



Food and Agriculture
Organization of the
United Nations

Setting up and Running Micro-Farms





What is Micro Farms (MF)

Micro Farms : are small production units that can yield a wide range of vegetables, roots and tubers, and herbs in small spaces, such as balconies, patios and rooftops. They fit the urban context, where limited space and scarcity of water prevail.

Type of Micro Farms :

- 1- Homestead Garden
 - 2- Micro Garden
 - 3- Kitchen Garden
-



1- Homestead Garden

- Optimal size is between 1 and 2 Donoms (**1000-2000 square meters**)
- Use for income generation purposes and it is preferable if it can be combined with livestock production which is the most advantageous from this kind of intervention,
- production value for this kind of MF is **1.5-3** times greater than input costs.





2- Micro Garden

- Optimal size is between **100 - 200 square meters**
- can adopt for income generation if it is combined with livestock production.
- It is the very good choice for adoption in the urban areas in the cities.





3- Kitchen Garden

- Optimal size for kitchen garden is between **10-20 square meters**,
- Can only use for household food consumption (fresh food availability),
- Good choice for camps and besieged areas, which is low input costs.



www.shutterstock.com - 25171090



Objective:

- ✓ To cope with the stressful situation through gardening.
 - ✓ Improving social relations between people sharing green units and learning from each other.
 - ✓ To innovate and adapt the production units to camp conditions.
 - ✓ Partially subsidize the diet of the refugees and the hosting communities.
-



Benefits of Micro Farms

- Micro Farms systems are designed to allow families to grow nutritious, fresh and safe vegetables, to help meet the needs for vitamins, minerals and plant proteins for a better and balanced diet. It can also be a source of income from the sale of small surpluses.

Its principal assets are:

- Simple and low-cost technology
 - Need little space
 - Quick results (harvest within 45 to 90 days)
 - No chemical pest control
 - Purifies the air and recycles waste materials
-



Cost effectiveness

- Micro-gardens are highly productive and can be easily managed.
 - FAO studies show that a micro-garden of one square meter can produce any one of the following:
 - ✓ Around 200 tomatoes (30 kg) a year
 - ✓ 36 heads of lettuce every 60 days
 - ✓ 10 cabbages every 90 days
 - ✓ 100 onions every 120 days
-



Technologies

- Micro Gardens illustrate the principles of sustainable production intensification and diversification, the “Save and Grow” approach, to produce more with less.

LESS	MORE
<ul style="list-style-type: none">✓ Space✓ Soil✓ Water✓ Pesticides✓ Fertilizers✓ Physical effort	<ul style="list-style-type: none">✓ More yield per unit of 1me and surface.✓ More yield per unit of water.✓ More diversity.✓ More people of the family can grow a micro garden -- young and elderly, as well as disabled

Technologies



Water harvesting





Seeds



Fertilizer



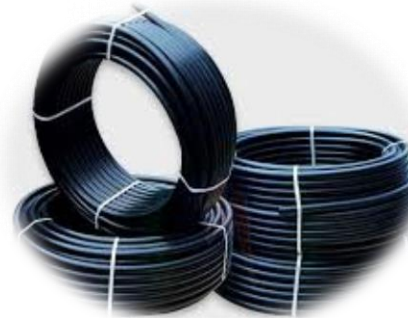
Sprayer



pesticide



Hoe



Drip irrigation



Site selection criteria

- Water availability.
- Availability of space for the units.
- Willingness of the people.



Process for MFP

- ✓ Setting up garden production units.
- ✓ Assessment of participants perception (before and after) of micro-garden's unit value in terms acceptability, productivity and cost effectiveness.
- ✓ Training in the use and management of micro-gardening.
- ✓ Evaluation of plant performance and yield.
- ✓ Production of a “ how to “ outreach guideline manual.
- ✓ One academic publication.



Recommendations/Lessons learned

- ✓ Starting Date
 - ✓ Selection criteria
 - ✓ Market Assessment
 - ✓ Piloting new approaches
 - ✓ Engagement of communities
 - ✓ Existing farmers teach/coach new users
 - ✓ Production packages designed based on the Market's needs.
-



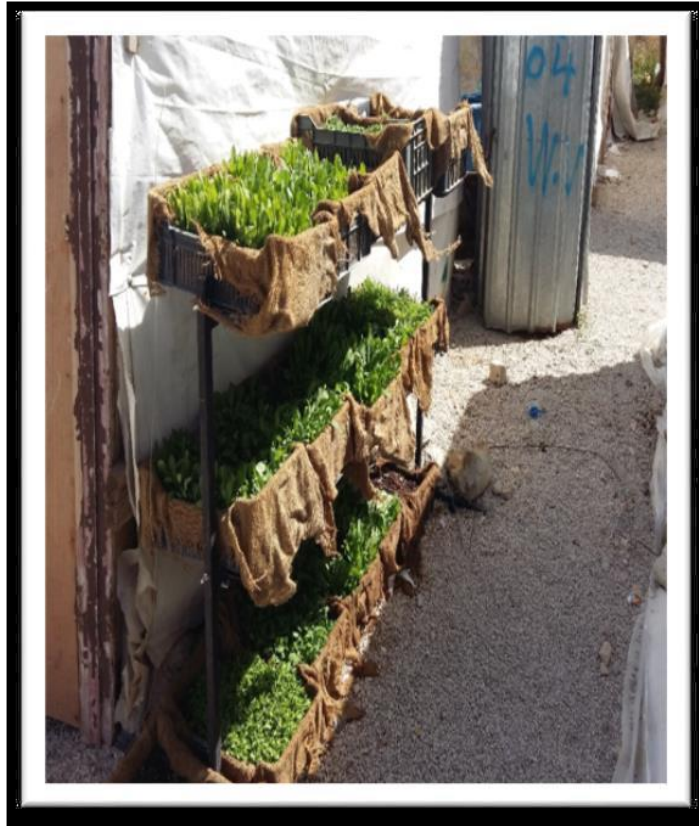
Recommendations/Lessons learned

- ✓ Focus on Local seeds (Use of available and affordable resources)
- ✓ Provide Nutrition education
- ✓ Spend more effort to mitigate the effects of drought
- ✓ Use of an exit strategy
- ✓ use of manure instead of chemical fertilizers

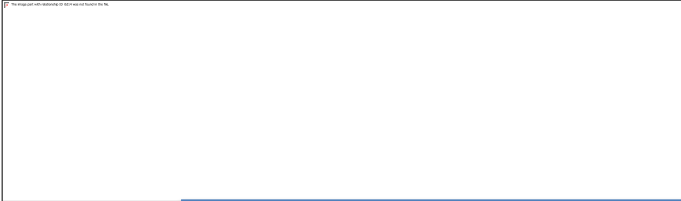










- 
-
- agriculture water can
 - plastic boxes
 - hardware items (metal wire, pliers, bolts, nuts, rondelle)
 - bucket
 - irrigation items (pipes 20mm, plastic fittings, valves)
 - linen jute
 - polystyrene foam
 - small garden shovel
 - seeds /Seedling



Thank you

Contact us
Ahmed.Ekzayez@fao.org