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KARNATAKA'S ARECANUT BOOM: UNDERSTANDING THE CURRENT SCENARIO AND FACTORS DRIVING THE SHIFT

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Introduction

'Arecanut', botanically known as Areca catechu, is a tropical plant found all over South-East Asia. This tree belongs to the palm tree species and is from the Aceraceae family. The fruit (nut) of this tree is popularly known as the betel nut or supari in India. India is the largest producer of Arecanut and at the same time the largest consumer also. Major states cultivating this crop are Karnataka (40%), Kerala (25%), Assam (20%), Tamil Nadu, Meghalaya, and West Bengal. Areca nut production in India is the largest in the world, as per the Food and Agriculture Organization of the United Nations (FAO) statistics, accounting for 54.07% of its world output. The state's Horticulture Department reports a substantial increase in arable land dedicated to Arecanut cultivation, totaling 4.51 lakh hectares over the last five years. Arecanut is mainly grown in Karnataka, Kerala, and Assam. Among these, Karnataka alone accounts for around 40 per cent of the country's production. Karnataka has witnessed a notable shift towards Arecanut cultivation in terms of area expansion. This increasing preference for Arecanut cultivation has led to a gradual decline in the area under traditional food crops such as paddy, ragi, and pulses.

Current scenario of Arecanut

Area and production of Arecanut in Karnataka 2014-15 to 2023-24

Table 2. Area and production of Arecanut in Karnataka 2014-15 to 2023-24

Year	Area	Production
	(In '000 Hectare)	(In '000 Tonne)

2014 - 2015	218.01	457.56
2015 - 2016	235.77	436.29
2016 - 2017	227.84	435.75
2017 - 2018	254.64	517.35
2018 - 2019	476.38	850.78
2019 - 2020	500.2	1081.84
2020 - 2021	549.66	1238.01
2021 – 2022	603.12	1348.93
2022 - 2023	674.81	1024.12
2023-2024	676.95	1032.02
CAGR%	16.20	14.12

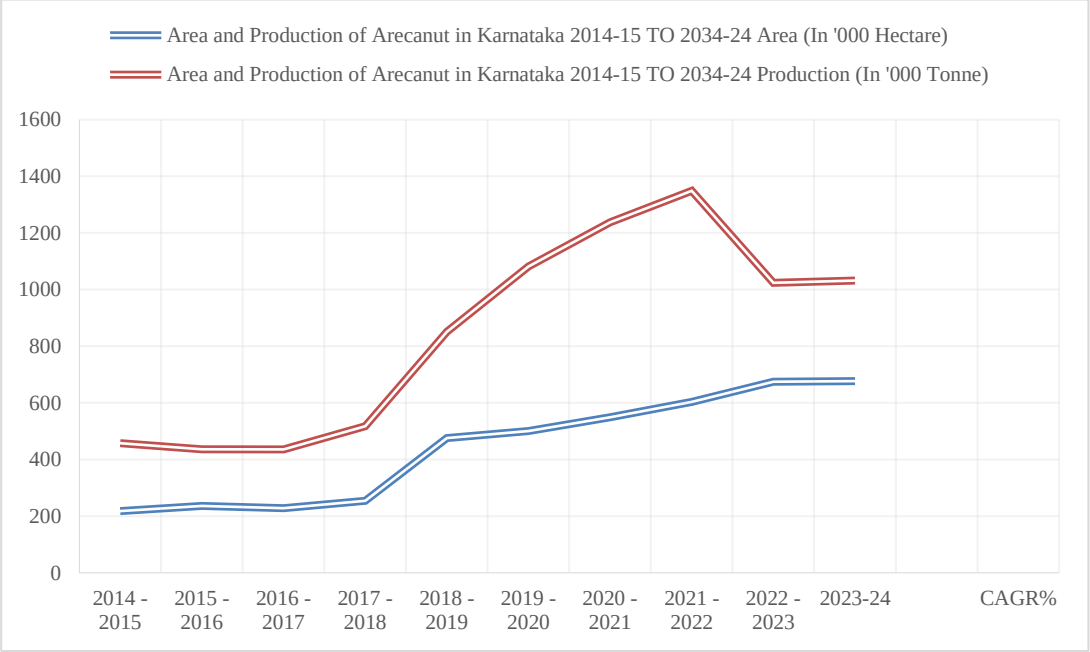

Fig.1: Trends in Arecanut Cultivation of Karnataka

Significant expansion in cultivation area

In 2014–15, Karnataka had 218.01 thousand hectares under Arecanut cultivation. By 2023–24, this had increased to 676.95 thousand hectares, more than tripling over 10 years. This expansion translates to a Compound Annual Growth Rate (CAGR) of 16.20%**,** indicating a rapid and sustained increase in the cultivation area**.** Due to higher returns compared to traditional crops (like paddy, ragi) and increased access to irrigation (especially borewells and micro-irrigation).

Steady rise in production

Arecanut production rose from 457.56 thousand tonnes in 2014–15 to 1032.02 thousand tonnes in 2023–24**.** This reflects a CAGR of 14.12%**,** showing strong production growth**,** though slightly lower than the area growth rate. While production has increased significantly, the fact that the area grew faster than output suggests a possible decline in yield efficiency or plateauing productivity in some regions. This might be due to marginal land expansion, pest/disease outbreaks, or climatic variability.

