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Review Of Research

# "PRODUCTION AND MARKETING TRENDS OF COCONUT IN KARNATAKA STATE: AN ECONOMIC ANALYSIS."

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## ABSTRACT

This paper is an attempt to analyse economics of coconut production and marketing in major coconut producing districts of Karnataka state and state as a whole. India is the third largest producer of coconut followed by Indonesia and Philippines with maximum productivity at the global level. At present India is producing 20.44 billion nuts (23 percent of the total) from an area of 1.97 million hectares (2014-15). Karnataka state ranks second in the country by producing 5141.15 thousand million nuts from an area of 515.03 million hectares in 2014-15. In the state, year over year fluctuations are observed both in area, production and productivity. But growth in productivity is insignificant due to longer gestation period, lack of groundwater availability, low garden maintenance and so on. Further, because of Coconut Development Board initiatives, area under coconut crop expanded significantly. Districts namely, *Tumkur, Hasan, Chikmagalur, and Chitradurga* shared more than 43 percent of total state coconut production from 56 percent of the total coconut area under coconut cultivation. Further, Tiptur and Turuvekere talukas in Tumkur district are well-known for its contribution to the state coconut production and production of best grade 'milling copra' at the global level.

**KEYWORDS** :coconut production, lack of groundwater, Coconut Development.

## I. INTRODUCTION

Agriculture can work in concert with other sectors to produce faster growth, reduce poverty,

and sustain the environment. Agriculture is the largest and the most important sector of the Indian economy. It provides goods for consumption, for exports and for manufacturing sector. The share of agriculture (and Allied sector) to the country's GDP has gone down from more than 51 percent at the time of independence to nearly 13.9 percent (at constant 2004-05 prices) in 2013-14. Despite this, it provides employment to about 52.1 percent of the total work force of the country during 2005-06. Hence, even today agriculture sector occupies a key position in India's development planning and economic policies. Therefore agriculture is backbone of the Indian economy.

Of late, agriculture sector has become more diverse and there is more emphasis on cash crops particularly horticultural crops. India is bestowed with varied agro-climatic condition, which is highly favourable for growing a large number of horticultural crops. Plantation crops, are high value crops of great economic importance, which occupied third important place in the horticulture scenario of the country. The major plantation crops are, Coconut, Cashew nut, Areca nut, Cocoa, Oil palm, Tea, Coffee and Rubber. Of total plantation crops, Coconut accounted for 60.1 percent and 90.43 percent, (2007-08) of total production and area respectively in India.

Coconut, (Cocos nucifera L.), is grown in 93 countries in the world. Out of total only five major coconut growing countries of the world; Indonesia, Philippines, India, Brazil, and Sri Lanka contribute 99.66 percent to the world coconut production. India is the third largest producer of coconut followed by Indonesia and Philippines with maximum productivity at the global level.

At present India is producing 20.44 billion nuts (23 percent of the total) from an area of 1.97 million hectares (2014-15). In India total Coconut area is distributed among 18 states including Karnataka (second largest producer) and three union territories. This geographical area has 3000 years tradition in coconut cultivation. India has been known as the producer of best grade milling copra in the world yielding high-grade Coconut oil known for its aroma and flavour and now it is turned as the premier coir manufacturing country in the world. It is the source of permanent income to nearly 12 million farm families and contributes more than Rs. 10,000 crores to the country's GDP apart from an export earnings of Rs. 1,450.24 crores. Copra, de-husked coconut, tender coconut, and coconut shell command a great demand in view of their traditional, medicinal, industrial, and many other end uses. Besides this, each and every part of the tree is economically useful. Hence, it is called as the Kalpavriksha (Tree of Paradise) in India.

The contribution of coconut in manufacture of number of products, in employment generation, to GDP, to foreign exchange reserves, and etc, clearly shows its important contribution to the Indian economy in general and Karnataka economy in particular. Hence, the present study intended an in-depth analysis of economics of coconut production and marketing.

## II. MATERIALS AND METHODS

In India, Karnataka state ranked second both in terms of area and production of coconut. Hence, Karnataka state has been selected purposively for the study. In the state four major coconut growing districts namely Tumkur, Hasan, Chitradurga, and Chikmagalur were selected. Further, two major coconut growing talukas are selected from each selected districts for the present study. It is based on both primary and secondary data. In this connection yearly time series data on Area, Production, and Productivity from 2001-2015 (15 years) as well as cross sectional data was collected. Data was collected from Coconut Development Board, Min. of Agriculture and Statistics Govt. of India, District Statistical offices, and FAO publications and field survey, for detailed analysis of Coconut Production and Marketing.

