



Research Paper

Export Performance of Karnataka State

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Abstract

In the development of any nation, business plays multiple roles by contributing to the economic, social and environmental aspects. Export offers an opportunity to earn foreign exchange which further leads to strengthen the domestic economy. Exports also provide an additional sales and revenue for a businessman over domestic business. Karnataka has secured and maintained its position as the 4th largest exporting state in the country during 2014-15 to 2018-19. Karnataka state has a very long tradition of international business in the form of import and export. Karnataka has been a major exporter of commodities like coffee, spices, silk, cashew nuts, handicrafts and agarbatti historically. The main purpose of this study is to explore the export profile of the Karnataka state specially related to export of goods. This study is based on secondary data. Simple Percentage, Mean, Standard deviation, Ranks and One Way ANOVA have been used for analyzing the data. Least square method is also adopted to determine the trend values. The study reveals that software / service export from Karnataka has an increasing trend while export of merchandise/ goods has a declining trend. A significant difference also existed among the various selected exports of goods.

Key Words: Export, Karnataka, Merchandise

Business plays multiple roles in the development of a nation as it contributes to the development of economic, social and environmental aspects. Business has two broad levels like domestic business and international business which meet the different needs of the country/state. Import and export are the two faces of international trade. Imports are essential for getting the raw material, technology and finished goods at a cheaper rate than the production made locally. Export offers an opportunity to earn foreign exchange which further leads to strengthen the domestic economy. Exports also provide an additional sales and revenue to the businessman over domestic business. Karnataka has secured and maintained its position as the 4th largest exporting state in the country during 2014-15 to 2018-19¹. Karnataka state has a very long tradition of international business in the form of import and export. Karnataka has been a major exporter of commodities like coffee, spices, silk, cashew nuts, handicrafts and agarbatti in olden days. Nowadays, the State has emerged as a major exporter of software service, engineering goods, readymade garments, leather goods, chemicals, minerals and ores. Karnataka's exports amounted to about Rs. 545780 crore in 2017-18 which represented about 18.05% of the Country's exports in the year. The share of merchandise exports in the national exports constitutes around 6.00% and software / service exports around 39% for the year 2017-18². It can undoubtedly be quoted that the Karnataka state has a remarkable journey in its export performance and become an export hub in the coming future. Therefore, with this background, researcher has felt necessary to analyse the export performance of the state. The objectives, research methodology adopted and the analytical part of the study are going to be presented in the following paragraphs.

OBJECTIVES OF THE STUDY: The main purpose of this study is to explore the export profile of the Karnataka state. In order to achieve the main objective following supportive objectives also formulated.

1. Department of Commerce and industry (2020), Export Strategy of Karnataka 2020, <https://vtpc.karnataka.gov.in/storage/pdf-files/Export%20Strategy%202020.pdf> Page 2
2. ² Karnataka State economic Survey 2018-19 <https://karnataka.gov.in/storage/pdf-files/ESR%202018-19%20English.pdf> Page 123

- ❖ To analyze the export share of goods and services of Karnataka
- ❖ To study the most valued merchandise exports of Karnataka

RESEARCH METHODOLOGY: The present study is based on secondary data which is desk-research in its nature. The secondary data has been collected from various books, reports and websites for four financial years from 2016-17 to 2019-20. Based on the export values, top 14 categories of goods were selected for study. Simple Percentage, Mean, Standard Deviation, Ranks and *One Way ANOVA* techniques have been used for analyzing the data. Least square method has been used to find the trend values. In addition, the study has a major hypothesis which is stated below.

H₀: There is no significant difference in the export value of merchandised goods

H₁: There is no significant difference in the export value of merchandised goods

ANALYSIS AND INTERPRETATION: Karnataka is one of the fast growing business hub in India.. The natural resources, policy incentives and infrastructure in the state favor investments in the IT/ITeS, biotechnology, engineering, electronics, automotive, textiles, agriculture and food-processing sectors. Karnataka State holds 4th position in the export performance. Table No.-1 and Figure No.-1 show the total amount of Service Exports and Merchandise Exports made by Karnataka from 2016-17 to 2019-20.

