

**FEMALE EMPLOYMENT IN INDIAN MANUFACTURING: A
STUDY OF THE GARMENT INDUSTRY IN BANGALORE
AND THE NCR REGION**

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INDIAN INSTITUTE OF TECHNOLOGY DELHI**

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by

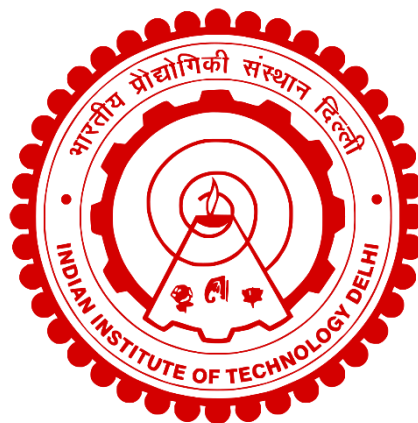
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Submitted

in fulfilment of the requirements of the degree of Doctor of Philosophy

to the



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CERTIFICATE

This is to certify that the thesis titled **“Female Employment in Indian Manufacturing: A study of the Garment Industry in Bangalore and the NCR Region”**, being submitted by **Ms. Chinju Johnny** to the Indian Institute of Technology Delhi for the award of the degree of Doctor of Philosophy, is a record of original bona-fide research carried out by her under my supervision. In my opinion, the thesis has reached the standards fulfilling the requirements for submission relating to the degree.

The results contained in the thesis have not been submitted, in part or full, to any other institute or university for award of any degree or diploma.

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Abstract

The thesis examines some aspects of female labour in manufacturing in India, with a focus on the garment sector. The size of manufacturing employment in India in general, and female manufacturing employment in particular, has been relatively small. Despite being a country with large reserves of surplus labour, India's inability to emerge as a major growth pole in labour-intensive industries such as garments has been puzzling for scholars and policymakers. The low rate of absorption of female workers into manufacturing jobs in India assumes importance in the context of a low and declining rate of female labour force participation in the country in recent years.

The thesis is partly based on an extensive analysis of secondary data from India's official statistical agencies including Employment and Unemployment surveys of the National Sample Survey Organisation (NSSO), Periodic Labour Force Survey (PLFS), Annual Survey of Industries (ASI), and the Survey on Unincorporated Non-agricultural Enterprises (2015-16). At the core of the thesis is the primary data on women workers and firms that I collected from two garment clusters in India: Bangalore and Delhi–National Capital Region (NCR).

There are three separate but interlinked themes that motivate my enquiry. The first one is the low female participation and its implications for women's well-being and agency. The second one is the slow growth of employment, and particularly female employment, in India's manufacturing sector. The third is about the global nature of the garment industry value chain and the implications of the same for workers and supplier firms based in developing countries.

Given the context above, I specifically addressed five questions in the thesis. They are, the first, to explore the size and nature of employment, especially female employment, in Indian manufacturing. The second question addressed in the thesis was to understand how the industry structure and firms' strategies determine the nature of female participation in Indian manufacturing, especially in the garment industry in India. The third question was to examine the socio-economic characteristics of the women workers in the garment industry. It also tries to understand how these characteristics influence the decisions relating to labour supply and demand. The fourth question tries to understand the nature of the relation between women workers and the factories in which they work. In particular, we look at the roles in which women contribute to the production process, the process of recruiting the workers, and finally,

the wages and working conditions. And fifth question was to understand what women's work means to their families, their own lives and women workers' capabilities for collective action.

