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REVIEW ON ASSESSMENT OF SPINNING INDUSTRIES IN INDIA IN PRESENT SCENARIO

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Abstract: Indian Spinning Industries have spread their wings world-class, with the best machinery being used among all other textile manufacturing nations and it is 30-40 percent higher producer than China. Indian spinners have absorbed the higher capital cost functioning better than that with respect to Chinese counterparts. Apart from machine productivity, spinners in India have aced the art and functioning of spinning with rapid training of the workforce. Spinning Industries have enhanced production utilization and thus the returns on their investments are higher. To the reader's amazement, yarn is the highest exported product among various textile products being exported. Its exports have grown at 30% y-o-y (year on year) in value terms. There should be a few policy aberrations that transform slowly with time to get resolved. The manufacturing sector will grow rapidly with investment being evolved, mainly in states which are surplus producers of cotton and these states are offered high investments and incentives. We aim to study several spinning industries in India and to show the returns on investments and production utilization.

Keywords: Spinning Industry, Export, Import, Production Utilization, Return on investments.

Introduction:

In India, the spinning sector has evolved and progressed into a modern and globalized organization with strong lobbying abilities. Spinning is the most integrated and technically well-organized and coherent sector in India's textile industry. It is the main branch of the cotton textile industry. It has almost 3300 mills across India and produces 12 million Kg (Kilograms) of yarn every day. The current spindle which is installed in Indian industries has a capacity of 43 million spindles, which is expected to be increased by 2 to 4 million spindles in the near future in 2-3 years. In terms of spindleage, India is ranked second in textile industry sector in the world, and it has accounted for 23% of the world's spindle capacity.

Yarn exports increased from 2.38% to 15.8% of production in a period of time, i.e., from 1993 to 2003. Cotton production has increased over a period of time but the yarn quality has not increased. To increase the superior quality of yarn, a higher count is to be increased to get good and better earnings with the addition of new values to the quality of yarn.

Yarn count shows the quantity of yarn packed in a given area. A generous portion of the crop is used for the production of cotton yarn. It is a derived material in which India is the world's largest exporter, with a global share of 25%. Technological development is the best way to reduce production costs, enhance fabric and yarn quality, and expand the information in a series of consecutive steps that include and lead to the creation of the product.

More research is to be done to know that the requisite supply and appropriate quality of cotton yarn reach the weavers in handlooms in India and that the corrupted or illegal links along the value chain are restricted and minimized.

The objective of the study is to observe and detect the production utilization and return on investment for different spinning companies in India.

Review of Literature:

Perkins et al. (1984)³, stated that the changes that have taken over the past 100 years in the manufacturing process of yarn. The fibre quality demands yarn with different dimensions, diameters, and weights per unit length for variable uses. By using modern machinery high-quality yarn can be produced rather than that from the old system, by extracting yarn from raw cotton.

Price (1986)⁴, explained the advantages of using fine and mature fibres with enhanced length and strength since this gives higher-quality of yarn strength with lower twists, leading to high productivity.

Izawa (1994)⁵, stated that the price of cotton is affected by the demand and supply of the product all over the world. The most quantitative users of cotton are spinners. Thus the production of the type of cotton required by spinners can increase the productivity and earnings in the market.

Kondo (2001)⁶, explained that in spite of being well-planned, efficient, and competitive in the world Indian spinning industry started deteriorating. Since the 1960s the production of cotton yarn per spindle has declined. Despite of restrictions on cotton export and the availability of huge cotton for the domestic cotton industry have not contributed to an increase in cotton yarn required for a growing market.

Landes et al. (2005)⁷, in their research report mentioned that the export of yarn in the global market is an important source of demand for cotton in India. Most of the produced yarn is consumed by the weaving sector for value addition domestically.

Grandhi and Crawford (2007)⁸, in their paper, denoted the fluctuation of prices in the yarn market. Many farmers noticed that the export of raw cotton is more profitable than supplying cotton to local spinning industries or mills. Many producers of yarn argued that this strategy would neglect value addition from yarn to the production of fabrics and there will be a loss of revenue for India by exporting raw materials.

Sankar (2010)⁹, in his article, denotes the importance of the spinning industry. The Weaving of fabric and the next value-added stages depend on the spinning industry. High revenue, earnings, and competitiveness can be magnified by improving yarn quality.

CRISIL (2011)¹⁰, in their report, evaluated that the revenue of cotton yarn players will increase over the next quarters due to a reduction in input cost and modest raise in demand.

Gherzi (2011)¹¹, states that the cotton yarn to be produced depends on the demand in the market and on the quantitative value of the raw material available. The cotton yarn market is highly sensitive to the demand for supply of cotton.

Murugan et al. (2011)¹², in their paper particularly stated the fact that any other methods must be found in the current economic slow down for producing optimum quality yarns at a lower cost.

