

## INDIAN COFFEE PRODUCTION AND EXPORT DESTINATIONS: AN OVERVIEW



### Science

**KEYWORDS :** Coffee production, Rainfall, Export destination, Regional split-up

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### ABSTRACT

*Coffee is not just a drink. It is a global commodity. As one of the world's most traded products, second in value only to oil, the coffee industry employs millions of people around the world through its growing, processing and trading. While the coffee trade is vital to the politics, survival and economies of many developing nations, the industry's pricing and futures are decided in conference rooms and on stock exchange floors in some of the world's wealthiest cities. Climate change is threatening coffee crops in virtually every major coffee producing region of the world. Higher temperatures, long droughts punctuated by intense rainfall, more resilient pests and plant diseases, all of which are associated with climate change, have reduced coffee supplies dramatically in recent years. Indian coffee production is affected due to the continuous fall in rainfall affecting production and export. This study aims at determining the position of coffee production in general, with regard to region wise split-up, taking into account Indian geographical area and production units and export data*



### INDIAN COFFEE

Coffee is grown in three regions of India with Karnataka, Kerala and Tamil Nadu forming the traditional coffee growing region of South, followed by the new areas developed in the non-traditional areas of Andhra Pradesh and Orissa in the eastern coast of the country and with a third region comprising the states of Assam, Manipur, Meghalaya, Mizoram, Tripura, Nagaland and Arunachal Pradesh of North-eastern India, popularly known as "Seven Sister States of India".

Indian coffee, grown mostly in southern India under monsoon rainfall conditions, is also termed as "Indian Monsoon Coffee". Its flavour is defined as: "The best Indian coffee reaches the flavour characteristics of Pacific coffees, but at its worst it is simply bland and uninspiring". The two well known species of coffee grown are the Arabica and Robusta, the first varieties that were introduced in the Baba Budan Giri hill ranges of Karnataka in the 17<sup>th</sup> century.

### Coffee Board of India

The Coffee Board of India is engaged in research, development, extension, quality upgrade, market information, and domestic and international promotion of Indian coffee. Since 2002, the Coffee Board has been conducting the India International Coffee Festival, a biennial event held in India, in collaboration with other stakeholders in the coffee sector. India is one of the few countries in the world that have initiated research efforts in coffee with an objective of providing technical guidance to the planting community. The United Planters Association of South India (UPASI) established in 1892, took first major step in organizing research efforts to tackle various pests and diseases afflicting the coffee plantations.

### Future outlook of Indian Coffee Industry

The humble cup of coffee that cheers up mood, initiates conversation and relaxes you from a tiring day is brewing up a storm in India. The Indian ready-to-drink (RTD) tea and coffee market has picked up a great business in the last 5 years. Reports say that the market is expected to grow to a whopping Rs 2,250

crores by 2017- thanks to the cafe culture among urban youth. The domestic market, which currently stands at an estimated Rs 1,100 crore, is dominated by outlets like Cafe Coffee Day, Baristas, Costa Coffee, Coffee World, Lavasa, Coffee Bean & Tea Leaf. The latest entrant is Starbucks, with many more in the pipeline. More than 1,200 cafes have sprung up across India in the past decade, mostly from six organized chains, clocking an average annual growth of around 40 percent. They have made the cafe industry - currently capped at Rs1,000 crores - one of the fastest growing organized retail segments.

### NEED FOR THE STUDY

Indian coffee has created a niche for itself in the international market and the Indian Coffees are earning high premium, particularly Indian Robusta which is highly preferred for its good blending quality. Arabica Coffee from India is also well received in the international market. The Indian coffee market is recently affected due to a fall in production due to lack of rainfall. The study aims at determining the current market position of coffee production in general with regard to region wise split-up.

### OBJECTIVES OF THE STUDY

- To determine the overall production quantity of coffee in India and region wise split up
- To spot the key markets and export destination of coffee and determine the export increase or decline trend
- To sum up the future of coffee market and determine the post blossom coffee crop forecast

### COFFEE PRODUCTION IN INDIA

The primary coffee growing regions of India are Karnataka, Kerala and Tamil Nadu forming the traditional coffee growing region of South, followed by the new areas developed in the non-traditional areas of Andhra Pradesh and Orissa in the eastern coast of the country and with a third region comprising the states of Assam, Manipur, Meghalaya, Mizoram, Tripura, Nagaland and Arunachal Pradesh of North-eastern India.



