

# INTERNATIONAL JOURNAL OF RESEARCH IN COMMERCE & MANAGEMENT

I  
J  
R  
C  
M



A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

*Indexed & Listed at:*

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A.,

Open J-Gate, India [link of the same is duly available at Infilbnet of University Grants Commission (U.G.C.)],

The American Economic Association's electronic bibliography, EconLit, U.S.A.,

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 4255 Cities in 176 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

<http://ijrcm.org.in/>

# CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	FORECAST SALES OF SEMICONDUCTOR INDUSTRY IN TAIWAN <i>CHENG-WEN LEE &amp; TSAI-LUN CHO</i>	1
2.	SUSTAINABLE CONSTRUCTION SOLUTION FOR CHINA'S PUBLIC RENTAL HOUSING: INDUSTRIALIZED BUILDING ADOPTION <i>DR. XIAOBO CHEN</i>	6
3.	ROLE OF MEDIA: A STUDY ON IMPACT OF ATYPICAL MEDIA IN RURAL AREAS OF UTTAR PRADESH, INDIA <i>MOHD SHUAIB SIDDIQUI &amp; DR. AFTAB ALAM</i>	11
4.	SPILL-OVER EFFECTS OF MORTGAGE CREDIT CRISIS IN USA ON EUROPE <i>SANJAY SRIVASTAVA</i>	14
5.	INDIAN REAL ESTATE INDUSTRY: ISSUES AND INITIATIVES <i>G. RAMA PRASAD REDDY &amp; DR. P. MOHAN REDDY</i>	19
6.	CUSTOMER SATISFACTION, LOYALTY AND COMMITMENT IN ORGANISED RETAIL OUTLETS IN CHENNAI - AN EMPIRICAL STUDY <i>DR. BEULAH VIJI CHRISTIANA. M</i>	23
7.	A STUDY ON CONSUMER'S CO-OPERATIVE SOCIETIES AND ITS MOVEMENT IN INDIA <i>A. NALINI &amp; DR. P. ASOKAN</i>	29
8.	A STUDY OF MICRO, SMALL AND MEDIUM ENTERPRISES IN BANKURA DISTRICT OF WEST BENGAL <i>KRISHNA SEN &amp; DR. SEIKH SALIM</i>	31
9.	GREEN MARKETING MIX AND SUSTAINABLE DEVELOPMENT <i>NAMITA PADHY &amp; PRAMA VISHNOI</i>	34
10.	REVIEW OF COMMODITY FUTURES MARKET EFFICIENCY AND RELATED ISSUES <i>P. KARTHIKA &amp; DR. P. KARTHIKEYAN</i>	37
11.	MARKET CONCENTRATION AND EMPLOYMENT ORGANIZED MANUFACTURING INDUSTRIES 1999-2013 <i>ASHISH KUMAR SEDA</i>	42
12.	GST IN INDIA CHALLENGES AND PROSPECTUS <i>POONAM</i>	49
13.	CHANGES IN CONSUMER PREFERENCES <i>NAMITA PADHY &amp; PRAMA VISHNOI</i>	51
14.	THE ANTECEDENTS OF COGNITIVE-AFFECTIVE-CONATIVE MODEL OF RESTAURANT IMAGE <i>YU-LING SU</i>	53
15.	CONSUMERS AWARENESS WITH REGARD TO ONLINE SHOPPING: A COMPARATIVE STUDY OF MYSURU (MYSORE) AND RAICHUR DISTRICTS <i>GEETHANJALI &amp; GURUDATT KAMATH B</i>	58
16.	A COMPARATIVE ANALYSIS OF PRODUCTION OF CLOTH IN INDIAN TEXTILES INDUSTRY BETWEEN THE PRE AND POST MFA PHASE-OUT PERIOD <i>DR. SABIHA KHATOON</i>	63
17.	PERFORMANCE OF SUGAR INDUSTRY IN INDIA WITH SPECIAL REFERENCE TO HARYANA STATE <i>SUMAN DEVI</i>	67
18.	MARKET MICROSTRUCTURE OF STOCK MARKETS: A REVIEW OF LITERATURE <i>NEETI PANWAR</i>	71
19.	REVIEW OF LITERATURE FOR SCALE DEVELOPMENT: E-SERVICE QUALITY <i>RAJANI ROSHAN JOHN</i>	77
20.	FOREIGN DIRECT INVESTMENT IN INDIA; TRENDS AND POLICY: APRIL, 2000 TO MARCH, 2015 <i>RITIKA DONGREY</i>	83
	<b>REQUEST FOR FEEDBACK &amp; DISCLAIMER</b>	90