In this study, tabular analysis, percentage, Simple diagrammes and pie-charts are employed to

draw meaningful conclusions.

## III. RESULTS AND DISCUSSIONS

### a) Production Trends of Coconut in India

India is a third largest country in the world in coconut production. It is clear from the table: 1 that Karnataka turned as the second largest state in the country by producing 5141.15 thousand million nuts from an area 515.03 million hectares in 2014-15. In the country four southern states of India namely Kerala, Karnataka, Tamil Nadu, and Andhra Pradesh jointly accounted for 90.11 percent of the coconut production from 87.86 percent coconut area in the country. Kerala stands first in area with lower yield of 7535 nuts/hectare and interestingly Tamil Nadu state has registered marked increase in production (6917.46 thousand million nuts) as well as in area (465.11 million hectares)under coconut with significant increase in yield 14873 Nuts/Hectare which is highest in the country.

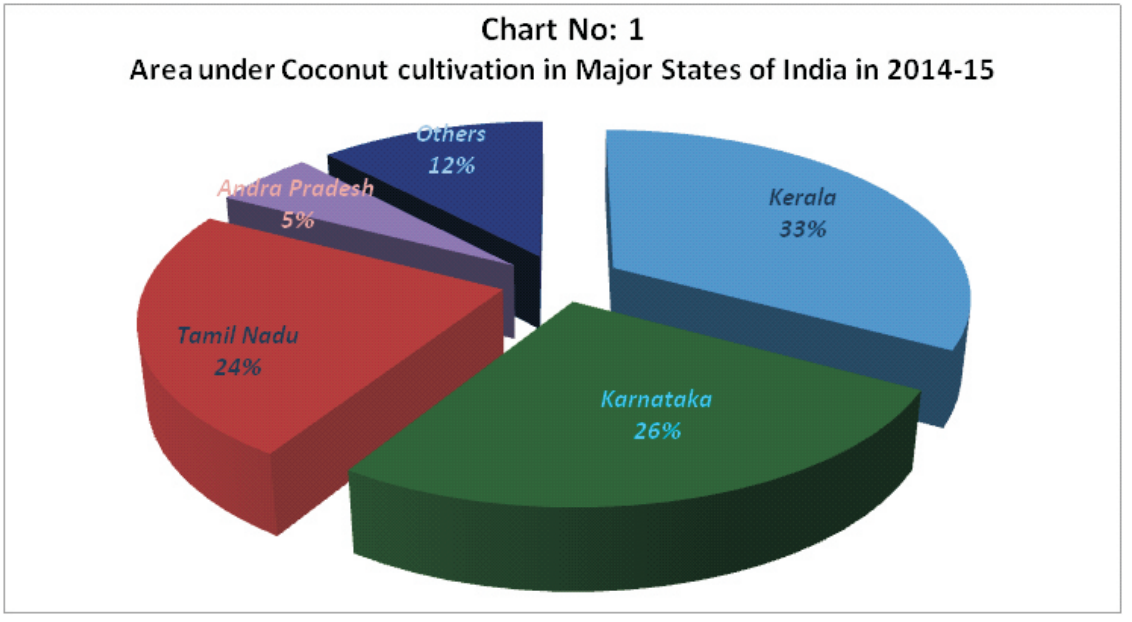
**Table: 1**
**Area, Production and Yield of Coconut in Respect of Major Coconut Producing States in India (2014-15)**

Area- 'Million Hectares'
Production- '000 Million Nuts'
'Yield- Nuts/Hectare'

