in school garden/demo farm ● Harvest crops using proper tools and techniques ● Perform group harvesting while observing proper procedures and safety standards
9-10	● Perform post-harvest in crop production	**Post-Harvest Handling** ● Discuss cleaning, sorting, grading, and packing ● Explain importance of proper handling ○ Arrange harvested products according to quality ○ Demonstrate proper sorting and grading procedures ● Discuss hygienic and environment-friendly harvesting practices

Week	Learning Competency	Suggested Activities
		Proper Storage of Harvested Products • Discuss the importance of proper storage • Explain effects of improper storage on crop quality and shelf life • List common harvested products and their storage requirements • Create a chart showing proper storage conditions for different crops **Types of Storage Facilities and Materials** • Identify storage facilities (warehouse, cold storage, granary) • Discuss storage materials and containers • Identify storage facilities available in the community • Demonstrate proper arrangement of harvested products in storage areas **Discuss safety precautions in storage operations** • Explain sanitation and pest prevention practices • Prepare a checklist of safety and sanitation practices in storage • Role-play proper and improper storage practices **Monitoring Stored Products** • Discuss proper monitoring of temperature, moisture, and pests • Identify signs of spoilage and contamination

Week	Learning Competency	Suggested Activities
		○ Recording and Monitoring Harvest Data ● Discuss importance of harvest records ● Demonstrate recording of harvest yield and quality ○ Record sample harvest data ○ Analyze harvest records and present findings
	● Perform selling of harvested crops in the locality	**Introduction to Selling Harvested Crops** ● Discuss the importance of marketing harvested crops ● Identify buyers and market outlets in the locality **Preparing Harvested Products for Selling** ● Discuss sorting, grading, cleaning, and packaging before selling **Pricing and Costing of Crops** ● Discuss factors affecting crop prices ● Explain simple computation of production cost and selling price **Customer Relations and Communication Skills** ● Discuss proper communication with buyers/customers ● Demonstrate good selling practices **Marketing Strategies for Crops** ● Discuss basic marketing strategies and promotion techniques

Week	Learning Competency	Suggested Activities
		Suggested Learning Resources • Market pictures/charts, crop marketing videos, textbooks • Actual harvested crops, packaging materials, weighing scale • Pricing and Costing Calculators, sample price lists, record sheets • Customer Relations Role-play scripts, communication guides • Sanitation materials, safety posters • Posters, sample advertisements, flyers
	• Prepare crops production report in accordance with enterprise reporting procedures	**Introduction to Crops Production Reporting** • Discuss the importance of farm and production reports • Identify types of reports used in crop production- List the importance of keeping production records **Components of a Crops Production Report** • Discuss parts of a production report: – Date – Crop planted – Inputs used – Activities performed – Yield/harvest data **Recording Farm Activities** • Demonstrate proper recording of farm operations such as planting, irrigation, fertilization, and harvesting

Week	Learning Competency	Suggested Activities

		Recording Inputs and Expenses
		• Discuss proper recording of seeds, fertilizers, pesticides, labor, and expenses
		  ○ Compute and record sample farm expenses
		  ○ Prepare a simple farm expense report
		
		Recording Harvest and Sales Data
		• Discuss proper recording of harvest quantity and sales transactions
		  ○ Prepare a sample harvest and sales report
		  ○ Summarize harvest and sales data from a case activity
		
		Preparing Consolidated Production Reports
		• Demonstrate organizing farm records into one production report
		  ○ Prepare an individual production report using given data
		  ○ Prepare a consolidated group production report
		
		Interpreting and Analyzing Farm Records
		• Discuss how reports help improve farm productivity and decision-making
		  ○ Identify strengths and weaknesses based on sample reports
		  ○ Present analysis and recommendations from

Week	Learning Competency	Suggested Activities
		production Records • Practical Reporting Activity ○ Conduct actual preparation of crop production reports using gathered data ○ Complete an individual crops production report ○ Prepare and present a complete group production report

Suggested Performance Tasks	**Individual Task:** • Make a nutrient chart showing the function and deficiency symptoms of N, P, and K. • Identify appropriate fertilizer methods for selected crops. • Enumerate safety practices in fertilizer handling. • Apply fertilizer correctly following prescribed rates and safety standards. • Solve sample problems on fertilizer computation. • List at least five common plant pests and diseases found in the locality. • Draw or paste pictures of common pests and describe the damage they cause. • Create a poster on Integrated Pest Management (IPM). • Enumerate safety precautions in pesticide application. • Crop maturity identification • Harvest tool identification • Harvest record preparation • Actual harvesting demonstration • Practice introducing and selling a product • Create a simple advertisement or slogan for crops • Design a promotional poster for harvested products

	• Record sample farm activities in a log sheet **Group Task:** • Group discussion: "Effects of improper fertilizer application on crops and environment." • Create a poster illustrating the correct methods for applying fertilizer. • Role play on proper and improper fertilizer handling practices. • Conduct proper fertilizer application in assigned crop areas while observing OSHS and GAP. • Compute fertilizer requirements for a sample farm area. • Create a comparison chart between plant pests and plant diseases. • Conduct a school garden inspection and identify visible pests. • Role-play proper pesticide handling and application. • Group Performance Tasks • Harvesting simulation • Sorting and grading activity • Harvest planning presentation • Post-harvest handling demonstration • Role-play buyer and seller situations • A farm activity record