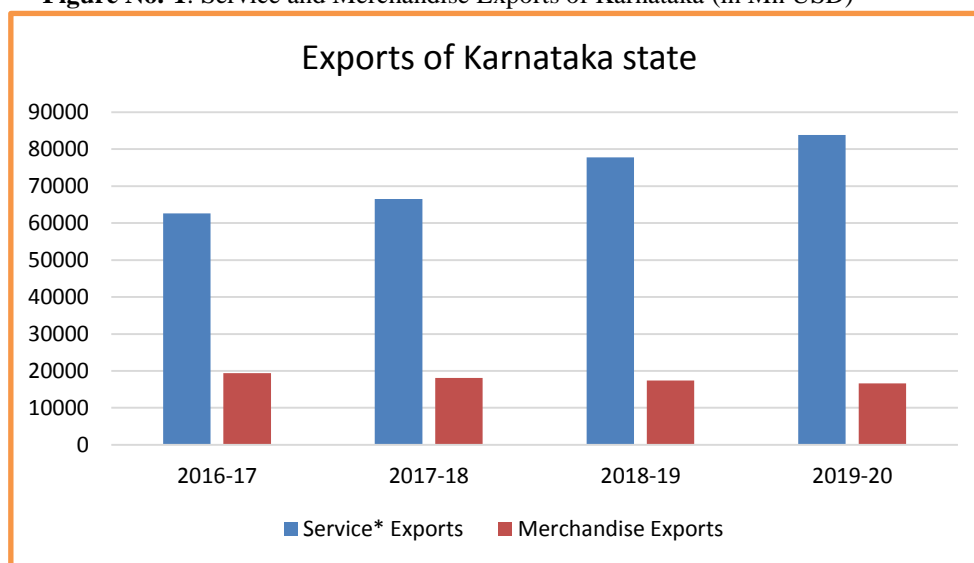
Table No.-1: Service and Merchandise Exports of Karnataka (in Mn USD)

Year	Service Exports	Merchandise Exports	Total
2016-17	62666.37 (76.36)	19404.61 (23.64)	82070.98 (100.00)
2017-18	66564.77 (78.67)	18052.30 (21.33)	84617.07 (100.00)
2018-19	77808.80 (81.75)	17371.33 (18.25)	95180.13 (100.00)
2019-20	83876.64 (83.44)	16642.08 (16.56)	100518.72 (100.00)
TOTAL	290916.58 (80.28)	71470.32 (19.72)	362386.90 (100.00)
Mean	72729.15	17867.58	90596.73
Standard Deviation	9820.53	1175.40	8715.85
Slope	+7487.48	-896.86	+6590.63
Trend	Increasing	Decreasing	Increasing

Note: Figures in the brackets represent percentage on year-wise total

Source: <https://tn.data.gov.in/resource/export-data>

Figure No.-1: Service and Merchandise Exports of Karnataka (in Mn USD)



The aforesaid table and figure reveal that the Karnataka state made exports of 362386.90 Million USD of which includes the merchandise exports to the tune of 71470.32 Million USD with 19.72% and service export to the tune of 290916.58 Million USD with 80.28%. Total export of Karnataka state had an increasing trend with a slope of +6590.63 Million USD yearly. The average of merchandise export shows 17867.58 ± 1175.40 Million USD which has a decreasing trend with slope of - 6590.63 Million USD yearly. As far as Service Export is concerned, the average value is 72729.15 ± 9820.53 Million USD which shows an increasing trend with a slope of +7487.48 Million USD yearly.

Merchandised Exports includes the fourteen major goods. They are: Engineering, Petroleum Readymade Garments, Chemicals, Pharmaceuticals and Cosmetics, Gems and Jewellery, Agriculture and Processed Food Aerospace, Coffee, Automobile, Iron Ore and Minerals, Handicrafts, Marine Products, Plastics Goods, Cashew and Cashew Kernals and Others. Table No.-2A and Table No.-2B show the export values of merchandised goods and the analytical values in terms of mean, standard deviation, slop and trend respectively.

