



INTERNATIONAL RESEARCH JOURNAL OF HUMANITIES AND INTERDISCIPLINARY STUDIES

(Peer-reviewed, Refereed, Indexed & Open Access Journal)

DOI : 03.2021-11278686

ISSN : 2582-8568

IMPACT FACTOR : 7.560 (SJIF 2024)

Unveiling Tobacco Cultivation in Karnataka: Historical Roots, Economic Impact, and Contemporary Dynamics

Veerasha K M

Research Scholar,
Jain Deemed to be University,
Banglore (Karnataka, India)

E-mail: Veereshamcom.km@gmail.com

Dr. S Muralidhar

Assistant Professor and research guide,
Jain Deemed to be University,
Banglore (Karnataka, India)

DOI No. **03.2021-11278686** DOI Link :: <https://doi-ds.org/doilink/01.2024-87228936/IRJHIS2401007>

Abstract:

This comprehensive article delves into the cultivation of tobacco in Karnataka, India, contextualizing its historical roots, economic significance, and the intricate landscape of tobacco production. It provides an in-depth overview of the various types of tobacco cultivated in the country and their respective contributions to the economy, showcasing the diverse agro-climatic conditions that support this industry. The historical journey of tobacco's introduction to India and its subsequent growth into a vital commercial crop are traced through significant milestones and the establishment of research institutions dedicated to its development. Moreover, the article meticulously examines the trends in tobacco cultivation over the past decade in Karnataka, encompassing fluctuations in cultivation area, production, and productivity, thereby highlighting the dynamic nature of this agricultural sector. Additionally, it analyzes district-wise data, offering insights into specific regions' cultivation patterns and productivity levels. The document concludes by dissecting the factors influencing the reduction in tobacco production area, attributing this phenomenon to a multifaceted interplay of societal, economic, environmental, and regulatory dynamics. This article serves as a comprehensive reference for understanding the intricate landscape of tobacco cultivation in Karnataka, providing valuable insights into its historical evolution, economic significance, and contemporary challenges.

Keywords: Tobacco, Indian Economy, area, Production

Introduction:

India stands as the world's second-largest producer and exporter of tobacco, trailing only behind China and Brazil. Cultivated across approximately 0.42 million hectares, the country yields a substantial 758 million kilograms of tobacco. This crop significantly contributes to the national exchequer, injecting around Rs. 28,000 crores through excise revenue, which accounts for approximately Rs. 22,000 crores, and earnings from exports amounting to about Rs. 6,000 crores.

The cultivation of various tobacco types, including Flue-Cured Virginia (FCV), Burley, Oriental, Bidi, Natu/Pikka, Chewing, and Rustica, takes place under diverse agro-climatic conditions. Acknowledging the specific requirements of these distinct tobacco variants, the Indian Council of Agricultural Research established the All India Coordinated Project on Tobacco in 1970-71. Initially headquartered in Anand, Gujarat, the coordinating unit was later relocated to ICAR-CTRI, Rajahmundry, Andhra Pradesh, on August 16, 1998.

Tobacco cultivation spans approximately 75,000 hectares of land in Karnataka, primarily concentrated in the Periyapatna, Hunsur, and HD Kote taluks within the Mysuru district. The Mysuru region, specifically, produces over 80% of Virginia Flue-Cured (VFC) tobacco renowned for its export quality. This particular variant garners global attention due to its low nicotine and tar content, attracting buyers from various parts of the world.

The objective of the study:

1. To Analyze the historical trajectory and geographical origins of tobacco
2. To understand the tobacco contribution to Indian economy.
3. To know the Area, Production and Productivity of Tobacco in Karnataka state.

Limitation of the study:

1. The study is only concentrating on background of tobacco cultivation.
2. The study is restricted Karnataka state only.
3. This article is based on secondary data.

Methodology:

For this purpose secondary data were collected. The secondary data were collected through journals, conference proceedings and annual reports of Tobacco Board.

ORIGIN OF THE CROP:

The origins and historical background of tobacco are enigmatic and characterized by conflicting narratives. Plant geneticists have pinpointed the Peruvian/Ecuadorian Andes as the epicenter of tobacco's inception, where it was initially cultivated around 5000-3000 BC. Although historical records indicate the presence of tobacco in Asia as early as the twelfth century, during a time when it remained unknown in other regions, tobacco served dual purposes of being an intoxicant and a remedy for various ailments, as well as a means of paying reverence to deities.