## CHIEF PATRON

**PROF. K. K. AGGARWAL**

Chairman, Malaviya National Institute of Technology, Jaipur  
(An institute of National Importance & fully funded by Ministry of Human Resource Development, Government of India)  
Chancellor, K. R. Mangalam University, Gurgaon  
Chancellor, Lingaya's University, Faridabad  
Founder Vice-Chancellor (1998-2008), Guru Gobind Singh Indraprastha University, Delhi  
Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

## FOUNDER PATRON

**LATE SH. RAM BHAJAN AGGARWAL**

Former State Minister for Home & Tourism, Government of Haryana  
Former Vice-President, Dadri Education Society, Charkhi Dadri  
Former President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

## FORMER CO-ORDINATOR

**DR. S. GARG**

Faculty, Shree Ram Institute of Business & Management, Urjani

## ADVISORS

**PROF. M. S. SENAM RAJU**

Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi

**PROF. M. N. SHARMA**

Chairman, M.B.A., Haryana College of Technology & Management, Kaithal

**PROF. S. L. MAHANDRU**

Principal (Retd.), Maharaja Agrasen College, Jagadhri

## EDITOR

**PROF. R. K. SHARMA**

Professor, Bharti Vidyapeeth University Institute of Management & Research, New Delhi

## CO-EDITOR

**DR. BHAVET**

Faculty, Shree Ram Institute of Engineering & Technology, Urjani

## EDITORIAL ADVISORY BOARD

**DR. RAJESH MODI**

Faculty, Yanbu Industrial College, Kingdom of Saudi Arabia

**PROF. SANJIV MITTAL**

University School of Management Studies, Guru Gobind Singh I. P. University, Delhi

**PROF. ANIL K. SAINI**

Chairperson (CRC), Guru Gobind Singh I. P. University, Delhi

**DR. SAMBHAVNA**

Faculty, I.I.T.M., Delhi

**DR. MOHENDER KUMAR GUPTA**

Associate Professor, P.J.L.N.Government College, Faridabad

**DR. SHIVAKUMAR DEENE**

Asst. Professor, Dept. of Commerce, School of Business Studies, Central University of Karnataka, Gulbarga

## ASSOCIATE EDITORS

**PROF. NAWAB ALI KHAN**

Department of Commerce, Aligarh Muslim University, Aligarh, U.P.

**PROF. ABHAY BANSAL**

Head, Department of Information Technology, Amity School of Engineering & Technology, Amity University, Noida

**PROF. V. SELVAM**

SSL, VIT University, Vellore

**PROF. N. SUNDARAM**

VIT University, Vellore

**DR. PARDEEP AHLAWAT**

Associate Professor, Institute of Management Studies & Research, Maharshi Dayanand University, Rohtak

**DR. S. TABASSUM SULTANA**

Associate Professor, Department of Business Management, Matrusr Institute of P.G. Studies, Hyderabad

**DR. JASVEEN KAUR**

Asst. Professor, University Business School, Guru Nanak Dev University, Amritsar

## FORMER TECHNICAL ADVISOR

**AMITA**

Faculty, Government M. S., Mohali

## FINANCIAL ADVISORS

**DICKIN GOYAL**

Advocate & Tax Adviser, Panchkula

**NEENA**

Investment Consultant, Chambaghat, Solan, Himachal Pradesh

## LEGAL ADVISORS

**JITENDER S. CHAHAL**

Advocate, Punjab & Haryana High Court, Chandigarh U.T.

**CHANDER BHUSHAN SHARMA**

Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

## SUPERINTENDENT

**SURENDER KUMAR POONIA**

## **CALL FOR MANUSCRIPTS**

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography; Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript** **anytime** in **M.S. Word format** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com) or online by clicking the link **online submission** as given on our website ([FOR ONLINE SUBMISSION, CLICK HERE](#)).

## **GUIDELINES FOR SUBMISSION OF MANUSCRIPT**

1. **COVERING LETTER FOR SUBMISSION:**

DATED: \_\_\_\_\_

**THE EDITOR**

IJRCM

**Subject:** SUBMISSION OF MANUSCRIPT IN THE AREA OF \_\_\_\_\_.

**(e.g. Finance/Mkt./HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)**

**DEAR SIR/MADAM**

Please find my submission of manuscript entitled ' \_\_\_\_\_ ' for possible publication in one of your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the co-authors of this manuscript have seen the submitted version of the manuscript and have agreed to their inclusion of names as co-authors.

Also, if my/our manuscript is accepted, I agree to comply with the formalities as given on the website of the journal. The Journal has discretion to publish our contribution in any of its journals.

