

School kitchen garden: pilot project

Introduction

The aim of the project is to promote school kitchen (produce) gardens that can connect with the teaching and learning program, rather than being positioned as after school activities or as external to the school program.

Through the pilot we would like to work with select schools to explore what is possible in terms of integrating the garden into the teaching and learning activities. In short, we aim to:

Pilot activities

Establish school kitchen gardens

- Provide ideas for schools to establish/maintain school kitchen gardens (if not already in place) in the pilot school/s.
- Consider how to make the garden climate resilient - [Home-gardening-guide_English.pdf](#) (see this guide from Live and Learn), so consider wicking garden beds as appropriate and which plants are best suited.
- Where space is limited consider a one square meter garden or container garden (see images below) [lesson-17-square-meter-gardens.pdf](#)

Set up composting systems

- Provide information for schools to set up and maintain a composting system if not in place (addressing waste management and agriculture) – see ideas below

Map curriculum links

- Complete a curriculum mapping for the national curriculum in each country

The [evaluation](#) of an existing program in Australia found multiple benefits of the school garden program. It emphasized the opportunities to link across the curriculum.

Garden beds: Making a garden bed from existing materials



Photos: Rhonda Di Biase



<https://www.flickr.com/photos/greenscaper/4033679884>



<https://www.homedesigninspired.com/top-19-cool-ideas-to-create-a-round-garden-bed-with-recycled-things/>



<https://thehomesteadinghippy.com/6-free-raised-garden-bed-ideas/>





<https://www.youtube.com/watch?v=6hzSw2jHYcQ>



<https://www.fizzicseducation.com.au/articles/lesson-ideas-to-use-in-your-school-garden-for-stem/>



Photo courtesy of Kelly St Garden.

<https://cityfarmer.info/whats-left-out-of-the-conversation-when-it-comes-to-urban-agriculture/>



Loyola Composite Pre-University college

<https://cityfarmer.info/school-gardens-for-a-healthy-and-green-future-in-bangalore-india/>



Samoa Primary School, Vailele, Apia, Samoa

<https://www.samoobserver.ws/category/samoa/6565>



Victoriano de Castro Elementary School in Santa Rita, Pampanga province, The Philippines

<https://eatingasia.typepad.com/eatingasia/2010/09/pampanga-philippines-edible-schoolyard-school-farm.html>



Concord Primary, Singapore Learning gardens
<https://www.nparks.gov.sg/nparksbuzz/issue-02-vol-2-2009/gardening/learning-gardens>



<https://avrdc.org/school-gardens-growing-in-indonesia/>



Six partner schools in Laguna, Philippines established gardens utilizing tyres, used plastic bottles, plastic cups, stones and other recycled materials.

<https://www.searca.org/news/school-gardens-for-learning-improved-nutrition-and-savings>



<https://ccmgatx.org/resources/articles/article-repository/2020/february/creating-a-school-garden/>



DIY Cucumber Trellis
 MADE FROM A PALLET
 LOVELYGREENS.COM



<https://www.pinterest.com.au/pin/500181102384557957/>



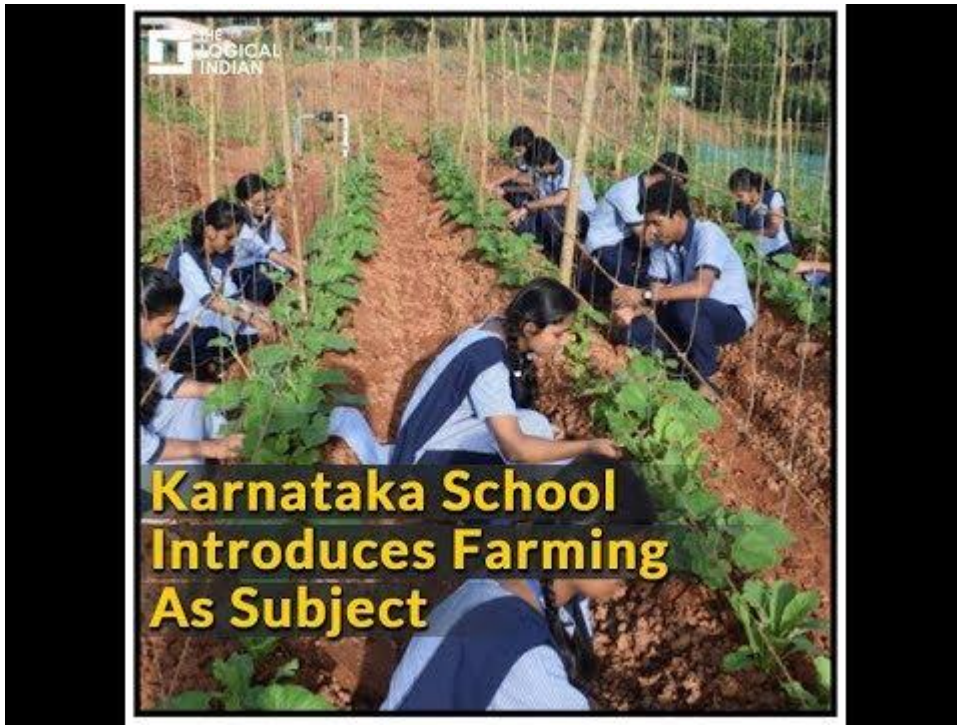
<https://www.hindustantimes.com/mumbai/composting-in-mumbai-school-waste-not-turn-it-into-manure-instead/story-OyNAVReVZUjliO50x9Tz0J.html>

The Eco Club comprising 50 students lead the 800 students in running a school garden and composting system at school. Each week, students collectively bring approximately 150 kg of food scraps to school. It is composted in 2 large drums. The soil which comes from the composted food is used to grow vegetables and herbs. Students use old PVC pipes and tyres as planters for their crops. All class levels are involved. The younger students bring discarded paper to be used as dry waste. Grade 5 classes rotate the compost and add dry leaves necessary to keep the correct brown to green consistency. Grades 6 and 7 remove the completed compost to the recycled PVC and tyres. The upper levels maintain the garden surface with soil and do the plant and maintain the crops. Years 9 and 10 produce videos of the school's programs, reporting to the school and wider community. All students take turns in waste collection and gardening.

