

Workshop on Gender in Global and Regional Trade Policy:  
Contrasting Views and New Research.

University of Warwick, 5 – 7 April 2006

**Export Orientation of the Economy and Women's  
Empowerment: Empirical Evidence from India**

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**Session 3: Lessons from Research**

*Revised version: 31 March 06*

## **Export Orientation of the Economy and Women's Empowerment: Empirical Evidence from India**

### **Executive Summary**

The most common view seems to be that while the employment consequences of increased trade are negative in the North, the South is likely to benefit from trade expansion. However, all regions of the South have not been affected in the same way. Integration of markets has resulted in an improvement in the economic and social status for large numbers of women, but not for all. They include the millions of women workers newly absorbed into the global production system, for whom wage employment has brought higher incomes, particularly in service sectors. The expansion of trade over the last forty years has brought about an increase in labour-intensive exports from developing countries. Employers in these industries have predominantly hired women, and the growth of exports such as textiles and clothing, shoes, jewelry, and electronics has almost always been accompanied by a significant increase in female wage employment in the formal sector. Increases in female wage employment have given women greater access to income, and have changed their position in society.

This study is an attempt to analyze the relationship between women's empowerment and export share (ES) in state domestic product, the measure of the export orientation of state domestic product. The study basically examines whether export oriented change in the production structure can bring changes in the socio-economic condition of women in India. This study shows that there is significant positive association between export share in state domestic product and the empowerment of women. The regression result indicates that the higher the share of exports in the economy, the higher is the empowerment of women. However, if you remove education from the gender development index, the effect of trade liberalization on gender development becomes insignificant, which indicates the crucial role of education in delivering holistic benefits from trade liberalization. Sector specific case studies conclude that employment opportunities have increased in export oriented sectors, especially for women workers. Average wages have improved. Sectoral analysis further indicates that integration into global markets does generate uncertainties for women but these may be outweighed by net economic gains and distributional effects. The macro indicators have demonstrated net welfare gains for women, but anecdotal evidence has also shown that global integration has had adverse consequences for women in several instances.

In view of these differences, UNCTAD under its "Project on Strategies and Preparedness for Trade and Globalization in India" has initiated an enquiry into the "**Impact of Trade and Globalisation on Gender in India**". The focus is to conduct a study that will map and assess the relationship between gender and trade in India at the sectoral and regional levels. It is expected to make an overall assessment of women's employment in India at sectoral and regional level and their role in the national economy. The study will examine the following sectors: Agriculture and Food Processing; Textiles and Clothing (including handlooms); Handicrafts; Fisheries and other marine products. The study will *inter alia* examine the following factors: Employment opportunities: opportunities to participate in the labour market in all sectors (horizontal distribution of activities) and all occupations (vertical distribution of activities in a profession); Wages; Working conditions and quality

of employment; Empowerment. Further, the study is expected to quantify the contribution of women to productivity in sectors and regions that are integrated to trade. Some relevant suggestions, it is hoped, will emerge, both broad and specific, that could be used in national trade policy formulation to advance and protect the interests of women in gender intensive sectors in the international trade regimes, (for example the WTO and regional trade agreements ) by suggesting possible measures (eg.GSPs, Preferential FDI etc).

## **Export Orientation of the Economy and Women's Empowerment: Empirical Evidence from India**

### **INTRODUCTION**

The greater integration of trade and investment may have different effects on women and men, and the extent of those effects, depend on how quickly they are able to cope with external shocks, and find new employment. For many women, more integrated markets have resulted in an improvement in their economic and social status. They include the millions of women workers newly absorbed into the global production system for whom wage employment has brought higher incomes. Wage employment has also given some women greater economic independence and more control over household resources, and has often raised their social status. Recent studies show that export-orientation in developing countries develops in tandem with the increase in women's share of paid employment. In industrialized economies, by contrast, increased trade with developing countries has led to loss of women's employment in industries where they are over-represented, such as textiles, apparel and leather goods. The most common view seems to be that while the employment consequences of increased trade are negative in the North, the South is likely to benefit from trade expansion (ILO, 1995: 35-39). However, not all regions of the South have been affected in the same way, with major gains concentrated in South East Asia while Africa appears to have been unable to take advantage of these international developments.

Trade expansion over the last forty years has brought about an increase in labour-intensive exports from developing countries. Employers in these industries have predominantly hired women, and the growth of exports such as textiles and clothing, shoes, jewelry, and electronics has almost always been accompanied by a significant increase in female wage employment in the formal sector. Increases in female wage employment have given women greater access to income, and have changed their position in society. Numerous studies point to the change in women's status and bargaining power within the household as well as obtaining greater control over household resources.

The important question is to look at whether the association of trade liberalization with an increase in women's share of paid employment in the export sector be expected to lead to higher incomes and greater empowerment for women, especially poor women? It is always very difficult to say something with certainty because the women empowerment and trade has multidimensional linkages. As gender inequalities are multidimensional, even women who may gain in one dimension, such as employment, may lose in another, such as leisure time. On the one hand, paid employment can potentially give them greater control over income and increase their status and bargaining power within households or communities. Further, increased control over income is likely to increase women's own well-being and that of their children. At the same time, women become incorporated into the paid workforce as 'inferior' sellers of labour, reflecting both inter-class disadvantage vis-à-vis capital and intra-class disadvantage vis-à-vis male workers.

