

Farming skills checklist (crops, not livestock)

1. Fertility and soil management

Core Competencies

Planning soil building crops
Planting and managing soil building crops
Understanding the basics of soil health
Cover cropping
Crop incorporation
Organic matter management
Understanding soil testing
Managing off farm inputs (e.g. compost, fertilizers, minerals)

Additional competencies

Fundamentals of composting
Hand built compost
Foliar feeding

2. Bed/Field Preparation

Core Competencies

Primary tillage/incorporating organic matter
Secondary tillage/seed bed preparation
Tractor/implement use
Rototiller use

Additional competencies

Raised beds
Plastic mulch

3. Plant Care & Culture

Core Competencies

Vegetable crop planning
Cultivar selection
Understanding cultural needs of crops
Direct Seeding
Transplanting
Crop rotations
Spacing considerations
Succession planting
Basic concepts of plant botany

Additional competencies

Climate control/shading
Support structures for plants
Pollinating
Grafting, pruning & training

4. Weed Management

Core Competencies

Weed identification
Understanding culture of weeds
Hand tool cultivation
Mechanical cultivation
Reducing seed bank
Mowing

Additional competencies

Inter cropping
Stale bed making
Natural and plastic mulching

5. Pest and Disease Management

Core Competencies

Designing healthy crop rotations
Pest identification
Application of pest control inputs
Disease scouting and monitoring
Pest scouting and monitoring

Additional Competencies

Beneficial insects
Beneficial insect habitat
Designing bio diverse systems
Trap cropping
Barrier pest control

6. Greenhouse Management

Core competencies

Planning seeding schedule
Understanding planting media
Fertility in greenhouse
Germination techniques
Direct seeding techniques
Transplanting
Judging water needs - watering
Pest/disease management in greenhouse

Additional competencies

Building a greenhouse
Making soil mixes
Outdoor seed beds
In soil greenhouse growing

7. Irrigation

Core Competencies

Determining moisture needs
Understanding irrigation systems
Planning irrigation systems
Water source and quality
Irrigation management and scheduling
System maintenance
Winter preparation

Additional competencies

Soil moisture testing

8. Harvest

Core Competencies

Judging readiness for harvest
Harvesting techniques and tools
Managing field heat

Additional competencies

Forecasting maturity and yield
Collecting and processing seed

9. Post-Harvest

Core Competencies

Receiving
Cooling
Cleaning
Drying
Packing
Labeling
Dry and cold storage
Quality control
Sanitation
Delivery
Designing efficient pack area and equipment

10. Equipment Use

Core Competencies

Hand tool use and maintenance
Sourcing equipment
Tractor safety/emergency procedure
Other power equipment safety/emergency procedures
Basic tractor operation
Routine maintenance
Determining equipment needs

11. Farm design/management

Core Competencies

- Assessing and purchasing farm land
- Creating an annual budget
- Production record keeping
- Financial record keeping
- Business organization (e.g. LLC, sole proprietorship, etc.)
- Legal considerations
- Insurance
- Determining cost of production
- Writing a business plan
- Whole farm planning
- Farm safety
- Buffer zones
- Organic certification

Additional competencies

- Holistic farm management
- Biodynamic certification
- Computer literacy

12. Marketing

Core Competencies

- Identifying and developing markets
- Naming your farm for image
- Determining your niche
- Customer service/outreach
- Invoicing
- Pricing

Additional competencies

- Branding
- Signature crop
- Online presence

13. Labor Management

Core Competencies

- Determining needs
- Interviewing
- Determining compensation
- Payroll taxes
- Workers compensation
- Employer legal responsibilities
- Delegating tasks
- Evaluation and feedback
- Training
- Legal aspects of volunteers and interns