Nevertheless, it was Christopher Columbus who unintentionally stumbled upon the narcotic properties of tobacco during his expedition to the Americas in 1492. Upon arriving at the islands of Tobago, Columbus and his crew were astounded to witness indigenous inhabitants either inhaling powdered dry leaves or smoking crude rolls made from dried leaves. Intrigued, Columbus and his men decided to experiment with these practices and experienced the intoxicating effects firsthand.

Subsequently, they transported quantities of dried leaves and seeds back to Europe, thus marking the introduction of tobacco to the continent.

According to an alternative account, Native Americans utilized tobacco for medicinal and ceremonial purposes. They would inhale the smoke emanating from burning leaves through a hollow, forked cane, and over time, the instrument itself became associated with the plant. In Spanish, it was called 'Tobaco,' while in English, it acquired the name 'Tobacco.' In the year 1560, a Spanish physician introduced the plant to Europe after being dispatched to Mexico. Simultaneously, Jean Nicot, the French Ambassador to Portugal, became aware of tobacco in Lisbon and introduced it to the French Court. The plant's botanical name, *Nicotiana*, and the term 'nicotine' derive from his name. The habit of smoking rapidly spread across several countries during the seventeenth century.

Tobacco made its way into India during the early seventeenth century. Despite facing significant neglect and societal disapproval, it flourished within the country. At present, tobacco stands as a crucial commercial crop, generating approximately Rs. 6,000 crores in foreign exchange and Rs. 20,000 crores in excise revenue. The cultivation of tobacco provides livelihood security for approximately 45 million individuals, including farmers, farm laborers, tendu leaf pickers, bidi rollers, and traders.

History of Indian Tobacco:

The introduction of tobacco cultivation in India can be traced back to 1605 when the Portuguese first brought it to the country. Initially, it thrived in Gujarat's Kaira and Mehsana districts before spreading throughout the nation. The desire to improve Indian tobacco production began with the establishment of the Calcutta Botanical Gardens in 1787. As a result, seven *Nicotiana* species were imported from America and cultivated in Calcutta's botanical gardens by 1814. The establishment of a model farm in Pusa, Bihar in 1875, leased to Begg Dunlop & Co., contributed to the growth and curing of Virginia tobacco until 1903, meeting the demands of UK cigarette factories. The Imperial Agricultural Research Institute, established in 1903, played a crucial role in conducting botanical and genetic studies on tobacco. Dr. Howard, the first director of the IARI, isolated 52 tobacco lines, which were later expanded by Shaw and Kashiram to include 18 more lines. Among these, NP-28, NP-58, and NP-63 showed particular promise. In 1940, Dr. B.P. Paul identified the widely embraced NP-70 selection in North Bihar. The experimentation with Virginia tobacco began in Pusa and Ghazipur, while commercial cultivation started in black soils in 1920. The success of flue curing in Guntur in 1928 put India on the global tobacco map, leading to the establishment of the Cigarette Tobacco Research Station by the IARI in Guntur in 1936. The implementation of excise duty on tobacco in 1943-44 further highlighted its importance as a revenue source, which prompted the formation of the Indian Central Tobacco Committee (ICTC) in 1945. Consequently, the Central Tobacco Research Institute (CTRI) was established in 1947 under the ICTC and later

taken over by the Indian Council of Agricultural Research (ICAR) in 1965. Presently, CTRI in Rajahmundry, along with its six regional research stations, conducts extensive research on the various types of tobacco cultivated in India.

TYPE OF TOBACCO:

With its rich agro-climatic diversity, India has the unique position of growing all types of tobacco which are broadly classified as:

Table No: 01
Types of tobacco

1.	FCV Tobacco	Andhra Pradesh & Karnataka
2.	Bidi Tobacco	Gujarat & Karnataka & Andhra Pradesh
3.	Cigar & Cheroot	Tamil Nadu & West Bengal
4.	Hookah Tobacco	Assam, West Bengal, Bihar & UP
5.	Chewing & Snuff	Tamil Nadu, West Bengal, Bihar, Assam & U.P.
6.	Natu, Burley, Lanka & HDBRG	Andhra Pradesh
7.	Pikka Tobacco	Orissa

TOBACCO IN INDIAN ECONOMY:

Tobacco, an agricultural crop of great economic significance, holds a prominent position in the global market. Known for its ability to withstand drought, its hardiness, and short growth cycle, tobacco can be cultivated in soils that are not suitable for other profitable crops. In India, tobacco is cultivated across an area of 0.45 million hectares, which accounts for 0.27% of the total cultivated land, resulting in a production of approximately 750 million kilograms of tobacco leaf. In terms of global production and export, India ranks second after China and Brazil. The production of flue-cured Virginia (FCV) tobacco amounts to around 300 million kilograms, grown across an area of 0.20 million hectares, while non-FCV tobacco production reaches 450 million kilograms, cultivated across an area of 0.25 million hectares. In the global context, Indian tobacco covers 10% of the total cultivated area and contributes 9% to the overall production.