However, it is not clear, theoretically, whether trade liberalization and trade orientation of an economy should narrow or widen the differential in women's and men's status in society. The neo-classical view is that trade will open the economy to greater competition

and therefore allocate labour to its most productive use, so as to minimize costs. Gender discrimination, and resulting wage differentials, is economically costly insofar as it leads to an allocation of resources that do not maximize output. This would suggest that trade liberalization, and increased competition, would provoke a decrease in the gender differential in wages. Another view, based on the Heckscher-Ohlin model, points to the factor-price equalization effect of trade. Countries abundant in unskilled labour tend to specialize in unskilled labour-intensive exports. Demand for lower-skilled labour will therefore rise. The wages of unskilled labour will thus increase relative to skilled labour. This effect also points to a narrowing of the gender wage gap in developing countries opening to trade, since women are often employed in lower-wage, lower-skilled jobs than men. From this perspective it may be argued that economic upliftment of women may improve the status of the women in society. One view suggests that export-oriented firms will compete based on cost advantage and will use the wage differential as a competitive tool. It has been documented that trade often results in a premium on skills, due to the necessity to innovate constantly in a more competitive, integrated world economy. The bargaining power of skilled workers will therefore rise, while that of unskilled workers may not. Even if this argument is accepted, women's status will improve if there is increase in women employment relative to counterfactual scenario<sup>1</sup>.

Though not in itself biased against a particular gender, or "gendered", trade may have gendered impacts on societies due to the existence of gendered social structures. Thus, while trade may not be the source for gender disparities, it may act as a "magnifying glass" and worsen existing disparities. On the other hand, trade may also open new opportunities for women and men regardless of gender. Table 1 outlines the different ways in which trade might impact women, given their particular role in society and in the economy.

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<sup>1</sup> The benefit and loss accrued to a particular section of the society must be evaluated in absolute as well as relative terms. The absolute gains may be evaluated in terms of increase in women's employment, rise in wages, etc. In the relative sense, two scenarios emerge. One, compare impact of trade liberalization on the women and men and draw inferences whether gender inequalities has increased or decreased. Second, compare impact of trade liberalization in pre and post liberalization scenarios on the same gender, which is more important from developing country perspective. If women get employed irrespective of wage rate in post trade liberalization scenario without displacing other women employed, it improves the condition of women in counterfactual sense. Basically, counterfactual scenario is comparison of opportunity cost of female in pre and post liberalization scenario.

**Table-1****Potential Effects of Trade Liberalization on Women<sup>2</sup>**

<b>Issues</b>	<b>Potential Positive Effects</b>	<b>Potential Negative Effects</b>
<b>Employment</b>	<p><b>Increase in quantity of jobs available</b></p> <p><b>New alternatives to existing employment</b></p> <p><b>Greater quality in terms of income and work conditions with development of new industries</b></p> <p><b>Opening of new markets for goods and crafts, in particular traditional crafts</b></p>	<p><b>Poor quality of opportunities due to growing competition</b></p> <p><b>Insecurity of employment</b></p> <p><b>Increase in part-time work, home based work, day-laboring and piece-based remuneration</b></p> <p><b>Loss of traditional sector of activities and of business because of foreign competition</b></p>
<b>Public Service availability</b>	<p><b>More efficient and more adapted services in response to women's specific demands</b></p>	<p><b>Decrease in service availability in some areas because not deemed profitable</b></p> <p><b>Increase in the cost of services and medicines</b></p>
<b>Price effects</b>	<p><b>Growing availability of cheaper foodstuff and goods</b></p>	<p><b>As local production is displaced, gradually rising price of goods, and greater sensitivity to fluctuating exchange rates</b></p>
<b>Wage gap</b>	<p><b>Unclear whether trade liberalization can have any effect on the wage gap.</b></p>	<p><b>Competitive pressure may drive wages down as firms seek to minimize costs</b></p>

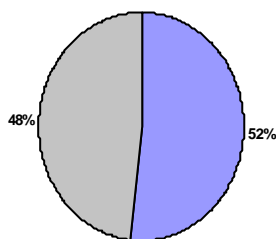
Trade policies, like any other economic policy, are likely to have gender differentiated effects because of women's and men's different access to, and control over, resources, and because of their different roles in both the market economy and the household. This paper analyzes the impact of trade expansion on gender empowerment in India.

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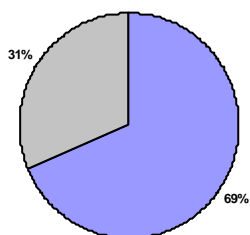
<sup>2</sup>Trade Liberalization, Gender and Development: What are the Issues and How Can We Think About Them? presented by Organisation of American States at Second Ministerial Meeting, April 2004, Washington DC.

## WOMEN'S EMPLOYMENT IN INDIA: SOME TELLING INDICATORS

In India, women represent 48% of total population, but in the employment market out of the 397 million employed in 1999/2000, only 123 million (around 31%) were women. Even of this, only about 5 million women are in the organized sector while remaining 118 million are in the unorganized sector.



