Standard Operating Procedure (SOP)
Nutri-garden (Approx 100 m2)

NMHS Project: Strategies to Improve Health and Nutritional Status of Hill Farm Women through Technological Intervention

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Majority of rural women in IHR are suffering from Chronic Energy Deficiencies (CED) and their intake of micronutrients is lower than Recommended Dietary Allowances. One of the solutions to this prevailing problem in hills can be "Local need meet locally". Climatic conditions of hill region are suitable for seasonal and off seasonal vegetable and fruit production which are rich in micronutrients. As landholding size in the region is small and fragmented, establishment of nutri-garden is easy and remunerative way to address prevailing malnutrition among hill community. Local nutritional need of people can be met out locally by reviving traditional practices along with amalgamation of science and technological knowledge. Nutri-garden will have a positive impact on food security in rural areas as consuming such micronutrient rich food and improving dietary diversity will substantially reduce micronutrient deficiencies. An organized and worked out nutri-garden is a big way in maintaining healthy diet by overcoming hunger, malnutrition and mineral deficiency among women and children. A well planned nutri-garden is a complete farming system.

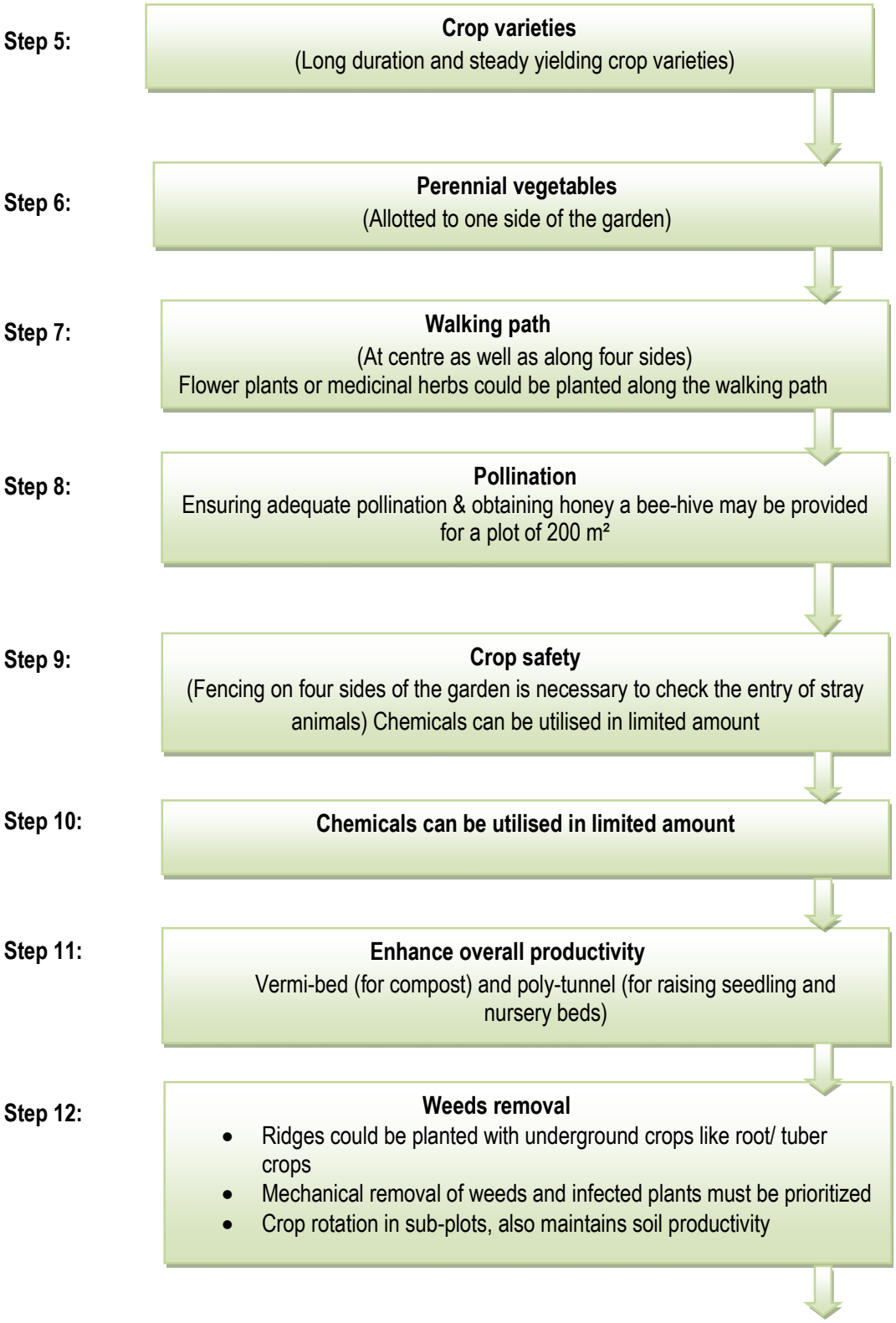
1. **Area 100 m2 (12 m x 8.5 m)**

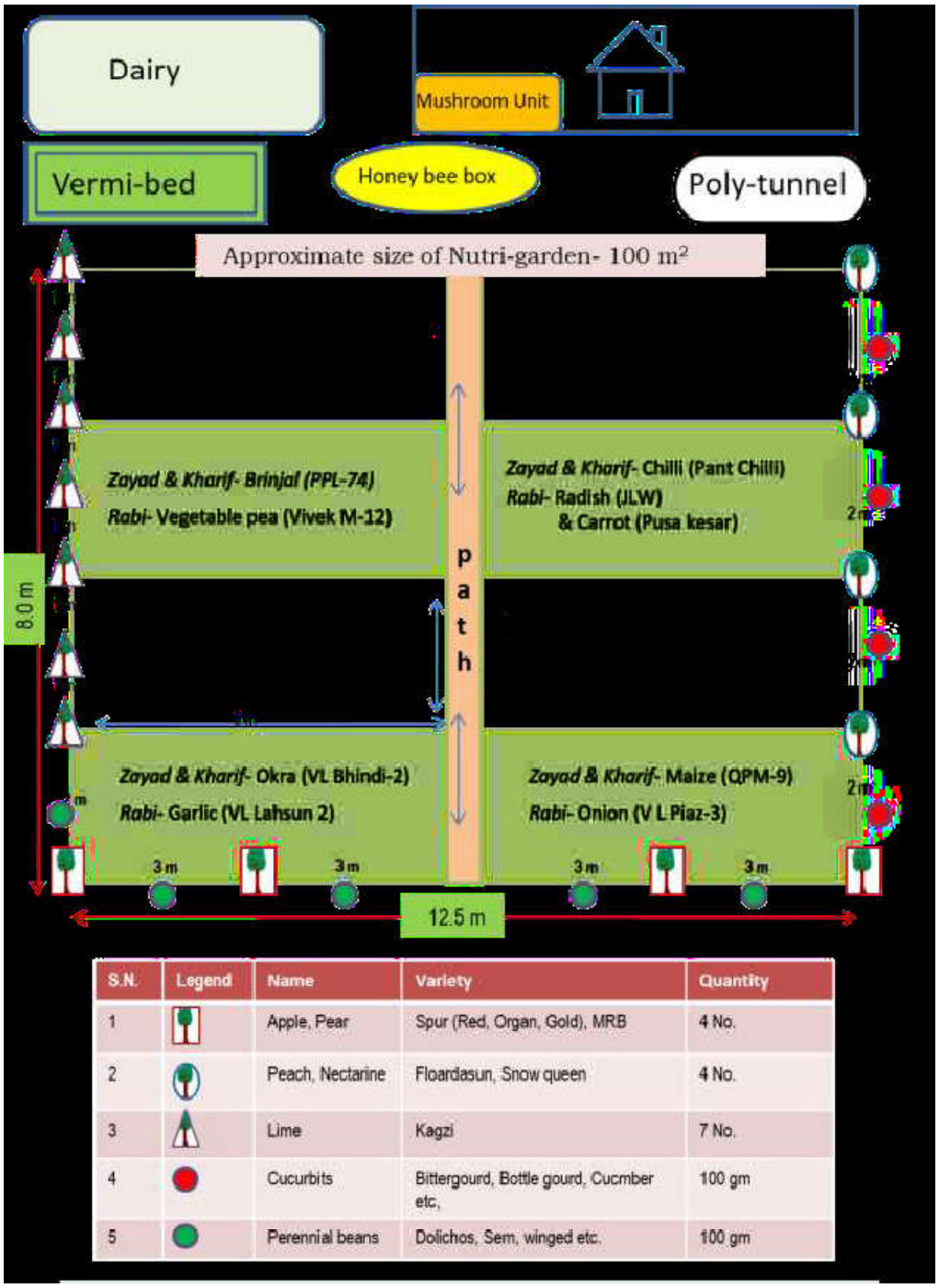
Step 1: **Crop allotment**
(As per the season and local/ micro- climate of establishment.)

Step 2: **Compost pits**
(Corner of nutri-garden)

Step 3: **Garden partition**
(Divided into 6-8 equal plots for growing annual vegetable crops)

Step 4: **Cropping**
2-3 annual crops can be raised in the same plot.