A distinctive feature of tobacco production in India is the diverse range of Flue-cured Virginia (FCV) styles and various types of non-FCV tobacco, which are cultivated in different agro-ecological regions across the country. Tobacco is grown in approximately 15 states in India, making a significant impact on the economy and well-being of the farming community. The country cultivates different types of tobacco, including FCV, Bidi, Hookah, Chewing, Cigar-wrapper, Cheroot, Burley, Oriental, HDBRG, Lanka, Pikka, Natu, Motihari, and Jati. FCV, Burley, and Oriental tobacco are the major types that are exported.

Tobacco farming in India provides livelihood security for approximately 36 million individuals, including 6 million farmers and 20 million agricultural laborers. In addition, it offers employment opportunities to 10 million people engaged in processing, manufacturing, and exports within the tobacco industry. Bidi rolling alone provides employment for 4.4 million individuals, and 2.2 million tribal members are involved in the collection of tenduleaves. The main beneficiaries of the tobacco industry are small and marginal farmers, rural women, tribal youth, and the economically disadvantaged sections of society. Annually, tobacco contributes 4,400 crores towards foreign exchange earnings, accounting for 4% of the country's total agricultural exports, and generates 14,000 crores in excise revenue, which amounts to more than 10% of the total excise revenue collected from all sources.

India possesses a distinct advantage over the foremost tobacco-producing nations in terms of its low production cost and the average prices of both its farms and exports. Consequently, Indian tobacco is widely regarded as being highly cost-effective. India currently stands as one of the primary exporters of tobacco, securing the second position after Brazil. The country's contribution to the global tobacco trade amounts to 6% by volume and 0.7% by value, with approximately 80-85% of our exports consisting solely of FCV tobacco. Over the course of the past five years, the quantity and value of tobacco and tobacco product exports have seen a notable increase of 76% and 209% respectively. The United Kingdom, Germany, Belgium, the former Soviet Union, South Korea, and South Africa are the principal importers of Indian FCV tobacco, accounting for over 60% of our total exports. Presently, Brazil, Zimbabwe, Turkey, China, and Indonesia pose as competitors to India within the export market. India's share in the global cigarette export market is limited to less than 1% exclusively. Nevertheless, it is worth highlighting the noteworthy exports of scented Bidis, Hookah tobacco paste, scented chewing tobacco, and Zarda. Furthermore, there exists a promising potential to further enhance the exportation of these products in the near future.

POSITIVE FEATURES OF INDIAN TOBACCO:

The distinctive and positive features of Indian tobacco include the lower levels of heavy metals, very low levels of Tobacco Specific Nitrosamines (TSNAs) and pesticide residues compared to the other tobacco producing countries in the world. Further, endowed with varied agro-climatic conditions, India has the capacity to produce different styles of tobacco ranging from coloury neutral filler to flavourful leaf catering to the needs of a wide variety of customers globally. In addition, production and processing costs of tobacco are also quite low in India, thus making the Indian tobacco price-competitive and value for money.

Area, Production and Yield in Karnataka:

Tobacco is cultivated across approximately 75,000 hectares of land in Karnataka. The estimated production of tobacco in Karnataka is substantial, contributing significantly to the state's

agricultural output. However, specific production figures might vary annually based on various factors like weather conditions, market demand, and agricultural practices. The yield of tobacco per hectare can vary based on multiple factors including the type of tobacco, cultivation practices, and environmental conditions. The average yield per hectare for tobacco in Karnataka varies, but it's important to note that certain regions within the state might have higher or lower yields based on various factors like soil quality, climate, and farming techniques.

Table No: 02

Area, Production and Yield in Karnataka

Year	Area	Production (tonnes)	Productivity (Kg/ha)
2010-11	118989	127850	1074
2011-12	104393	104290	999
2012-13	93974	93860	999
2013-14	97770	102020	1043
2014-15	85934	103400	1203
2015-16	75837	71950	949
2016-17	76089	98720	1297
2017-18	81083	106890	1318
2018-19	83696	85080	1017
2019-20	80369	106180	1321
2020-21	73609	88420	1201

Source: Tobacco Board, Guntur

The data reflects the fluctuating trends in tobacco cultivation in Karnataka over the past decade. While the area under cultivation has varied, ranging from 73,609 hectares in 2020-21 to a peak of 118,989 hectares in 2010-11, the production levels have shown variability, hitting a high of 127,850 tons in 2010-11 and dropping to 71,950 tons in 2015-16. This fluctuation has led to changes in productivity per hectare, which ranged from 949 kg/ha in 2015-16 to 1,321 kg/ha in 2019-20, showcasing a degree of inconsistency in yield over the years. Overall, the data indicates dynamic shifts in both cultivation area and production levels, impacting the productivity of tobacco in Karnataka during this period.

