

CENTER FOR SUSTAINABLE DEVELOPMENT

Nutrition and Kitchen Gardens Workshop Series

Kitchen Gardens 1.2: Forming Beds and Planting Seeds.

For many people living in the cycle of poverty, the idea of starting a kitchen garden might seem overwhelming. It could be the time investment, it might be perceived costs. It might be a lack of know-how: what to plant, how to plant and how to care for a garden. However, the positive benefits make it worthwhile enabling community members in gardening for nutrition.

Start small, think simple. The purpose of the first year's workshops and the gardens that get planted are to give the participants a win—so that they will be encouraged to plant again the following year. Even if they plant only one bed 1 meter by 4 meters, they should be able to get positive, delicious, nutritious results. Digging a new bed each year also minimizes the year one time investment, and gives them the chance to decide where to locate the next bed.

Nutrition. In Kitchen Gardens 1.1: Family Nutrition & Gardens, community members learned about their family's nutritional deficits, and were given ideas of what they could grow to offset this challenge. Work with an agriculturalist in your area to list plants rich in vitamin A, and fruits and vegetables that offer protein and fats like avocados. Work with villagers to pick the things from the list they would be interested in growing first.

Planning. A garden must first be planned and designed. In the first year we won't get into too much detail; let us not scare people away from the idea with too much information. During the course of the year we can gradually teach them more so that they can do a better job of planning for year two.

But first, work with the family to make a decision: a single small bed the first year—or something bigger? Look at the [How-To card](#) to get some ideas. Look for an area which is sunny and not too steep. Stake out an area for a bed that is no wider than 1 meter; clear it of any vegetation or trash. Put together a simple fence to protect the bed from animals. Be creative and use any free materials just to get going the first year. The fence could be made of branches, old tires, old barrels, or old pallets.

Raised Beds. Begin using raised beds. They provide a soft environment for roots, they drain well, and the soil flora and fauna receive the oxygen they need. Soil is a living, breathing organism of sand, clay, organic matter, earthworms, nutrients, minerals, water and plant roots. It can suffer from being too wet, too dry and too sandy. This workshop will detail the importance soil handling and of introducing compost and manure to mitigate these problems.

In the first year, since you may not have compost, begin by spreading whatever chopped-up organic material (OM) you can find on top of the staked out soil. This can be leaves, manure, corn stalks, vegetable-based kitchen scraps. Organic material in garden soil provides nutrients, structure and facilitates holding water.

Beginning at one end of the new bed, dig a 1 meter long trench one shovel in depth and one shovel width wide. Place the soil to the side. See the [How-To card](#) for a drawing. With a garden fork or with the shovel, loosen the soil in the bottom of the trench a further shovel depth—but don't remove it. Place some more organic material in the trench. Dig a second trench alongside the first one, tossing the soil into the first trench. With the addition of the OM and the fluffing of the soil, the soil should now be higher than the surrounding terrain. Continue this process for the entire length of the bed. Place the soil from the first trench into the last trench.

Using a garden rake, and without walking on the new bed, carefully break up any clumps of soil and rake the surface of the new bed smooth, flat and level. Carefully rake the outer edges so that they are at a 45-degree angle, and so that a small lip forms at the upper edge for holding water. (See the [How-To card](#)).

Seed Planting. In the Family Nutrition and Gardens workshop, and with the help of the agriculturist, a list of appropriate, nutritious plants should have already been selected and seeds obtained. The seeds should come with directions for correct spacing for planting and correct planting depths. Working with your community members, explain how to measure out and mark the beds for planting the seeds. Being sure not to walk on the new beds, help them plant the seeds and cover them with soil.

Watering. If possible, using a watering can with a fine spray, gently water the newly planted seeds. Water slowly enough that the water can soak in and not form pools; pools can cause the seeds to float to the surface.

A [Lesson Plan](#) is available for field staff to use to use this information in leading this workshop, and in following up with the families. Previous workshop in the series: Kitchen Gardens 1.1: Family Nutrition & Gardens
Next workshop in the series: Kitchen Gardens 1.3: Care and Maintenance

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