



HEALTH TREASURES IN YOUR BACKYARDS

Green Spots for Small Land Holdings

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All the imageries used in the booklet are from KVK Ganderbal farm. The vegetable garden layouts are suggested by Dr. Aijaz A. Malik who has a decade long experience in traditional and exotic vegetable cultivation

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Introduction

There is a huge reportage on Maximum Residue Limits (MRLs) prescribed by the Food Safety and Standards Authority of India from fruit and vegetable samples taken across the country. According to a popular leading newspaper, 58 of the 1,489 fruit and vegetable samples tested in Jammu and Kashmir between 2023 and 2026 were found to contain pesticide residues above the Maximum Residue Limits (MRLs) prescribed by the Food Safety and Standards Authority of India (FSSAI) (Rising Kashmir, Aug 2026)

At 3.9 per cent, J&K's rate of samples exceeding MRLs was higher than the national average of 3.1 per cent, calculated from 2,223 non-compliant samples out of 70,652 tested across 23 states and Union Territories over the same three-year period. Among the 23 states and UTs tested, Telangana recorded the highest violation rate at 5.9 per cent (486 of 8,198 samples), followed by Haryana at 6.4 per cent (152 of 2,371). Several states, including Odisha, Jharkhand and Chhattisgarh, recorded zero non-compliant samples. While the concerned agencies are taking mandatory measures to tackle the problem at various levels, a small measure at the grassroots would be to maintain a bare minimal vegetable or nutri-garden to ensure pesticide-free vegetables and fruits to the consumer.

Urban and peri-urban spaces are shrinking. Not only is cost of land plummeting but it is also being diverted to non-agricultural purposes like building for commercial spots. Land available for residential purposes and kitchen gardens for household food security are also diminishing. However the need to consume safe, healthy and nutritious seasonal cannot be undermined.

The Changing Paradigm of Nutritional Health

The nutritional paradigm has transitioned drastically over the last few decades. While the country grappled with under-nourished and stunted growth in children, it now faces an added challenge of its adult citizens facing Non-Communicable Diseases or the Lifestyle Disorders. These are largely owing to changing lifestyles of the general population, desk-jobs, sedentary lifestyles, fusion-cuisine and binge eating – weight gain has been on a rise among many and ultimately culminate into Non-Communicable Diseases cardiovascular diseases, stroke, diabetes, chronic respiratory diseases and mental health disorders. These are health conditions that are not caused by infectious agents but rather by a combination of genetic, physiological, environmental and lifestyle factors. These disorders are often chronic and if left untreated, can lead to serious health complications and even premature death. The busy schedule of the fast pace world often pushes employed men and women to eat on-the-go. They often skip regular home cooked meals and resort to street snacks or office canteens – food items which are not only cooked in unhealthy environment but often nutritionally unsuitable for their bodies. Young men and women as students and young professionals, often compromise optimal dietary intake and resort to Fusion Cuisine consuming colas, rolls, pizzas, Street food (Biriyani and Tikkas). All this has consequences on their health and fitness

NCDs contribute to around 38 million (68%) of all the deaths globally and to about 5.87 million (60%) of all deaths in India. Urbanization and lifestyle changes happening rapidly around the globe including India have resulted in increased prevalence of NCD and Jammu & Kashmir is no exception to this worldwide problem. The rising trend in NCDs warrants surveillance and awareness amongst population. In Jammu & Kashmir out of the given population, 10 of men and women are hypertensive, 4 are diabetic and 24 are pre-diabetic. The Union territory of Jammu & Kashmir has enrolled 45.36 Lakh individuals aged 30 years or more into the NCD portal in 2022-23.

The Indian sub-continent has a typical diet platter, especially that of Kashmiris. It is predominantly a heavyereal based diet with minimal dietary fibre. The protein intake is still adequate with servings of eggs, meat and poultry every other day with the intake of oil little more than judicious. The valley is lined with nut trees like walnuts and almonds yet they do not feature in our daily diet as a routine. **In the changing lifestyles where most of us are sedentary, a typical meal plate has to change.** The bulk of cereal must be replaced with high fibre and healthy fats. The traditional kitchen garden essentially grew bottle gourd, saag, tomatoes, cucumbers and beans. Its about time we turn them into more meaningful segments of urban and peri-urban household food security through smart kitchen gardens to ensure a robust supply of vegetables almost round the year to typically feed a mid-size family.

Non-communicable diseases (NCD) are known threats to socio-economic development not only in developing countries but worldwideThis document has been generated for Information, Education and Communication of ensouraging green spots or smart kitchen gardens for urban and peri-urban households where land holdings are limited but health is a concern.

