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United Nations Research Institute for Social Development (UNRISD)

GLOBALISATION, EXPORT-ORIENTED EMPLOYMENT FOR WOMEN AND SOCIAL POLICY: A CASE STUDY OF INDIA

Paper prepared for the UNRISD project on Globalization, Export-Oriented Employment for Women and Social Policy

******DRAFT NOT FOR CITATION******

Jayati Ghosh
Jawaharlal Nehru University
New Delhi

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1211 Geneva 10, Switzerland

Tel: (41 22) 9173020
Fax: (41 22) 9170650
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This paper seeks to examine the Indian experience with respect to women's employment in export-oriented manufacturing industry in the era of globalisation. It also considers the role of social policy in providing work and survival security to women, by first evaluating the effects of state policy, and then considering other attempts to ensure minimum security to women workers. The first section sets out some of the issues with respect to the feminisation of labour in export-oriented employment, and situates the discussion in the context of the experience of the high-exporting East Asian economies in the 1990s. The evidence pointing to a fall in the share of women in export-oriented manufacturing employment even *before* the onset of the East Asian crisis is considered, and the possible reasons for it are discussed. With this background, the next section briefly highlights the important trends with respect to aggregate female employment in the Indian manufacturing sector over the 1990s. It is argued that much of the use of female labour in export production in India has been in informal and unorganised workplaces, including home-based work, with associated implications for pay, working conditions and consequently also for social policy. The cases of Export Oriented Units (EOUs) and Export Processing Zones (EPZs) are then taken up in the third section, with specific attention to what such employment has meant for job, material and social security. Issues relating to social protection of female labour through the agency of the state and other examples of attempts to provide social security are considered in the final section. In this section there is also an argument for the need to have a macroeconomic perspective on the conditions for improving employment conditions for women workers, which would have wider applicability to other developing countries as well.

I. Women workers and export production in Asia: Recent issues and trends

The link between export employment and the feminisation of employment is now well known. (See Horton [1995], Wee [1998] and Joekes [1999] for discussions of some of this literature). While feminisation of employment can refer to either the absolute or the relative increase in numbers of women employed, most of the literature on this process in export-oriented employment has tended to look at the share of women to total workers in particular sectors. This is because the absolute increase in such employment (or even an increase in the share of women so employed to total female labour force) could be part of a fairly standard development pattern whereby more and more people are drawn into labour markets determined by changing patterns of labour demand, but need not tell us anything about any particular preference for women workers. By contrast, the relative increase in the share of women in total export employment, which was so marked for a period in parts of Asia, is a qualitatively different phenomenon. Of course, such feminisation has obviously been reflected in more and more women being drawn into paid employment.

This process was most marked over the period 1980 to 1995 in the high-exporting economies of East and Southeast Asia, where the share of female employment in total employment in the Export Processing Zones (EPZs) and export-oriented manufacturing industries typically exceeded 70 per cent. It was also observed in a number of other developing countries,for example in Latin America in certain types of export manufacture.

Women workers were preferred by employers in export activities primarily because of the inferior conditions of work and pay that they were usually willing to accept. Thus, women workers had lower reservation wages than their male counterparts, were more willing to accept longer hours and unpleasant and often unhealthy or hazardous factory conditions, typically did not unionise or engage in other forms of collective bargaining to improve conditions, and did not ask for permanent contracts. They were thus easier to hire and fire at will and according to external demand conditions, and also, life cycle changes such as marriage and childbirth could be used as proximate causes to terminate employment.

Another important reason for feminisation was the greater flexibility afforded by such labour for employers, in terms of less secure contracts. Further, in certain of the newer “sunrise” industries of the period such as the computer hardware and consumer electronics sectors, the nature of the assembly line work - repetitive and detailed, with an emphasis on manual dexterity and fineness of elaboration - was felt to be especially suited to women. The high “burnout” associated with some of these activities meant that employers preferred work-forces that could be periodically replaced, which was easier when the employed group consisted of young women who could move on to other phases of their life cycle.

The feminisation of such activities has had both positive and negative effects for the women concerned. On the one hand, it definitely meant greater recognition and remuneration of women’s work, and typically improved the relative status and bargaining power of women within households, as well as their own self-worth, thereby leading to empowerment. [Such positive effects are documented in Heyzer [1988], Joekes and Weston [1995] and Kibria [1995], inter alia.] On the other hand, it is also true that most women are rarely if ever “unemployed” in their lives, in that they are almost continuously involved in various forms of productive or reproductive activities, even if they are not recognised as “working” or paid for such activities. This means that the increase in paid employment may lead to an onerous double burden of work *unless* other social policies and institutions emerge to deal with the work traditionally assigned to (unpaid) women. For example, without adequate socially provided crèche and child care facilities, or adequate and accessible medical care and hospitalisation, the job of looking after the young, the sick and the old, which is typically unpaid labour performed by women in a household, can devolve on girl children if the adult women are employed outside the home. Similarly the burden of regular housework typically continues even for women employed outside the home, except to the extent that these can be devolved to other household members or shifted to paid services.