**Table 1: Production of Coffee in Major States/Districts of India (in MTs)**

STATE/TYPE OF COFFEE AND PRODUCTION QTY	Post Blossom Estimation 2014-15			Final Estimate 2013-14		
	Arabica	Robusta	Total	Arabica	Robusta	Total
<b>Karnataka</b>						
Chikmagalur	41,170	40,000	81,170	38,250	30,640	68,890
Kodagu	20,150	113,000	133,150	21,040	90,820	111,860
Hassan	19,380	14,600	33,980	19,150	11,200	30,350
Sub total	80,700	167,600	248,300	78,440	132,660	211,100
<b>Kerala</b>						
Wayanad	0	57,900	57,900	0	56,425	56,425
Travancore	900	7,300	8,200	900	6,700	7,600
Nelliampathies	1,175	1,600	2,775	1,100	1,550	2,650
Sub total	2,075	66,800	68,875	2,000	64,675	66,675
<b>Tamil Nadu</b>						
Pulneys	7,575	375	7,950	6,975	325	7,300
Nilgiris	1,600	3,775	5,375	1,800	3,950	5,750
Shevroys (Salem)	2,700	50	2,750	3,875	50	3,925
Anamalais (Coimbatore)	1,300	500	1,800	1,300	500	1,800
Sub total	13,175	4,700	17,875	13,950	4,825	18,775
<b>Non Traditional Areas</b>						
Andhra Pradesh	8,790	70	8,860	7,250	70	7,320
Orissa	620	0	620	440	0	440
Sub Total	9,410	70	9,480	7,690	70	7,760
<b>North Eastern Region</b>	140	80	220	120	70	190
<b>Grand Total (India)</b>	<b>105,500</b>	<b>239,250</b>	<b>344,750</b>	<b>102,200</b>	<b>202,300</b>	<b>304,500</b>

**Final estimation of coffee production for 2013-14 and Post blossom forecast for the year 2014-15**

Every year the Coffee Board carries out estimation of coffee crop production at two stages viz., post-blossom stage (May/June) and post-monsoon stage (Nov/Dec) to forecast the coffee crop and finally estimates the actual production in May/June of a year for the previous financial year. Accordingly, the Coffee Board has carried out the Post Blossom coffee crop estimation for the current year (FY 2014-15) and also the final harvested crop estimates for the previous year (FY 2013-14).

At the first estimate at post-blossom stage for 2013-14 season crops, a higher crop was expected as the crop condition was good with favourable weather conditions of normal blossom and backing showers in all most all the coffee growing areas. However, coffee areas witnessed a long period of drought after receiving blossom showers, followed by an extremely harsh monsoon. As such before the onset of monsoon, there was a heavy proliferation of White Stem Borer because of the long period of drought in the months of April/May and the subsequent heavy monsoon rains damaged Robusta crop leading into wet feet conditions; fruit droppings; low fruit to clean coffee out-turns resulted in decline in actual crop harvested and thus the final crop estimate for the year 2013-14 is placed at 304,500 MT, which showed a decrease of 7,000 MT (-2.25%) over the post monsoon estimate of 311,500 MT.

**Karnataka**

Of the total final estimate of 304,500 MT, the share of Arabica is

102,200 MT and that of Robusta is 202,300 MT. The production of Arabica has shown a marginal increase of 200 MT (0.20%) while Robusta decreased by 7,200 MT (-3.44%) over the post-monsoon estimate made before crop harvesting in 2013. The loss in production has mainly come from Karnataka. The final crop estimate for Karnataka is placed at 211,100 MT for 2013-14 with a break up of 78,440 MT of Arabica and 1,32,660 MT of Robusta. The final production in Karnataka has shown a decline of 6,600 MT (-3.03%) over the post-monsoon estimate which is mainly due to decline in Robusta production by 6,510 MT (-4.68%). Among the districts, the major decline in production is seen in Kodagu district with 4,715 MT (-4.04%) followed by 1,610 MT in Chikmagalur (-2.28%) and 275MT in Hassan (-0.90%) districts.

**DOMESTIC PRODUCTION**



**Kerala**

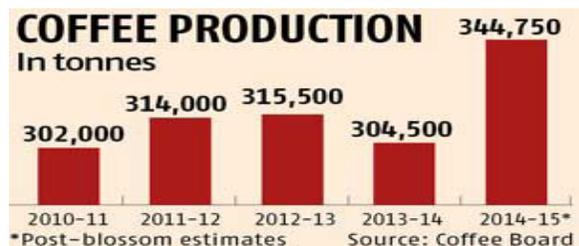
In Kerala, the final estimate of 2013-14 is placed at 66,675 MT with a marginal decline of 600 MT (-0.89%) from the post monsoon estimate of 67,275 MT mainly seen in the Mananthavady (-6.45%), Kattapana (-2.29%) and Vandeperiyar (-2.29%) zones.