**NAME OF CORRESPONDING AUTHOR** :

Designation :

Institution/College/University with full address & Pin Code :

Residential address with Pin Code :

Mobile Number (s) with country ISD code :

Is WhatsApp or Viber active on your above noted Mobile Number (Yes/No) :

Landline Number (s) with country ISD code :

E-mail Address :

Alternate E-mail Address :

Nationality :

**NOTES:**

- a) The whole manuscript has to be in **ONE MS WORD FILE** only, which will start from the covering letter, inside the manuscript. **pdf. version is liable to be rejected without any consideration.**
- b) The sender is required to mention the following in the **SUBJECT COLUMN of the mail:**  
**New Manuscript for Review in the area of** (e.g. Finance/Marketing/HRM/General Mgt./Engineering/Economics/Computer/IT/ Education/Psychology/Law/Math/other, please specify)
- c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any **specific message** w.r.t. to the manuscript.
- d) The total size of the file containing the manuscript is expected to be below **1000 KB**.
- e) **Abstract alone will not be considered for review** and the author is required to submit the **complete manuscript** in the first instance.
- f) **The journal gives acknowledgement w.r.t. the receipt of every email within twenty four hours** and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending a separate mail to the journal.
- g) The author (s) name or details should not appear anywhere on the body of the manuscript, except the covering letter and the cover page of the manuscript, in the manner as mentioned in the guidelines.

2. **MANUSCRIPT TITLE:** The title of the paper should be **bold typed, centered and fully capitalised**.
3. **AUTHOR NAME (S) & AFFILIATIONS:** Author (s) **name, designation, affiliation (s), address, mobile/landline number (s), and email/alternate email address** should be given underneath the title.
4. **ACKNOWLEDGMENTS:** Acknowledgements can be given to reviewers, guides, funding institutions, etc., if any.
5. **ABSTRACT:** Abstract should be in **fully italicized text**, ranging between **150 to 300 words**. The abstract must be informative and explain the background, aims, methods, results & conclusion in a **SINGLE PARA. Abbreviations must be mentioned in full.**
6. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of **five**. These should be arranged in alphabetic order separated by commas and full stop at the end. All words of the keywords, including the first one should be in small letters, except special words e.g. name of the Countries, abbreviations.
7. **JEL CODE:** Provide the appropriate Journal of Economic Literature Classification System code (s). JEL codes are available at [www.aeaweb.org/econlit/jelCodes.php](http://www.aeaweb.org/econlit/jelCodes.php), however, mentioning JEL Code is not mandatory.
8. **MANUSCRIPT:** Manuscript must be in **BRITISH ENGLISH** prepared on a standard A4 size **PORTRAIT SETTING PAPER. It should be free from any errors i.e. grammatical, spelling or punctuation. It must be thoroughly edited at your end.**
9. **HEADINGS:** All the headings must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.
10. **SUB-HEADINGS:** All the sub-headings must be bold-faced, aligned left and fully capitalised.
11. **MAIN TEXT:**

**THE MAIN TEXT SHOULD FOLLOW THE FOLLOWING SEQUENCE:****INTRODUCTION****REVIEW OF LITERATURE****NEED/IMPORTANCE OF THE STUDY****STATEMENT OF THE PROBLEM****OBJECTIVES****HYPOTHESIS (ES)****RESEARCH METHODOLOGY****RESULTS & DISCUSSION****FINDINGS****RECOMMENDATIONS/SUGGESTIONS****CONCLUSIONS****LIMITATIONS****SCOPE FOR FURTHER RESEARCH****REFERENCES****APPENDIX/ANNEXURE****The manuscript should preferably range from 2000 to 5000 WORDS.**

12. **FIGURES & TABLES:** These should be simple, crystal **CLEAR, centered, separately numbered & self explained, and titles must be above the table/figure. Sources of data should be mentioned below the table/figure. It should be ensured that the tables/figures are referred to from the main text.**
13. **EQUATIONS/FORMULAE:** These should be consecutively numbered in parenthesis, horizontally centered with equation/formulae number placed at the right. The equation editor provided with standard versions of Microsoft Word should be utilised. If any other equation editor is utilised, author must confirm that these equations may be viewed and edited in versions of Microsoft Office that does not have the editor.
14. **ACRONYMS:** These should not be used in the abstract. The use of acronyms is elsewhere is acceptable. Acronyms should be defined on its first use in each section: Reserve Bank of India (RBI). Acronyms should be redefined on first use in subsequent sections.
15. **REFERENCES:** The list of all references should be alphabetically arranged. **The author (s) should mention only the actually utilised references in the preparation of manuscript** and they are supposed to follow Harvard Style of Referencing. **Also check to make sure that everything that you are including in the reference section is duly cited in the paper.** The author (s) are supposed to follow the references as per the following:
- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
  - Use **(ed.)** for one editor, and **(ed.s)** for multiple editors.
  - When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
  - Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
  - The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
  - For titles in a language other than English, provide an English translation in parenthesis.
  - **Headers, footers, endnotes and footnotes should not be used in the document.** However, **you can mention short notes to elucidate some specific point**, which may be placed in number orders after the references.

**PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:**

**BOOKS**

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

**CONTRIBUTIONS TO BOOKS**

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

**JOURNAL AND OTHER ARTICLES**

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

**CONFERENCE PAPERS**

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–23

**UNPUBLISHED DISSERTATIONS**

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

**ONLINE RESOURCES**

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

**WEBSITES**

- Garg, Bhavet (2011): Towards a New Gas Policy, Political Weekly, Viewed on January 01, 2012 <http://epw.in/user/viewabstract.jsp>

## A COMPARATIVE ANALYSIS OF PRODUCTION OF CLOTH IN INDIAN TEXTILES INDUSTRY BETWEEN THE PRE AND POST MFA PHASE-OUT PERIOD

**DR. SABIHA KHATOON**  
**TEACHER**  
**SENIOR SECONDARY SCHOOL (GIRLS)**  
**ALIGARH MUSLIM UNIVERSITY**  
**ALIGARH**

### ABSTRACT

*Manufacturing of textiles has always remained an indispensable part of the history of Indian Civilization. Now, India has proved itself as the world's third largest producer of cotton and second largest producer of cotton yarn and textiles. The complete removal of quotas under Multi-fibre Agreement on 31<sup>st</sup> December 2004, has had a very energetic impact on production and export of textiles in India. In order to trace the increase in production of cloth in Indian Textiles Industry (ITI), the researcher tried to measure the significant changes in cloth production in ITI between the Pre and the Post MFA phase-out period. For this, Paired Samples T-Test is used in order to test the formulated hypotheses and to reach to the conclusion. The results suggest that production of cloth in ITI has significantly increased after the removal of quotas under MFA.*

### KEYWORDS

MFA, Cloth Production, Indian Textiles Industry.

### INTRODUCTION

The history of textiles in India dates back to the use of mordant dyes and printing block around 3000 BC (Chandra P, 2005). Indian textile is a vital part of her cultural heritage and it dates back to the Indus valley Civilization where people used to manufacture cloth at their homes.. Rig-Veda gives the literary information about textiles in India and it refers to weaving (History of Textiles, n.d.). Ramayana and Mahabharata the two great ancient epics of Hinduism depict the use of fine and stylized garment by the aristocrats and simple clothes by the commoners. In pre-industrial period, spices and textiles were the main commodities and their trade was made on barter. India was known for her quality textiles and always remained in trade with Far and South East Asia. The Dutch East India Company chartered in 1597 and British East India Company in 1600 exchanged Indian textiles for spices grown in Malay Islands. (Sardar, 2003) Because of exclusive design, color and texture Indian textiles became highly popular and exported directly to European countries. In a short span of time Indian textiles became a symbol of fashion in International market. The universality of Indian textiles is evidenced in the number of words that have made their way into English: Calico, pajama, gingham, dungaree, chintz, and khaki (Sardar, 2003). Developing countries have faced restrictive blocks called quotas for the export of textiles and clothing products. For more than forty years, this sector has been controlled by the number of agreements namely: Short term cotton agreement in 1961 and the Long term cotton agreement from 1962 to 1973. This Long Term Cotton Agreement took the place of one-year Short Term Cotton Agreement. LTA renewed several times and was finally replaced by the Multifibre Agreement (MFA) in 1974, which was lengthened to cover the exports of synthetic fibres and woolen products, besides cotton (Liu & Sun, 2003). Under MFA there was a set of bilateral agreements between developed country importers such as U.S. and exporters from developing countries such as India, China, and Bangladesh. The MFA did not apply the trade between rich industrialized countries themselves. Under this agreement the developed countries like EU and US imposed quotas on export of textile and apparel products by developing countries.

