

# Microgreens: A Nutrient-Packed Revolution in Indian Kitchens

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Microgreens, the tiny, vibrant greens that have taken the culinary world by storm, are making a significant impact in Indian kitchens. These miniature versions of vegetables and herbs not only add a burst of flavor and color to dishes but also pack a powerful nutritional punch. As the popularity of healthy eating continues to rise, microgreens are becoming an essential part of the Indian culinary landscape. Microgreens are young, edible seedlings of vegetables and herbs that are harvested just a few weeks after germination. In recent years, their popularity has surged in India as people seek to enhance the nutritional content of their meals. The trend is driven by a growing awareness of the health benefits associated with these tiny greens, which are known to be rich in vitamins, minerals, and antioxidants. Despite their small size, microgreens are concentrated sources of essential nutrients. These young plants often contain higher levels of vitamins and minerals compared to their mature counterparts. For example, broccoli microgreens are known to have higher concentrations of sulforaphane, a compound with anti-cancer properties. Similarly, microgreens like kale and spinach are rich in vitamins A, C, and K.



Fig. 1: Different types of microgreens

One of the reasons for the increasing popularity of microgreens in India is their ease of

cultivation. These greens can be grown indoors on windowsills, balconies, or kitchen counters, requiring minimal space and resources. Even those with limited gardening experience can successfully grow a variety of microgreens at home. This accessibility has empowered many Indian households to incorporate fresh and home-grown microgreens into their daily diet. With a wide range of flavors – from peppery arugula to earthy radish – microgreens enhance the taste of salads, sandwiches, soups, and more. Their delicate, tender leaves make them an attractive garnish for a variety of Indian dishes, providing both visual appeal and a nutritional boost. The rise of microgreens in India has also led to increased support for local farmers and suppliers. As more people embrace the trend of growing and consuming microgreens, there is a growing demand for fresh, locally sourced produce. This not only benefits local farmers but also promotes sustainable agriculture practices. Microgreens are transforming the way Indians approach nutrition and culinary experiences. With their vibrant colors, intense flavors, and nutrient-rich profiles, these tiny greens are a welcome addition to plates across the country. Whether grown at home or sourced locally, microgreens are a simple yet powerful way to enhance the health and well-being of individuals and contribute to the thriving culinary culture in India.

## Importance of microgreens in the Indian economy

- 1. Agricultural Diversification:** The cultivation of microgreens represents a form of agricultural diversification. As farmers incorporate microgreens into their crop portfolios, it provides them with an opportunity to diversify income streams. This can be especially crucial in mitigating risks associated with traditional crops and weather-dependent agriculture.
- 2. Job Creation:** The growing demand for microgreens has the potential to create employment opportunities throughout the

supply chain. From cultivation to distribution and retail, the increased demand for these greens can generate jobs in rural and urban areas alike. This can be particularly beneficial for small-scale farmers looking for alternative and sustainable income sources.

**3. Support for Small-Scale Farmers:** Microgreens cultivation does not necessarily require vast expanses of land, making it accessible for small-scale and subsistence farmers. By encouraging the cultivation of microgreens, the economic benefits are distributed more widely, supporting local and rural communities.

**4. Export Opportunities:** As the popularity of microgreens grows, there is potential for India to tap into international markets. High-quality, locally grown microgreens can be exported, contributing to foreign exchange earnings. The global interest in healthier and diverse food options provides a significant market for Indian microgreens producers.

**5. Value Addition and Agribusiness:** Microgreens represent a value-added product in the agricultural sector. The transformation of seeds into nutrient-rich, flavorful microgreens adds value to the produce. This value addition can lead to the development of microgreen-based agribusinesses, such as processing, packaging, and marketing, thereby contributing to the overall economic growth.

**6. Health and Wellness Industry Growth:** The rise of microgreens aligns with the increasing awareness of health and wellness, driving growth in this industry. As more consumers seek nutrient-dense and locally sourced food options, the demand for microgreens can fuel economic growth within the broader health and wellness sector.

**7. Innovation and Entrepreneurship:** The cultivation and marketing of microgreens provide fertile ground for innovation and entrepreneurship. Entrepreneurs can explore innovative farming techniques, sustainable practices and unique culinary applications,

contributing to economic development through the creation of new businesses.

**8. Sustainable Agriculture Practices:** Microgreens are often cultivated using sustainable and environmentally friendly practices. The adoption of such practices can have positive implications for the overall sustainability of agriculture in India, aligning with global trends and consumer preferences for eco-friendly products.

### Health benefits

**1. Rich in Nutrients:** Microgreens are dense in essential vitamins and minerals. Depending on the variety, they can contain high levels of vitamins A, C, E, and K, as well as important minerals like iron, magnesium and potassium. These nutrients are vital for overall health, immune function, and maintaining various physiological processes.

**2. Antioxidant Properties:** Many microgreens are rich in antioxidants, such as beta-carotene, lutein, and zeaxanthin. Antioxidants help combat oxidative stress in the body, which can contribute to the prevention of chronic diseases and support overall well-being.