Kotb (2012)¹³, pointed out that the cotton fabric highly depends on the quality of the yarn. The properties such as length, fineness, strength, etc should be considered while selecting cotton yarn cotton fibers.

Guruprasad and Chattopadhyay (2013)¹⁴, in their article pointed out that India is a vast producer as well as consumer of cotton. It has a major share of the global market. But poor fiber strength, impure fabrics, and wide varieties are drawbacks of cotton yarn in India. The raw material cost from yarn accounts for 50-70 percent.

According to India Rating and Research, (2013)¹⁵, cotton yarn manufacturers get benefit from a slow but steady pick-up in domestic demand. Stability in cotton prices will enable spinning mills to better plan inventory buying. However, spinners in Southern India and Gujarat continue to underutilize capacity due to power shortages or incur a high cost of self-generated power.

Antoshak (2014)¹⁶, states that India supplies a large amount of yarn production to China. Chinese weavers depend on the Indian Spinning sector. India is known for its fine quality of yarn and fabric and is spreading its wings by exporting business to China, Pakistan, Bangladesh, and Vietnam.

Bokhari (2014)¹⁷, denotes the conflicts between spinning and the value-added sector regarding the imposing of custom duty on imports of cotton from India. The custom duty on Indian imports and value-added sectors are against each other when the rate in the global market falls, the spinners sell their yarn at higher prices in the domestic or local markets.

Ashwani et al.(2020)¹⁸, represented that manufacturing of yarn or the process of spinning is the process of converting fibres into yarns. Natural fibres such as wool, cotton, flax and synthetic fibres are converted into yarn in spinning industries using spindles.

Research Methodology:

To find out the return on investment and production utilization for various spinning companies in India data given in table 1.1 is analyzed using equations 1.1 and 1.2.

Table 1.1 Production, Cost, Price, and Profit of Various Yarn Counts for Spinning Companies in 2010-11

Name of the Industry	Type of Yarn	Estimated Annual Production (ton)	Observed Annual Production (ton)	Cost/ton (Rs.)	Price/ton (Rs.)	Profit/ton (Rs.)
Sri Krishna Spinning and Weaving Mill (P) Ltd.	20s	2990	3080	155060	178100	22924.08
	30s			159900	184100	24142.87
	40s			173770	208800	34929.58
	60s			235200	288100	52667.66
	80s			283600	342100	58286.72
Surya Lakshmi Cotton Mills Limited	20s	14400	14000	151700	165600	13887.80
	30s			155400	178100	22715.30
	40s			174160	196100	21742.39
Rajasthan Spinning and Weaving Mill	(5 – 20) s	38620	30120	175700	186100	10415.52
	(21 – 30) s			186600	207100	20489.22
	(31 - 40) s			191500	214100	22652.78
JKT Fabrics Pvt Ltd.	30s	660	690	163400	182600	19252.00
	40s			171800	208100	36072.42
BST Textile Mills Pvt Ltd.	10s	12100	12550	132500	168100	35608.15
	20s			147000	178100	31105.49
	(21-30) s			162500	176100	13594.76
Jawahar Spinning Mills	20s	12700	9940	189700	227100	37401.89
	30s			167700	188100	20436.72

Return on Investment:

To find out the return on investment, the formula is used

$$\frac{\text{Price/unit}}{\text{Cost/unit}} \times 100$$

Production Utilization

To find out production utilization, the formula used is

$$\frac{\text{Observed capacity}}{\text{Estimated capacity}} \times 100$$

Results and Discussions:

Table 1.2 Return on Investment and Production Utilization of Various Yarn Counts for Spinning Companies in 2010-11

Name of the Industry	Type of Spinning	Return on Investment (%)	Production Utilization (%)
Sri Krishna Spinning and Weaving Mill (P) Ltd.	20s	114.8	103.01
	30s	115.1	
	40s	120.15	
	60s	122.49	
	80s	120.62	
Surya Lakshmi Cotton Mills Limited	20s	109.16	97.22
	30s	114.60	
	40s	112.59	
Rajasthan Spinning and Weaving mill	(5 - 20) s	105.91	77.99
	(21 - 30) s	110.98	
	(31 - 40) s	111.80	
JKT Fabrics Pvt Ltd.	30s	111.75	104.54
	40s	121.12	
BST Textile Mills Pvt Ltd.	10s	126.86	103.71
	20s	121.15	
	(21-30) s	108.36	
Jawahar Spinning Mills	20s	119.71	78.26
	30s	112.16	