**Though women constitute around 48% of the total population .....**



**....their contribution to workforce is much smaller**

The ratio of women in the workforce is not commensurate with their share in the population, though their participation in economic activities is increasing. The female work participation rate (WPR) has increased overall from 19.7% in 1981 to 25.7% in 2001. Though the trend is upward, the female WFPR is still around 50% lower than the male participation rate. The participation of women in the rural areas is much higher than in the urban areas, an indicator of the high absorptive capacity of agriculture and allied sectors (Table 2).

Table-2

**India's Work force participation rates (1971 – 2001)(in percent)**

Census	T/R/U	Female	Male
1971	Total	12.06	52.61
	Rural	13.36	53.62
	Urban	6.65	48.8
1981	Total	19.7	52.6
	Rural	23.1	53.8
	Urban	8.3	49.1
1991	Total	22.3	51.6
	Rural	26.8	52.6
	Urban	9.2	48.9
2001	Total	25.7	51.9
	Rural	26.8	52.4
	Urban	9.2	50.9

Source: Census documents

Within India, there are *inter state differences* wherein the North Eastern states show a higher ratio than the all India average- a pointer to their matrilineal social systems. But, in these states as well, the maximum participation of women is in agriculture and the unorganized segments. In Table 3, listed are the top fifteen states with respect to female work participation ratios.

Table-3

Rank	State	Female participation rate
1	Mizoram	47.63
2	Himachal Pradesh	43.69
3	Manipur	40.51
4	Chattisgarh	40.04
5	Dadra and nagar Haveli	38.68
6	Sikkim	38.59
7	Nagaland	38.25
8	Arunachal pradesh	36.45
9	Meghalaya	35.02
10	Andhra Pradesh	34.93
11	Rajasthan	33.48
12	Madhya Pradesh	33.1
13	Maharashtra	32.59
14	Karnataka	31.88
15	Tamil Nadu	31.32
	All India	25.7

Source: Census documents



The rural and urban female distribution *by industry* shows the predominance of the rural women in the primary sector, while in the urban areas more and more women are absorbed by the services sector. The decade of nineties has witnessed a continuation of the same trend, though there has been a marginal decline in the share of the primary sector and the tertiary sectors in the employment of rural and urban women respectively. More than 2/3<sup>rd</sup> of working rural women are in primary sector (84%) and less than 1/3<sup>rd</sup> are in secondary (11%) and tertiary (5%) sectors. In the urban areas, on the other hand, tertiary sector absorbs more than 2/3<sup>rd</sup> of working women with the secondary sector providing employment to 33% and the primary sector to around 20% of urban women according to the 57<sup>th</sup> round of NSS.

Looking at a broad *sectoral distribution of women workforce* in India in two time periods, 1993/4 and 1999/2000, we find that around 90% of Indian women are employed in nine sectors namely, agriculture, live stock, textiles and textile products, beverage and tobacco, food products, construction, petty retail trade, education and research and domestic services. The share of these sectors in women's employment has remained more or less constant in the time period considered(table-4).

Table-4

<b>WOMEN EMPLOYMENT: SECTORAL DISTRIBUTION</b>				
	<b>1993-94</b>		<b>1999-2000</b>	
<b>Sector</b>	<b>Number</b>	<b>Per cent</b>	<b>Number</b>	<b>Per cent</b>
<b>1. Agriculture</b>	<b>8,10,13,000</b>	<b>66.6</b>	<b>7,91,30,000</b>	<b>64.3</b>
<b>2. Live stock</b>	<b>1,18,55,000</b>	<b>9.7</b>	<b>1,10,74,000</b>	<b>9.0</b>
<b>3. Textiles &amp; textile products</b>	<b>36,24,000</b>	<b>3.0</b>	<b>34,79,000</b>	<b>2.8</b>
<b>4. Beverage &amp; Tobacco</b>	<b>30,19,000</b>	<b>2.5</b>	<b>36,76,000</b>	<b>3.0</b>
<b>5. Food products</b>	<b>13,53,000</b>	<b>1.1</b>	<b>13,17,000</b>	<b>1.1</b>
<b>6. Construction</b>	<b>16,48,000</b>	<b>1.4</b>	<b>20,57,000</b>	<b>1.7</b>
<b>7. (Petty) Retail trade</b>	<b>31,22,000</b>	<b>2.6</b>	<b>42,28,000</b>	<b>3.4</b>
<b>8. Education &amp; Research</b>	<b>23,22,000</b>	<b>1.9</b>	<b>32,90,000</b>	<b>2.7</b>
<b>9. Personal services(domestic)</b>	<b>44,22,000</b>	<b>3.6</b>	<b>39,25,000</b>	<b>3.2</b>
<b>Total</b>		<b>92.4</b>		<b>91.2</b>

*Sundaram, K., EPW, August 11, 2001*

## Literature review

Economists taking a broad ‘universalist’ approach are generally positive about the impacts of trade liberalization on gender. The feminist view focuses on micro-level complexity, employs multi-dimensional concepts of gender, and is less positive about the impact of trade liberalization on gender. The two perspectives occupy different ‘domains’ and are not easily integrated (Jha, 2003). Many women’s organizations have challenged the assumption that open markets will lead to higher growth that benefits all members of a country (IWGGT 2000; IDS 2000; Hale 1998; UNIFEM 1999). Other studies have shown that trade is beneficial to certain groups of women (Black and Brainerd 1999, Fontana 1998).