**TABLE 1: SCHEDULE OF PHASING OUT OF QUOTAS UNDER THE ATC**

Stage	Date of Implementation	%age of products to be integrated with GATT rules (based on 1990 trade)
1	1 Jan 1995-31 Dec 1997	16% minimum
2	1 Jan 1998-31 Dec 2001	17% minimum
3	1 Jan 2002- 31 Dec 2004	18% minimum
4	1 Jan 2005 (Full integration into GATT, final elimination of quotas, termination of ATC)	49% Full elimination

Source: WTO

Stages I and II called for the removal of no less than 16% & 17% respectively of the importing country's textiles and clothing quotas (based on 1990 level). These initial changes did not have much impact, because they generally applied to those products whose imports were already below quotas levels. The last two phases had a strong impact, since they applied to the products that were more strongly bounded by the use of quotas. Phase III which began on January 1, 2002, and was completed on December 31, 2004, called for the elimination of no less than an additional 18 percent of quotas. The remaining 49 percent of quotas were eliminated in 2005. (Appelbaum, 2004)

### OBJECTIVES OF THE STUDY

The present study has the following specific objectives:

- To understand the importance of textile industry in India.
- To study the strength and weakness of Indian Textiles Industry.
- To study the structure of Indian Textiles Industry.
- To measure the changes in production of cloth in Indian Textiles Industry before and after the phase-out of MFA.

### RESEARCH METHODOLOGY

The present study is exploratory and descriptive in nature. The entire data has been collected from reliable secondary sources. In order to perform this study the Secondary Data has been extracted from Annual reports, Newsletters, Survey reports, Websites, Publications and other available resources. Data has also been collected from Ministry of Textiles, Govt. of India in order to ensure complete reliability. With a view to compare the performance of production of cloth in ITI between Pre and Post MFA Phase-out Paired Samples T-Test has been applied. The whole data set has been divided into two periods. Period from 1996-97 to 2004-05 has been taken as Pre MFA Phase-out period and from 2005-06 to 2013-14 as Post MFA Phase-out period.

### LIMITATIONS OF RESEARCH

- The study is limited to the production of cloth in ITI.
- The study carried out comprises secondary data from 1996-97 to 2013-14.

**LITERATURE REVIEW**

A brief review of the existing relevant to the present has been given below.

**Diao Xinshen and Somwaru Agapi, (2001)**, in their joint publication captioned, "Impact of the MFA Phase-out on the World Economy-An intertemporal, Global General Equilibrium Analysis" tried to measure the possible impact of the MFA phase-out on the world economy. **Chaudhary, Dr. Asiya (2004)**, in her paper "Indian Textile industry beyond 2005", focused upon what will be the face of Indian textile industry after MFA phase-out. **Rangarajan, (2005)** in his article "International Trade in Textile and Clothing: Post- MFA challenges and strategies considerations for India" examined the post- MFA challenges for the textiles and clothing industry in general and India in particular. **Dr. KarthiReyan, G.B. & Dr. Ramachandran, A. (2009)** in their study "Marketing Strategies to be adopted by the Garment Exporters after the Quota Removal in the Tirupur" analyzed the marketing strategies, brand name establishment and driving factors to be adopted by the Tirupur exporters after the quota removal.

**HYPOTHESIS OF THE STUDY**

H<sub>0</sub>: There is no significant difference in production of cloth in ITI between Pre and Post MFA phase-out period.

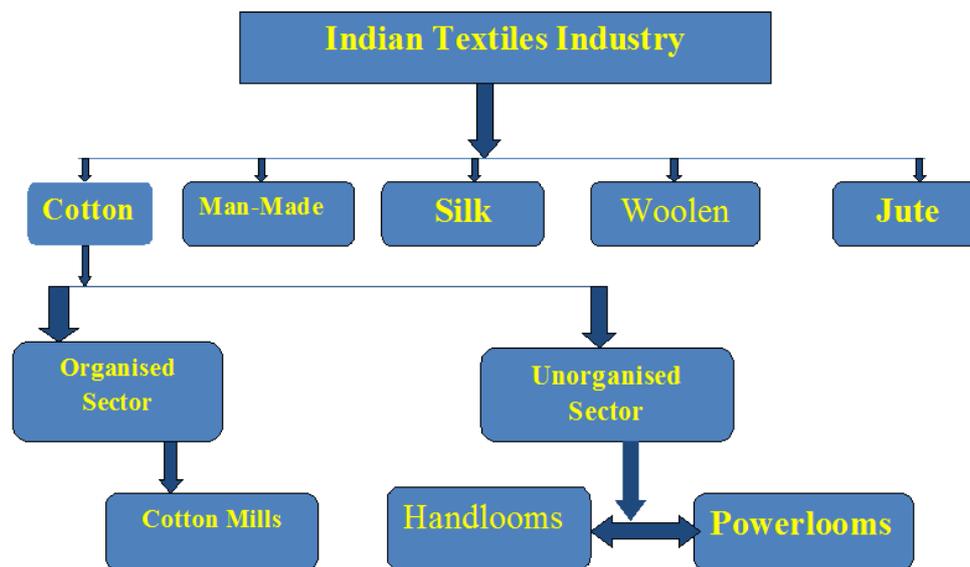
H<sub>1</sub>: There is a significant difference in production of cloth in ITI between Pre and Post MFA phase-out period.