District-wise Area, Production and Productivity of FCV Tobacco during 2021 under Ramanathapura platform

Table No: 03

**District-wise Area, Production and Productivity of FCV Tobacco during 2021 under
Ramanathapura platform**

District	Area (ha)	Production (tonnes)	Productivity (kg/ha)
Hassan (Holenarasipura and Arakalagudu)	3860	3.86	1000
Mysore (K R Nagara)	2100	0.92	4.41
Shivamogaa	48	0.0027	47
Davanagere	241	0.045	190
Haveri	2	0	0
Chikkamagaluru	29	0	0
Total	6280	4.8277	1678

Source: Tobacco Board, Auction platform Ramanathapura

The data provides insights into tobacco cultivation in various districts of Karnataka:

- **Hassan (Holenarasipura and Arakalagudu):** This district shows significant cultivation with 3,860 hectares dedicated to tobacco, resulting in a production of 3.86 tonnes and a productivity of 1000 kg/ha.
- **Mysore (K R Nagara):** Although occupying 2,100 hectares, the production is relatively low at 0.92 tonnes, resulting in a productivity of 4.41 kg/ha.
- **Shivamogga:** Cultivation area here is minimal at 48 hectares, producing 0.0027 tonnes with a productivity of 47 kg/ha.
- **Davanagere:** Similarly, in Davanagere, the cultivation area is 241 hectares, resulting in a production of 0.045 tonnes and a productivity of 190 kg/ha.
- **Haveri and Chikkamagaluru:** Both districts have negligible production, with Haveri having 2 hectares and no recorded production, and Chikkamagaluru with 29 hectares also not yielding any recorded production.
- **Total:** Considering all districts, the combined area for cultivation is 6,280 hectares, resulting in a total production of 4.8277 tonnes and an overall productivity of 1,678 kg/ha.

This data indicates varying degrees of cultivation and productivity across districts, with some regions demonstrating substantial cultivation areas and moderate to high productivity, while others exhibit negligible production despite allocated cultivation space.

Area, production and productivity in Karnataka during last 5 years:

Table No: 04

Area, production and productivity in Karnataka

Year	Area (ha)	Production (m.kg)	Productivity (kg/ha)
2017-18	81083	106.89	1320
2018-19	83696	85.08	1017
2019-20	81360	106.07	1307
2020-21	72650	88.40	1213
2021-22	71700	68.10	959

Source: Regional manager officer, Tobacco board, Mysore

Certainly! This dataset represents the trends in tobacco cultivation in Karnataka over five consecutive years:

- **2017-18:** The area under cultivation was 81,083 hectares, producing 106.89 million kilograms of tobacco, with a productivity of 1,320 kg/ha, indicating a robust yield.
- **2018-19:** Despite a slight increase in the cultivation area to 83,696 hectares, the production decreased to 85.08 million kilograms, resulting in a reduced productivity of 1,017 kg/ha compared to the previous year.
- **2019-20:** The cultivation area remained relatively consistent at 81,360 hectares, resulting in a production of 106.07 million kilograms and a productivity of 1,307 kg/ha, showing a slight increase from the preceding year.
- **2020-21:** There was a notable decrease in the cultivation area to 72,650 hectares, yielding 88.40 million kilograms of tobacco, with a productivity of 1,213 kg/ha.
- **2021-22:** The trend continued with a reduction in both cultivation area (71,700 hectares) and production (68.10 million kilograms), resulting in a lower productivity of 959 kg/ha compared to the previous year.

Overall, the data reflects fluctuations in both cultivation area and production levels over the years, impacting the productivity of tobacco in Karnataka. While there have been variations in each parameter annually, the general trend indicates some inconsistency in both production and productivity over the studied period.