A number of reports and studies from the nineties have addressed the issue of the employment consequences of globalisation (Wood, 1994; ILO, 1995; World Bank, 1995). Increased manufactured exports from the South are very strongly associated with the feminisation of the industrial labour force, as shown in a study of formal sector employment in manufacturing in developed and developing countries over the period 1960-1985 (Wood, 1991). Another dimension which is less investigated is that of the negative employment effects induced by cheap import displacement. These are likely to be strongest in small-scale subsistence agriculture and in the informal sector, although in this latter case other offsetting forces may be at play (e.g. expansion of sub-contracting) (Beneria and Lind, 1995; Gammage and Mehra, 1999).

The formal manufacturing sector has been most studied empirically, partly due to data availability, and with the most clear-cut results. Trade liberalisation has led to the feminisation of the manufacturing labour force in developing countries. The greater the share of garments, textiles and electronics in a country’s exports, the greater the employment-creating impact of trade has been for women. A cross-country study of formal sector employment in manufacturing in developed and developing countries over the period 1960-1985 (Wood, 1991) shows a strong relation between increased exports and increased female employment in manufacturing in the South. Similar trends continued until the mid-1990s, as described in Standing (1999).

Women’s participation in export industries such as textiles, clothing, pharmaceuticals, food processing, electronics and toy production, has been between 53% and 90% of the labour force. Many of these jobs in light-manufacturing export sectors are newly created. Many are located in export processing zones – between 33% and 88% of total exports in the selected sectors were produced in export processing zones. One source suggests there are 50 million jobs in export processing zones worldwide, and 80% of these are held by women (ICFTU 2005). Export processing zones are subject to a different set of regulations in some countries; in some others, regulations are implemented less stringently; many zones have their own systems of labour administrations (Jane Korinek, 2005).

While women have benefited from the job opportunities opened by the integration of their countries in international markets, it remains to be seen whether their participation in trade has reduced gender inequality and contributed to close the gender gap. Preliminary evidence suggests that trade and growth have drawn a significant proportion of women into paid work for the first time and while wages for women are lower than for men, they are perhaps much higher than what these women would have earned in alternative sources of employment. Further, all things remaining equal, women may at times be preferred to men in factory jobs, and once there the regularity of wages may have increased the role of

women in household decisions. The existing literature from women studies highlighted this aspect of trade liberalization on women's empowerment. One common inference that can be drawn is that the impact of trade liberalization varies from region to region and sector to sector.

Although globalization is considered to have generated positive employment effects, the studies made in this connection have indicated a significant increase in casualisation. The opportunities generated by expansion of trade are also not uniform across sectors. Sectors concentrated in export-oriented growth have by and large benefited. Traditional sectors such as agriculture, handicrafts, on the other hand, show a different (?) trend. In this context, it is essential to analyze the impact of trade liberalization in India both at state and sectoral level. An econometric analysis has been conducted to draw inferences about the trade liberalisation and women empowerment. The detailed methodology is given in Appendix-1.

### **Econometric Analysis:**

This study makes an attempt to analyze the relationship between women's empowerment in a composite sense, and export share in state domestic product, the measure of export orientation of state domestic product. Women's empowerment level has been proxied by STD values in each state. Standardized values (STD) are based on 52 ranked criteria indicators, the broad aggregation of which is given in Appendix-2. The criteria indicators are weighted equally in determining the STD value of the factor indicator they make up. The Pearson Correlation coefficient is estimated to see association between STD and Export Shares (ES) and partial correlations are estimated after controlling for women education. The results are presented in table 5. The correlation between STD and ES is positive (0.624) and significant. The correlation between STD and ES is positive (0.355), but insignificant after controlling for women education

Table-5

#### **Correlations**

	Export Shares	
Women empowerment	Bivariate Correlation	0.624*
	Sig. (2-tailed)	0.017
<b>Partial Correlations controlling for women education</b>		
Women empowerment	Partial Correlation	0.3558
	Sig. (2-tailed)	0.233

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

In the absence of a well established theory about the causality between women development/empowerment (STD) and export orientation (ES), on the basis of literature surveyed and empiricism, the STD values are regressed on ES. The results are presented in Table 6. The regression results are corrected for possible heterocedasticity. The result indicates that ES coefficient is positive and significant at 5 percent level of significance, implying that the export orientation of the state economy empowers women in the states. The 33 percent variation in state level women empowerment is explained by export orientation (ES). The F-statistics are significant at five percent level of significance. Further, STD values are regressed on ES and WE. The results are given in table 7. It was found that the coefficient of ES becomes insignificant at five percent level of significance while the coefficient of index of women education are found to be significant The 72 percent variation in the women empowerment is explained jointly by export orientation (ES) and women education index The F-statistics are significant at five percent level of significance.