**INDIAN TEXTILE INDUSTRY TREND AND COMPOSITION**

Indian textiles industry contributes nearly 4% to GDP, 14% to Industrial production and 10.5% to total exports of goods. It is the second largest employer in the country just after agriculture. Nearly 35 million of Indian population gets employment through this sector. Directly or indirectly Indian textile industry has strong linkage with both Rural and Urban India.

The Indian textiles industry is divided into two types of sectors i.e. Organized Sector and Unorganized Sector. Organized sector comprises of spinning mills and composite mills whereas unorganized sector embraces handlooms, powerlooms, hosiery and knitting, readymade garments, khadi and carpet manufacturing units. Spinning mills (Non SSI) organized sector involve only in spinning activities whereas composite mills consists of spinning, weaving and processing activities. As per the data released by Ministry of Textiles, Government of India in 2014, production of Man-made fibre increased by 2% and filament yarn production decreased by about 4% during the year April- Dec. 2014. Cotton yarn, Blended and 100% non-cotton yarn production increased by 3% and 2% respectively during the year April- Dec.2014. Cloth production by mill sector decreased by 1% during April- Dec. 2014 whereas Cloth production by powerloom and hosiery sectors increased by 2% and 5% and handloom production decreased by 1%. The total cloth production during April- Dec. 2014 increased by 2%.

FIG. 1



**SWOT ANALYSIS OF INDIAN TEXTILES INDUSTRY**

Strength	Weakness
<ul style="list-style-type: none"> <li>• Independent and Self-Reliant industry.</li> <li>• Strong Raw Material base.</li> <li>• Vast pool of skilled and semi-skilled labour force.</li> <li>• Presence across the value chain.</li> <li>• Growing domestic and international market.</li> <li>• Strong entrepreneurship base.</li> <li>• Third largest cotton producer in the world.</li> <li>• One of the best garment industry in the world.</li> <li>• One of the largest exporters of yarn.</li> <li>• Manufacturing flexibility.</li> </ul>	<ul style="list-style-type: none"> <li>• Technology Obsolescence.</li> <li>• Highly fragmented industry.</li> <li>• Highly dependent on cotton.</li> <li>• Down trend in Mill Segment.</li> <li>• Lack of infrastructural facilities.</li> <li>• High rate of interest and taxes.</li> <li>• High rate of power.</li> <li>• Unfavorable working conditions.</li> <li>• Unfavorable labour laws.</li> <li>• Unable to generate Economies of Scale because of small level of operation.</li> </ul>
Opportunities	Threats
<ul style="list-style-type: none"> <li>• Large potential and untapped domestic and international market.</li> <li>• Huge demand for Indian textiles in international market.</li> <li>• Increased purchasing power of Indian customers.</li> <li>• Phase-out of MFA leads to greater market development.</li> <li>• Research &amp; Product development.</li> <li>• Minimal import duties.</li> <li>• Opportunities for foreign investors.</li> </ul>	<ul style="list-style-type: none"> <li>• Competition from fast emerging economies, particularly China.</li> <li>• Removal of quantitative restrictions under MFA leads to fluctuations in Export Demand.</li> <li>• Dumping of foreign goods in domestic market.</li> <li>• Threat for handloom products.</li> <li>• Geographical disadvantages.</li> <li>• International labour and Environmental Laws.</li> <li>• Rupee appreciation.</li> </ul>

DATA ANALYSIS AND INTERPRETATION

TABLE 2: PRODUCTION OF CLOTH IN DIFFERENT SECTORS IN INDIAN TEXTILES INDUSTRY (in mn. Sq.mtrs)