According to Table 1.2, the production utilization of all the spinning companies is satisfactory except the industries, Rajasthan Spinning and Weaving Mill and Jawahar Spinning Mills i.e., 77.99% and 78.26% respectively. The production utilization of Rajasthan Spinning and Weaving Mill is affected due to low-grade fiber quality and its utilization. And production utilization of Jawahar Spinning Mills is affected due to a mix of different qualities of fibers. The production utilization of JKT Fabrics Pvt Ltd. is the highest i.e., 104.53%, which is then followed by BST Textile Mills Pvt Ltd. i.e., 103.71%, then followed by Sri Krishna Spinning and Weaving Mill(P)Ltd. i.e., 103.01% and then followed by Surya Lakshmi Cotton Mills Limited i.e., 97.22%. JKT Fabrics Pvt Ltd. only concentrates on (30-40)s counts. The production utilization of JKT Fabrics Pvt Ltd is the best due to the following reasons, they are; the best fiber quality, technically advanced machinery, technically ace workers, strong marketing policies, and fast supply of products on demand. BST Textile Mills Pvt Ltd. is the next best company as it has superior quality of and a balance between demand and supply. Sri Krishna Spinning and Weaving Mill (P) Ltd. is the third best company according to the study as it uses modern technology, skilled workers, good fiber quality, and (20-80)s variety of yarn, fulfilling the demand in the market. All the companies have sustained production utilization.

CONCLUSION:

Yarn production has eventually increased over a period of time in India. The production utilization of the companies has slowly started gaining momentum i.e., it started increasing, thus the return on investments is higher for all spinning companies. But, in order to match the international demand or to supply internationally, the upgradation in technology is a required aspect to be fulfilled by the companies, and enhancement of value addition is also an essential aspect for the growth of the companies. The Spinning industry invests a high amount in import of the spindles being used in the industry and these are imported from various parts of the country. If India had a strong basis of research and development then these industries would have manufactured the spindles in India domestically, and reduced the cost of production thus the earnings of the companies and industries increases.

REFERENCES:

- [1] Venkata Sai Renuka Subha Sri. P. Student M.Sc (Mathematics).
- [2] Dr. Subhashish Biswas. Research Guide.
- [3] Perkins, H.H., Etheridge, D. E. and Bragg, C.K. 1984. Fibre. In: Kohel R.J. and Lewis C.F. (ed) Cotton. ASA-CSSA-SSSA Monograph Series No. 24. Madison Wisc. USA.
- [4] Price, J.B. 1986. Future Fibre Requirements for Modern Spinning Technology. Paper presented at the Texas Seed Trade Association (Cotton Division) Production and Research Conference.
- [5] Izawal, S. 1994. Fibre Characteristics and the Spinner's Perspective: A Look into the Future. What does the Spinner Need. Paper presented at the ICAC Plenary Meeting, Recife, Brazil September 1994.
- [6] Kondo, M. 2001. The Political Economy of Commodity Export Policy – a Case Study of India. A research working paper.
- [7] Landes, M., MacDonald, S., Singh, S. K. and Vollrath, T. 2005. Growth Prospects for India's Cotton and Textile Industries. Electronic Outlook Report from the Economic Research Service, USDA.
- [8] Grandhi, V. S. and Crawford, A. 2007. Price Volatility in the Cotton Yarn Industry: Lessons from India. Published in International Institute for Sustainable Development.
- [9] Sankar, C. S. 2010. New Developments in Spinning, Weaving and Processing. The Indian Textile Journal.
- [10] CRISIL 2011. Profitability of Textile cos to Improve: CRISIL. The Economic Times, Delhi edition page No. 15.
- [11] Gherzi Textile Organisation AG. 2011. A Study on Behalf of United Nation Industrial Development Organization. Feasibility Study for a Cotton Spinning Mill in 11 sub-Saharan African countries.
- [12] Murugan, R., Vigneswaran, C. and Ghosh, A. 2011. Novel Technique for Improving Yarn Quality and Reducing Hairiness in Conventional Ring Frame, Indian Journal of Fibre and Textile Research, 36: 211-214.

- [13]Kotb, N. A. 2012. Predicting Yarn Quality Performance Based on Fibres Types and Yarn Structure. Life Science Journal, 9(3): 1009-1015.
- [14] Guruprasad, R. and Chattopadhyay, S. K. 2013. Indian Cotton and the Needs of Spinning Industry. Cotton Research Journal, 5(2).
- [15]A report by India Rating and Research, a Fitch Group of Company. 2013. 2013 Outlook: Indian Textile.
- [16]Antoshak, R. P. 2014. A New World Beckons: The Future of Yarn Spinning in China and Elsewhere. A post in Sourcing Online Journal.
- [17]Bokhari, A. 2014. Upswing in Yarn Imports. A newspaper article, www.dawn.com.
- [18]Ashvani Goyal, Raj Kishore Nayak. 2020. Sustainable Technologies for Fashion and Textile. Woodhead Publishing Series in Textile.

