# SONOPANT DANDEKAR ARTS, V.S. APTE COMMERCE AND M.H. MEHTA SCIENCE COLLEGE, PALGHAR



# Green Campus

Prepared by Internal Quality Assurance Cell

### BANANA PLANTATION (21780 sq.ft.)

Banana is the fourth most important crop of the food market, this makes banana to be the prime leading fruit crop in terms of volume and value in the world market. Bananas are one of the most widely consumed fruits globally and offer numerous health benefits. Establishing a plantation within the college campus not only serves as an educational opportunity for students but also provides a sustainable source of revenue and contributes to the campus's environmental sustainability goals.

Banana cultivation has been gaining popularity due to its high demand in both local and international markets. With advancements in agricultural practices, it has become feasible to grow bananas in various climates. The proposed venture aims to utilize a portion of the college campus to cultivate bananas, integrating educational, environmental, and economic benefits. The college campus offers a suitable environment for banana cultivation, with ample sunlight and access to water sources for irrigation. A detailed soil analysis should be conducted to ensure it meets the requirements for banana cultivation, primarily well-drained, fertile soil with good organic content.

The demand for bananas remains consistently high due to their nutritional value and versatile usage in various cuisines. Local markets, supermarkets, and wholesale distributors provide avenues for selling the produce. Additionally, the college explores partnerships with local businesses, such as restaurants and juice bars, to promote the sale of bananas and banana-based products.

Initial investment was done for land preparation, seedlings, irrigation infrastructure, and labor. However, the returns are substantial over time. Financial projections should include estimates of production costs, revenue from banana sales, and potential profits. The college also considers alternative revenue streams, such as eco-tourism or agro-tourism, by offering guided tours of the plantation. Banana cultivation aligns with the college's commitment to environmental sustainability. The plantation will contribute to carbon sequestration, soil conservation, and biodiversity enhancement. Implementation of organic farming practices further minimize environmental impact and promote ecosystem health.

The banana plantation offers valuable educational opportunities for students across various disciplines, including agriculture, environmental science, business, and marketing. Students participate in every stage of the cultivation process, from planting to harvesting, gaining practical knowledge and skills that complement their academic studies.







# MANGO PLANTATION (6 acre / 261360 sq.ft.)

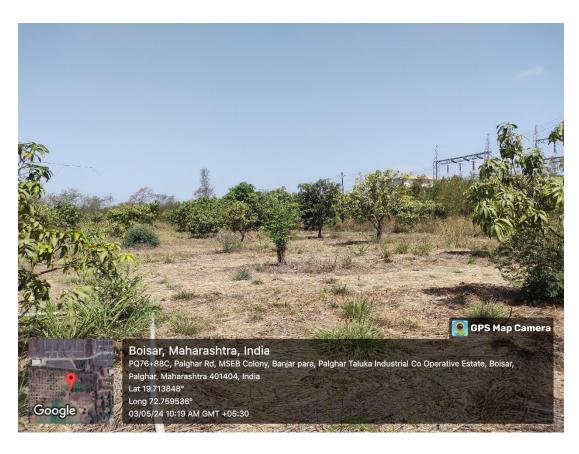
Mango cultivation offers numerous economic, environmental, and educational benefits. The report explores site suitability, market potential, financial projections, environmental impact, and educational opportunities associated with the proposed venture. Mango, often hailed as the "king of fruits," is esteemed for its delicious taste and nutritional value. Cultivating mangoes within the college campus not only presents an opportunity for revenue generation but also aligns with the institution's commitment to environmental sustainability and experiential learning.

The 6-acre college campus provides adequate space for establishing a mango plantation. Factors such as soil type, drainage, sunlight exposure, and access to water sources must be assessed to ensure optimal growing conditions for mango trees. A soil analysis is imperative to determine suitability and to make necessary amendments for successful cultivation. Mangoes enjoy high demand in local, national, and international markets. The college capitalizes on this demand by selling mangoes directly to consumers through on-campus markets, local vendors, supermarkets, and export opportunities. Additionally, value-added products like mango juice, dried mangoes, and preserves can further diversify revenue streams.