For effective utilization of plot accession cropping, (inter and mixed cropping)


Step 5:
Crop varieties
(Long duration and steady yielding crop varieties)
Step 6:
Perennial vegetables
(Allotted to one side of the garden)
Step 7:
Walking path
(At centre as well as along four sides)
Flower plants or medicinal herbs could be planted along the walking path
Step 8:
Pollination
Ensuring adequate pollination & obtaining honey a bee-hive may be provided for a plot of 200 m²
Step 9:
Crop safety
(Fencing on four sides of the garden is necessary to check the entry of stray animals) Chemicals can be utilised in limited amount
Step 10:
Chemicals can be utilised in limited amount
Step 11:
Enhance overall productivity
Vermi-bed (for compost) and poly-tunnel (for raising seedling and nursery beds)
Step 12:
Weeds removal
Ridges could be planted with underground crops like root/ tuber crops
Mechanical removal of weeds and infected plants must be prioritized
Crop rotation in sub-plots, also maintains soil productivity



S.N.	Legend	Name	Variety	Quantity
1		Apple, Pear	Spur (Red, Organ, Gold), MRB	4 No.
2		Peach, Nectarine	Floardasun, Snow queen	4 No.
3		Lime	Kagzi	7 No.
4		Cucurbits	Bittergourd, Bottle gourd, Cucmber etc,	100 gm
5		Perennial beans	Dolichos, Sem, winged etc.	100 gm

A well planned layout of nutri-garden for higher and mid hills (1200-2000 m AMSL

Step 13:

Advantages of a nutri-garden are:

- Supply fresh fruits and vegetables high in nutritive value
- Supply fruits and vegetables free from toxic chemicals
- Save expenditure on purchase of vegetables
- Vegetables harvested from home garden taste better than those purchased from market.
- An approx area 100 m2 (12 m x 8.5 m can meet out the requirement of daily fresh veggies 4 members' family throughout the year)