**Tamil Nadu**

The Tamil Nadu final production of 2013-14 is placed at 18,775 MT which is a marginal decline of 100 MT over the post monsoon estimate of 18,875 MT.

**Non-traditional Areas and North India**

In the Non-Traditional Areas and North Eastern Region, the final estimate of 2013-14 is placed at 7,950 MT against post monsoon estimate of 7,650 MT. The higher forecast has come mainly from Andhra Pradesh which showed an increase of 300 MT (4.32%) of Arabica Production.



**Table 2: Executive view of Coffee Market**

	2012/2013		2013/2014		2014/2015	
	Market Begin:	Year	Market Begin:	Year	Market Begin:	Year
Coffee, Green	Oct 2012		Oct 2013		Oct 2014	
India	USDA	New	USDA	New	USDA	New
	Official	Post	Official	Post	Official	Post
Area Planted	411	415	410	411		410
Area Harvested	370	376	370	370		370
Bearing Trees	568	568	568	568		568
Non-Bearing	64	64	64	64		64
Trees						
Total Tree	632	632	632	632		632
Population						

Beginning Stocks	1,421	1,473	1,527	2,000	1,830
Arabica	1,643	1,643	1,650	1,667	1,617
Production					
Robusta	3,660	3,660	3,475	3,333	3,513
Production					
Other Production	0	0	0	0	0
Total Production	5,303	5,303	5,125	5,000	5,130
Bean Imports	1,175	1,130	925	1,000	1,018
Roast & Ground Imports	3	3	2	2	2
Soluble Imports	30	31	15	28	20
Total Imports	1,208	1,164	942	1,030	1,040
Total Supply	7,932	7,940	7,594	8,030	8,000
Bean Exports	3,750	3,406	3,675	3,630	3,660
Rst - Grnd Exp.	5	3	5	3	3
Soluble Exports	1,500	1,431	1,475	1,367	1,437
Total Exports	5,255	4,840	5,155	5,000	5,100
Rst, Ground Dom.	800	750	770	770	750
Consum					
Soluble Dom.	350	350	430	430	430
Cons.					
Domestic Use	1,150	1,100	1,200	1,200	1,180
Ending Stocks	1,527	2,000	1,239	1,830	1,720
Total Distribution	7,932	7,940	7,594	8,030	8,000
1000 HA, MILLION TREES, 1000 60 KG BAGS					

**Production:** Marketing year (MY) 2014/15 (Oct/Sep) coffee production is forecast at 5.1 million 60 kg bags. The 2014/15 crop is expected to be slightly higher than the revised 2013/14 production estimate on account of higher Robusta crop production as the crop enters its 'on-year' in the production cycle. Robusta is the more popular variety and constitutes 70 percent of the coffee production in India. The Arabica crop is entering the 'off-year' of the biennial production cycle and is expected to bear a lower fruit than last year. Traditionally, the harvest of Arabica takes place from November to January, while for Robusta harvest is December to February.

Coffee production in marketing year (MY) 2013/14 (Oct/Sep) is estimated 100,000 60 kg bags lower at 5.0 million 60 kg bags, well below the previous Coffee Board pre and post monsoon estimates of 5.8 and 5.2 million 60 kg bags respectively. Prolonged dry weather from mid-March harmed plant development and an unusually wet 2013 monsoon with continuous rains for more than 60 days led to berry droppings, defoliation, and the emergence of certain fungal diseases. Government of India rainfall data indicates that rainfall amounts in southern interior Karnataka, which accounts for 70 percent of total production, were 25 percent higher than normal during the monsoon season. These heavy rains in key growing regions appear to have reduced yields of the Robusta crop in particular. Trade sources indicate that the quality of beans that were harvested was good and there were no issues in marketing the crop. The Coffee Board's final estimate for the harvested crop will be released at the end of May.

**Area:** India accounts for about four percent of world coffee production and exports. Production is mostly confined to the southern states of Karnataka, Kerala, and Tamil Nadu which account for 85 percent of planted area. The non-traditional lower-yielding areas of Andhra Pradesh, Orissa, and north-eastern have seen a marginal increase in area, but planted area in these states is limited. With coffee estates in close proximity to protected forest reserves, there is limited opportunity for further area expansion. Growers are gradually shifting towards replanting to replace their aging plantations at an annual rate of 2-3 percent per year which leaves a difference of approximately 40,000 ha between harvested and planted area. Area harvested and plant inventory estimates remain unchanged.