**Table-6****Regression Results**

Dependent Variable: Women Empowerment(STD)				
Sample(adjusted): 1 14				
Included observations: 14 after adjusting endpoints				
White Heteroskedasticity-Consistent Standard Errors & Covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.215541	0.083952	-2.567421	0.0247
Export shares	0.032373	0.011708	2.765054	0.0171
R-squared	0.389174	F-statistic		7.645521
Adjusted R-squared	0.338272	Prob(F-statistic)		0.017118
Log likelihood	1.279440	Durbin-Watson stat		2.896995

**Table-7****Regression Results**

Dependent Variable: Women Empowerment(STD)				
Sample(adjusted): 1 14				
Included observations: 14 after adjusting endpoints				
White Heteroskedasticity-Consistent Standard Errors & Covariance				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.068573	0.064668	-1.060396	0.3117
Export shares	0.011300	0.006758	1.672027	0.1227
Women's Education	0.360732	0.083151	4.338273	0.0012
R-squared	0.771466	F-statistic		18.56641
Adjusted R-squared	0.729914	Prob(F-statistic)		0.000298
Log likelihood	8.161324	Durbin-Watson stat		2.999351

From empirical analysis it can be concluded that empowerment of women and export orientation of state economy are significantly related. However, when the effect of education is removed from the women's development index and export shares, the relationship is no more statistically significant. However it continues to be positive. This indicates the crucial role of education in delivering holistic benefits from trade liberalization. At the same time, it emphasizes that trade liberalization is positive step in right direction in the process of gender empowerment.

## A SECTORAL DISCUSSION

### **AGRICULTURE**

India in recent years has been a net exporter of agricultural goods. The exports of agricultural products from India, which stood at \$6,734 million and \$7,888 million in 2002/3 and 2003/4 respectively, were more than two times the import of agricultural products in the corresponding years. The share of agri exports in total exports has hovered around 10-13%, with marine products cornering the maximum share. Among the other major categories of agri exports are rice, oil meals, fruits, vegetables and pulses and cashew kernels.

Participation of women in production, processing and marketing of these agro products has traditionally been high and the states where these activities are predominant are those where the participation of women in agriculture and allied activities is quite high. The share of women employment in these sectors ranges from around 66% in Kerala to 92% in Maharashtra. **The cashew industry, for example, contributes around 33% to Kerala's export earnings and around 95% of its registered work force is comprised by women.** A high export orientation of the crops grown in these states, as is shown in the table above, would therefore in all probability have a positive impact on women employment.

- In Madhya Pradesh female workers contributed 54 per cent labour on paddy fields (Marothia, 1991).
- In a tribal region in Orissa, women spent 185 days in cultivation as family labour vis-à-vis 86 days spent by men. Against this, men spend 113 days in wage labour vis-à-vis 26 days by women (Kayastha, 1991).
- In 1988, the total number of workers employed in tea plantation consisted of 3.72 lakh men and 3.84 lakh women (Bhadra, 1991). In rubber plantation women constituted 36 per cent of the workforce during 1983-84 (Haridasan, 1991).
- In Punjab women contributed 13 per cent of the total labour use in wheat, 38 per cent in potato and 60 per cent in vegetable cultivation.
- In Gujarat women's contribution to total labour use in wheat was 31 per cent and in groundnut 46 per cent.

### **Agricultural allied activities and impact on women's employment:**

The future growth of agriculture depends significantly on the non-crop sectors where women have a larger presence. The National Agricultural Policy (2001) envisages that the targeted growth of 4 per cent per annum during the tenth plan would require at least 8 per

cent growth in each of the sub-sectors viz.: horticulture, livestock, fisheries. Women should get to play an increasing role in these sub-sectors to which they are the major contributors. But, this may not be automatic, but would require conscious efforts to recognize and consolidate the rightful share of women in these sub-sectors. It must be realized that gender issues need to be integrated with the larger perspective of reforms. For instance, structural and institutional reforms need to recognize that women are stakeholders. This has happened in some countries in the fisheries sector and in India in forestry where issues of sustainability and gender have impacted upon commercial and trade objectives.

### **Horticulture**

Given the agro-climatic, bio-physical and cultural diversity, India had emerged as the largest producer of fruits and second largest producer of vegetables with 10 and 13 percent share in the world production respectively (Kaul, 1997). What is most important is that it provides significant scope for processing and value addition where women should and ought to find increasing space. **The states experiencing faster growth in areas under horticulture are: Maharashtra, Karnataka, Haryana, Punjab, Kerala, Andhra Pradesh, Gujarat and Rajasthan.** It is essential that future growth of horticulture products results in increased employment and income to producers especially, to women and, at the same time ensures greater availability of consumption among a majority of poor households.

### **Fisheries**

India is among the top 10 fish producing countries in the world contributing about 3% to the world marine fish catch. In India, nature and extent of women's participation in fisheries varies across the states. There are around 5.4 million people fully engaged in the fisheries sector out of which 70% are men and the rest 30% are fisherwomen. Fishery is one sector where women are involved in all activities (except netting) - drying, salting, cleaning, sorting and vending. Fish drying/curing, marketing, handbraiding and ret-mending are the main areas of women's involvement in **Tamil Nadu, Andhra Pradesh and Orissa.** Women are also involved in shrimp processing in these states. In addition, in Andhra Pradesh, women are engaged in mollusc and shell collection on a seasonal basis in a few places along the coastline.

