

FPI ONLINE ACADEMY

PRACTICAL WORKSHEET SERIES

FARM PLANNING

From a site assessment to a practical, market-led farm plan.

OBSERVE	DESIGN	BUDGET	VERIFY
Land and resources	Enterprises and layout	Costs and cash	Risks and actions

LEARN / COMPLETE / APPLY

Practical reading, worked examples and reusable worksheets for farmers, youth enterprises, cluster teams and agricultural professionals.

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Release 01 | October 2026 | USD examples

Printable and digitally fillable PDF + editable Word edition. This is a planning and learning resource, not an approved site design or a guarantee of financial results.

START HERE

How to use this pack

Build a plan for one clearly defined farm and planning year. Work with real observations, dated quotations and buyer conversations. Where information is missing, write "unverified" and assign an action rather than inventing a figure.

Route	Pages	Your output
Farm identity and resource evidence	3-5	Site baseline and land-use sketch
Market, production and money	6-9	Enterprise choice, calendar, budget and cash flow
Operations and implementation	10-12	Risk controls, action plan and review
Technical reading and reuse	13	Sources and decision limits

Digital and printed use

In the PDF, click the pale response cells and save a new copy after entering information. PDF calculations are manual; the separate irrigation spreadsheet performs its own calculations. Use Word for expanded tables and PDF annotation tools or paper for sketches. Keep a blank master copy.

Learner / farm / country / planning year / reviewer

What must this farm plan help you decide?

Suggested workflow: desk preparation -> farm walk -> buyer and supplier verification -> draft budget -> peer review -> approval. These are planning steps, not proof that a farm is ready to operate.

This pack uses market, resource, enterprise-budget and cash-planning ideas discussed in FAO training literature. The worksheets and teaching cases are original for this release. [F1-F3]

FP-01 | IDENTITY AND OBJECTIVES

Define the farm and the decision

State the boundary of the enterprise before selecting crops or purchasing equipment. Distinguish legal access, total land, usable production land and expansion land. Record both livelihood objectives and business objectives.

Planning question	Your record
Farm / operator / contact role	
Location, coordinates and parcel reference	
Land access / tenure evidence and expiry	
Total area / usable area / protected or excluded area (ha)	
Planning period and current development stage	
Target customer and intended product form	

Objective	Measurable target	By when / owner
Production or quality		
Cash / income objective		
Soil, water or community objective		

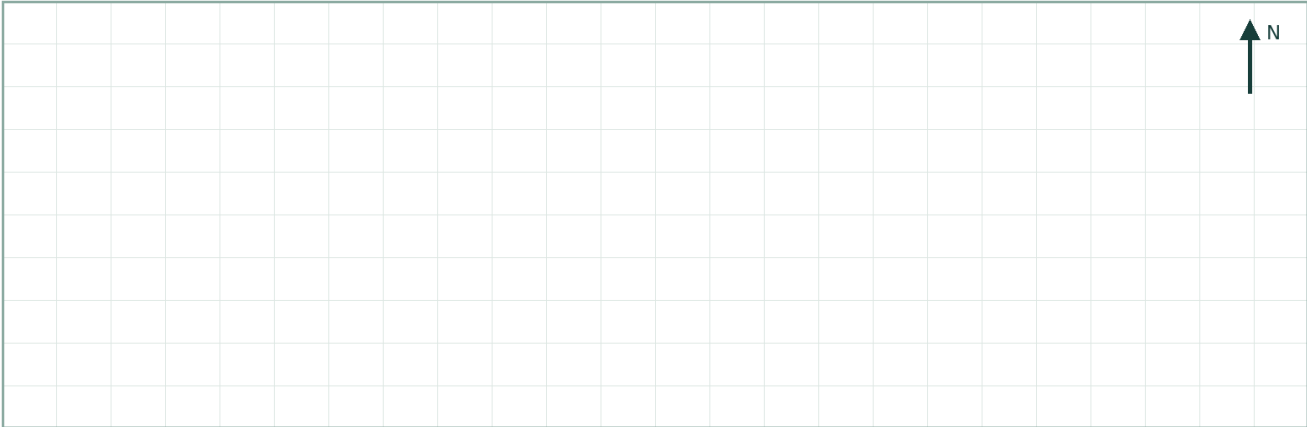
Main decision and the evidence needed before committing money

Do not confuse hectares owned with hectares ready to irrigate. Access lanes, buildings, buffers, drainage, steep land and conservation areas all compete for space.

FP-02 | MAP AND LAND ALLOCATION

Draw how the farm will work

Walk the boundary and sketch access, north, slope direction, water source, storage, field blocks, buildings, drainage routes and sensitive areas. Separate proposed features from existing features in the legend.