Video: Amazing Vegetable Garden Ideas Using Indigenous and Recycled Materials



https://youtu.be/5_yxKaaQwBg



<https://youtu.be/wj1E7z1JU3w>

<https://thelogicalindian.com/exclusive/mangalore-school-farming-curriculum/>

Ideas for making a compost system



Photos: Rhonda Di Biase



<https://www.compostinstructions.com/7-diy-composter-plans/>



Homemade compost bin <https://www.youtube.com/watch?reload=9&app=desktop&v=QdZkMhmYMko>

Ban Map Ta Phut School, Rayong Province, Thailand

SCG NEWS CHANNEL



Green Cone Station at Ban Map Ta Phut School

Green Cone Station” where food waste is composted to soil

<https://scgnewschannel.com/en/scg-news/authentic-lessons-beyond-textbooks-piloting-school-waste-management-learning-stations-for-young-generations-hands-on-experience-towards-a-waste-free-community/>



Trench Composting

<https://www.pinterest.com.au/pin/302093087479731376/>

Making your own compost is easy



Making free compost in a small space

Video: Making your own compost is easy Click here to watch the video <https://www.pinterest.com.au/pin/351912465042692/>



Tropical Organic Gardening Episode 9 Composting
<https://www.youtube.com/watch?v=wiXLyqXjtvs>

Eco-schools@Home invites photos ,feedback from Students/ Teachers/ Principals to showcase their Positive #Handprint action taken at home & Tag us on our Facebookpage-@Ecoschoolsindia



CEE

<https://www.youtube.com/watch?v=NqcPHddycPA&t=65s>



<https://www.ecoschools.in/EcoWaM>



<https://www.searca.org/news/school-gardens-for-learning-improved-nutrition-and-savings>

More ideas here - <https://www.pinterest.com.au/earthhaulers/diy-compost-bin-ideas/>



In the Fiji Clean School project, students are composting their food waste and returning the compost to the garden.

<https://www.scribd.com/document/470369006/Fiji-Clean-School-Program>

Ideas for making a wicking bed

A wicking bed stores water at the bottom so the roots can continually find water. This type of garden bed requires much less water so is a good option where continual watering may be difficult.

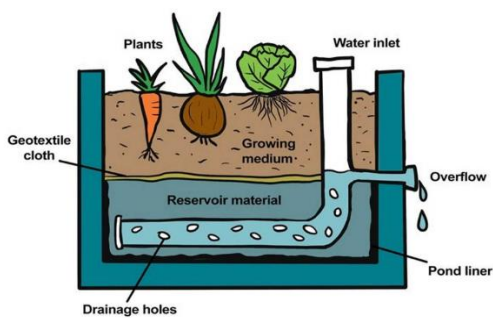


<https://www.abc.net.au/gardening/how-to/building-a-wicking-bed/9435452> (see video below for explanation)



Video: How To Make a Wicking Bed

Example 3



Building A Wicking Bed

<https://www.botanicgardens.org.au/discover-and-learn/gardening-home/gardening-tips/building-wicking-bed>

Homemade fertilizer

<https://sustainableholly.com/15-easy-organic-fertilizers-to-make-at-home/>

Facebook link -

https://www.facebook.com/groups/1095610907623792/?multi_permaLinks=1944374596080748&ref=share

Organic Fertilizer for Your Plants

Although plant roots do not distinguish between one type of fertilizer and another, those of synthetic origin end up creating imbalances. Not only does it reduce the presence of “good” microbes, but it also kills earthworms.

Here are ways to make organic fertilizer for your plants

Organic fertilizer made from banana peel

Banana peel is one of the best ingredients for making organic fertilizers because it contains potassium. This essential mineral is one of the most important plant nutrients after nitrogen. Participates in photosynthesis and the formation of resistant tissues.

Additionally, it helps revitalize plants when they have reduced flowering or are wilted. The best thing is that they can be used in their natural state or brewed into a tea.

Instructions :

Cut the banana peels into several slices and boil them in a pot of water for 15 minutes.

After this time, turn off the heat and wait for it to rest.

Finally, sprinkle the compost around the plant. If you wish, you can leave the shells.

Organic Apple Cider Vinegar Fertilizer

The acetic acid in apple cider vinegar can help fertilize plants growing in acidic soil. Absorbing its nutrients helps keep the plant in good shape and prevents its leaves from having a burnt appearance.

Instructions :

Add 1 tablespoon of apple cider vinegar to the water for watering the plants and use it as usual. Renew the application at least once a month.

Organic Fertilizer with Eggshell

When making organic eggshell fertilizer, other natural ingredients are usually used. However, they can also be used alone, as they contain high doses of calcium and prevent blossom-end rot in plants such as tomatoes, peppers and eggplants.

Instructions :

Crush several eggshells and insert them into the bottom of the plantings.

Optionally, dry the skin and grind it into a fine powder using a grinder.

Then put the powder around the plant.

Organic Fertilizer from Wood Ash

Composting wood ash can help the fruits and flowers of various plants ripen. This natural element contains high doses of potassium and phosphorus, both necessary to fertilize the soil.

Making a hand spade from plastic bottles

Option 1: <https://www.instructables.com/Plastic-Bottle-Shovel/>



Option 2: <https://www.youtube.com/watch?app=desktop&v=jEQef71W9ko>