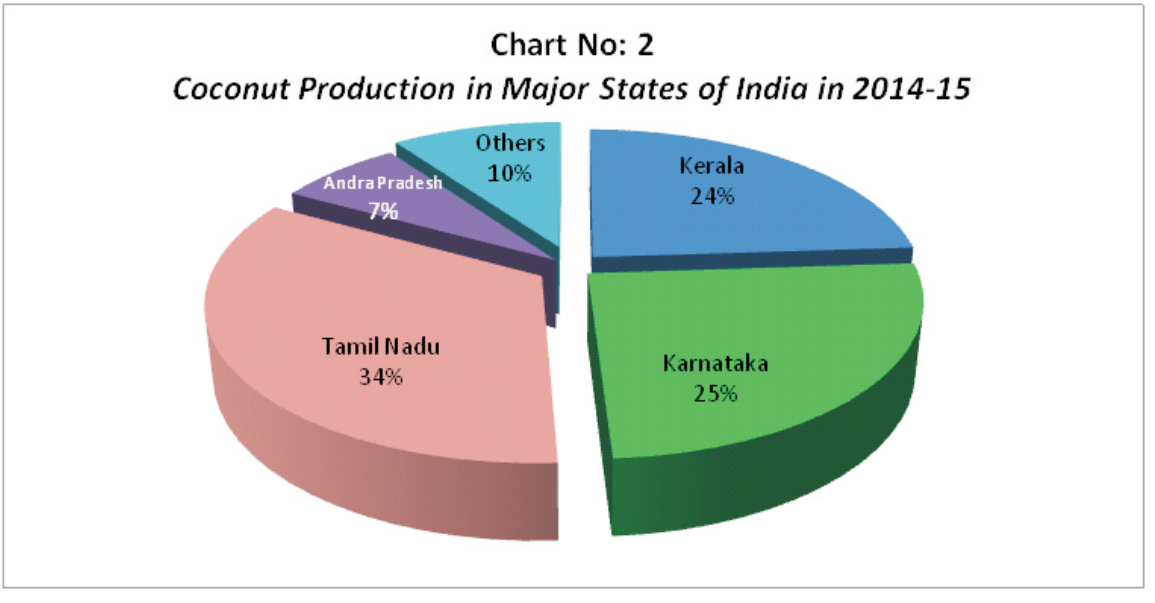
| States | Area | % Area to All India | Production | % Production to All India | Yield |
|---|---|---|---|---|---|
| Kerala | 649.85 | 32.89 | 4896.61 | 23.95 | 7535 |
| **Karnataka** | **515.03** | **26.07** | **5141.15** | **25.15** | **9982** |
| Tamil Nadu | 465.11 | 23.54 | 6917.46 | 33.84 | 14873 |
| Andra Pradesh | 105. 99 | 5.36 | 1463.56 | 7.16 | 13808 |
| Orissa | 50.68 | 2.56 | 324.89 | 1.59 | 6411 |
| Gujarat | 31.63 | 1.60 | 295.03 | 1.44 | 9328 |
| West Bengal | 29.41 | 1.48 | 372.23 | 1.82 | 12657 |
| Maharashtra | 28.1 | 1.42 | 187.44 | 0.92 | 6670 |
| Goa | 25.79 | 1.3 | 127.72 | 0.62 | 4952 |
| Others | 73.41 | 3.7 | 714.01 | 3.49 | -- |
| All India | 1975.81 | 100 | 20439.6 | 100 | 10345 |

Foot note: states have been arranged in descending order of percentage share of Area to the country.
Source: Coconut Development Board-Ministry of agriculture and statistics GOI.

It was observed from the chart-1 that in India, Karnataka state accounted 26.07 percent of the total area under coconut cultivation followed by Kerala (32.89 percent). Tamil Nadu is turning as a third largest state, covering an area of 23.54 percent of the total area under the crop in the country.




It was noticed in chart-2 that, in production of coconut Tamil Nadu state stands first accounting 34 percent of the total coconut production while Karnataka state occupies second by producing 25 percent of the total coconut production in the country. Further, share of the state to total coconut area in the country increased from 18.3 in 2000-01 to 26.06 in 2014-15.




### b) Production Trends of Coconut in Karnataka State

Karnataka state bestowed with varied agro-climatic conditions to produce varieties of crops. Interestingly, now farmers are shifting to produce commercial crops, due to high price risk, perishability in food crops. Coconut is one of the important commercial crops. In production of coconut Karnataka state ranks second in the country.

**Table: 2**

**Area, Production and Productivity of Coconut in Karnataka state**

Area- 'in Hectares'
Production- 'in Lakh Nuts'
'Productivity- Nuts/Hectare'

| *Years* | *Area* | *Production* | *Productivity* |
|---|---|---|---|
| 2000-01 | 333800 | 17542 | 5255 |
| 2001-02 | 369800 | 15036 | 4066 |
| 2002-03 | 375400 | 15253 | 4063 |
| 2003-04 | 376000 | 15291 | 4067 |
| 2004-05 | 385400 | 12096 | 3139 |
| 2005-06 | 385400 | 12098 | 3139 |
| 2006-07 | 401000 | 16250 | 4052 |
| 2007-08 | 405000 | 16350 | 4037 |
| 2008-09 | 419000 | 21760 | 5193 |
| 2009-10 | 419000 | 23398 | 5584 |
| 2010-11 | 419000 | 23398 | 5584 |
| 2011-12 | 511000 | 59153 | 11576 |
| 2012-13 | 513100 | 60589 | 11808 |
| 2013-14 | 517290 | 50412 | 9745 |
| 2014-15 | 515030 | 51412 | 9982 |

Source: Coconut Development Board-Ministry of agriculture and statistics GOI.