Years	Sector								TOTAL
	Mill	% Growth	Handloom	% Growth	Decentralised Powerloom	% Growth	Decentralised Hosiery	% Growth	
1996-97	1957	Nil	7457	Nil	19351	Nil	5533	Nil	34298
1997-98	1948	-0.46	7604	1.971	20951	8.26	6393	15.5	36896
1998-99	1785	-8.37	6792	-10.7	20689	-1.25	6276	-1.83	35542
1999-00	1714	-3.98	7353	8.26	23187	12.07	6373	1.55	38627
2000-01	1670	-2.57	7506	2.081	23803	2.65	6696	5.07	39675
2001-02	1546	-7.43	7585	1.05	25192	5.83	7067	5.54	41390
2002-03	1496	-3.23	5980	-21.2	25954	3.02	7881	11.5	41311
2003-04	1434	-4.14	5493	-8.14	26947	3.82	7847	-0.43	41721
2004-05	1503	4.81	5722	4.16	28325	5.11	9112	16.1	44662
2005-06	1656	10.18	6263	9.45	30537	7.80	10393	14.1	48849
2006-07	1746	5.43	6536	4.35	32879	7.66	11504	10.7	52665
2007-08	1744	-0.11	7074	8.23	35304	7.37	12645	9.92	56767
2008-09	1796	2.98	6677	-5.61	33648	-4.69	12077	-4.49	54198
2009-10	1961	9.18	3942	-41	21867	-35	7779	-35.6	55549
2010-11	2205	12.44	6949	76.28	37929	73.45	14646	88.3	61729
2011-12	2313	4.89	6901	-0.69	37445	-1.28	12946	-11.6	59605
2012-13	2418	4.54	6953	0.75	38054	1.62	14541	12.3	61966
2013-14	2560	5.873	7116	2.34	37712	-0.9	15931	9.56	63319

Source: Ministry of Textiles, GOI

Note: % growth is calculated on the basis of immediate previous year.

PAIRED-SAMPLES T TEST

TABLE 3: PAIRED SAMPLES STATISTICS

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 Pre MFA Production of Cloth in ITI	39346.8889	9	3326.41054	1108.80351
Pair 1 Post MFA Production of Cloth in ITI	54960.7778	9	8729.23577	2909.74526

Interpretation

In the above Paired Samples Statistics table, the mean for the production of cloth in ITI before the phase-out of MFA is 39346.8889. The mean for the production of cloth in ITI after the phase-out of MFA is 54960.7778. By comparing the two means, it can be concluded that the production of cloth in ITI increased after the phase-out of MFA as the mean value of production of cloth in ITI after the phase-out of MFA is greater than the mean value of production of cloth in ITI before the phase-out of MFA.

TABLE 4: PAIRED SAMPLES TEST

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre MFA Production of Cloth in ITI- Post MFA Production of Cloth in ITI	-15613.88889	7766.27967	2588.75989	-21583.57990	-9644.19788	-6.031	8	.000

Interpretation

In the above Paired Sample Test table t-value is -6.031 with 8 degrees of freedom. P-value Sig. (2 tailed) is 0.000

As the calculated p-value is less than the significance level (0.05) it imply that the difference in production of cloth in ITI between Pre and Post MFA phase-out period is highly consiquential. Based on the above results it can be concluded that the alternative hypothesis that **there is a significant difference in production of cloth in ITI between Pre and Post MFA phase-out period** stands accepted and null hypothesis is rejected.

FINDINGS

To find out the significant variations in production of cloth in ITI between pre and post MFA phase-out, Paired Samples T-test has been used. A significant change is noticed in production of cloth in ITI after the phase-out MFA. This indicates that the removal of quotas stimulated this labour-intensive sector to increase its productivity in India. Moreover this lead to the allocation of productive resources more efficiently as compared to the pre-MFA period.

CONCLUSION

It may be concluded that no doubt India has benefited from the phase-out of MFA. Production of cloth has been increased after the removal of quotas in different segments of ITI. But at the same time some sector of ITI particularly handloom sector is showing a decline in production. As India possesses the largest number of looms to weave fabrics, comprising 64% of the world's installed looms. But most of the looms are dominated by handloom sector, which largely use old equipments and outdated technologies thus resulting in low productivity. Moreover workers engaged in ITI are not professionally trained that is why they are not able to produce as per their capacity. Power supply which is one of the main ingredients of textiles industry is another important hurdle. The supply of power to most cotton textile mills is irregular and inadequate which negatively affects the production. Labour strikes and lockouts are common not only in the industrial sector but allover the country, cotton textile industry suffers a lot due to frequent strikes by labour force.

SUGGESTIONS AND RECOMMENDATIONS

In order to improve the productivity of cloth in ITI, certain suggestions discussed below may prove to be instrumental:

➤ Adoption of New Technology

Indian textile industries are still running on outdated and obsolete methods and machines. Though modernization has taken place, we still lag behind. International market is full of strong players with latest technologies and if we want to stand in the market and face competition we have to update ourselves. Thus, it makes necessary to transfer and adopt latest and selective technology in order to increase the productivity in Indian Textiles Industry.

