

Berries in India — A Silent Horticultural Sunrise

*Bharti¹, Manraj Singh², Naval Kishore Meena³ and Ashish Kumar³

¹Ph.D. Scholar, Dept. of Fruit Science, ICAR- IIHR, Hessaraghatta, Bengaluru, India

²M.Sc. Scholar, Department of Post Harvest Management, ICAR - IIHR, Hessaraghatta, Bengaluru, India

³Ph.D Scholar, Department of Horticulture (Fruit Science), Rajasthan College of Agriculture, MPUAT, Udaipur, Rajasthan, India

*Corresponding Author's email: bhthakur777@gmail.com

Berries include a wide and diverse group of fruits such as strawberry, raspberry, blackberry, blueberry, cranberry, mulberry, amla (Indian gooseberry), jamun and goji berry. Some of these, like blueberry and goji berry, are relatively new introductions to Indian agriculture, while others such as amla, jamun and mulberry are native species that have been consumed for generations.

Despite their diversity, berries share common characteristics—small size, attractive colour, pleasant flavour and exceptionally high nutritional value, especially antioxidants and vitamins—making them important both from agricultural and health perspectives.



Why the Sudden Interest?

The rising popularity of berries in India is closely associated with changing consumer preferences and evolving lifestyle patterns. With increasing awareness about health and wellness, consumers are now more inclined towards foods that not only satisfy hunger but also provide functional health benefits. Berries are rich sources of essential vitamins, minerals, antioxidants and dietary fibre, making them highly nutritious. Regular consumption of berries is known to support immunity enhancement, heart health, digestive efficiency and management of lifestyle-related disorders such as diabetes and obesity. Urbanization and rising income levels have further contributed to the demand for such premium and health-oriented fruits. In addition, the growing popularity of fitness culture, preventive healthcare and natural foods has strengthened consumer interest in berries. As awareness spreads through media and health campaigns, berries are gaining acceptance among a wider section of society. Consequently, the demand for fresh and processed berries is increasing steadily. This rising demand has encouraged farmers and entrepreneurs to invest in berry cultivation. As a result, berries are emerging as an important and promising segment of Indian horticulture.

Changing Farmer Mindsets

Traditionally, Indian farmers have relied heavily on staple crops and a few major fruit crops such as mango, banana and citrus for their livelihoods. However, rising input costs, unstable market prices and increasing climate variability have made these systems more risky and less profitable. In response, farmers are now actively searching for alternative crops that offer

better economic security. Over the past decade, berry cultivation has emerged as an attractive option due to its higher returns per unit area, shorter cropping cycles and growing consumer demand. Berries allow farmers to earn income within a relatively short period compared to many perennial fruit crops. The availability of improved and high-yielding planting material has further increased confidence among growers. In addition, advancements in modern cultivation practices, including fertigation, mulching and precision farming, have improved productivity. The use of protected cultivation structures such as polyhouses and shade nets has helped farmers reduce climate risks and improve fruit quality. Together, these factors have significantly encouraged farmers to adopt berry crops as a profitable and future-ready horticultural enterprise.

Major Berry Crops in India

While strawberry currently dominates commercial berry cultivation in India, several other berry crops are rapidly gaining importance due to their nutritional value, adaptability and expanding markets. Strawberry is widely grown in states such as Himachal Pradesh, Uttarakhand, Maharashtra and parts of South India, driven by strong consumer demand and high market prices. Mulberry, traditionally associated with sericulture, is increasingly valued for its nutritious fruits, offering farmers dual income from fruit production and silkworm rearing. Amla (Indian gooseberry), a native berry crop, is recognized as a superfruit because of its exceptionally high vitamin C content and wide use in medicinal and processing industries. Jamun, once largely collected from the wild, is now being promoted for orchard cultivation due to its proven health benefits, particularly for managing diabetes. Meanwhile, blueberry and goji berry are emerging as high-value crops with strong export potential and growing demand in health and wellness markets. Although each of these berry crops has specific climatic and management requirements, they all present promising opportunities for enhancing farmer income, crop diversification and rural livelihoods.



Table 1. Popular Berries and Their Key Features in India

Berry Crop	Main Growing Regions	Special Features	Primary Uses
Strawberry	Himachal, Uttarakhand, Karnataka	High demand, early fruiting	Fresh fruit, jams, desserts
Mulberry	Telangana, Karnataka, West Bengal	Dual use (fruit + sericulture)	Fresh fruit, leaves for silkworms
Amla	Madhya Pradesh, Uttar Pradesh	High vitamin C	Juice, candy, ayurvedic products
Jamun	Maharashtra, Tamil Nadu	Native berry, medicinal	Fresh fruit, juices
Blueberry	Himachal, Uttarakhand	Export potential, high antioxidants	Fresh, processed, export
Goji Berry	Himachal, Uttarakhand	“Superfruit”, high value	Dried fruit, health foods