The thesis begins with an analysis of the size of employment in the organised and the unorganised manufacturing sectors in India (Chapter 2). The chapter finds that the size of employment in the unorganised manufacturing sector may have declined substantially during the period from 2011-12 to 2017-18 -- from 61.1 million to 58.5 million. This decrease in overall manufacturing employment was mainly due to the fall in female employment by 4 million. During the same period, factory-sector employment increased from 13.4 million to 15.6 million. The thesis finds that the acceleration in the factory sector employment, which began in the second half of the 2000s, has continued while manufacturing employment growth in the informal sector has slowed down. Textiles, garments and leather industries have been an important source of manufacturing employment (organized and unorganized combined) in India and a majority of the workers are engaged in enterprises that fall outside the factory sector. These industries are also characterized by relatively low value-added per employee. The size of the female workforce is small in manufacturing, both in absolute and relative terms. The chapter also finds that the quality of employment was very low in manufacturing, especially for female workers. The region-wise analysis shows that the lead of the western and the southern States over other regions is particularly marked in the factory sector. But the north and east are characterised by high levels of overall manufacturing employment implying their significant presence in the unorganised sector. When it comes to female industrial employment, especially in the factory sector, regional concentration is much sharper.

The thesis then discusses the context of the study and methodology (Chapter 3). India's share in global exports of garments increased only marginally although it was predicted to increase significantly post the Multi-Fibre Agreement (MFA). The chapter finds distinct variations in factory employment across various States in terms of size of the firms, directly employed female workers, contract workers and emoluments to workers. The methodology, especially the field research, is motivated by the analytical literature on production networks that take into account the role of labour and institutional factors. The third chapter also forms the rationale for choosing the two clusters – Bangalore in South India and NCR in North India, for understanding the female employment patterns in the garment industry.

The second question addressed in the thesis was to understand how the industry structure and firms' strategies determine the nature of female participation in Indian

manufacturing, especially in the garment industry in India. Bangalore is characterised by relatively large firms and a very high share of women in the workforce. On the other hand, firms in NCR are small and female participation is low. We find that the above-referred characteristics - factory size and female share of employment - are strategies adopted by firms in the respective clusters, given the specific market opportunities and constraints they face. We argue that the decisions to employ more female workers in Bangalore and more male workers in Delhi-NCR are driven not entirely by economic considerations. Equally important have been the historical legacies in the respective industries, institutional factors, and most importantly, the perceptions held by the employers and the industry in general about gender and work.

The third and fourth questions were to examine the socio-economic characteristics of the women workers in the garment industry and the nature of the relation between women workers and the factories in which they work. In particular, the chapter addresses the roles in which women contribute to the production process, the process of recruiting the workers, and the wages and working conditions in the industry (Chapter 5). Women workers in Bangalore are short-term migrants from rural areas of Karnataka. Women workers employed in factories in NCR were not migrant workers while the factories in NCR are dominated by male migrant workers. The nature of the jobs that women do is also different, women mainly work as tailors in the factories while women in NCR do work that is categorised as helpers. Wage theft is practised in the garment industry in Bangalore by making workers do overtime without benefits and by underpaying the workers in NCR-Delhi. Even though the jobs are of regular nature, women workers in NCR do not receive any of the social security benefits that workers in Bangalore receive.

The fifth question the thesis addressed was to understand what women's work means to their families, their own lives and the women workers' capabilities for collective action (Chapter 6). In this way, we aim to find out how women's work in the garment industry contributes to their well-being and agency. We understand that women's entry into paid work has not redefined the gender roles where women are responsible for most of the unpaid domestic work. Work has been more about upward mobility for the workers in Bangalore and paid for the education of their children. In NCR, work was about ensuring basic facilities such as food for their families. Garment manufacturing provides a steady source of income for many women workers, especially in NCR where many of the male members in the family are unemployed. Work in the garment factories has positively transformed the lives of many women workers in

Bangalore and NCR, even when it has been exploitative. Transportation is also an important barrier for women in accessing labour markets, especially in NCR. We also discuss the possible agents of change for more equitable distribution in the industry.

The thesis concludes that the size of the factories and the female share of employment are part of the strategies adopted by firms, given their specific market opportunities and the constraints they face. While the price of the garments has fallen over the years squeezing the suppliers and the workers in the process, government support is appearing to be crucial for the future growth and survival of the industry.