Diabetes mellitus is emerging as one of the fastest-growing public health concerns in Jammu and Kashmir, with the latest health data showing a sharp rise in the number of adults living with high blood sugar as experts warn that unhealthy lifestyles, obesity and delayed diagnosis are fuelling the disease. According to the National Family Health Survey (NFHS-6, 2023-24), 13 per cent of women and 11.3 per cent of men aged 15 years and above in Jammu and Kashmir have elevated blood sugar levels or are on medication for diabetes. The figures mark a significant increase from the previous NFHS-5 (2019-21), when 8.7 per cent of women and 8 per cent of men were reported to have high blood sugar. (Source: Kashmir Observer, July 2026)

A study finds pesticide residues in breast cancer tissues, raises concerns over exposure risks. The findings point to a possible link between environmental exposure and cancer risk, while also highlighting gaps in awareness and safety practices at the grassroots level. (The Hindu, June 2026)

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Why Green Spots?

Apart from being a green spot to lift your spirits the vegetable gardens can be your savior on many accounts.

Primarily, you control what you eat. You control the input into soil and therefore your body.

Grow staples mandatorily, but arch for diversification. Introduce lettuce, herbs and a few exotic for adding salad greens to ensure roughage in diet and eliminating that carb load on your plate.

The Fresh, garden-cut veggies yield better taste than stored food. Vitamins stay high when you eat food right after the harvest.

Dig, sow and weed. This could be your physical exercise to keep you fit and connect with nature. *Mycobacterium vaccae* is a friendly bacterium found abundantly in living, organic dirt. that triggers the release of serotonin in the brain, naturally lifting your mood and reducing anxiety.

Reduce waste. Pick only the amount that you need.

Revive Kashmiri culture and tradition. Share excess produce with relatives and neighbors.

What follows ahead are two models that can be experimented with at home in residential spaces with limited land resource in order to ensure fresh, safe, healthy and nutritious food.

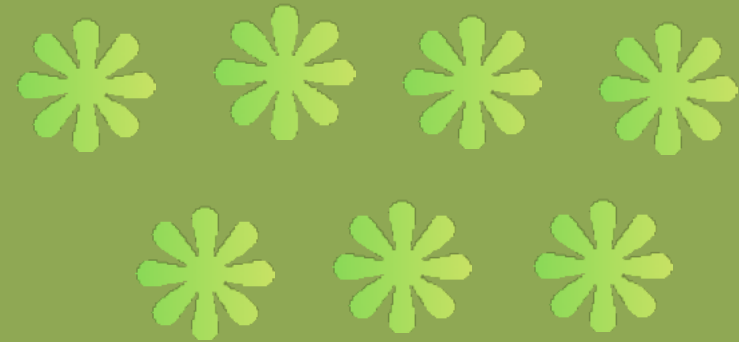


6-7 marla, 1090 to 1900 SQ.FTt

MODEL 1: BALANCED NUTRITION GARDEN



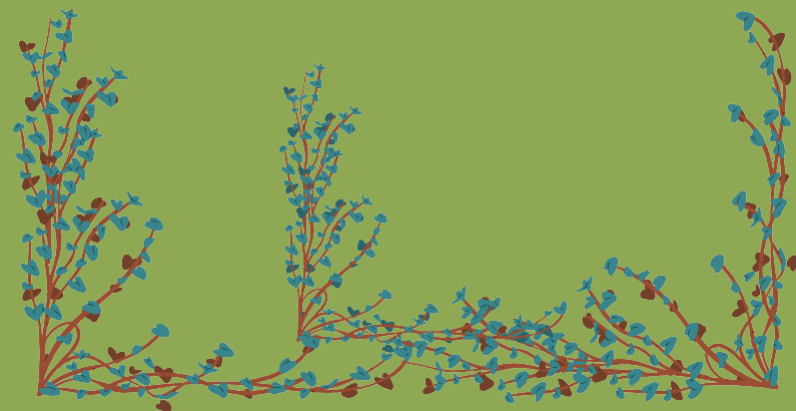
Border: Onion, garlic & herbs, with 1-2 fruit saplings at the corners



Leafy Greens



Roots



Legumes



Solanacea

Compost Pit

Nursery Bed

Water Storage

Layout Notes

- Suits relatively large land holding households. Also suited for Anganwadi centres, Working Womens Hostels, Colleges.
- Four beds allow crop rotation across seasons to keep soil healthy
- A small nursery bed lets the centre raise its own seedlings
- 1-2 fruit saplings (apple/walnut) at the corners for the long term.
- A proper compost pit replaces the bin used in the smallest model

6-7 marla, 1090 to 1900 SQ.FTt

MODEL 1: CROP PLANS AND INPUTS

Basic inputs needed: seed packets for 4-5 vegetables, a compost bin, a watering can, and a bamboo trellis — minimal cost, quick to set up.

Leafy Greens: Collard Greens, Lettuce, Spinach. Continous sowing from March to September

Roots: Knol Khol & Radish. Staggered sowing every 3 weeks

Legumes: Peas for spring and beans in summer. Ensure soil fertility through Nitrogen fixation.

