



PROMOTING LIFELONG  
HEALTHY EATING HABITS



# SETTING UP AND RUNNING A SCHOOL GARDEN

Teaching Toolkit





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# CONTENTS

## INTRODUCTION

### ■ SET A FIRST THINGS FIRST

(Ref: Manual Chapter 3)

- A1** Shall we have a garden?
- A2** What plants like
- A3** Starting with soil
- A4** Soil quality
- A5** Seeds and germination
- A6** Growing plants
- A7** Organic gardening
- A8** The Garden File

### ■ SET B ENTRY POINTS

(Ref: Manual Chapter 4)

- B1** Ecological audit
- B2** Garden citizens
- B3** Insects and others
- B4** Compost
- B5** Cooking compost
- B6** Ideas for the school grounds

### ■ SET C PREPARING THE GROUND

(Ref: Manual Chapter 5)

- C1** Tools and equipment
- C2** Water management
- C3** Preparing the site
- C4** Protecting the garden
- C5** Garden layout
- C6** Garden beds

### ■ SET D GROWING FOOD

(Ref: Manual Chapter 6)

- D1** What we eat
- D2** Good eating (1)
- D3** Good eating (2)
- D4** Food plants
- D5** What shall we grow to eat?
- D6** Crop experts

### ■ SET E MARKET GARDENING

(Ref: Manual Chapter 7)

- E1** Market research
- E2** Product proposals
- E3** Product information
- E4** Profit budget
- E5** Business plan
- E6** Marketing and publicity
- E7** Book-keeping and records

### ■ SET F GROWING PLANTS

(Ref: Manual Chapter 8)

- F1** Sowing seeds
- F2** Planting and transplanting
- F3** Mulching: the soil blanket
- F4** Watering (1)
- F5** Watering (2)
- F6** Weeding
- F7** Keeping the garden healthy
- F8** Plant doctors
- F9** Harvesting

### ■ SET G PREPARING FOOD

(Ref: Manual Chapter 9)

- G1** Keeping food
- G2** Food hygiene
- G3** Preparing food
- G4** Cooking in the garden
- G5** Conserving and preserving

### ■ SET H OVERVIEW

(Ref: Manual Chapter 10)

- H1** Project plan
- H2** Showing and telling
- H3** Evaluation
- H4** Celebrations

## GUIDES: TOPIC INDEX





# INTRODUCTION



Some of today's biggest crisis points are nutrition, the environment, livelihoods and education. In all these areas, school gardens are making a proven contribution to children's wellbeing, understanding and life prospects. FAO's manual *Setting up and running a school garden* helps schools, governments and NGOs to establish gardens and to make them successful. This Toolkit is a companion to the Manual.

School gardens can help to provide healthy school meals and generate income for school funds, but they are primarily a platform for learning - learning how to grow food for a healthy diet, improve the soil, protect the environment, market food for profit, enjoy garden food and, not least, advocate it to others.

There is strong evidence that classroom lessons and practical learning in the garden reinforce each other, indeed that often one does not work without the other. New garden projects and programmes are therefore making sure that the classroom curriculum finds room for garden-related learning about agriculture, nutrition and the environment.

This Teaching Toolkit is FAO's contribution. It contains lessons which supplement and support gardening activities. These "garden lessons" should have a regular place in the classroom timetable, on top of gardening time. The "garden curriculum" aims to give learners some control over the "food cycle" process, through planning, organizing, promoting, evaluating and - not least - celebrating achievements. The lessons therefore aim not only at knowledge and practical skills but also at awareness, attitudes and life skills.

The garden mix of theory, practice, enjoyment and ownership is a winning combination for improving lives.





## PRINCIPLES

The school garden should be mainly for learning: about life, better eating, livelihoods and the environment. “Garden lessons” therefore have enormous educational value. They bridge theory and practice, reinforcing classroom learning with hands-on experience and observation, and vice versa.

“Tell me, and I will forget.

Show me, and I may remember.

Involve me, and I will understand.”

*Attributed to Confucius, 450 B.C.*

Some of the principles of this Teaching Toolkit are:

1. **Growing food for healthy eating** Children need to learn not only how to grow food and how to have a healthy diet, but also how to combine the two in *growing food for healthy eating*. This aim should guide the whole gardening process from planning what to grow to deciding how to prepare and consume the produce. A secondary aim for older learners is to learn how to grow food for the market, to supplement their future incomes.
2. **The environment** Learners must be aware of the impact a garden has on the environment, *to respect the environment and learn to work with it*. Organic approaches, if well understood, put this awareness into action.
3. **Ownership** To learn how to run a food garden, learners must “own the process”. Every year’s work is a project, to be *planned, executed, monitored and evaluated by learners*. They should make decisions, undertake responsibilities, manage activities, record and report events, find out, discuss the garden and promote garden food to the outside world. Life skills and communication are part of the syllabus.
4. **Families and community** *Garden learning should involve families, the whole school and the community* - as helpers, supporters, informants, experts, sponsors, audience, objects of observation, and as learners themselves. Schools should have policies for the garden and for healthy eating; school gardens should set an example for home gardens and should contribute to school snacks and school meals; teachers should be role models for children; learners should discuss food at home for homework, open their eyes to what is going on in the community, and talk to neighbours, farmers, stallholders, vendors, cooks and local gardeners.
5. **Motivation** The garden project will be successful if it results in free and willing changes in lifestyle and attitude. If gardening has a negative image in the local community, effort must go into revaluing the garden by creating pride in it and making sure the activities are enjoyed and the results are appreciated. *Enjoyment and motivation are paramount*, to be cultivated through ownership (of process and product), achievement, recognition, competition, display, self-congratulation etc. All garden projects should end with a celebration.