थीसिस परिधान क्षेत्र पर ध्यान देने के साथ भारत में विनिर्माण क्षेत्र में महिला श्रम के कुछ पहलुओं की जांच करती है। सामान्य तौर पर भारत में विनिर्माण रोजगार और विशेष रूप से महिला विनिर्माण रोजगार का आकार अपेक्षाकृत छोटा रहा है। अधिशेष श्रम के बड़े भंडार वाला देश होने के बावजूद, वस्तु जैसे श्रम प्रधान उद्योगों में एक प्रमुख विकास ध्रुव के रूप में उभरने में भारत की अक्षमता विद्वानों और नीति निर्माताओं के लिए उलझन का कारण है। भारत में विनिर्माण नौकरियों में महिला श्रमिकों के अवशोषण की निम्न दर हाल के वर्षों में देश में महिला श्रम बल की भागीदारी की कम और घटती दर के संदर्भ में महत्व रखती है।

थीसिस आंशिक रूप से राष्ट्रीय नमूना सर्वेक्षण संगठन (एनएसएसओ), आवधिक श्रम बल सर्वेक्षण (पीएलएफएस), उद्योगों के वार्षिक सर्वेक्षण (एसआई) के रोजगार और बेरोजगारी सर्वेक्षण सहित भारत की आधिकारिक सांख्यिकीय एजेंसियों के माध्यमिक डेटा के व्यापक विश्लेषण पर आधारित है। अनिगमित गैर-कृषि उद्योगों पर सर्वेक्षण (2015-16)। थीसिस के मूल में महिला श्रमिकों और फर्मों पर प्राथमिक डेटा है जिसे मैंने भारत में दो परिधान समूहों: बेंगलोर और दिल्ली-राष्ट्रीय राजधानी क्षेत्र (एनसीआर) से एकत्र किया है। तीन अलग-अलग लेकिन परस्पर जुड़े हुए विषय हैं जो मेरी जांच को प्रेरित करते हैं। पहली कम महिला भागीदारी और महिलाओं की भलाई और एजेंसी के लिए इसके निहितार्थ हैं। दूसरा, भारत के विनिर्माण क्षेत्र में रोजगार और विशेष रूप से महिला रोजगार की धीमी वृद्धि है। तीसरा परिधान उद्योग मूल्य श्रृंखला की वैश्विक प्रकृति और विकासशील देशों में स्थित श्रमिकों और आपूर्तिकर्ता फर्मों के लिए इसके निहितार्थ के बारे में है। उपरोक्त संदर्भ को देखते हुए, मैंने थीसिस में विशेष रूप से पांच प्रश्नों को संबोधित किया। पहला प्रश्न, भारतीय विनिर्माण में रोजगार के आकार और प्रकृति, विशेष रूप से महिला रोजगार को समझने का प्रयास करता है। थीसिस में संबोधित दूसरा प्रश्न यह समझना था कि उद्योग संरचना और फर्मों की रणनीतियां भारतीय विनिर्माण में, विशेष रूप से भारत में परिधान उद्योग में महिलाओं की भागीदारी की प्रकृति को कैसे निर्धारित करती हैं। तीसरा प्रश्न परिधान उद्योग में महिला श्रमिकों की सामाजिक-आर्थिक विशेषताओं की जांच करना था। यह समझने की भी कोशिश करता है कि ये विशेषताएं श्रम आपूर्ति और मांग से संबंधित निर्णयों को कैसे प्रभावित करती हैं। चौथा प्रश्न महिला श्रमिकों और उन कारखानों के बीच संबंधों की प्रकृति को समझने की कोशिश करता है जिनमें वे काम करती हैं। विशेष रूप से, हम उन भूमिकाओं को देखते हैं जिनमें महिलाएं उत्पादन प्रक्रिया में योगदान करती हैं, श्रमिकों की भर्ती की प्रक्रिया, और अंत में, मजदूरी और काम करने की स्थिति। और पाँचवाँ प्रश्न यह समझना था कि महिलाओं के काम का उनके परिवारों, उनके स्वयं के जीवन और सामूहिक कार्रवाई के लिए महिला श्रमिकों की क्षमताओं के क्या मायने हैं।