**Inputs:** Recent increases in the cost of farm inputs, along with the elimination of subsidies for fertilizer and diesel, have increased production costs for growers. Labour costs, which account for more than 50 percent of the cost of cultivation, continue to escalate, with increasing off-farm employment.

**THE KEY MARKETS AND EXPORT DESTINATIONS OF INDIAN COFFEE**

Coffee in India is grown in one of the world's rainiest inhabited region that receives 2,500 to 4,000 mm rainfall spread over 100 days, followed by more than 100 days of continuous dry period. Indian coffee is grown under a thick natural shade. This is one of the 25 biodiversity hotspots of the world and is home to a large diversity of butterflies (331 species), amphibians (121 species), reptiles (157 species), birds (508 species) and mammals (120 species), and is flanked by orchids and a large number of medicinal and aromatic plants.

**Key Markets and Export Destinations**

- India is the seventh largest coffee producer in the world and the third largest in Asia
- In 2013-14, India's coffee exports stood at 313,025 metric tonnes, generating a revenue of US\$ 793.22 million
- India exports coffee to over 45 countries, over 50 per cent of Indian exports in 2013-14 headed to Europe
- Italy is the largest market importing more than 25 per cent from India, followed by Germany, Belgium, Turkey and the Russian Federations.

**Table 3: Exports of coffee from India by countries**

Sl.No.	Destination	Quantity (In MTs)		
		2010-11	2011-12	2012-13
1	ITALY	80653	71010	75554
2	GERMANY	33371	38138	24855
3	R U S S I A N FEDERATION	29978	33112	24770
4	BELGIUM	18236	18900	19907
5	SPAIN	11043	13451	6650
6	U.S.A.	6985	6157	6078
7	JORDAN	5927	9436	7389
8	SLOVENIA	5154	9629	13388
9	GREECE	5122	6848	6468
10	SWITZERLAND	4808	3455	3499
11	FINLAND	4787	5638	5332
12	CROATIA	4507	2132	1902
13	FRANCE	4424	3232	3121
14	EGYPT	4349	5598	3031
15	UKRAINE	4300	4784	6188
16	PORTUGAL	4207	3293	2942
17	ISRAEL	4085	3716	3574
18	AUSTRALIA	4035	4819	6003
19	MALAYSIA	4019	6259	8278
20	SINGAPORE	3857	3587	2109
21	OTHERS	55931	79987	67025
	TOTAL	299778	333181	298063

Source: Coffee Board of India

Table 3 shows that the exports of coffee from India have not been consistent during the past few years. Among the top 20

countries to which India has been exporting coffee in large quantities in the past few years, only Belgium, Slovenia, Ukraine, Australia and Malaysia show consistent increase in the quantities exported. The total exports have increased in the financial year 2011-12 when compared to 2010-11. However, in 2012-13 the total coffee exports have decreased when compared to exports in both the previous financial years 2010-11 and 2011-12.

#### Coffee exports from India dipping as rains shrink harvest

Coffee shipments from India being the Asia's third-largest grower, are poised to fall this year as a rally in global prices deters buyers from Italy to Russia and after unseasonal rains and bad climatic conditions affecting the primary production in various states of India followed with a low output for the first time in six years. Exports declined as much as 10 per cent from 312,756 tonne in 2013. The harvest probably dropped below 300,000 tonne in the 12 months started October 1 from a record 318,200 tonne a year.

#### Coffee exports in India drops at 6% for the August quarter

- Indian coffee exports have dipped nearly 6 percent for the eight-month period that ended August 2014 following a squeeze in supply and lazy demand
- The demand is expected to pick up in the coming months; growers fear that the inclement weather will pull down production
- Coffee export figures touched 2,22,297 tonne by end of August which is 5.5 percent lower over the same period last year
- Exports showed a rise in the initial months because of increased shipments of Arabica, but the shipments have slowed down after April.

#### POST BLOSSOM COFFEE CROP FORECAST FOR THE YEAR 2014-15

At the time of carrying out assessments for the post blossom forecast for the current year 2014-15, it was observed that the blossom showers were by and large adequate though the distribution of these showers was not uniform and there was a slight delay in receiving the backing showers in certain pockets. However, after the blossom showers, coffee areas witnessed an abnormally long dry period. It may further be noted that this is the second successive year when coffee areas are facing long dry spell followed by blossom showers. Due to the prolonged dry spell, the Arabica areas witnessed heavy infestation of Coffee White Stem Borers resulting in crop loss in Arabica. Further 2014-15 is an on year for Robusta crop which had suffered because of excessive rainfall during the previous year 2013-14. The continuing dry spell will have a negative impact on the development of coffee berries.