## THE MATERIALS

**Age range** Most lessons can be done with all learners in the age range 9-14, but in some lessons alternative activities are suggested for younger (9-11) or older (12-14) learners. Check through each lesson beforehand to see what will suit your own learners. **Set E: Market gardening** is suitable for older learners.

**General approach** The lessons try to engage learners actively and encourage them to observe and experiment. The reflective element of experiential learning – monitoring, reporting, recording, reviewing, discussing, listening to others – is built into the lessons.

**Contents** There are eight sets of outline lessons. Each set relates to a different part of the Manual. Each lesson contains

- *Teachers' Notes*, which give learning objectives, preparation and resources required, a lesson outline, ideas for homework and follow-up and links with other subjects. Some features are:

- **Objectives.** The lessons aim not only at knowledge and skills, but also at awareness, life skills, attitudes and routine behaviour.
- **Technical content.** The technical content of the lessons is as simple as possible. For example, there is no attempt to explain photosynthesis, the physical basis of evaporation, capillary action or the structure of seeds. These are left to the normal curriculum.
- **Lesson preparation.** This includes lesson preparation by learners, who are expected to explore questions before coming to class and bring their findings to the lesson.
- **Lesson activities.** These may take place in the classroom or in the garden or both.
- **Lesson follow-up.** This may be specific homework or more extensive project work.

- *Guides* (one or more) The Guides present relevant ideas, processes, practices and procedures in pictures and captions. They are often essential to the lesson. They can also help in discussions with parents, helpers, community members, agricultural experts, farmers, education advisers and other school staff. To make them available teachers can photocopy them, get learners to re-draw them poster-size, or make them into a separate booklet.





## SEQUENCE OF LESSONS

The sets of lessons have been organized in roughly chronological order, with planning and decisions about what to grow followed by lessons on gardening activities and ending with evaluation and celebrations. However, some sets (e.g. **Set D: Growing Food** and **Set H: Overview**) need to be distributed through the gardening season at appropriate times.

**Set A: First Things First** (Ref Manual Part 3: *What is our garden for?*) These lessons can be done even before you have a garden. They discuss the reasons for having a garden, give essential background information, set up principles of good gardening and suggest ways of keeping records.

**Set B: Entry Points** (Ref. Manual Part 4: *Where do we start?*) can also be done before the gardening season begins. These lessons aim to raise environmental awareness. They focus on the existing ecosystem in the garden and plan a project for “greening” the whole school grounds. They also deal with making compost, since this has to be started well before the gardening season begins.

**Set C: Preparing the Ground** (Ref. Manual Part 5: *What does our garden need?*) These lessons are mainly about planning. They encourage learners to look at what is needed, and they help with preparing the site and planning garden layout. If you already have a garden, some lessons will be more important than others – for example you may feel learners already know how to use garden tools, but have a lot to learn about water and watering.

**Set D: Growing Food** (Ref. Manual part 6: *What shall we grow to eat?*) After several lessons on diet, nutrition and food plants, learners discuss what they would like to grow to eat and become “experts” on particular food crops and how they are grown.

**Set E: Market Gardening** (Ref. Manual Part 7: *What shall we grow to sell?*) These lessons are aimed at older learners. They take learners through the process of planning and carrying out a market gardening project: from market research through product proposals, budgeting, drawing up a business plan and keeping accounts, to marketing the products and publicising the project.

**Set F: Growing Plants** (Ref. Manual Part 8: *How do we grow things?*) goes through the process of growing plants from planting through plant care to harvesting - preparing for, explaining and supporting garden activities. The lessons are to be done at appropriate times during the gardening season. They try to make sure that learners not only know what to do and why, but also enjoy what they do and take pride in it.

**Set G: Preparing Food** (Ref. Manual Part 9: *How will we eat our garden food?*) Once food is harvested, learners prepare for processing and preserving garden produce by learning about food hygiene, how to keep food, preserving food, cooking to conserve food value and saving fuel.

**Set H: Overview** (Ref Manual Part 10: *What’s the plan?*) gives a framework to the whole garden project. Learners reflect on and talk about their work, explain their activities to others, evaluate what they have done, plan for the future, and celebrate their achievements. These lessons are spread through the gardening season; the last two (evaluation and celebration) round off the year’s garden work







## WHICH LESSONS DO WE DO?

You will not want or need to do all the lessons. To draw up your teaching programme for the year:

- Make a preliminary decision on whether you are mainly interested in growing food to eat, in growing food to sell, or in both, and whether you want to have a garden project for improving the school environment (**Set B**).
- Review the lessons to see what your learners really need. Learners may already know (for example) how to water plants, while some topics (e.g. food hygiene) may already be covered in other parts of the curriculum.
- Decide on the order of the lessons. They are in roughly chronological order, but you will need to decide how to distribute the gardening lessons from **Set F** and the overview lessons from **Set H**.

This should give you about one lesson a week over the school year. Alternatively you can spread the lessons over two years, or repeat some the following year and add on others.





## YOUR CONTRIBUTION

It is difficult to produce lessons which will suit schools in all parts of the world and in many different circumstances. We welcome feedback from users on what they find useful, gaps they think should be filled, or tips they would like to share with other users. For feedback and suggestions, and additional ideas for lessons, please contact:

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