### **Impact on Employment**

Post-liberalization there has been a strong growth in the export of processed food products from India. Employment and average wages have increased, as has the percentage of women employed in the food processing industry, in both the organised and unorganised sectors. All these indicators suggest the position of women workers in the food processing industry has improved. However, women are employed more in part-time than in full-time work. Women are also employed in higher proportions in the unorganised sector, where conditions of workers tend to be less favourable.

The following employment trends are evident:

- The total number people employed has increased;
- There has been increased employment through contractors and a decrease in people directly employed;
- There has been an increase in the number of women employed and a decrease in the number of men employed;

- There has been an increase in wages across different categories of workers; and
- There has been an increase in employer's contributions to workers funds and welfare expenses.

### **Impact on Wages and Method of Payment**

Wages are paid according to the experience and skill of the worker, the speed in processing and grading. The maximum wages paid are Rs 2300 per month for supervisors and the minimum is even lower than Rs 1800 per month in some areas. The conditions of peeling shed workers are worse than those working in processing units. Their wages are paid on a piece rate basis varying from Rs 30 to Rs 50. The wages to the workers tend to be passed on by the companies to the contractors who then organize payments to the workers. In most of the cases displacement allowance or overtime was not paid.<sup>3</sup> Though bulk of fishers of Kerala still contributes about 60% of the total marine catch yet, they are the lowest paid and severely threatened by the mechanized fisheries sector.

### **Impact on Health, Safety and Social Security**

Several studies have indicated that processing workers in marine processing plants work under very unsatisfactory conditions, which have resulted in the poor health of workers. Though employment has given women financial independence and a chance to improve their standard of living, at the cost of their health. The most prevalent physical hazard is the cold/ chilled working environment, which has caused health problems such as frostbite, chilblains, immersion foot, pneumonia, bronchitis and asthma.<sup>4</sup> Workers are generally provided with a mouthpiece, apron and head cap to safeguard the quality of export product. However, the damp atmosphere, long working hours, lack of Personal Protective Equipment (PPE) and contact with chlorinated water, contribute to the poor health of workers in processing plants. As per statutory requirement, migrant workers are often provided with a housing facility. Lodgings generally accommodate approximately 60 women and are located on the factory premises, which is mostly an overcrowded environment with poor sanitation.

From our above discussion it is safe to conclude that employment opportunities have increased in this sector, especially for women workers. However, the market may be lost if strict international hygiene standards are not adhered to. It may threaten the Indian marine export industry and consequently women's employment in this sector. Average wages have improved. Women are represented in greater numbers in the unorganized sector and in part-time employment. However, the conditions of work in the industry are still very poor.

## **TEXTILE AND GARMENT INDUSTRY**

An important aspect of this sector is that the major share of the workforce in this sector is comprised by women. Since most of the rapidly growing number of garment units are functioning in the houses (or rented sheds) of employers, it is difficult to get a reliable estimate of their actual number. However, according to CMIE (Centre for Monitoring the Indian Economy) the industry provides employment to about 15 million people, of which almost 90 per cent are women. Most of the garment-making units belong to the unorganised sector. Hardly 15-20 per cent of the units fall in the organised sector. Labour legislations,

<sup>3</sup> *ibid*

<sup>4</sup> S. Vanaja Rani, "Impact of Liberalisation on Women's Health in Marine Food Export Processing Industry", in The Indian Journal of Social Work, Vol. 62, Issue 4, October 2001, pp.603 – 615

legal measures, and Minimum Wages Act are applicable only to a small section of the industry coming under the organised sector. Evidence from the garments industry suggests that trade-related demand for female labor has also grown within the informal sector, through subcontracting links with the formal sector (Delahanty, 1999; Ghosh, 2000; Joekes, 1999). Unfortunately, formal and informal sector links are poorly understood, and quantitative information regarding informal activities is sparse. However, some authors identify increasing subcontracting in the textiles industry as a primary consequence of trade liberalization.

Though there has been an increase in the employment of women there has been no simultaneous improvement in the conditions of work or wages. In fact it may be argued that women are sought out precisely because they are perceived as cheap labour. However the counterfactual i.e. what were these women doing prior to employment at the garment factories has not been established. Also judging by the economic profile of the women workers, it appears that the opportunity cost of their alternative employment is very low, so in any case incremental employment may be welfare generating.

### FOOD PROCESSING INDUSTRY

The food processing sector is very important to India's national economy and represents 10% of total exports (of which 35% is rice and 37% fish). India's food processing industry is well developed and characterized by a diverse industrial base that includes both small and large scale enterprises. The nature of women's employment in the food processing sector can be gathered from a variety of case studies, including the West Bengal prawn industry by Banerjee (1991), the dairy sector (World Bank, 1991) and an earlier 1983 survey of the shrimp, pickle, masala and papad sectors in the Mumbai area (Desai and Gopalan in Baud, 1987).

