

Performance of Khadi Sector in India

Abstract

Khadi constitutes an important segment of the textile sector. The production of khadi is more than 6.5 percent share of the overall fabric production in India. Khadi has been defined as any cloth woven on handlooms in India from cotton, silk or woollen yarn handspun in India or from a mixture of any two or all of such yarns. The main objective of the study is to analyse the performance of khadi sector in India for the period 2004-05 to 2017-18 based on three important performance variables such as Production, Sales and Employment. The paper highlights the performance, weaknesses, challenges of khadi sector and the solution for such challenges.

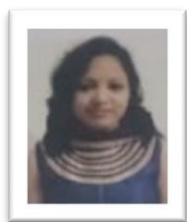
Keywords: Khadi, Industry, Production, Employment, Compound Annual Growth Rate (CAGR).

Introduction

Khadi is an Indian fabric. Hand spinning and hand weaving have been around for thousands of years, thus, making the craft of khadi ancient. The Indus civilization, around 2800 B.C., had a well-developed tradition of textiles. Discovery of terracotta spindle whorls for spinning yarn, bone tools for weaving, terracotta beads with textile impressions and figurines wearing woven fabrics are evidence of this period. Over the years, Indian textiles became more refined with natural dyes and broader prints. The East India Company encouraged cotton farming and mill-produced fabrics flooded Indian markets, thus, starting a downward spiral for handwoven *khadi*. Mill culture started in Bombay, and mill fabric became the norm, thus, bringing a further decline in hand spinning. The Indian national congress decided to encourage 'khadi' in the Nagpur session in 1920. The first khadi production centre was established at katiawad, Gujarat. Mahatma Gandhi was referred to khadi as 'the livery of freedom'. In his words:

'The spinning wheel represents to me the hope of the masses. The masses lost their freedom, such as it was, with the loss of the Charkha. The Charkha supplemented the agriculture of the villagers and gave it dignity.'

Khadi was introduced as a political weapon and as the best instrument for giving concrete expression to the Swadeshi spirit to boycott foreign goods in 1920. Khadi rendered an opportunity to every man, woman and children do earn self- discipline and self-sacrifices as a part of non-cooperation movement (Nanda, 1950). All India Spinners Association was launched with the intention of propagation, production and the selling of *khadi* in 1925. Techniques were improved upon, and employment to the scale of two lakh was created. After independence, the movement continued, and the All India Khadi and Village Industries Board was created, which later culminated in the formation of Khadi and Village Industries Commission. KVIC today is responsible for the planning, promotion, organization and implementation of programs for the development of *khadi* and other village industries in rural areas with the coordination of other agencies in rural development wherever necessary (Sinha, 2018). *khadi* industry is considered at a community scale in India. It brings power to the grass roots from the top. The tools used in khadi enterprise like spinning wheels and handlooms are simple and inexpensive. Khadi creates interdependence within the community that it enables to understand the value of interdependence, which alienates people from one another (Koulagi, 2015). It constitutes an essential segment of the textile sector. The production of khadi is more than 6.5 percent share of the overall fabric production in India (GOI, 2018). Khadi has been defined as any cloth woven on handlooms in India from cotton, silk or woollen yarn handspun in India or from a mixture of any two or all of such yarns. Due to the artistic nature of khadi products and with sustained efforts, good demand of khadi products can be created in the international market. KVIC (Khadi and Village Industries Commission) has been creating



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employment opportunities for spinners, weavers, and other allied artisans (Busenna, et.al, 2011).

Khadi activities are supported by 34 State Khadi & Village Industries (KVI) Boards, 2518 khadi institutions affiliated to KVIC and State KVIBs, 60263 artisans trained during 2017-18 throughout the country. khadi is natural, hand crafted, bio-degradable, eco-friendly and non-exploitative, niche product (GOI, 2018). Under the Govt. scheme 'Swachhata Hi Seva' campaign in a unique way, Khadi India has launched a designer carry bag made from a mix of plastic waste and paper pulp. KVIC conducted experiments at its Kumarappa National Handmade Paper Institute (KNHPI) unit at Jaipur to develop the unique bag. According to KVIC polyethylene waste could be used to make cost effective handmade paper, reducing the existing production cost by 34 per cent, which in turn can be used to make cheaper carry bags it is called REPLAN (Reducing Plastic in Nature), the waste plastic from nature is collected, de-structured and de-gradated and then mixed with paper pulp in a ratio of 80 is to 20 (GOI, 2018).

