Understanding The Economic Impact of Spice Export on Local Farmers (Chilli peppers) in The Growth of Savory Snack Categories

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Abstract

Members of the nightshade family Solanaceae, chili peppers (also spelled "chile" or "chilli") are berryfruit plants from the genus Capsicum that are grown for their spiciness. Red hot chili peppers contents - 88% water, 9% carbohydrates, 2% protein

and 0.4% fat. For small-scale farmers, growing chilies has the potential to be a very lucrative venture. Commercially speaking, growing chilies in India has advantages, such as-high diversification, low cultivation costs, sustainable farming practices, profitabilitytthrough export. A significant part of the snack food market is made up of spicy flavors. Savory snacks are foods that have a salty or spicy flavour rather than a sweet flavour. Chilli pepper enhances the flavor-heat, pungency, warmth, and bite and color of foods that fall within the spicy flavor category. With the globalization of regional cuisines, there has been a significant increase in consumer appetite for hot foods.

Introduction

Chili refer to the bright, colorful fruits of various capsicum species. Members of the nightshade family Solanaceae, chili peppers (also spelled "chile" or "chilli") are berry-fruit plants from the genus Capsicum that are grown for their spiciness. When consumed or administered topically, capsaicin and its related capsaicinoids are what give chili peppers their spiciness. Chili peppers come in a variety of tastes and levels of intensity. The availability of various varieties of chili powder, each with a unique flavor and degree of heat, is due to this diversity.

Cultivation

Depending on the cultivar, the plants range in size from 20 to 60 centimeters, making them suitable for commercial use in polytunnels, greenhouses, or pots. The plants are perennial, if they are protected from the cold. The fruits might be green, orange, red, or purple, and their shapes range from spherical and

knobby to smooth and elongated. A sunny location with warm, loamy soil ideally between 21 and 29 °C is perfect growing conditions for peppers.

Nutritional value per 100 g (3.5 oz)	
Energy	166 kJ (40 kcal)
Carbohydrates	8.8 g
Sugars	5.3 g
Dietary fiber	1.5 g
Fat	0.4 g
Protein	1.9 g
Other constituents	Quantity
Water	88 g
Capsaicin	0.01g - 6 g

Nutritional value

Red hot chili peppers contents

- ➤ 88% water
- ➤ 9% carbohydrates
- > 2% protein
- > 0.4% fat

In a 100-gram reference amount, chili peppers supply 40 calories, and are a rich source of vitamin C and vitamin B6.

Impact of spice exports

1. On Local Farmers

For small-scale farmers, growing chilies has the potential to be a very lucrative venture. Production of chilies are less expensive for small-scale farmers as it does not require expensive equipment or large spaces. Due to their very short growing season, growers are also able to harvest many crops of chili peppers each year.

Chili farming in India

In India, growing chilies is a major part of agriculture and is done both for personal and commercial use. With considerable production in Andhra Pradesh, Maharashtra, and Karnataka, India is one of the world's top producers of chilies.







Immature chilies

Ripe chilies



Ripe chili pepper with seeds

Commercially speaking, growing chilies in India has various advantages, such as:

- **1. High demand:** Due to the rising popularity of spicy food, there is a growing demand for chilies worldwide.
- **2. Diversification:** Growing chilies can give farmers an extra source of income, diversifying their sources of income and lowering the chance of financial loss from crop failure or market swings.
 - **3. Low cultivation costs:** Farmers are drawn to chilies because they are a crop that is quite simple and affordable to grow. Cchilies are the perfect crop because of their low cultivation costs and large profit margins.
- 3. Sustainable farming practices: Using drip irrigation and mulching sheets reduces the expense of weeding and irrigating the land. Fertilizers and insecticides used carefully and at the right times if chilies are to be profitable.
- 4. Profitability Through Export: One efficient strategy to increase sales and expand the clientele is to export chili peppers. Having certifications like organic, non-GMO, fair trade, or BRC will help the goods stand out from the competition and draw in more buyers. Asia, the Middle East, and Europe get the majority of India's chili exports, farmer get

access to international markets and increase their profits. Finding target markets and comprehending their customs and consumption patterns are crucial when exporting. When exporting, establishing a solid reputation is essential since it attracts potential clients in other nations and help one stand out in a crowded industry.

For smallholder farmers, cultivating spices is a significant source of income. Examples of ancillary industries that the spice trade supports are processing and packaging. Many rural residents rely heavily on the money they receive from cultivating spices to help them escape poverty and pave the way for financial security. Infrastructure in countries like Madagascar and India that grow spices has improved as a result of the demands of the spice trade. Improved roads increase market accessibility, reduce transportation costs, and boost economic activity beyond the spice sector. These infrastructural improvements improve local communities' quality of life and support rural areas' overall economic growth.

2. On savory snack categories

Savory snacks are foods that have a salty or spicy flavour rather than a sweet flavour. These snacks are made with a variety of ingredients, including vegetables, fruits, grains, nuts, seasonings, and vegetable oils. These snacks are high in nutrients, minerals, vitamins, and fibre. The savory snack products market is expected to develop due to increased consumption of low-calorie snacks and increased demand for baked food products among customers. The savory snack products market was estimated at USD 203.9 billion in 2022 and is expected to reach USD 263.0 billion by 2027, growing at a CAGR of 5.2%.

Technological developments have led to a steady growth in the market for savory snacks. A significant part of the snack food market is made up of spicy flavors. Chili peppers in the spicy taste category improve the color and flavor of cooked meals by contributing heat, pungency, warmth, and bite. As customers become more receptive to trying out new culinary sensations, hot and spicy flavors that are often seen in restaurant entrees are increasingly showing up in snack flavors. In the snack food industry, spicy flavors are crucial. Chilli pepper enhances the flavor—heat, pungency, warmth, and



bite—and color of foods that fall within the spicy flavor category.

Conclusion

Due to its application in a wide variety of cuisines, chili is highly sought after both domestically and internationally. Because of its low startup costs, high yield, diversity, sustainable alternative farming alternatives, export potential, and seasonality, chili is the perfect crop for small farmers and produces excellent results. By employing the right farming methods and marketing plans, small-scale farmers can boost their yields and earnings from chili cultivation. All things considered, growing chilies is a fantastic way to boost a farmer's income. The export of spices generates revenue, creates jobs, and advances infrastructure. Additionally, there are plenty of chances for development and enhancement.

A significant part of the snack food market is made up of spicy flavors. Chili peppers in the spicy taste category improve the color and flavor of cooked meals by contributing heat, pungency, warmth, and bite. Customers ultimately want food and beverages that provide more than just mouthwatering flavor. They expect personalized, one-of-a-kind experiences, so as customer demands become more intricate, there is definitely pressure to develop new snack flavors. With the globalization of regional cuisines, there has been a significant increase in consumer appetite for hot foods.

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