#### South India has raised the hope for a better production

Widespread blossom showers in major coffee-growing regions in south India have raised hopes of a better crop this year. Most of the growing regions in Chikmagalur, Kodagu and Hassan districts of Karnataka, which account for 70 per cent of India's coffee

production, received good rain in March and April. Planters say satisfactory blossom showers in these two months is crucial for a good crop, adding the growing regions, except parts of south Kodagu, received 20.3-25.4 cm of rains. Going by current trends, the 2014-15 coffee crop could stand at about 310,000 tonnes, a 10-11 per cent rise compared to last year. While the Karnataka Planters Association (KPA), an organisation of coffee growers, has estimated the harvested crop for 2013-14 at 280,000 tonnes, coffee traders have estimated it at 290,000 tonnes.

COFFEE OUTPUT (In tonnes)			
Year	Arabica	Robusta	Total
2007-08	92,500	169,500	262,000
2008-09	79,500	182,800	262,300
2009-10	94,600	195,000	289,600
2010-11	94,140	207,860	302,000
2011-12	101,500	212,500	314,000
2012-13	98,600	219,600	318,200
2013-14*	90,000	190,000	280,000
2014-15**	80,000	230,000	310,000

\*Harvest estimates by Karnataka Planters' Association (KPA)  
\*\*Predictions by KPA for 2014-15  
Source: Coffee Board and KPA

The Coffee Board is yet to come out with its estimate for the harvested crop. "The growing regions have, more or less, received satisfactory rains. Currently, the plantations are in the pinhead development stage. The conditions are favourable for the Robusta crop and, compared to last year, when we witnessed very high temperatures during April and May, the situation is better this year." Production for 2014-15 could be about 310,000 tonnes, adding what had dampened the picture was a white stem borer pest attack at many growing regions.

#### CONCLUSION

Coffee production is dependent on the climatic conditions and rain fall. The past years have shown a declining trend in coffee production due to lack of rainfall. The post blossom coffee forecast has also shown a negative sign that the continuing dry spell will have a negative impact on the development of coffee berries for the up-coming year. Coffee production in India largely occurs on small, family-owned farms. A long-term increase in the number of extreme and unseasonal rainfall events will lead to lowered crop yields, threatening the livelihood of Indian coffee worker and will affect their employment. Italy, Germany, Russian Federation, Belgium, Spain, U.S.A., Jordan, Slovenia, Greece, Switzerland, Finland, Croatia, France, Egypt, Ukraine, Portugal, Israel, Australia, Malaysia and Singapore have been the top twenty countries of Indian coffee exports in the past. However, the export of coffee has shown a shrink due to lack of rainfall which has a direct effect on production and export.

## REFERENCE

- Akarsha, B.M. (2009): Farm Labour in the Indian Coffee Sector: Emerging Challenges for Factor Intensive Systems in Karnataka, Master Thesis, Humboldt university of Berlin. | Amalie, K. (2008): A Value Chain Analysis of the Coffee Sector: A Fair Share for Coffee Farmers?, Master Thesis, Development and International Relations, Aalborg University. | DSOUZA, G.L. 1971, Crop losses on coffee estates in South India. *Indian Coffee*, 35: 505-508. | KANTHARAJU, 1989, A study on adoption of improved practices of coffee and cardamom by small farmers in Hassan district of Karnataka. M.Sc.(Agri.) thesis, University of Agricultural Sciences, Bangalore. Coffee Board of India. (2011): Database on Coffee, March 2011 | Karnataka J. Agric. Sci., 19(4): (960-962) 2006 Constraints in Production and Marketing of Coffee in Chikmagalur District, Karnataka | Bosselmann, A. S., et al. (2009). "The influence of shade trees on coffee quality in small holder coffee agroforestry systems in Southern Colombia." *Agriculture, ecosystems & environment* 129(1): 253-260. | www.indiacoffee.org. | www.indiacoffee.org | http://www.knowindia.net/coffee.html | http://coffee.wikia.com/wiki/Coffee\_industry\_of\_India | http://www.ibef.org/exports/coffee-industry-in-india.aspx | http://timesofindia.indiatimes.com/topic/Coffee-Board-of-India