Khadi plays a commendable role in Indian economy in providing employment opportunities to the needy entrepreneurs and removing poverty in both rural as well as in urban areas. Khadi has moved from a freedom fighters identity cloth to a fashion fabric (Shrivastava and Prasad, 2018). In India total khadi production during 2017-18 is estimated at Rs. 1465.21 crore as against Rs. 1401.84 crore in corresponding period of 2016-17. Similarly, the estimated sales of khadi is Rs. 2249.18 crore in 2017-18 as against Rs. 2007.61 crore in 2016-17. The employment in khadi sector in 2017-18 is 4.34 lakh persons as against 4.28 lakh persons in 2016-17.

Objective of the Study

1. To analyse the production of various varieties of khadi Industry in India.
2. To analyse the employment in khadi sector in India.

Concept/ Hypothesis

The main concept of the paper is employment will be generating more with increase of production as well as sale of khadi in India.

Research Design

The performance of khadi industry in India can be seen from the year 2004-2018. The production, sale, employment as well as variety wise production of khadi has analysed by using secondary data. The main sources of secondary data are Annual Reports of KVIC, Ministry of Micro, Small and Medium Enterprises (MSMEs), Annual Reports of Agro and Rural Industries, Ministry of Textiles and Newspaper. For the analysis of data statistical tools like averages, percentages and regression analysis has been used.

Performance of Khadi sector

The Khadi production which was around 462 crore in 2004-05, has increased to 1465.21 crore in 2017-18, indicating an increase of around 3.12 times in a span of 14 years. The production of khadi has increased all the years except 2010-11 (510.91 crore) reason being uncertainty over the continuation of the rebate policy for KVIs, which upset the production

schedule and output of khadi producers along with some supply side problems like poor marketing linkages and obsolete weaving technology which has the main reasons decline in production (Goel and Jain, 2015). The compound annual growth rate (CAGR) of production of khadi has been found 8.60 percent during 2004-05 to 2017-18. The annual growth rate in Khadi production was 1.46 percent in 2004-05 which has increased to 21.09 percent in 2015-16 and to 4.52 percent in 2017-18.

Table 1 Production of Khadi Industry

Year	Production (in crore rupees)	% Annual growth rate
2004-05	461.54	-
2005-06	468.3	1.46
2006-07	485.18	3.60
2007-08	543.39	12.00
2008-09	585.25	7.70
2009-10	628.98	7.47
2010-11	510.91	-18.77
2011-12	716.98	40.33
2012-13	761.93	6.27
2013-14	811.08	6.45
2014-15	879.98	8.49
2015-16	1065.6	21.09
2016-17	1401.84	31.55
2017-18	1465.21	4.52
CAGR	8.60	

Source: Annual reports, Khadi and Village Industries Commission

The sale of khadi industries in India has been shown in table 2. The sale of khadi was 617.84 crore in 2004-05 which has increased to 867.01 crore during 2009-10, decreased to 784.63 crore in 2010-11 due to demand side problems like less awareness & preference to foreign brands, limited working hours of the khadi bhandars and uneven quality and limited design patterns (Goel and Jain, 2015) There should be awareness of khadi products to the masses to increase the demand of khadi products. Afterwards it has increased to 2249.18 crore in 2017-18 with a compound annual growth rate of 9.66 percent. The growth rate has increased from 1.76 percent in 2005-06 to 5.49 percent in 2006-07 and 9.23 percent in 2007-08 to 10.38 percent in 2008-09. In 2009-10 and 2010-11 growth rate has decreased from 8.43 percent to -9.50 percent. Further, the growth rate shows positive move during 2011-12 (23.35 percent) to 2017-18 (12.03 percent). The maximum growth rate can be seen in 2011-12 (23.35 percent) and 2015-16 (29.02 percent) as compared to all periods.

Table 2 Sale of Khadi Industry in India

Year	Sales of khadi (in crore)	% Annual growth rate
2004-05	617.84	
2005-06	628.69	1.76
2006-07	663.19	5.49
2007-08	724.39	9.23
2008-09	799.6	10.38
2009-10	867.01	8.43
2010-11	784.63	-9.50
2011-12	967.87	23.35
2012-13	1021.56	5.55

2013-14	1081.04	5.82
2014-15	1170.38	8.26
2015-16	1510	29.02
2016-17	2007.61	32.95
2017-18	2249.18	12.03
CAGR	9.66	

Source: Annual reports, Khadi and Village Industries Commission

The employment of khadi industries has been shown in table 3. The Khadi sector has provided employment to around 9 lakh people in the country in 2004-05 which has increased to 10.45 lakh during 2011-12, to 11.07 lakh in 2015-16 afterwards it drastically decreased to 4.28 lakh persons and 4.34 lakh persons during 2016-17 and 2017-18 respectively, reason being most spinners were working on single spindle traditional charkhas earlier which are more employment intensive. With the adoption of New Model Charkhas (NMCs) many old artisans have exited. The annual growth rate shows the positive trends in all the years except 2016-17 with a CAGR of -4.79 percent during 2004-05 to 2017-18.