➤ Technical Skills

Indian textiles industry lags behind in technically skilled manpower as compared to other countries. There are very little numbers of technical programmes to bring technological changes in the textile sector. Moreover Indian textile firms invest very little to provide training and guidance to their employees and ultimately this gives birth to unskilled and semiskilled labours. So initiatives should be taken to provide technical courses at graduate level. Moreover Indian

textile firms should offer enough training and development programmes to sharpen the skills of the labour. India should focus on the development of human capital. This will lead to increased production.

➤ **Incentive Packages**

With a view to motivate Indian textiles manufacturers, incentives packages in the form of concessions in taxes, capital, interest subsidies, land at concessional rate should be offered. This will encourage them to invest in different projects under textiles sector. this will positively affect the production of textiles in Indian Textiles Industry.

➤ **Business Environment**

If we talk in terms of business environment, India is not healthy, which is discouraging for doing business. Labour market rigidity, lack of facilities at ports and airports, excessive bureaucracy, lengthy legal procedures, corruption, many such factors that discourage manufactures to invest in new projects under Indian Textiles Industry. Making these barriers easy will increase the production in ITI.

### INITIATIVES TAKEN BY GOVERNMENT OF INDIA

In last few years, Ministry of Textiles of Government of India has taken various attractive policy initiatives with the objective of accelerating the growth and enhancing the competitiveness of Indian Textiles Industry. The schemes launched by GOI are discussed below:

- Technology Up gradation Fund Scheme (TUFFS)
- Scheme for Integrated Textiles Park (SITP)
- Integrated Processing Development Scheme (IPDS)
- Textile Workers' Rehabilitation Fund Scheme (TWRFS)
- Technology Mission on Technical Textiles (TMTT)
- Integrated Skill Development Scheme (ISDS)
- Export Promotion Councils (EPC)

### CONCLUSION

It can be concluded that manufacturing of textiles has always remained an indispensable part of the history of Indian Civilization. Now, India has proved itself as the world's third largest producer of cotton and second largest producer of cotton yarn and textiles. The complete removal of quotas under Multi-fibre Agreement on 31<sup>st</sup> December 2004, has had a very energetic impact on production and export of textiles in India. In order to trace the increase in production of cloth in Indian Textiles Industry (ITI), the researcher tried to measure the significant changes in cloth production in ITI between the Pre and the Post MFA phase-out period. For this, Paired Samples T-Test is used in order to test the formulated hypotheses and to reach to the conclusion. The results suggest that production of cloth in ITI has significantly increased after the removal of quotas under MFA.

### REFERENCES

1. Appelbaum, Richard P.(2005). The End of Apparel Quotas: A Faster Race to the Bottom?. UC Santa Barbara: Global and International Studies. Retrieved from: <http://escholarship.org/uc/item/0q40t681>
  2. Appelbaum, Richard P. (2004). Assessing the Impact of the Phasing-out of the Agreement on Textiles and Clothing on Apparel Exports on the Least Developed and Developing Countries. Center for Global Studies, Institute for Social, Behavioral, and Economic Research, UC Santa Barbara.
  3. India and the WTO.(1999). WTO Agreement on Textiles and Clothing. A monthly newsletter of the Ministry of Commerce. 1(8)
  4. Liu & Sun(2003).Beyond Phae-out of Quota in Textiles and Clothing Trading: WTO-Plus Rules and the Case of US Safeguards against Exports in 2003.(Discussion Paper). Retrieved from,[http://www.unescap.org/pdd/publications/apdj\\_11\\_1/liu&sun.pdf](http://www.unescap.org/pdd/publications/apdj_11_1/liu&sun.pdf).
  5. Sardar. M. (2003). Indian Textiles: Trade and Production. In Heilbrunn Timeline of Art History. New York: The Metropolitan Museum of Art.
- WEBSITE**
6. [http://www.wto.org/english/thewto\\_e/whatis\\_e/tif\\_e/agrm5\\_e.htm](http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm5_e.htm)

## **REQUEST FOR FEEDBACK**

**Dear Readers**

At the very outset, International Journal of Research in Commerce & Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you to supply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mail [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com) for further improvements in the interest of research.

If you have any queries please feel free to contact us on our E-mail [infoijrcm@gmail.com](mailto:infoijrcm@gmail.com).

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

**Academically yours**

Sd/-

**Co-ordinator**

## **DISCLAIMER**

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, neither its publishers/Editors/Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal are exclusively of the author (s) concerned.

## ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

### *Our Other Journals*