थीसिस भारत में संगठित और असंगठित विनिर्माण क्षेत्रों में रोजगार के आकार के विश्लेषण के साथ शुरू होती है (अध्याय 2)। अध्याय में पाया गया है कि 2011-12 से 2017-18 की अवधि के दौरान असंगठित विनिर्माण क्षेत्र में रोजगार के आकार में 61.1 मिलियन से 58.5 मिलियन तक की काफी गिरावट आई है। समग्र विनिर्माण रोजगार में यह कमी मुख्य रूप से महिला रोजगार में 4 मिलियन की गिरावट के कारण थी। इसी अवधि के दौरान कारखाना क्षेत्र में रोजगार 13.4 मिलियन से बढ़कर 15.6 मिलियन हो गया। थीसिस में पाया गया कि 2000 के दशक के उत्तरार्ध में शुरू हुआ कारखाना क्षेत्र के रोजगार में तेजी जारी रही, जबकि अनौपचारिक क्षेत्र में विनिर्माण रोजगार वृद्धि धीमी हो गई है। कपड़ा, वस्त्र और चमड़ा उद्योग भारत में विनिर्माण रोजगार (संगठित और असंगठित संयुक्त) का एक महत्वपूर्ण स्रोत रहा है और अधिकांश श्रमिक ऐसे उद्यमों में लगे हुए हैं जो कारखाना क्षेत्र से बाहर हैं। इन उद्योगों की विशेषता प्रति कर्मचारी अपेक्षाकृत कम मूल्यवर्धित भी है। निर्माण में महिला कार्यबल का आकार निरपेक्ष और सापेक्ष दोनों दृष्टि से छोटा है। अध्याय में यह भी पाया गया है कि विनिर्माण क्षेत्र में विशेष रूप से महिला श्रमिकों के लिए रोजगार की गुणवत्ता बहुत कम थी। क्षेत्र-वार विश्लेषण से पता चलता है कि अन्य क्षेत्रों पर पश्चिमी और दक्षिणी राज्यों की बढ़त विशेष रूप से कारखाना क्षेत्र में चिह्नित है। लेकिन उत्तर और पूर्व में समग्र विनिर्माण रोजगार के उच्च स्तर की विशेषता है, जो असंगठित क्षेत्र में उनकी महत्वपूर्ण उपस्थिति को दर्शाता है। जब महिला औद्योगिक रोजगार की बात आती है, विशेष रूप से कारखाना क्षेत्र में, क्षेत्रीय एकाग्रता बहुत तेज है।