Mango cultivation can contribute positively to the college campus's environmental sustainability goals. Mango trees act as carbon sinks, mitigate soil erosion, and provide habitat for biodiversity. Implementing organic farming practices, such as composting and natural pest control, can further enhance environmental stewardship. The mango plantation offers valuable educational experiences for students across disciplines, including agriculture, biology, environmental science, business, and marketing. Students can actively participate in all stages of mango cultivation, from planting and pruning to harvesting and post-harvest processing, gaining practical skills and knowledge.

Establishing a mango plantation within the 6-acre college campus presents a lucrative opportunity with multifaceted benefits. Beyond financial returns, it offers environmental sustainability, community engagement, and educational enrichment. With careful planning, management, and integration into the curriculum, the mango plantation can become a thriving asset for the college.







#### MARIGOLD CULTIVATION (5445 sq.ft.)

Marigold cultivation offers aesthetic, educational, and environmental advantages, making it an attractive proposition for enhancing the campus landscape while engaging students in practical learning experiences. Marigolds (Tagetes spp.) are popular ornamental plants known for their vibrant colors, easy cultivation, and various applications in gardening and landscaping. Cultivating marigolds within the college campus not only beautifies the environment but also provides opportunities for hands-on learning and community engagement.

The chosen 5445 sq.ft. area within the college campus should receive ample sunlight, preferably at least six hours per day, and have well-drained soil with good fertility. Accessibility to water sources for irrigation and proximity to student foot traffic for educational purposes should also be considered. Marigold cultivation provides hands-on learning experiences for students studying botany, horticulture, agriculture, and environmental science. It offers opportunities for practical exercises in plant propagation, cultivation practices, and pest management. Marigolds attract beneficial insects such as pollinators and predatory insects, contributing to biodiversity and ecological balance within the campus ecosystem. They also serve as natural pest repellents, helping to control pests in nearby crops or gardens.

Cultivating marigolds within the 5445 sq.ft. area of the college campus offers numerous benefits, including aesthetic enhancement, educational opportunities, and environmental impact. By implementing proper cultivation practices and engaging students in the process, the college can create a visually appealing and enriching environment while fostering a deeper connection between students and nature.



# CHIKOO PLANTATION (3 acre/ 130680 sq.ft.)

Chikoo cultivation offers numerous advantages, including educational opportunities, environmental benefits, and potential revenue generation. The report assesses site suitability, market potential, financial projections, and educational implications associated with the proposed venture. Chikoo, also known as Sapodilla (Manilkara zapota), is a tropical fruit tree valued for its sweet and flavorful fruit. Cultivating chikoo within the college campus not only provides an opportunity to enhance the campus environment but also offers educational experiences for students in agriculture, biology, and environmental science. The college campus should have suitable conditions for chikoo cultivation, including well-drained soil, adequate sunlight, and protection from strong winds.

A site assessment should be conducted to ensure optimal growing conditions and sufficient space for the plantation. Chikoo cultivation provides hands-on learning experiences for students in agriculture, biology, and environmental science. Students can participate in all stages of cultivation, from planting and pruning to harvesting and post-harvest handling. Chikoo trees contribute to environmental

sustainability by sequestering carbon, reducing soil erosion, and providing habitat for wildlife. Additionally, chikoo cultivation promotes biodiversity within the campus ecosystem.

Depending on market demand, surplus chikoo fruits are sold to generate revenue for the college. Establishing partnerships with local markets, supermarkets, and fruit vendors facilitate sales of chikoo fruits.

Establishing a chikoo plantation within the college campus offers numerous benefits, including educational opportunities, environmental sustainability, and potential revenue generation. By implementing proper cultivation practices and engaging students in the process, the college creates a valuable resource that enhances the campus environment and enriches the educational experience.





#### **Botanical Garden**





#### **Garden**