Notable milestones

Between 2017–18 and 2018–19, there was a dramatic jump in area from 254.64 to 476.38 thousand hectares and production from 517.35 to 850.78 thousand tonnes, reflecting a major shift to arecanut cultivation in non-traditional areas. However, between 2021–22 and 2023–24**,** production slightly declined despite area expansion, suggesting emerging challenges like soil fatigue, water stress, or yield stagnation.

Driving factors influence in shift of arecanut

- *Increased cultivation cost of other crops drives the shift to arecanut:* The rising cultivation costs of traditional crops like paddy have been a major factor driving farmers in Karnataka to shift toward arecanut farming. Paddy cultivation demands high inputs, including substantial water usage, fertilizers, pesticides, and labor, making it increasingly expensive. Despite these costs, market prices for paddy often remain low, offering minimal returns. Moreover, labor shortages, particularly during critical stages like transplanting and harvesting, have further burdened farmers. As a result, many have opted for arecanut cultivation, which, being less labor-intensive and offering higher and more stable returns, is seen as a more economically viable alternative.

- *Economic incentives:* Higher and Stable Income Arecanut provides consistently better returns per acre compared to many traditional crops like paddy, ragi, or jowar.

- *Climatic and environmental factors*

  - *Climate Suitability:* Arecanut thrives in warm, humid climates with well-distributed rainfall, making regions like Karnataka, Kerala, and parts of the Northeast ideal.

  - *Climate Variability:* Changes in weather patterns, such as irregular rainfall during crop period in dryland, which led to crop losses.

- *Availability of borewell water:* Borewells have played a critical enabling role in the expansion of Arecanut cultivation, especially in non-traditional and semi-arid regions of India like Chitradurga, Tumakuru, and Davanagere in Karnataka. Borewells make Arecanut possible in rain-deficient or seasonal rainfall regions where surface water or canal irrigation is not available. Borewell irrigation reduces dependence on unpredictable rainfall

- *Micro-Irrigation systems:* Drip irrigation and sprinkler systems have made it viable to grow Arecanut in non-traditional, water-scarce areas.

    - Benefits: Efficient water use (essential for arecanut's shallow roots) reduces water stress in summer, helps expansion in semi-arid zones like Tumakuru, Chitradurga, and Davanagere (Karnataka)

- *Arecanut as a perennial crop:* Once the Arecanut palms mature (after 5–7 years), they start yielding nuts every year. Arecanut (Areca catechu) is a perennial crop, meaning it continues to produce harvests year after year without replanting. A mature Arecanut plantation yields annually for 25–30 years, ensuring long-term income stability.

- *Mechanization:* Machines for dehusking, slicing, and drying Arecanut reduce labor dependency. Small-scale Arecanut processing units make post-harvest operations more efficient and profitable.

- *Intercropping advantage:* During the early years before full maturity, farmers often grow intercrops like banana, maize, or ginger, which provide short-term income

- *Cultural status and farmer identity:* Owning Arecanut plantations is seen as a sign of prosperity and land ownership. This social aspiration factor drives land use conversion toward plantation crops. Arecanut is often considered a “legacy crop” that can be passed from one generation to the next. Many families grow it not just for income, but to secure their children’s future

- *Cultural and traditional use:* Arecanut is deeply embedded in Indian rituals, customs, and daily life, commonly used in Pan (betel quid) chewed with betel leaves and slaked lime. Religious offerings and ceremonies: Especially in Karnataka, Kerala, Assam, and Odisha. Social functions: Weddings, housewarmings, and festivals often involve its exchange. In many communities, Arecanut and betel leaves are offered to guests as a sign of respect and auspiciousness.

- *Domestic market demand is strong:* The domestic market demand for Arecanut as a raw material is strong in India. The demand for areca nut products supari and gutkha, contributes to the continuous increase in Arecanut prices.

- *Low perishability & easy storage:* Dried Arecanut has a long shelf life, which makes it easier to transport and store. Reduces pressure to sell immediately. Traders and processors buy in bulk without worrying about quick spoilage, improving liquidity in the market.

- *Export potential:* Both raw nuts and value-added products (like supari, areca leaf plates, fibers, etc.) are increasingly finding buyers in global markets.

Country	Key Import
Bangladesh	Raw Arecanut (main importer)
Nepal & Sri Lanka	Raw & processed supari
UAE & Gulf Nations	Flavoured supari, pan masala
USA, Germany, UK	Areca leaf plates, eco-packaging
Malaysia, Singapore	Supari and areca leaf cutlery

- *Entrepreneurial activity led to a shift toward arecanut cultivation:* Arecanut plantations create a lush, evergreen landscape with tall, aesthetic palms ideal for eco-resorts and nature retreats.
- *Arecanut processing business:* The arecanut processing business involves transforming raw areca nuts through various steps, such as
  - Cleaning, boiling, and drying; the processed nuts are then made ready for the market, often as value-
  - Added products that enhance their commercial appeal and profitability.

Conclusion

The growing shift toward Arecanut cultivation in Karnataka highlights both opportunities and emerging challenges in the agricultural landscape. While the crop offers attractive economic benefits such as higher returns, year-round income through perennial yield, and growing domestic and export markets, it also introduces significant risks due to over-dependence on a single commercial crop.

This mono-cropping trend, driven by the perceived profitability of Arecanut, makes farming communities, especially small and marginal farmers, highly vulnerable to multiple external shocks. These include market price volatility, pest and disease outbreaks (such as Yellow Leaf Disease), and unpredictable climate events like droughts or unseasonal rains. Unlike diversified farming systems, monocultures lack the resilience needed to absorb these shocks, which could lead to financial distress, increased debt burdens, and even land alienation or farmer suicides in extreme cases.

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