**3. Anti-Inflammatory Effects:** Certain microgreens, including broccoli and kale, contain compounds with anti-inflammatory properties. These compounds may help reduce inflammation in the body, potentially contributing to the prevention of chronic inflammatory conditions.

**4. Heart Health:** Components like potassium and folate are associated with maintaining healthy blood pressure levels, while antioxidants may help protect against cardiovascular diseases.

**5. Improved Digestion:** Microgreens are a good source of dietary fiber, which is essential for maintaining a healthy digestive system. Fiber helps regulate bowel movements, prevents constipation and supports the growth of beneficial gut bacteria.

**6. Blood Sugar Regulation:** Some microgreens, like fenugreek and cilantro, have been studied

for their potential to help regulate blood sugar levels. Including these microgreens in the diet may be beneficial for individuals managing diabetes or at risk of developing the condition.

**7. Weight Management:** Microgreens are low in calories but high in nutrients, making them a nutrient-dense food. Including microgreens in the diet can help individuals meet their nutritional needs while managing calorie intake, which is essential for weight management.

**8. Supports Immune Function:** The vitamins and minerals found in microgreens, particularly vitamin C, play a crucial role in supporting immune function. A well-functioning immune system helps the body defend against infections and illnesses.

**9. Detoxification:** Certain microgreens, such as cilantro, have been associated with natural detoxification processes in the body. They may help remove heavy metals and other toxins, supporting the body's natural detox mechanisms.

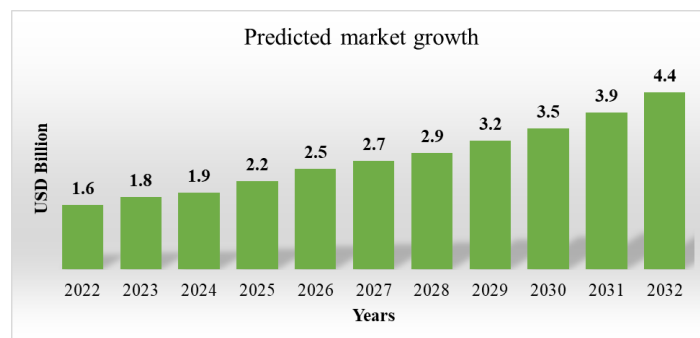
**10. Eye Health:** Microgreens like kale and spinach are rich in lutein and zeaxanthin, which are important for maintaining eye health. These compounds may help protect against age-related macular degeneration and other eye conditions.

## Microgreens market

Microgreens Market size is expected to be worth around USD 4.4 Bn by 2032 from USD 1.6 Bn in 2022, growing at a CAGR of 11.0 per cent during the forecast period from 2023 to 2032.

Microgreens are finding use in a wide range of industries, including skincare and cosmetics, in addition to the food industry. These sectors are aware of the many ways that microgreens support and maintain good skin. Microgreens have antioxidant qualities that can effectively protect the skin from the damaging effects of environmental stresses and free radicals. As a result, they are now widely used as essential ingredients in a wide variety of skincare products, such as facemasks, serums, and moisturizers. Microgreens have become popular in the

food industry as well, as many companies are using them in their fresh food product offers and menus. Microgreens are in high demand outside of traditional brick-and-mortar retailers, as seen by the rise in eCommerce food sales. A vast array of microgreen items are now being offered by online shops to satisfy the needs of tech-savvy customers.



**Table 1: Microgreens market size (2022-2032)**

Source: Marketresearch.com

Many small and medium-sized business owners now find that operating microgreens firms is a lucrative endeavour. To meet market demand, business owners are putting several business models and strategies into practice. Although there have been worries about market saturation, the fastest-growing market categories don't appear to be slowing down. The market for microgreens is flourishing because of important market trends, rising consumer desire for wholesome, fresh food, creative company ideas, and effective distribution strategies. The microgreens market is expected to have consistent growth over the projected period as people continue to look for healthier dietary options.

## Conclusion

The journey of microgreens in Indian kitchens is nothing short of a nutrient-packed revolution. As these tiny greens find their way onto our plates, they bring not only a burst of vibrant colors and exquisite flavors but also a treasure trove of health benefits. The versatility of microgreens, coupled with their ease of cultivation, has empowered households across the country to embrace a new dimension of culinary and nutritional experiences. Moreover, the economic implications are noteworthy, as microgreens cultivation supports local farmers, encourages agricultural diversification, and fosters a sense of

community. The market for microgreens not only contributes to the well-being of individuals but also plays a role in shaping a more sustainable and resilient agricultural landscape.

As we savor the flavors and reap the health benefits of microgreens, we witness a paradigm shift in how we perceive and integrate fresh produce into our diets. This nutrient-packed revolution has not only revitalized our plates but has become a symbol of a healthier, more conscious way of living. In the vibrant tapestry of Indian kitchens, microgreens have earned their place as a culinary delight and a nutritional

powerhouse, leaving an indelible mark on the way we nourish our bodies and savor the essence of good health.

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