थीसिस तब अध्ययन और कार्यप्रणाली के संदर्भ पर चर्चा करती है (अध्याय 3)। कपड़ों के वैश्विक निर्यात में भारत का हिस्सा केवल मामूली रूप से बढ़ा, हालांकि मल्टी-फाइबर समझौते (एमएफए) के बाद इसके उल्लेखनीय रूप से बढ़ने की भविष्यवाणी की गई थी। यह अध्याय विभिन्न राज्यों में फर्मों के आकार, प्रत्यक्ष रूप से नियोजित महिला श्रमिकों, ठेका श्रमिकों और श्रमिकों के लिए पारिश्रमिक के संदर्भ में कारखाने के रोजगार में अलग-अलग बदलाव पाता है। कार्यप्रणाली, विशेष रूप से क्षेत्र अनुसंधान, उत्पादन नेटवर्क पर विश्लेषणात्मक साहित्य से प्रेरित है जो श्रम और संस्थागत कारकों की भूमिका को ध्यान में रखता है। तीसरा अध्याय परिधान उद्योग में महिला रोजगार पैटर्न को समझने के लिए दो समूहों - दक्षिण भारत में बैंगलोर और उत्तर भारत में एनसीआर को चुनने का औचित्य भी बनाता है। थीसिस में संबोधित दूसरा प्रश्न यह समझना था कि उद्योग संरचना और फर्मों की रणनीतियां भारतीय विनिर्माण में, विशेष रूप से भारत में परिधान उद्योग में महिलाओं की भागीदारी की प्रकृति को कैसे निर्धारित करती हैं। बैंगलोर अपेक्षाकृत बड़ी फर्मों और कार्यबल में महिलाओं की एक बहुत बड़ी हिस्सेदारी की विशेषता है। दूसरी ओर, एनसीआर में फर्में छोटी हैं और महिलाओं की भागीदारी कम है। हम पाते हैं कि उपर्युक्त विशेषताओं - कारखाने का आकार और रोजगार की महिला हिस्सेदारी - संबंधित समूहों में फर्मों द्वारा अपनाई गई रणनीतियां हैं, जो विशिष्ट बाजार के अवसरों और बाधाओं का सामना करती हैं। हमारा तर्क है कि बंगलौर में अधिक महिला श्रमिकों और

दिल्ली-एनसीआर में अधिक पुरुष श्रमिकों को नियुक्त करने का निर्णय पूरी तरह से आर्थिक विचारों से प्रेरित नहीं है। समान रूप से महत्वपूर्ण संबंधित उद्योगों में ऐतिहासिक विरासत, संस्थागत कारक, और सबसे महत्वपूर्ण बात, नियोक्ताओं और उद्योग द्वारा सामान्य रूप से लिंग और कार्य के बारे में धारणाएं हैं।

तीसरा और चौथा प्रश्न परिधान उद्योग में महिला श्रमिकों की सामाजिक-आर्थिक विशेषताओं और महिला श्रमिकों और उन कारखानों के बीच संबंधों की प्रकृति की जांच करना था जिसमें वे काम करते हैं। विशेष रूप से, अध्याय उन भूमिकाओं को संबोधित करता है जिनमें महिलाएं उत्पादन प्रक्रिया में योगदान करती हैं, श्रमिकों की भर्ती की प्रक्रिया और उद्योग में मजदूरी और काम करने की स्थिति (अध्याय 5)। बैंगलोर में महिला श्रमिक कर्नाटक के ग्रामीण क्षेत्रों से अल्पकालिक प्रवासी हैं। एनसीआर में कारखानों में कार्यरत महिला श्रमिक प्रवासी श्रमिक नहीं थीं, जबकि एनसीआर में कारखानों में पुरुष प्रवासी श्रमिकों का वर्चस्व है। महिलाओं द्वारा किए जाने वाले कार्यों की प्रकृति भी भिन्न होती है, महिलाएं मुख्य रूप से कारखानों में दर्जी का काम करती हैं जबकि एनसीआर में महिलाएं सहायकों के रूप में वर्गीकृत काम करती हैं। बेंगलुरु के गारमेंट उद्योग में श्रमिकों को बिना किसी लाभ के ओवरटाइम करने के लिए और एनसीआर-दिल्ली में श्रमिकों को कम भुगतान करके मजदूरी की चोरी का अभ्यास किया जाता है। हालांकि नौकरियां नियमित प्रकृति की हैं, एनसीआर में महिला श्रमिकों को बंगलौर में श्रमिकों को मिलने वाले सामाजिक सुरक्षा लाभों नहीं मिलते हैं।