Original blank planning grid. Add a scale, orientation and legend; it is not a survey or satellite image. Use PDF annotation tools, Word or a printed copy for drawing.

Land use	Area (ha)	Existing / proposed	Evidence / action
Production blocks			
Nursery / stores / processing			
Roads / utilities / water storage			
Buffers / conservation / drainage			
Total allocated area			

Legend, scale and unresolved boundary / access questions

Area check: sum all non-overlapping allocations. The total must not exceed the land area available to the project. Keep separate seasonal crop-area totals when the same land is cropped more than once.

FP-03 | RESOURCE EVIDENCE

Test the assumptions beneath the plan

Separate what was measured from what was guessed. A soil or water result is useful only when the sample location, date, method and interpretation are traceable. Prioritise gaps that could stop the proposed enterprise.

Resource	Measurement / evidence	Constraint / decision
Soil depth, texture and drainage		
Soil pH, nutrients and salinity		
Water quantity and dry-season reliability		
Water quality and intended use		
Rainfall, heat, wind and frost exposure		
Labour, skills, equipment and electricity		
Transport, communications and storage		

Three highest-priority tests or checks: responsible person, cost and due date

A reassuring single test result does not establish whole-farm suitability. Use local agronomic and irrigation expertise to interpret soil, water, climate and crop requirements together. Link water checks to IR-01 in the irrigation pack.

FP-04 | MARKET-LED CHOICE

Choose an enterprise you can sell

Define the buyer, product form, quality specification, delivery window and payment terms before estimating revenue. Interest is not a purchase commitment. Compare enterprises on evidence and resource fit, not on the highest advertised price. [F2]

Market question	Evidence / source / date
Named customer and contact role	
Product form, pack size, grade and specification	
Order volume, frequency and delivery location	
Price basis, currency, deductions and payment period	
Rejection rules, transport and traceability needs	

Enterprise option	Market evidence	Resource fit	Reason to accept / reject
Option A			
Option B			
Option C			

Selected enterprise, cautious pilot size and conditions before expansion

FP-05 | PRODUCTION AND PEOPLE

Build the operating calendar

Work backwards from the delivery window. Include seed or planting-material lead time, land preparation, establishment, monitoring, harvest, post-harvest work and delivery. A calendar should reveal simultaneous tasks and labour bottlenecks, not merely list months.

Operation / block	Timing	Labour / equipment	Owner and completion evidence
Inputs and planting material			
Soil / land preparation			
Planting / establishment			
Irrigation and crop care			
Scouting and record checks			
Harvest and grading			
Drying / storage / transport			
Maintenance and review			

Labour screen: required person-days = task quantity / measured output per person-day. Example only: 6,000 units / 300 units per person-day = 20 person-days. Four equally productive workers need five working days; allow for local conditions and non-productive time.

Peak workload, missing skills and the backup arrangement

FP-06 | ENTERPRISE BUDGETING

Separate sales from margin and profit

Gross revenue is the value of saleable output. Gross margin deducts variable enterprise costs; it is not net profit. Fixed costs, depreciation, finance and taxes still matter. [F1]

Illustrative one-hectare fresh-crop case	Calculation	Value / unit
Saleable output	12,000 kg x (1 - 10% rejected)	10,800 kg
Gross revenue	10,800 kg x USD 0.80/kg	8,640
Variable production and selling costs	Teaching assumption	5,700
Gross margin	8,640 - 5,700	2,940
Allocated fixed operating costs	Teaching assumption	1,200
Balance before depreciation / finance / tax	2,940 - 1,200	1,740

This case is not a moringa yield, a market price or a profit promise. Keep the same area, crop cycle, product form and period in every calculation.

Your enterprise / cycle	Quantity or basis	USD amount
Expected harvest and saleable share		
Buyer price and gross revenue		
Seed, fertility, protection and water		
Labour, harvest, packing and delivery		
Total variable cost / gross margin		
Fixed costs / finance / tax / final result		

Largest uncertain budget input and how you will verify it

FP-07 | CASH TIMING

Find the cash shortfall before planting

A profitable-looking enterprise may still run out of cash before the buyer pays. Record actual receipt and payment months. Financing inflows are not sales; loan principal is a cash outflow, not an operating expense. [F1]

Period	Opening USD	Operating receipts USD	Finance in USD	All cash out USD	Closing USD
Month 1					
Month 2					
Month 3					
Month 4					
Month 5					
Month 6					
Month 7					
Month 8					
Month 9					
Month 10					
Month 11					
Month 12					

Closing cash = opening cash + operating receipts + financing received - all cash payments. Next month opens with the previous closing balance. Include inputs, wages, assets, interest, principal, tax and household drawings where relevant, with a separate supporting payment list.

