

PERCEPTIONS ON NUTRIGARDEN FOR FOOD SECURITY

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INTRODUCTION:

Historically, food security was a solution to India's nutritional problems. From the days of acute food shortage to famine, India embarked on a variety of agricultural technologies and is now self-sufficient. But, mono-cropping and shift towards market-driven economy in agriculture as a consequence of 1960s Green Revolution in our country, radically decreased crop diversity. The emphasis on growing cash crops shifted precedence from producing of cereals, pulses and vegetables for themselves to purchasing them from the market or procuring grains from PDS.

A proper diet is essential from very early stages of life for growth, development, and state of overall well-being. Apart from supplying nutrients, food provides other non-nutrient phytochemicals that have a positive impact on health. Malnutrition is a universal problem that has many forms and no country is untouched affecting all geographies, age groups, sexes, rich and poor people. Under nutrition in rural communities can be traced to lack of information about nutrition and consequences of malnutrition include increase in childhood death and future adult disability, including diet-related non-communicable diseases as well as

enormous economic and human capital costs. Although there is considerable economic growth and development in India, the prevalence of malnutrition has not decreased significantly. NHFS-4 (2015-16) findings highlighted increased incidence of triple burden of malnutrition in India. The adequate intake of vegetables can help combat malnutrition by providing essential vitamins and minerals required for children's development and overall good health. India's present vegetable production level permits per capita consumption of only 120 g, against the recommended daily intake 300 g per day. The hidden hunger can be combated by reverting back to age old practice of growing vegetables in the backyard in rural areas and as roof top or terrace or vertical or container gardening in urban areas.

NUTRI-GARDENS:

The concept of farming and cultivation is not new to the rural and tribal communities of India. However, it has remained limited to cash crop cultivation and mostly used for revenue generation. The main objective of introducing the concept of nutri-gardens was to encourage

rural and tribal women to cultivate healthy food crops in their backyards or on farm bunds. A nutri-garden ensures an inexpensive, regular and handy supply of fresh vegetables to provide micronutrients deficit in diet. It is a cost-effective model for growing nutrient-rich crops for consumption to promote good health and well-being.

Green vegetables are rich sources of vitamins and minerals along with antioxidants to fight against diseases. Tribal and rural communities have easy access to all the essential resources like land and water but they lack knowledge about the nutritional value and scientific consumption pattern of the available and easily-cultivable nutritious food products. Hence, nutri-gardens can be simple but innovative option to bridge the gap between the available resources and its utilization in a sustainable manner for addressing the problems of hidden hunger and combat malnutrition. It also helps to create additional revenue-generating opportunities for farming communities especially women.

Table 1: Seasonally suitable vegetable crops for rural and urban areas

S. No.	Season	Vegetable crops		Perennial plants in rural areas
		Rural areas	Urban areas	
1.	Kharif	Bhendi, brinjal, chili, tomato, ridge gourd, bitter gourd, bottle gourd, amaranth, palak, meethi, roselle, sorrel, elephant foot yam, colocasia, pumpkin, ash gourd and spine gourd	Bhendi, brinjal, tomato, chili, capsicum, broccoli, beans, ridge gourd, bitter gourd, bottle gourd, snake gourd, amaranthus, palak and meethi	Curry leaf, moringa and coccinea
2.	Rabi	Dolichos bean, jack bean, tomato, brinjal, bhendi, chili, cabbage, cauliflower and bottle gourd	French bean, broccoli, spinach, lettuce, palak, coriander, meethi, sorrel, roselle, carrot, beetroot, cabbage, cauliflower, radish and baby corn	Curry leaf, moringa and coccinea
3.	Summer	Bhendi, cluster bean, cucumber, ridge gourd, bitter gourd, roselle, basella and amaranthus	Kheera, cucumber, ridge gourd, bitter gourd, bhendi and cluster bean	Curry leaf, moringa and coccinea



A well laid out nutri-garden can help to meet the entire requirements of fruits and vegetables for a family for the entire year. It is a low-cost sustainable approach for reducing malnutrition, increasing awareness of vegetable production increasing working hours and achieving food, nutrition and economic security. The nutrient dense plants consisting of minimum one tree (perennial) and three green leafy vegetable can be an ideal source for improving the consumption of greens in diet. Along with them, roots and tubers plus other vegetables also can be grown. The benefits of growing our own vegetables helps to:

- Increase the availability of nutrient rich vegetables throughout the year
- Obtain fresh and pesticide residue free produce
- Supplement income in rural areas with extra produce
- Use biodegradable household waste as manure to reduce environmental pollution
- Empower women in rural areas to contribute economically as cost of purchase of vegetables is reduce by at least Rs. 1000/- per month for a family of 4 to 5 members
- Surplus produce if not sold can be distributed to needy people in the neighbourhood

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NUTRI THALI:

The traditional thali lack in nutrients by 50.0% in today's time. The most famous and very palatable Punjabi thali is topped with either extra litres of ghee or big chunks of butter resulting in extra intake of calories. The traditional Marathi food thali on the other hand, uses food ingredients that make the thali full of nutrition. But traditional Gujarati thali has lots of fat as more than 60.0% food in their thali is full of sweets. The traditional vegetarian and non-vegetarian thalis of south India are nutritionally significant. These include chakra pongal, sambar and vada, dal curry and appam, kebabs with veggies.

CONCLUSION:

The taste and variety in food matters but health should not be compromised. Adequate amount of protein along with salads should be there in the diet. The pulse to cereals combinations with vegetables and fruits can make a traditional thali more nutritious to meet the daily dietary requirements.