थीसिस का पांचवां प्रश्न यह समझना था कि महिलाओं के काम का उनके परिवारों, उनके स्वयं के जीवन और सामूहिक कार्रवाई के लिए महिला श्रमिकों की क्षमताओं का क्या अर्थ है (अध्याय 6)। इस तरह, हमारा उद्देश्य यह पता लगाना है कि परिधान उद्योग में महिलाओं का काम उनकी भलाई और एजेंसी में कैसे योगदान देता है। हम समझते हैं कि भुगतान किए गए काम में महिलाओं के प्रवेश ने उन लिंग भूमिकाओं को फिर से परिभाषित नहीं किया है जहां महिलाएं अधिकांश अवैतनिक घरेलू काम के लिए जिम्मेदार हैं। बंगलौर में काम का प्रभाव श्रमिकों के लिए ऊपर की ओर गतिशीलता के पर रहा है और उनके बच्चों की शिक्षा के भुगतान में सहायक रहा है। एनसीआर में काम उनके परिवारों के लिए भोजन जैसी बुनियादी सुविधाएं सुनिश्चित करने में सहायक रहा था। गारमेंट निर्माण कई महिला श्रमिकों के लिए आय का एक स्थिर स्रोत प्रदान करता है, विशेष रूप से एनसीआर में जहां परिवार के कई पुरुष सदस्य बेरोजगार हैं। कपड़ा कारखानों में काम ने बैंगलोर और एनसीआर में कई महिला श्रमिकों के जीवन को सकारात्मक रूप से बदल दिया है, भले ही यह शोषक रहा हो। श्रम बाजारों तक पहुँचने में महिलाओं के लिए परिवहन भी एक महत्वपूर्ण बाधा है, खासकर एनसीआर में। हम उद्योग में अधिक न्यायसंगत वितरण के लिए परिवर्तन के संभावित एजेंटों पर भी चर्चा करते हैं। थीसिस का निष्कर्ष है कि कारखानों का आकार और रोजगार की महिला हिस्सेदारी फर्मों द्वारा अपनाई गई रणनीतियों का हिस्सा है, उनके विशिष्ट बाजार के अवसरों और उनके

सामने आने वाली बाधाओं को देखते हुए। जबकि इस प्रक्रिया में आपूर्तिकर्ताओं और श्रमिकों को निचोड़ने वाले कपड़ों की कीमत वर्षों में गिर गई है, उद्योग के भविष्य के विकास और अस्तित्व के लिए सरकारी समर्थन महत्वपूर्ण प्रतीत हो रहा है।

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Abbreviations

| | |
|---------|--|
| ASI | Annual Survey of Industries |
| ATC | Agreement on Textiles and Clothing |
| CITU | Centre of Indian Trade Unions |
| CIVIDEP | Civil Initiatives for Development |
| GATT | General Agreement on Trade and Tariffs |
| GAWU | Garment and Allied Workers Union |
| GCC | Global Commodity Chain |
| GLU | Garment Labour Union |
| GPN | Global Production Network |
| GST | Goods and Services Tax |
| GVC | Global Value Chain |
| HMS | Hind Mazdoor Sabha |
| ILO | International Labour Organisation |
| IT | Information Technology |
| LDC | Least Developed Countries |
| MEM | Mazdoor Ekta Manch |
| MFA | Multi-Fibre Agreement |
| MITRA | Mega Integrated Textiles Region and Apparel Park |
| NCR | National Capital Region |
| NGO | Non-governmental Organisation |
| NSO | National Statistical Office |
| NTUI | New Trade Union Initiative |
| PLFS | Periodic Labour Force Survey |
| PLI | Production-Linked Incentive |
| SLD | Society for Labour and Development |
| SSI | Small Scale Industry |
| TUS | Time Use Survey |
| WITS | World Integrated Trade Solution |
| WTO | World Trade Organization |



Map of India

Source: <https://upload.wikimedia.org/wikipedia/commons/b/b3/Medium-india-political-wall-map-vinyl-moi4781121786238-original-imaezawqex9x5dbb.jpg>



Map of Karnataka

Source: <http://www.indiafile.com/india-maps/karnataka-map.html>



Map of NCR

Source: [https://commons.wikimedia.org/wiki/File:National_Capital_Region_\(India\).svg](https://commons.wikimedia.org/wiki/File:National_Capital_Region_(India).svg)