Worst cash month / amount needed / committed source / action date

Do not label an unsigned loan or grant application as available cash. The irrigation spreadsheet supplies a separate, formula-driven cash budget for irrigation costs only.

FP-08 | OPERATIONS AND RISK

Make the farm safe, traceable and resilient

Assign a control, record and responsible person to each major operational risk. Specify site-appropriate hygiene, access and incident procedures with competent local advice. The worksheet is a management record, not a complete regulatory checklist.

Operational area	Required control / record	Owner / review date
Entry, visitors and vehicle access		
Planting material, pests and isolation		
Water source, drainage and contamination		
Input storage, handling and worker safety		
Harvest, lot identity and grading		
Drying / storage / rejected material		
Fire, power failure, theft and drought		

Minimum lot-record exercise

Lot ID	Block / date	Input or operation	Quantity / destination

Highest-priority risk, trigger for action and who can stop work

FP-09 | 90-DAY EXECUTION

Convert the plan into accountable action

Approve only work supported by evidence. Use decision gates to prevent expansion ahead of market access, water reliability, skills or finance. Dates below are relative to the start of your project, not a fixed workshop timetable.

Window	Action / evidence	Owner	Cost USD / decision
Days 1-15: establish baseline			
Days 16-30: validate buyer and design			
Days 31-60: pilot and commissioning			
Days 61-90: monitor and correct			

Indicator	Baseline / target	Review frequency	Action if off-track
Saleable output and rejection			
Water / energy use per output unit			
Cash balance and unpaid invoices			
Worker safety / traceability completion			

Next review date, decisions approved and decisions still on hold

REVIEW AND PRACTICE

Check whether the plan is defensible

Worked reasoning exercise

A grower has 5 ha of land but only 3 ha has a verified water supply. A buyer has confirmed a small trial order, not annual offtake. The grower wants to plant the full 5 ha immediately. What should the plan change?

Your decision, reasons and missing evidence

Suggested answer: keep the water-supported area as a ceiling, not an automatic planting target. Size the pilot around the trial order, documented agronomy and cash capacity. Verify additional water and market demand before expanding. Do not treat unused land or buyer interest as proof of readiness.

Review criterion	Ready / revise	Evidence reference
Land / resource baseline is traceable		
Market assumptions have a source and date		
Areas, quantities, prices and periods agree		
Budget separates revenue, margins and cash		
Risk controls have owners and triggers		
Funding gaps and unresolved approvals are visible		

Reviewer feedback and required revisions

READING AND REUSE

References and planning limits

[F1] FAO. Farm Management Tools, Module 4. Budgeting, labour, cash flow and records.

<https://www.fao.org/4/a1298e/a1298e12.pdf>

[F2] FAO. Farm Planning and Management for Trainers of Extension Workers - Asia. 2007.

<https://www.fao.org/4/a0812e/a0812e00.htm>

[F3] Kahan, D. and Worth, S. FAO. The Farm Business School: Handbook. 2015.

https://www.fao.org/fileadmin/user_upload/nr/research-extension/FBSHandbook.pdf

Use the three packs as one learning pathway

Complete Farm Planning first to define the farm and its constraints. Use ABC Design to coordinate several farms and shared services. Use Irrigation Budgeting to quantify water and irrigation cash needs. Farm land and cash totals must reconcile with the cluster and irrigation records.

Before calling the plan investment-ready

Obtain site-specific agronomic and irrigation review, confirm land and water access, validate buyer requirements, collect written installed-cost quotations and identify committed finance. Apply local employment, environmental, food-safety and tax requirements with appropriate advice. This pack does not provide a jurisdiction-specific compliance opinion.

Record discipline

Keep version number, date, preparer and reviewer on every completed plan. Store laboratory results, drawings, quotations and correspondence with the worksheets. Update forecasts after actual production and sales evidence becomes available.

Your supporting evidence index and next revision date

References checked 12 October 2026. Source citation does not imply endorsement. All worked cases and blank worksheet structures in this pack were prepared as educational examples.

Turn learning into a working plan

A farm plan should connect land, water, people and customers to a realistic sequence of decisions. This pack helps learners replace assumptions with evidence and turn that evidence into a practical operating plan.

What you will produce

A farm profile, evidence register and land-use sketch.

A market-led enterprise decision and production calendar.

An enterprise budget, cash-flow record and 90-day action plan.

Use within Agriculture Systems Integration

Connect the farm, the cluster and the water budget. Use all three worksheet packs together, but maintain separate evidence files, decisions and approvals for each project.

Farmers Pride International
RUAIPP: Rural and Urban Agriculture Innovative Production Program
ABC: Agriculture-Based Cluster
ASI: Agriculture Systems Integration

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