Given these features, it has been fairly clear for some time now that the feminisation of work need not be a cause for unqualified celebration on the part of those interested in improving women’s material status. On the other hand, it is also well known that the very process of feminisation can also set in place social and political changes which improve the bargaining position of women not only within their own households, but also within the society and economy in general. The exposure to paid employment has also played a major role in encouraging greater social recognition of women’s unpaid work and led to greater social pressure for improving the conditions of all work performed by women in a number of countries. As more and more women get drawn into the paid work force, there is greater public and social pressure generally for improvement in their conditions of work and security of contract, for greater health and safety regulation in the workplace, and for improvement in relative wages. Thus there are several reasons why, despite the acknowledged inferior conditions of such work, such a process of feminisation in labour markets was generally welcomed by the women who were involved in it.

However, it is now becoming evident that the process of feminisation of labour in export-oriented industries may have been even more dependent upon the relative inferiority of remuneration and working conditions, than was generally supposed. This becomes very clear from a consideration of the pattern of female involvement in paid labour markets in East and Southeast Asia, and more specifically in the export industries, over the entire 1990s.

It is well known that the expansion in export production which fueled the economic boom in the East Asian region in the decade 1985 to 1995 was largely based on the growing use of women as wage workers. Indeed, the Asian export boom was driven by the productive contributions of Asian women in many different ways: in the form of paid labour in export-related activities and in services, through the remittances made by migrant women workers, and through the vast amounts of unpaid labour of women as liberalisation and government fiscal contraction transferred many areas of public provision of goods and services to households (and thereby to women within households).

Most countries of the region (barring a few important exceptions notably India) the period between 1985 and 1997 witnessed a massive increase in the labour force participation of women. This process was most marked in the Southeast Asian region which was also the most dynamic in terms of exporting. Throughout Asia, as a consequence, the gap between male and female labour force participation rates narrowed, suggesting that this period was one in which - at least in terms of quantitative involvement - the gender gap narrowed. Indeed, this narrowing of the gender gap was not confined to overall employment – it also extended into wage differentials and even working conditions as the proportion of women involved in such activities grew.

In the exporting economies of Southeast Asia, these pressures were quite apparent, even if not always effective, from the early 1990s onwards, and to some limited extent they did contribute to a slight narrowing of the wage gap. But it is now evident that, as this more positive process occurred, there was in fact *a decline in the share of women employed in the export manufacturing sectors.* Thus, as the relative effective remuneration of women improved (in terms of the total package of wage and work and contract conditions), their attractiveness to employers decreased. This is discussed in a little more detail below, and is based on a more extended discussion of the issue in Ghosh [1999b].

Most observers would not be surprised to find that the share of women in employment in the East Asian region has fallen in the very recent past, since this is after all a pattern well noted in economic downturns. It is obvious that the crash of mid-1997 dramatically altered both the potential for continued economic activity at the pre-crisis rate, as well the conditions of employment in the East and Southeast Asian region. When the export industries started to slow down from the middle of 1995, it became evident that continued growth of employment in these export-oriented industries could not be the same engine of expansion that they had served as over the previous decade. Obviously, therefore, there could be some setback to the feminisation of employment that had been occurring, since the export industries had become the most important employers of women at the margin, especially in the large employment sectors such as textiles. Indeed, the very features which had made women workers more attractive to employers - the flexibility of hiring and firing and the more casual, non-unionised nature of labour contracts - are precisely those which are likely to render them to be the first to lose their jobs in any recessionary phase.

But in fact the reduced role for women workers (at the margin) was something that was coming into play even before the effects of the economic crisis worked themselves through. It is now apparent that even the earlier common assessment of the feminisation of work in East Asia had been based on what was perhaps an overoptimistic expectation of expansion in female employment. Trends in aggregate manufacturing employment and female employment in the export manufacutring sector over the 1990s in some of the more important Southeast Asian countries, as described in Table 1, reveal at least two points of some significance. The first is that there is no clear picture of continuous employment in manufacturing industry over the decade even before the period of crisis. In several of these economies - South Korea, Singapore, Hong Kong China - aggregate manufacturing employment over the 1990s actually declined. Only in Malaysia, Indonesia and Thailand was there a definite upward trend to such employment.

Table 1: Trends in manufacturing employment and share of women workers

Country and Year	Total manufacturing employment, 000s	Women employed in manufacturing, 000s	Share of women workers, per cent
South Korea, 1992	4,828	1,931	40
South Korea, 1997	4,474	1,594	35
Malaysia, 1992	1,637	767	47
Malaysia, 1997	2,003	807	40
Indonesia, 1990	7,693	3,483	45
Indonesia, 1996	10,773	4,895	45
Thailand, 1990	3,133	1,564	50
Thailand, 1996	4,334	2,065	48
Singapore, 1991	423	189	44
Singapore, 1997	414	166	40
Hong Kong SAR, 1990	751	314	42
Hong Kong SAR, 1997	444	160	36