It has been observed from the table-2 that, over a period of time, area, and production of coconut increasing significantly in Karnataka state. Area under coconut cultivation was increased from 333800 hectares in 2000-01 to 515030 hectares in 2014-15. In the same year coconut production is increased from 17542 lakh nuts to 51412 lakh nuts. Year over year fluctuations are observed in productivity.

**Table: 3**

**Area, Production and Productivity of Coconut in Karnataka State**

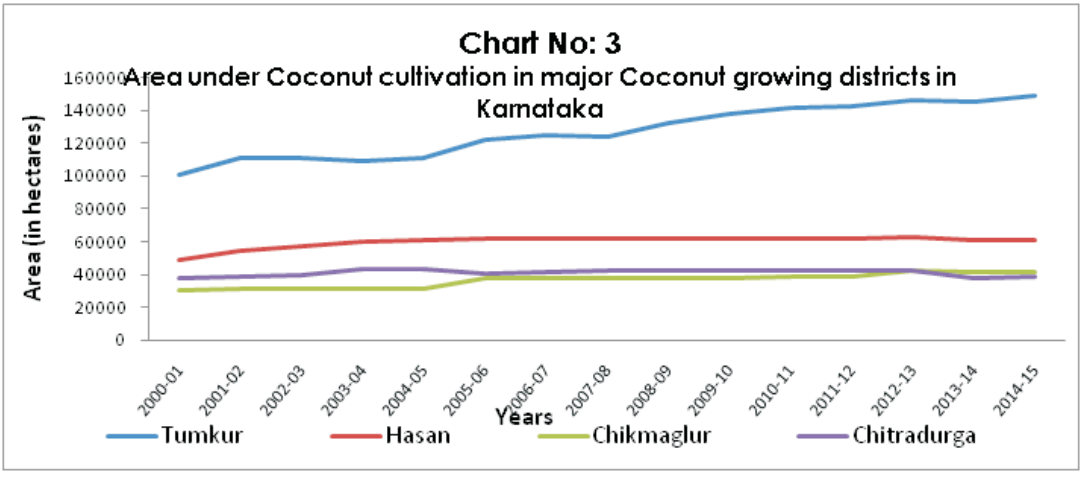
Area- 'in Hectares'
Production- 'in Lakh Nuts'
'Productivity- Nuts/Hectare'

| **Districts** | **2000-01** | | | **2014-15** | | |
|---|---|---|---|---|---|---|
| | *Area* | *Production* | *Productivity* | *Area* | *Production* | *Productivity* |
| Tumkur | 100810 | 6633 | 6580 | 149419 | 12837 | 8592 |
| Hasan | 49079 | 2717 | 5537 | 61019 | 3826 | 6271 |
| Chitradurga | 38162 | 2234 | 5853 | 38729 | 2979 | 7693 |
| Chikmagalur | 30161 | 760 | 2521 | 41329 | 2381 | 5761 |
| Others | 115588 | 5198 | -- | 224534 | 29388 | -- |
| **Karnataka State** | 333800 | 17542 | 5255 | 515030 | 51412 | 9982 |

