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Microclimate In Sabjikothi And Its Benefits To Street Vendors: A Review

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Abstract
Sabjikothi, or vegetable marketplaces, play a crucial role in urban environments, particularly in providing fresh produce to consumers and supporting livelihoods for street vendors. This paper examines the microclimate within Sabjikothi and its benefits to street vendors. Understanding the microclimate dynamics can shed light on the environmental conditions that influence vendors' work and overall well-being.
Key words*: Street Vendor, Sabjikothi, market place,microclimate*

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I. Introduction

Sabjikothi, commonly found in bustling cities, are essential hubs for the sale and distribution of fresh fruits and vegetables. These marketplaces not only serve as economic centers but also contribute to the urban microclimate. Street vendors operating within Sabjikothi are exposed to various environmental factors that can affect their productivity, health, and overall quality of life. This review explores the microclimate conditions within Sabjikothi and discusses their positive impacts on street vendors. Our solution 'Sabjikothi / Preservator' : A wheel-mountable, storage-cum-transportation solution can extend the shelf-life and preserve the freshness of horticultural produce anywhere between 3 to 30 days by using only 20 watts of power and few liter water. It needs an adequate decentralized storage for perishables which Can protect perishables from outer harsh environment. It can maintain the freshness of the produce. It can extend the shelf-life of perishables. It should be affordable, accessible, and available. The extremely short shelf life of horticultural and floricultural produce results in a big chunk of the produce not making it to the market at all and ends up getting wasted. 70% of fruit and vegetable output is wasted, accounting for 40% of the total cost. As a result, fruit and vegetable prices are twice what they would be otherwise. Sabjikothi addresses the issue of the perishability of horticultural commodities and works on reducing waste by the provision of affordable technology directly to individual farmers, cooperatives, and traders to ensure better post-harvest outcomes.

II. Microclimate In Sabjikothi:

1.Temperature Regulation: Sabjikothi often feature open-air layouts with minimal shade, exposing vendors to direct sunlight. However, the presence of abundant vegetation, including hanging plants and makeshift shelters, helps mitigate high temperatures by providing shade and facilitating natural ventilation. The arrangement of stalls and pathways also promotes airflow, creating a cooling effect within the marketplace.

2.Humidity Levels: The presence of fresh produce and water sources in Sabjikothi contributes to localized humidity levels. While high humidity can exacerbate discomfort during hot weather, it also helps maintain the freshness of fruits and vegetables, benefiting both vendors and consumers. Adequate ventilation and strategic positioning of goods minimize the risk of moisture-related issues such as mold growth.

3.Air Quality: Despite the proximity to vehicular traffic and industrial activities, Sabjikothi often exhibit better air quality compared to other urban areas. The abundance of vegetation serves as natural air filters, absorbing pollutants and particulate matter. Additionally, the constant movement of people and goods promotes air circulation, reducing stagnant pockets of pollution.

4.Microbial Diversity: The diverse array of fruits and vegetables in Sabjikothi supports a rich microbial ecosystem, including beneficial microorganisms associated with soil and plant health. Street vendors handling fresh produce are exposed to these microorganisms, which may have positive effects on their immune systems and overall well-being. However, proper hygiene practices are essential to mitigate the risk of foodborne illnesses.

Benefits to Street Vendors:

1. **Comfort and Well-being:** The favorable microclimate conditions within Sabjikothi contribute to the comfort and well-being of street vendors, enabling them to work more efficiently and effectively. Access to shade, natural ventilation, and relatively clean air enhances their working environment, reducing fatigue and heat-related stress.
2. **Preservation of Goods:** Optimal temperature and humidity levels within Sabjikothi help preserve the freshness and quality of fruits and vegetables, prolonging their shelf life. This allows vendors to maintain product integrity and attract customers with high-quality produce, ultimately improving their sales and livelihoods.
3. **Community Interaction**: Sabjikothi serve as vibrant community spaces where vendors interact with customers and fellow traders. The conducive microclimate encourages socialization and fosters a sense of belonging among vendors, enhancing their overall job satisfaction and mental well-being.

III. Conclusion:

The microclimate within Sabjikothi plays a significant role in shaping the working conditions and experiences of street vendors. By providing favorable environmental conditions such as temperature regulation, air quality improvement, and preservation of goods, Sabjikothi contribute to the livelihoods and well-being of vendors. Future research and urban planning efforts should consider the microclimatic factors in enhancing the sustainability and resilience of street vending environments.

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