Reduction in the production area of tobacco in Karnataka:

Several factors contribute to the reduction in the production area of tobacco in Karnataka:

1. **Shift in Cultivation Patterns:** Changes in agricultural practices and government policies might lead farmers to opt for other crops due to fluctuations in demand, pricing, or regulations. This shift could result in a decrease in the area allocated for tobacco cultivation.
2. **Health Awareness Campaigns:** Increasing awareness of the health risks associated with tobacco consumption might lead to societal changes, reducing demand and subsequently

affecting the cultivation area.

3. **Government Regulations and Policies:** Stringent regulations imposed by the government, such as increased taxation, advertising bans, or limitations on cultivation areas, could discourage farmers from growing tobacco.
4. **Diversification and Crop Alternatives:** Incentives or initiatives promoting crop diversification or offering support for alternative crops might encourage farmers to explore different agricultural options, leading to a reduction in tobacco cultivation area.
5. **Environmental Concerns:** Concerns about environmental impact, soil degradation, or water usage associated with tobacco cultivation might prompt farmers or regulatory bodies to discourage or limit its cultivation.
6. **Market Dynamics:** Fluctuations in global or domestic markets, changes in export-import policies, or shifts in consumer preferences can influence demand and subsequently impact the cultivation area for tobacco.
7. **Labour Intensity and Costs:** Tobacco cultivation might require intensive labor and specialized techniques. Changes in labor availability, costs, or difficulties in labor management could influence farmers to reduce tobacco cultivation.

These reasons, individually or collectively, contribute to the fluctuation or reduction in the production area of tobacco in India, reflecting a complex interplay of economic, social, environmental, and policy-related factors.

Conclusion:

The cultivation of tobacco in Karnataka stands as a testament to India's rich agricultural diversity and historical evolution in the realm of cash crops. Through centuries, the journey of tobacco, from its mysterious origins in the Andes to its global proliferation via European exploration, has transformed it into a vital commercial crop within India. This comprehensive exploration into Karnataka's tobacco cultivation encapsulates not only its historical roots but also its economic significance and the intricate landscape of production.

Tobacco's contribution to India's economy is substantial, injecting significant revenue into the national exchequer and supporting millions of livelihoods across the farming and processing sectors. Karnataka, with its diverse agro-climatic conditions, plays a pivotal role in this narrative, particularly in the cultivation of Virginia Flue-Cured tobacco, acclaimed for its export quality.

The fluctuating trends in tobacco cultivation over the past decade in Karnataka underscore the dynamic nature of this agricultural sector. Factors such as varying cultivation areas, production levels, and productivity highlight the complexities and challenges faced by tobacco farming in the state. District-wise data sheds light on regional disparities in cultivation patterns and productivity, emphasizing the need for a nuanced understanding of the diverse landscapes within Karnataka.

However, this article also acknowledges the limitations inherent in studying this subject. Relying on secondary data and focusing primarily on the background and trends of tobacco cultivation within Karnataka restrains the depth of analysis.

The reduction in the production area of tobacco in Karnataka reflects a multifaceted interplay of societal, economic, environmental, and regulatory dynamics. Shifts in cultivation patterns, increasing health awareness, government policies, market fluctuations, and concerns about labor and environmental impact contribute to this changing landscape.

In conclusion, this comprehensive article serves as a valuable reference, providing insights into the historical evolution, economic significance, and contemporary challenges surrounding tobacco cultivation in Karnataka. Understanding these dynamics is crucial for policymakers, agricultural stakeholders, and researchers to navigate the complexities and ensure sustainable agricultural practices in the cultivation of this significant cash crop.

References:

1. <https://tobaccoboard.com>
2. <https://tobaccoboard.com/publications.php>
3. https://ctri.icar.gov.in/for_origin.php
4. <https://www.jstor.org/stable/3741385>
5. <https://agritech.tnau.ac.in/agriculture/othercrops.html>
6. Chojar, Anil Kumar. *Tobacco Cultivation and Marketing*. New Delhi: Deep & Deep, 2002.
7. ———. *Tobacco Cultivation and Marketing*. New Delhi: Deep & Deep, 2002.
8. Hanafin, Joan, and Luke Clancy. "History of Tobacco Production and Use." In *Progress in Respiratory Research*, edited by R. Loddenkemper and M. Kreuter, 42:1–18. S. Karger AG, 2015. <https://doi.org/10.1159/000369289>.
9. <https://ctri.icar.gov.in/Digital%20library/Images/AINPT%20Annual%20Report%202021-22.Pdf>, n.d.
10. Kelley, W. D. "Physiological Differences among Isolates of *Phytophthora Cinnamomi*." *Canadian Journal of Microbiology* 21, no. 10 (October 1975): 1548–52. <https://doi.org/10.1139/m75-227>.