Economic Opportunities

Berry cultivation offers significant economic advantages over many traditional agricultural crops, making it an attractive option for farmers. Fresh berries generally fetch premium prices in local as well as urban markets due to their attractive appearance, freshness and high nutritional value. Their demand is especially strong among health-conscious consumers, hotels and food processing industries. Beyond fresh consumption, berries possess excellent

potential for value addition, as they can be processed into jams, jellies, juices, squashes, dried products and nutraceutical formulations. This processing potential helps farmers reduce post-harvest losses and earn additional income. Moreover, export opportunities, particularly for high-value berries such as blueberry and goji berry, further enhance their profitability. The availability of both domestic and international markets reduces economic risk. This combined advantage of fresh market sales and value-added processing makes berry cultivation a highly profitable and future-oriented horticultural enterprise.

Challenges on the Path

Despite their increasing popularity and economic potential, berry crops face several challenges that need careful attention. One of the major constraints is the high initial investment, particularly when berries are grown under protected cultivation systems such as polyhouses and shade nets. In addition, successful berry cultivation requires specialized technical knowledge and skill development, especially in areas like pruning, fertigation, pest and disease management and post-harvest handling. Berries are also highly perishable, making efficient cold storage, packaging and transportation facilities essential to maintain quality and reduce losses. Furthermore, certain berry species require specific climatic conditions, which can limit their adoption in all regions. However, these challenges are not insurmountable. With proper planning, farmer training, access to quality planting material and strong institutional and policy support, berry cultivation can be successfully expanded and sustained.

Role of Research and Extension

Research institutions, state horticulture departments and Krishi Vigyan Kendras (KVKs) play a pivotal role in advancing berry cultivation across India. These organizations are actively engaged in developing climate-resilient and high-yielding berry varieties, as well as refining cultivation techniques to improve productivity and fruit quality. They also focus on integrated pest and disease management practices to ensure healthy orchards and reduce crop losses. Through demonstration plots, farmer training programs, workshops and field days, these institutions provide practical, hands-on guidance to growers, helping them adopt modern technologies with confidence. Such initiatives not only enhance farmer knowledge and skills but also facilitate the successful expansion of berry cultivation under diverse agro-climatic conditions, making the sector more sustainable and profitable.

Health, Nutrition and Consumer Demand

Berries are frequently referred to as “superfruits” because of their exceptionally high content of antioxidants, vitamins, minerals and other bioactive compounds. These nutrients make berries not only delicious but also highly beneficial for health. Regular consumption of berries is linked to enhanced immunity, improved digestion, better cardiovascular health and a reduced risk of chronic diseases such as diabetes and obesity. With growing awareness among Indian consumers about the importance of healthy and balanced diets, the demand for both fresh and processed berries—including jams, juices, dried fruits and nutraceutical products—is expected to rise steadily. This increasing consumer interest directly translates into greater market opportunities and economic benefits for berry growers, encouraging more farmers to adopt these high-value crops.

Table 2. Nutritional Highlights of Common Berries

Berry	Key Nutrients	Health Benefits
Strawberry	Vitamin C, fibre, antioxidants	Immunity & skin health
Blueberry	Anthocyanins, vitamin K	Heart & brain health
Amla	Vitamin C, polyphenols	Immunity & digestion
Jamun	Iron, vitamin C	Blood sugar support
Mulberry	Vitamin K, iron	Bone & blood health

Sustainability and Future Potential

Beyond their economic benefits, berry cultivation plays a significant role in promoting agricultural diversification and sustainable farming practices. Unlike many traditional crops, berries can be successfully grown on relatively small plots of land, making them suitable for resource-efficient farming. They can be cultivated under protected structures such as polyhouses or shade nets, or integrated into existing cropping systems, enhancing overall farm productivity without requiring extensive additional land. Moreover, with proper research support, improved varieties, and extension services, berry crops can be introduced into non-traditional and marginal regions, helping expand the country's horticultural base. This not only reduces pressure on conventional crops but also promotes environmentally responsible farming, efficient land use, and long-term sustainability in Indian agriculture.

A New Sunrise in Indian Horticulture

From once being wild forest fruits and backyard plants, berries are now undergoing a remarkable transformation into commercial, high-value horticultural crops in India. This shift reflects the combined efforts of innovative farmers, supportive research institutions and a rapidly evolving consumer market. As farmers adopt modern cultivation practices, researchers develop improved varieties and technologies, and consumers increasingly demand nutritious and health-oriented foods, berries are steadily gaining prominence. Though this change is occurring quietly, its impact is significant. This silent horticultural sunrise holds immense potential to reshape fruit production systems, diversify agriculture, enhance farmer incomes and contribute meaningfully to a healthier and more nutrition-secure nation.