Table 3 Employment of Khadi Industries (in lakh persons)

Year	Employment	% Annual growth rate
2004-05	8.64	-
2005-06	8.68	0.46
2006-07	8.8	1.38
2007-08	9.16	4.09
2008-09	9.5	3.71
2009-10	9.81	3.26
2010-11	10.01	2.04
2011-12	10.45	4.40
2012-13	10.71	2.49
2013-14	10.98	2.52
2014-15	11.06	0.73
2015-16	11.07	0.09
2016-17	4.28	-61.33
2017-18	4.34	1.40
CAGR	-4.79	

Source: Annual reports, Khadi and Village Industries Commission

The variety wise quantity of khadi production in India has been shown in table 4. The over all quantity of khadi production has increased by 1.82 times from 2004-05 to 2017-18. The quantity of Khadi production has upward trend over the years. The CAGR of total production of Khadi is 4.37 percent; the mean value is 930.36 lakh square meter, standard deviation is 179.48 square meter and co-efficient of variation is 0.29 over the span of 14 years. The production of cotton khadi has increased from 590.2 lakh square meter in 2004-05 to 728.5 lakh square meter in 2011-12, to 1016.2 lakh square meter during 2017-18. Whereas share of cotton Khadi in total Khadi production quantity has decreased 79.8 percent in 2017-18 as compared to 84.4 percent in 2004-05. The quantity of cotton Khadi has been grown with a CAGR of 3.95 percent during the period. The mean of cotton khadi is 759.29 lakh square meter and the standard deviation is 132.82 lakh square meter. The co-

efficient of variation is 0.17. The production of Woollen Khadi has depicted upward trend from 64.2 lakh square meter in 2004-05 to 110.40 lakh square meters in 2015-16 and from 153.5 lakh square meter during 2016-17 which has decreased to 134.7 lakh square meter in 2017-18 with a CAGR of 5.43 percent. The share of Woollen Khadi production in the total Khadi production has increased from 9.19 percent in 2004-05 to 10.58 percent in 2017-18. After calculations, the mean of woollen Production is 97.38 lakh square meter and the standard deviation is 26.05 lakh square meter along with the co-efficient of variation is 0.26. The production of Silk Khadi reveals upward trend over the years. Production of silk Khadi increased from 44.4 lakh square meter in 2004-05 to 121.5 lakh square meter in 2016-17 which shows increase of silk production by 2.73 times. The share of silk Khadi in the total Khadi production has increased 6.35 percent in 2004-05 to 9.56 percent in 2016-17 along with a CAGR of 7.45 percent. The mean production of silk quantity is 73.68 lakh square meter and the standard deviation is 21.46 lakh square meter. The co-efficient of variation is 0.29.

Table 4 Variety Wise Quantity of Khadi Production in India (Amount in lakh square meters)

Year	Cotton	Woollen	Silk	Total
2004-05	590.2 (84.4)	64.2 (9.19)	44.4 (6.35)	698.8 (100)
2005-06	586.5 (83.85)	64.0 (9.15)	49.0 (7.01)	699.5 (100)
2006-07	600.8 (83.60)	68.6 (9.55)	49.3 (6.86)	718.7 (100)
2007-08	636.9 (83.53)	71.9 (9.43)	53.7 (7.04)	762.5 (100)
2008-09	673.4 (82.94)	81.9 (10.09)	56.6 (6.97)	811.9 (100)
2009-10	680.7 (81.91)	84.2 (10.13)	66.1 (7.95)	831.0 (100)
2010-11	705.0 (82.02)	86.3 (10.04)	68.2 (7.93)	859.5 (100)
2011-12	728.5 (82.10)	88.9 (10.02)	69.9 (7.88)	887.3 (100)
2012-13	748.33 (82.25)	90.54 (9.95)	70.98 (7.80)	909.85 (100)
2013-14	767.71 (82.33)	92.56 (9.92)	72.24 (7.75)	932.51 (100)
2014-15	773.75 (81.28)	105.17 (11.05)	73.05 (7.67)	951.97 (100)
2015-16	787.4 (80.8)	110.4 (11.32)	76.7 (7.88)	974.5 (100)
2016-17	992.8 (79.3)	153.5 (12.25)	105.9 (8.45)	1252.2 (100)
2017-18	1016.2 (79.8)	134.7 (10.58)	121.5 (9.56)	1272.4 (100)
CAGR	3.95	5.43	7.45	4.37
Mean	759.29	97.38	73.68	930.36
SD	132.82	26.05	21.46	179.48
CV	0.174939	0.267573	0.291316	0.192924

* includes muslin Khadi

Note: Figure in brackets denote Percentage of the total.