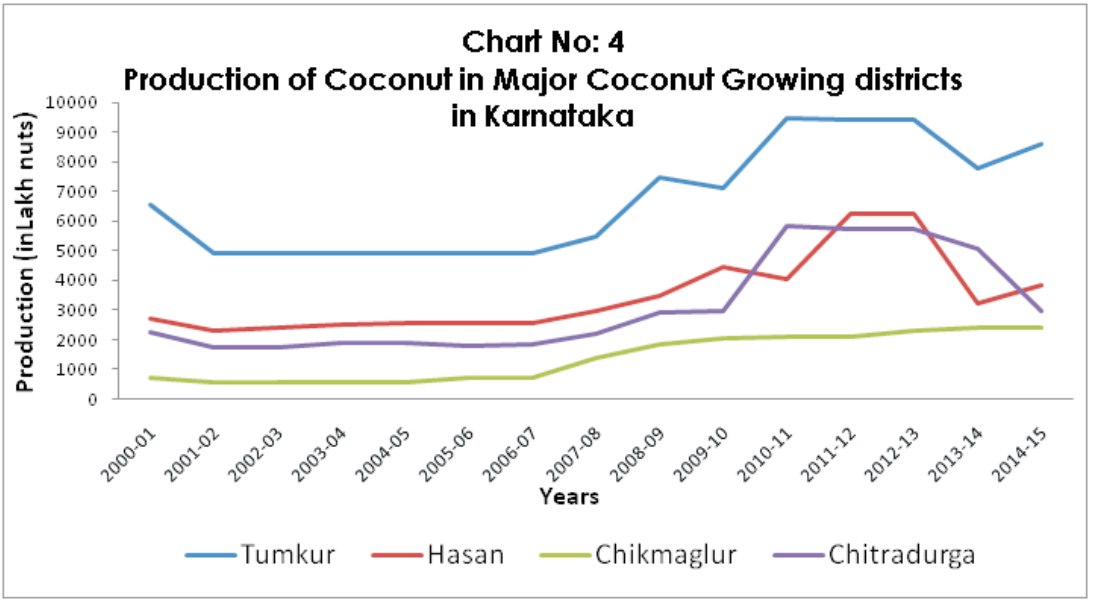
Source: Coconut Development Board-Ministry of Agriculture and Statistics GOI.

From the table-3, Tumkur has greater share in terms of both acreage as well as production of coconut crop in the state. The Tumkur district ranks first in the state by producing 12837 lakh nuts from an area of 149419 hectares in 2014-15. Further, total area was increased from 100810 hectares in 2000-

01 to 149419 hectares in 2014-15 and in the same year, production increased from 6633 lakh nuts to 12837 lakh nuts. Besides this, Tumkur, Hasan, Chikmagalur, and Chitradurga districts collectively contributed 56 percent to the total area and 43 percent to the total production of coconut of Karnataka in 2014-15.




It is observed from the chart-3 that, over a period of a time area under coconut cultivation in Tumkur district is increasing persistently. In Hasan district, growth in area is almost constant and significant increase in area is found in Chikmagalur district. Besides this, area under the said crop in Chikmagalur district expanding greater than that of Chitradurga district.




It is clear from the chart-4 that, all sample districts have witnessed constant increase in production of coconut from 2001-02 to 2007-08 and increased onwards. Further, Tumkur and Hasan districts have significant growth and Chitradurga district registering declining trend in production of the crop.

In Tumkur districts Tiptur and Turuvekere talukas have larger share in both area and production of the crop and these talukas producing best grade milling copra at the global level. In the same way Arasikere and Chanrayapatna gives larger contribution to the district acreage and production of the coconut in Hasan district. Further, in Chikamagalur district Kadur and Tarikere and in Chitradurga

district Hosadurga and Holalkere talukas have greater share in their respective districts.

### c) Coconut Marketing in Karnataka state

In the state Coconut produce is selling through different phases. Large farmers are getting better prices for their produce than that of small farmers, because of many intermediaries in the marketing process. Small farmers are getting loan from village traders or wholesalers or commission agents, on agreement to sell with lower price than market price. The following important marketing channels are identified they are,

1. Village Trader →Wholesaler →Processing unit →Retailer →Consumers,
2. Wholesaler →Processing unit →Retailer →Consumers.

Further, some producers are selling some part of the produce through 1st channel and rest of them through 2nd channel.

## IV. CONCLUSIONS

The present study found that, year over year fluctuations are observed both in area, production, and productivity in Karnataka state. But growth in productivity is insignificant due to longer gestation period, lack of groundwater availability, low garden maintenance and so on. Further, because of Coconut Development Board initiatives, area under coconut crop expanded significantly in the state. Major districts namely, Tumkur, Hasan, Chikmagalur, and Chitradurga shared more than 43 percent of total state coconut production from 56 percent of the total coconut area under coconut cultivation. Further, Tiptur and Turuvekere talukas in Tumkur district are well-known for its contribution to the state coconut production and production of best grade 'milling copra' at the global level.

Large farmers are getting better prices for their produce than that of small farmers, because of many intermediaries in the marketing process and small farmers are getting loan from village traders or wholesalers on agreement to sell produce to them with lower price than market price. Further second channel of marketing is beneficial for farmers.

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