Table No.-2A: Goods involved in Merchandise Exports of Karnataka (in Mn USD)

Type of goods	2016-17	2017-18	2018-19	2019-20	Total
Engineering	4093.65	4740.67	4774.33	5262.7	18871.35
Petroleum	1713.51	2235.53	3576.54	2555.12	10080.70
Readymade Garments	2174.98	2351.9	2276.44	2218.23	9021.55
Chemicals, Pharmaceuticals and Cosmetics	1930.33	2230.1	1756.7	1843.8	7760.93
Gems and Jewellery	5256.38	1586.95	81.47	49.83	6974.63
Agriculture and Processed Food	629.69	653.89	718.98	724.31	2726.87
Aerospace	450.32	600.39	428.36	425.43	1904.50
Coffee	491.1	575.01	447.4	390.84	1904.35
Automobile	406.12	459.95	507.3	489.35	1862.72
Iron Ore and Minerals	136.17	268.88	302.34	312.43	1019.82
Handicrafts	166.67	168.88	206.92	191.19	733.66
Marine Products	157.32	187.78	182.27	147.58	674.95
Plastics Goods	133.47	153.09	195.43	172.46	654.45
Cashew and Cashew Kernals	150.63	188.42	121.47	112.7	573.22
Others	1514.27	1650.86	1795.38	1746.11	6706.62
Total	19404.61	18052.3	17371.33	16642.08	71470.32

Source: <https://tn.data.gov.in/resource/export-data>

Table No.-2B: Analytical Values of Goods involved in Merchandise Exports of Karnataka

Type of goods	Total	Mean	Std. Dvn.	Slope	Trend
Engineering	18871.35	4717.84	479.65	354.08	Increase
Petroleum	10080.70	2520.18	785.04	386.58	Increase
Readymade Garments	9021.55	2255.39	76.60	5.43	Increase
Chemicals, Pharmaceuticals and Cosmetics	7760.93	1940.23	205.84	-73.30	Decrease
Gems and Jewellery	6974.63	1743.66	2449.20	-1712.51	Decrease
Agriculture and Processed Food	2726.87	681.72	47.20	34.90	Increase
Aerospace	1904.50	476.13	83.58	-24.67	Decrease
Coffee	1904.35	476.09	77.68	-42.84	Decrease
Automobile	1862.72	465.68	44.24	29.70	Increase
Iron Ore and Minerals	1019.82	254.96	81.35	56.22	Increase
Handicrafts	733.66	183.42	19.19	11.16	Increase
Marine Products	674.95	168.74	19.35	-3.47	Decrease
Plastics Goods	654.45	163.61	26.52	15.93	Increase
Cashew and Cashew Kernals	573.22	143.31	34.17	-18.07	Decrease

Others	6706.62	1676.66	123.77	84.00	Increase
Total	71470.32	17867.58	-	-	-

Source: <https://tn.data.gov.in/resource/export-data>

Table No. 2A and 2B reveal that the *Engineering* goods occupy the highest export value to the tune of 18871.35 Million USD with an average value of 4717.84 ± 479.65 during the study period followed by *Petroleum* (10080.7 Million USD with an average value of 2520.18 ± 785.04), *Readymade Garments* (9021.55 Million USD with an average value of 2255.39 ± 76.6), *Basic Chemicals, Pharmaceuticals & Cosmetics* (7760.93 Million USD with an average value of 1940.23 ± 205.84), *Gems & Jewellery* (6974.63 Million USD with an average value of 1743.66 ± 2449.2), *Agriculture and Processed Food* (2726.87 Million USD with an average value of 681.72 ± 47.2), *Aerospace* (1904.5 Million USD with an average value of 476.13 ± 83.58), *Coffee* (1904.35 Million USD with an average value of 476.09 ± 77.68), *Automobile* (1862.72 Million USD with an average value of 465.68 ± 44.24), *Iron Ore and Minerals* (1019.82 Million USD with an average value of 254.96 ± 81.35), *Handicrafts* (733.66 Million USD with an average value of 168.74 ± 19.35), *Plastics Goods* (654.45 Million USD with an average value of 163.61 ± 26.52), *Cashew & Cashew Kernals* (573.22 Million USD with an average value of 143.31 ± 34.17) and *Others* (6706.62 Million USD with an average value of 1676.66 ± 123.77), Similarly, the exporting of the products like *Basic Chemicals, Pharmaceuticals & Cosmetics* (-73.3), *Gems & Jewellery* (-1712.51), *Aerospace* (-24.67), *Coffee* (-42.84), *Marine Products* (-3.47) and *Cashew & Cashew Kernals* (-18.07) have shown the decreasing trend. On the contrary, the products like *Engineering* (+354.08), *Petroleum* (+386.58), *Readymade Garments* (+5.43), *Agriculture and Processed Food* (+34.9), *Automobile* (+29.7), *Iron Ore and Minerals* (+56.22), *Handicrafts* (+11.16), *Plastics Goods* (+15.93) and *Others* (+84) have shown an increasing trend.