Source: Annual reports, Khadi and Village Industries Commission

The variety wise value of khadi production in India has been shown in table 5. The overall value of khadi production has increased by 3.17 times from 2004-05 to 2017-18. The value of Khadi production shows an upward trend in all the years. The overall CAGR of Khadi production is 8.60 percent. The value of cotton Khadi production shows a positive trend from 26608 lakh in 2004-05 to 61739.42 lakh in 2015-16 and 78804 lakh, 81529 lakh during 2016-17 and 2017-18 with CAGR of 8.32 percent. The share of cotton Khadi in the total Khadi production has decreased to 55.66 percent in 2016-17 from 57.65 percent in 2004-05. The mean average of cotton value is 44909.78 lakh, the standard deviation is 17646.92 lakh and co-efficient of variation is 0.39. The production of Woollen Khadi has slight decrease in 2005-06 (7228 lakh) as compared to 2004-05 (7651 lakh). Afterwards, it has increased 22149 lakh in 2015-16 and decreased 19465 lakh in 2017-18 due to lack of raw wool last three decades. The compound annual growth rate of 6.89 percent. The share of woollen Khadi in total Khadi production value has declined from 16.58 percent to 13.30 percent in 2017-18. The mean average of woollen value is 12517.12 lakh, the standard deviation is 4564.35 lakh and co-efficient of variation is 0.36. Silk Khadi production value in India increases in all the periods except 2005-06. The value of silk in 2004-05 is 11896 lakh whereas in 2005-06 its value is 11602 lakh. Thereafter, it increases from 11602 lakh in 2005-06 to 45527 lakh in 2015-16 which has increased by 3.92 times of silk Khadi production value. The share of silk Khadi production value in total Khadi production value increases from 25.76 percent in 2004-05 to 31.04 percent in 2017-18. The value of CAGR in silk Khadi production is 10.06 percent. The mean average of silk value is 20820.19 lakh, the standard deviation is 10352.22 lakh and co-efficient of variation is 0.49.

Table 5 Variety Wise Value of Khadi Production in India (Amount Rs. In lakh)

Year	Cotton	Woolen	Silk	Total
2004-05	26608 (57.65)	7651 (16.58)	11896 (25.76)	46155 (100)
2005-06	28000 (59.79)	7228 (15.43)	11602 (24.77)	46830 (100)
2006-07	29576 (60.17)	7630 (15.52)	11945 (24.30)	49151 (100)
2007-08	32394 (59.61)	8909 (16.40)	13036 (23.99)	54339 (100)
2008-09	34702 (59.29)	9855 (16.84)	13968 (23.99)	58525 (100)
2009-10	36401 (57.87)	10495 (16.69)	16001 (25.44)	62897 (100)
2010-11	38892 (57.79)	11293 (16.78)	17116 (25.43)	67301 (100)
2011-12	40644 (56.69)	12064 (16.83)	18990 (26.49)	71698 (100)
2012-13	43259.32 (56.77)	12820.64 (16.83)	20113.17 (26.40)	76193.13 (100)
2013-14	46020.05 (56.74)	13615.28 (16.79)	21472.53 (26.47)	81107.86 (100)
2014-15	50169.43 (57.01)	14950.17 (16.99)	22878.77 (25.99)	87998.37 (100)

2015-16	61739.42 (57.94)	17114.52 (16.06)	27706.18 (26.000)	106560.12 (100)
2016-17	78804 (56.21)	22149 (15.7)	39231 (27.9)	140184 (100)
2017-18	81529 (55.66)	19465 (13.30)	45527 (31.04)	146521 (100)
CAGR	8.32	6.89	10.06	8.60
Mean	44909.78	12517.12	20820.19	78247.18
SD	17646.92	4564.37	10352.22	32378.81
CV	0.39	0.36	0.49	0.41

* includes muslin Khadi

Note: Figure in brackets denote Percentage of the total.

Source: Annual reports, Khadi and Village Industries Commission.

Conclusion

In khadi segment production and sale has been more increasing as compare to employment sector. The employment is drastically decreased from 11.6 lakh in 2015-16 to 4.28 lakh during 2016-17 due to introduction of new charkhas to replace the traditional single spindle ones. At the same time, the production of khadi increased by 31.6 percent and sales grew by 33 percent. The production of silk khadi has contained highest compound annual growth rate in both quantity and value. The khadi sector is suffering from the demand side problems like less awareness & preference to foreign brands, limited working hours of the khadi bhandars and uneven quality and limited design patterns, and supply side problems like poor marketing linkages and obsolete weaving technology. Most of the workers are unemployed due to new innovations. Khadi is an Indian fabric therefore, there should be adopt such type of technologies which are more employment intensive, otherwise proper training should be provided to artisans. There should be awareness of khadi products to the masses to increase the demand of khadi products.

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