Women are represented both in the informal as well as the formal segments of the food products and beverages industry. From the table below, it is evident that women constitute around 27% of total workers in the unorganized segment of the food processing industry. Also, women are employed in a far greater proportion as part time workers than full time workers. Women make up over half of the part time workers – 52.0 - percent but only 21.9 percent of full time workers. The significant participation of women in this sector makes it gender sensitive and growth of this sector in all probability would increase the level of employment of women as a whole.

#### **Employment in the Manufacturing of Food Products and Beverages in the Unorganized Sector 2000-2001**

(Value in '00s of Workers)

NIC Code	Full Time			Part Time			All		
	Male	Female	All	Male	Female	All	Male	Female	All
15	43771	12224	55995	5965	6460	12425	49736	18684	68420
15 Manufacture of Food Products and Beverages									

Source: Based on National Industrial Classification 1998



**Employment in the Organised Food Processing Industry 1999-2000**  
(figures are in actual numbers)

Characteristics	1511	1512	1513	1520	1531	Total
1 Directly Employed	2541	8644	11464	41797	133029	133029
1.1 Men	2200	4824	7286	40398	110161	164869
1.1 Women	341	3820	4178	1399	22868	32606

Source: National Industrial Classification, 1998

### **WOMEN IN SERVICE SECTOR AND TRADE IN SERVICES**

This is the subject of the GATS (General Agreement on Trade in Services) Mode 4, which seeks to liberalize trade in persons to balance trade in services, goods, and capital. Too often it is assumed that GATS Mode 4 is of little consequence for women because for the moment the beneficiaries are highly skilled workers and those employed in multinational corporations. This issue is very pertinent when there is asymmetrical skill distribution across gender in developing world. On the other hand, some economists argue that Mode 4 comes in particularly handy for women when the unemployment rates are high at home, both in absolute terms and in relation to men. Because of the limited employment opportunities domestically, and the time necessary for a structural change, movement of women abroad emerges as a very attractive option in the immediate term to alleviate these problems.

GATS may increase the need for women service workers in data processing, tourism, and banking. Yet these occupations seem to become increasingly casualized as they are exported. Educated, computer-literate women constitute the majority of workers who process data in India, Jamaica, and Mexico. But employers are creating export processing zones (EPZ) for data processing, which tend to be associated with poorer working conditions and wages (Marceline, 2001).

Further, the importance of Mode 4 movement of women service suppliers arise from the backward and forward linkages. Mode 4 movements enable women to improve their skill and educational levels. This in turn leads to improvement in their social and economic status. In this light, investment in women's education and skills development is greater in view of the potential opportunities that Mode 4 related employment would provide. It tends to increase the return on education and gives rise to greater investment and human capital development in the home economy, thus ensuring the continued availability of skills domestically, for example in the area of health services. Where movement involves less-skilled women, it is likely to induce a positive impact on lower-skilled wages in the home economy. There might be in some cases a pull-up effect on wages in the home country, improving gender outcomes. It enables women at all skill levels ranging from domestic and agriculture service providers to high-tech professional engineers and managers to seize the opportunities provided by Mode 4. There has been a significant contribution of Mode 4 to the reduction of the gender wage gap in home countries.

Recently, there has been pressure from a number of developing countries to include less

skilled workers. It can be argued that the prevailing global shortage of labour in reproductive sectors such as education, care, and health has considerable gender impact (Kofman 2004). Indian females can immensely gain by providing services in diversified service sector not only in Mode 4 but also in Mode 3 of GATS. The other important area where Indian female workers can gain, and are gaining due to its emergence as a large employer of young people, is the ICT sector. Presently, IT industry is considered as opening up avenues in favour of women. However, women are still in minority in this sector with a clear trend towards clustering at the lower ends of the job leading to feminization of service centers. In the years 2000, 5,22,250 (million?) people were employed. 79% of the software professionals were men and 21% were women. Still, this sector has provided better opportunities compared to other sectors (Padma, 2004).

### **IT SECTOR**

As per Nasscom estimates, women comprise 20–25% of total number of science and engineering graduates in India and their participation in the IT sector is fast increasing. In 1993 only 10% of the workforce were women, but this ratio increased to 21% in 2003. This is expected to go up to 35% in 2005. However, the participation of women in IT companies is mainly in cities of Bangalore, Poona, Chennai, Delhi, Hyderabad and Mumbai. More women are employed in the Southern regions of the country, where the hiring of professionals was 41 percent (of what?) as compared to Eastern region at 6 percent (Nasscom 2003). The women employed in IT belong to the younger age group. The overall median age of software professionals is about 25.6 years.

A large number of companies (for example, GE, American Express, Standard Chartered Bank, Citibank, British Airways, Microsoft, AOL time Warner, HP, Dell Computers, Prudential Insurance, Morgan Stanley, Marks & Spencer) have call centres where a sizeable number of women are employed ranging from 35 to 65% ([www.expressitpeople.com](http://www.expressitpeople.com)). GE capital has had 40 to 55% women employees in their various centres (Sandhya Sule, 2002). A study of an international call centre at Pune (Dutta, 2003) showed that 59% of employees were women.