In continuation with the analysis of the export performance of the different merchandise products of Karnataka state, the following hypothesis has been formulated.

H₀: There is no significant difference in the export value of merchandised goods

H₁: There is no significant difference in the export value of merchandised goods

The above hypothesis has been tested with the Single Factor Anova Test with 5% level of significance. As per the test results, F value (14.42273) is more than F_{crit} value (1.918246) and P Value (0.00) is less than Alpha value (0.05). It indicates the rejection of null hypothesis and acceptance of alternative hypothesis. In other words, it can be said that there is a significant difference in the export value of merchandised goods. The analytical results are presented in Table No.-3.

Table No.-3: Anova - Single Factor test

Groups	Count	Sum	Average	Variance		
Engineering	4	18871.35	4717.838	230066		
Petroleum	4	10080.7	2520.175	616286.5		
Readymade Garments	4	9021.55	2255.388	5867.972		
Basic Chemicals, Pharmaceuticals & Cosmetics	4	7760.93	1940.233	42368.21		
Gems & Jewellery	4	6974.63	1743.658	5998565		
Agriculture and Processed Food Including Seeds and Beverages	4	2726.87	681.7175	2227.948		
Aerospace	4	1904.5	476.125	6986.389		
Coffee	4	1904.35	476.0875	6033.715		
Automobile	4	1862.72	465.68	1957.573		
Iron Ore and Minerals	4	1019.82	254.955	6617.499		
Handicrafts	4	733.66	183.415	368.199		
Marine Products	4	674.95	168.7375	374.5815		
Plastics Goods	4	654.45	163.6125	703.3083		
Cashew & Cashew Kernals	4	573.22	143.305	1167.484		
Others	4	6706.62	1676.655	15317.96		
ANOVA						
Source of Variation	SS	df	MS	F	P-value	F crit

Between Groups	93352287.46	14	6668021	14.42273	0.00	1.918249
Within Groups	20804725.29	45	462327.2			
Total	114157012.75	59				

FINDINGS AND CONCLUSION:

The present study has been concluded with the following major findings.

1. The total export of the state during the study period amounted to 362386.90 Million USD of which merchandised export represented 19.72% and services export represented 80.28%.
2. Total export of the state has an increasing trend with a slope of +6590.63 Million USD yearly.
3. Total amount of merchandised exports amounted to 71470.32 Million USD with an average of 17867.58 ± 1175.40 Million USD which shows a decreasing trend with a slope of - 6590.63 Million USD yearly.
4. Total amount of service export amounted to 290916.58 Million USD with average of 72729.15 ± 9820.53 Million USD which shows an increasing trend with a slope of +7487.48 Million USD yearly.
5. The merchandised products like Engineering, Petroleum, Readymade Garments, Basic Chemicals, Pharmaceuticals & Cosmetics are the main products in which Karnataka state has more exports in terms of value.
6. The merchandised products like Basic Chemicals, Pharmaceuticals & Cosmetics, Gems & Jewellery, Aerospace, Coffee, Marine Products and Cashew & Cashew Kernels have shown decreasing trend during the study period.
7. The merchandised products like Engineering, Petroleum, Readymade Garments, Agriculture and Processed Food, Automobile, Iron Ore and Minerals, Handicrafts, Plastics Goods and Others have shown an increasing trend during the study period.
8. The study has proved that there is a significant difference in the export value of the different merchandised products.

To conclude, the state has a very long tradition of international business in the form of import and export. Historically, Karnataka has been a major exporter of commodities like coffee, spices, silk, cashew nuts, handicrafts and agarbatti. In the national export basket, the Karnataka state has secured first position in software/service exports and fourth in merchandise exports. The study reveals that service export from Karnataka has an increasing trend while export of merchandise goods has a declining trend. A significant difference has also been noticed in the export value of the different types of merchandised products.

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