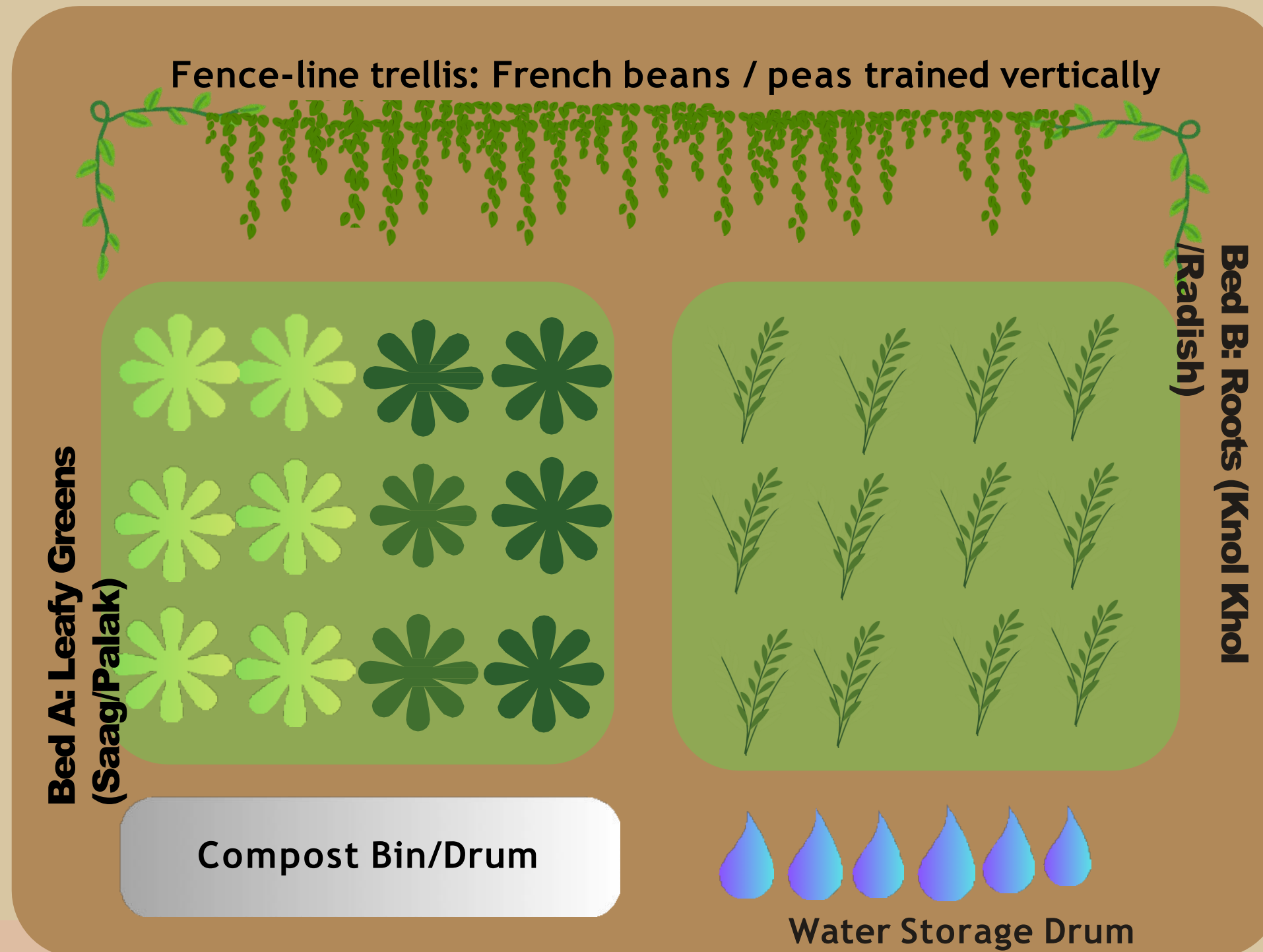
Solanacea: Tomato, chilli, brinjal, capsicum from nursery raised seedlings

Borders & Corners: Onion Garlic Coriander border with coriander with a 1-2 fruit sapling.

Nursery Bed: Raise seedlings from late february under low-poly cover from late February.

1-3 marla, 270-820 SQ.FTt

MODEL 2: COMPACT KITCHEN GARDEN



Layout Notes

- Ideal only where a courtyard or verandah strip is available
- Vertical trellis along the fence doubles yield without using extra ground
- Focus on fast-maturing, high-frequency-use vegetables for daily meals
- A compost bin (not a pit) keeps things tidy in a small footprint
- Water by hand from a single storage drum – no need for channels

1-3 marla, 270-820 SQ.FTt

MODEL 2: CROP PLANS AND INPUTS

Basic inputs needed: seed packets for 4-5 vegetables, a compost bin, a watering can, and a bamboo trellis — minimal cost, quick to set up.

Bed A - Leafy Greens: Collard Greens & Spinach. Sow every 3-4 weeks for a steady supply

Bed B - Roots: Knol Khol (Monjji) & Radish (Mujji) Quick 6-8 week crop. Easy to rotate.

Container Extras: Tomato or chilli in 2-3 large pots/grow-bags near the doorway for extra sun

Trellised Climbers: Bottle Gourd, Cucumbers, French Beans/Peas. Vertical, Protein-rich, space saving



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