Urban vegetable production in plastic bags

Recognize the problem
Urban areas usually have limited gardening space for vegetable production. Growing vegetables in plastic bags is a solution that utilises the limited space efficiently.

Background
Significant populations in urban areas are forced to use vegetables available from the markets. The introduction of the plastic bag technique provides an opportunity for urban dwellers to grow their own vegetables in a limited space. They may grow Chinese cabbage, spinach, kale or other vegetables. The technology is applicable as it uses locally available materials.

Management
To establish your urban vegetable garden:

• Buy strong plastic bags with a 50-100 kg capacity
• Perforate the bags with a knife to make at least 15 holes, distributed equally over the bag. The size of the holes required depends on the seedling root diameter.
• Add 5 to 10 tiny holes into the base of bag to allow water drainage
• Fill the bags with fertile soil and a central core of small stones (gravel or sand). This core allows water penetration and aeration.
• Water the soil through the gravel core to acquire enough moisture for seedling transplanting
• Transplant seedlings of a vegetable, such as Chinese cabbage, spinach, or kale into the bag holes
• Plastic bags should be placed in a shed or in the shade to protect them from too much sunlight which will warm up the bags and cause them to dry out quickly
• Bags need to be watered regularly but drainage out of lower holes needs to be checked and maintained to avoid standing water in the bags
• Continue with crop management practices such as weeding, watering, pest control, etc.
• Plastic bags can be reused if they are washed out with disinfectant after harvesting to avoid plant disease carry over

The recommendations in this factsheet are relevant to: Tanzania