

# Mushroom farming: Step by step guide

These mushrooms thrive in nearly all regions of the country, provided there is access to shelter, a reliable water supply, and consistent temperatures ranging from 15-30 degrees Celsius. Not only are they versatile in their growth requirements, but they also offer significant nutritional value, serving as an excellent source of lean proteins, antioxidants, and essential vitamins.

## Step-by-step guide

1. **Prepare a Suitable Structure:** First and foremost, you'll need a well-constructed structure, preferably a permanent one. This structure is essential to create an ideal environment for mushroom cultivation. It provides the necessary humidity and protection from adverse environmental conditions.
2. **Obtain Mushroom Spawn:** Procure high-quality mushroom spawn, which serves as the starting material for your mushroom cultivation.
3. **Mix Spawn and Substrate:** Mix the mushroom spawn with sterilized substrate material. Afterward, pack this mixture into small gunny bags. Approximately 2 kg of spawn mixed with substrate is sufficient to fill around 50 gunny bags.
4. **Plant the Spawn:** Create holes in the growing medium and place the spawn at a spacing of 9-12 inches apart. Additionally, sprinkle some spawn on the surface to expedite colonization and minimize the risk of contamination.
5. **Incubation Period:** During the incubation phase, store the bags in a dark area, away from direct sunlight, for about 21 days. Once the spawn becomes visible as white,

grainy particles on the surface, proceed to the next step.

6. **Casing:** Add a layer of about 2 inches of high-quality soil onto the growing bags. This process, known as casing, is essential to initiate fruiting. Cover the bags with a polyethylene sheet for approximately 2 days to eliminate any soil fungi and tiny insects. When mycelium begins to appear on the surface, it will trigger the fruiting phase.
7. **Maintain Humidity:** Introduce humidity into the cultivation environment. You can achieve this by using a humidity generator or a knapsack sprayer filled with clean water. Spray the air in the room, as well as the floors and walls, ensuring the water disperses as a fine mist. Adequate humidity is crucial to stimulate mushroom growth.

By following these steps and maintaining consistent care throughout the mushroom farming process, you can enjoy a successful and profitable venture in button mushroom farming in Kenya.