The new technology therefore, itself offers some possibilities towards redressing the past gender imbalance in the quantity and quality of work; but for these possibilities to become realities certain changes will be required in the division of labour in domestic life. There too, the solution lies not in confrontation, but in achieving greater cooperation and understanding.

### **OTHER SERVICES**

Hotels have traditionally been a major employer of women, but these also give the opportunity to women to climb the corporate ladder. According to ITC Hotels, 45% of their employees across different properties are women and there is sufficient representation of women even at the top rungs. Education and healthcare are other such sectors that employ large numbers of women, though at low wages with negligible social security.

## Concluding Remarks

Gender discrimination is less of an economic issue and more of a social and cultural one, particularly in the Indian context. The forces of modernization reduce gender biases and globalization strengthens and speeds up this force. Trade liberalisation is one significant instrument of globalization. Conventional economic theory dictates that in any such process there will be certain groups which will be adversely affected by the transitional period, but in the long run they too will derive benefits. Trade liberalization has positive as well as negative impacts. The nature and extent of the impact may be attributed to the sectoral and regional settings of women.

This study is an attempt to see the effect on women's empowerment in a composite sense. An attempt at aggregation of gender dimensions has been made through the use of Gender Development Index compiled by the National Productivity Council of India. By and large, trade has positive impact on empowerment of women. This also seems intuitively correct because trade liberalization is a neutral, productivity induced, mechanism of selection and here women's advantages are used. If you remove the education dimension from the gender development index, the effect of trade liberalization on gender development becomes insignificant, however it continues to be positive. These results are also vindicated by our empirical analysis at sectoral level, where employment and wages of women in almost all sectors has shown an improvement as a consequence of trade liberalization. However, conditions of work and gender indicators have improved more in services than in the goods sector. This indicates the crucial role of education in delivering holistic benefits from trade liberalization.

There is also a need to take a gendered approach in a counterfactual context when examining international trade. Trade liberalization has opened more alternative employment opportunities to unskilled and skilled women in the labour force. The unskilled women's labour would otherwise be mainly employed in unpaid household activities or low wage agriculture sector. The new emerging employment opportunities in export oriented sector provide relatively better paid employment even to unskilled women. India has an extensive educational network in which large numbers of young people are trained and educated. Given the limited number of employment opportunities, the bargaining power of educated women is reduced by the existence of a large reserve army of unemployed. Trade liberalization has increased employment and therefore increased their bargaining position.

Summing up, gender biases are multidimensional concepts and can only be corrected by multidimensional approaches. Globalization and trade liberalization are instruments which have by and large positive effects on gender empowerment/development. This is a long term process and trade liberalization is only one step in that direction. Several other attenuating measures are needed to ensure that gender discrimination is reduced in the overall sense in developing economies.

## Appendix-1

### Methodology

The methodology for this study basically consists of specifying and estimating the bivariate correlation functions and linear regression. The bivariate correlation has been used for detecting the linear relationship between index of women empowerment measured by STD values ( $x$ ) and export share (ES) in state domestic product measured in each state ( $y$ ). The simple correlation is measured using the following formula.

$$r_{x,y_i} = \frac{\sum_{i=1}^N (x_i - \bar{x})(y_i - \bar{y})}{\left[ \sum_{i=1}^N (x_i - \bar{x})^2 \sum_{i=1}^N (y_i - \bar{y})^2 \right]^{1/2}} \quad (1)$$

For finding out the causal relation between STD values and ES, regression techniques are applied. Heteroscedasticity consistent estimates were obtained by OLS using White's correction method for heteroscedasticity. To test the level of significance of the parameters of the equation-2, t-test is used.

$$x_i = \mathbf{b}_1 + \mathbf{b}_2 y_i + u_i \quad (2)$$

The hypotheses about the impact of the export orientation of the state economy on women empowerment are tested using the above methodology. The data on gender development index (STD) is taken as the measure of women empowerment across Indian states. The ranking of Indian states are arrived on the basis of state's standardized values (STD) as calculated by National Productivity Council, New Delhi. The data on ES are taken from DGCIS, Kolkata, Planning Commission. The information on STD and ES are available for 15 Indian States. We have used cross section data for 14 states only, because the data on Kerala state are found to behave as an outlier on the basis of our preliminary investigation, and hence excluded from further statistical analysis. The list of states are given below:

STATE
ANDHRA PRADESH
ASSAM
BIHAR
GUJRAT
HARYANA
KARNATAKA
MAHARASTRA
MP
ORISSA
PUNJAB
RAJASTHAN
TAMILNADU
UTTAR PRADESH
WEST BENGAL

**Appendix-2****Gender development**

<b>Rank in Factor Indicators</b>		
<b>1</b>	<b>Demography</b>	<b>3</b>
<b>2</b>	<b>Education</b>	<b>5</b>
<b>3</b>	<b>Health</b>	<b>7</b>
<b>4</b>	<b>Drudgery</b>	<b>8</b>
<b>5</b>	<b>Social Status</b>	<b>7</b>
<b>6</b>	<b>Labour Participation</b>	<b>7</b>
<b>7</b>	<b>Economic Status</b>	<b>5</b>
<b>8</b>	<b>Leadership</b>	<b>9</b>

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