Source: ILO Yearbook of Labour Statistics, 1994 & 1998

Some may see the trend of reduction of manufacturing employment as a typical indication of a "mature" economy, that is one in which the service sectors are achieving greater dominance and therefore there is a shift of labour away from secondary activities and towards a range of services. But remember that these are economies whose economic dynamism was fundamentally based on the ability to push out ever increasing quantities of manufacturing exports. And this reliance on exports was such that it fed into expectations in the rest of the economy, most particularly in the financial sector, thus creating conditions which made the crash possible. More significantly, it is precisely the ability of the manufacturing sector to respond (either to renewed export demand or to increased domestic demand resulting from a positive fiscal stimulus) which has determined the ability of the Southeast Asian economies to recover from crisis (Ghosh and Chandrasekhar [2001]). Thus, South Korea and Malaysia experienced partial recoveries which allowed both the volume of economic activity and employment to rebound led by the recovery in manufacturing activity. However Thailand has still not recovered even to pre-crisis activity levels, essentially because manufacturing growth has not picked up sufficiently. The renewed fears of stagnation, recession and possibly another financial shock that became widespread in the region in mid-2001 were again based on the slowdown in manufacturing activity. All this clearly points to economies which are still very much dependent upon increased manufacturing output as the basic reflection of economic expansion, which is quite far from the "mature economy" situation.

The second point to emerge from the data over the 1990s is that, while they do show that female employment in manufacturing was important, the trend over the 1990s, even *before* the crash, was not necessarily upward. In most of the countries mentioned, there is a definite tendency towards a decline in the share of women workers in total manufacturing employment over the latter part of the 1990s. In Hong Kong and South Korea, the decline in female employment in manufacturing was even sharper than that in aggregate employment. Similarly, even in the countries in which aggregate manufacturing employment increases over the period 1990-97, the female share has a tendency to stabilise or even fall. Thus, in Indonesia the share of women workers in all manufacturing sector workers increases from an admittedly high 45 per cent to as much as 47 per cent by 1993, and then falls to 44 per cent by 1997. In Malaysia the decline in female share is even sharper than in South Korea: from 47 per cent in 1992 to only 40 per cent in 1997. A slight decline is evident even in Thailand.

This fall in women's share of employment is evident not just for total manufacturing but even for export-oriented manufacturing, and is corroborated by evidence from other sources. Thus Joekes [1999] shows that the share of women employed in EPZs declined even between 1980 and 1990 in

Malaysia, South Korea and the Philippines, with the decline being as sharp as more than 20 percentage points (from 75 per cent to only 54 per cent) in the case of Malaysia.

In other words, what the evidence suggests is that the process of feminisation of export employment really peaked somewhere in the early 1990s (if not earlier in some countries) and that thereafter the process was not only less marked, but may even have begun to peter out. This is significant because it refers very clearly to the period *before* the effects of the financial crisis began to make themselves felt on real economic activity, and even before the slowdown in the growth rate of export production. So, while the crisis may have hastened the process whereby women workers are disproportionately prone to job loss because of the very nature of their employment contracts, in fact the marginal reliance on women workers in export manufacturing activity (or rather in the manufacturing sector in general) had already begun to reduce *before* the crisis.

This is an important issue that clearly requires further investigation. The reversal of the process of feminisation of work has already been observed in other parts of the developing world, notably in Latin America. [ILO, 1998] Thus Ghiara [1999] points out that in Mexico, as the share of exports in the machinery sector increased between 1987 and 1993, the proportion of women employed fell from 38 per cent to 29 per cent. Quite often, such declines in female share of employment have been found to be associated with either one of two conditions: an overall decline in employment opportunities because of recession or structural adjustment measures, or a shift in the nature of the new employment generation towards more skilled or lucrative activities.

In the East Asian case, until 1996 at least the first factor would not have been important, and while the second factor is certainly likely to have played a role, it would not have explained the entire shift that can be witnessed. Also, the shift towards more skilled activities was more marked in certain countires such as South Korea, Singapore and Malaysia, and less evident in others such as Thailand and the Philippines. But there may be another process which is associated with widespread feminisation of work, which creates conditions for its own unravelling over time. This relates to the relative cost of hiring women workers, and the relation to the perceived other advantages.

As mentioned above, one of the important reasons for preferring women workers in many export-related activities in particular, has been the lower reservation and offer wages of women. Throughout the East Asian region, women workers' wages have been consistently and significantly lower than male wages in the aggregate. The differentials have been particularly sharp in the case of South Korea, Malaysia and Singapore, where the average female wages were typically just above half those paid to male workers, as Table 2 indicates.

Table 2: Female wages as per cent of male wages in manufacturing work

Average	Per Cent
Bangladesh	71.7
Hongkong	65.9
South Korea	52.3
Malaysia	57.9
Philippines	84.0
Singapore	57.1
Sri Lanka	87.8
Thailand	63.8

Note: The data refer to an average of years for which data were available in the 1990s.
Source: ILO Yearbook of Labour Statistics, 1998

To some extent this reflects differences in the types of jobs for which women are used, which are typically at the lower skill and lower wage end of the employment spectrum. But it also reflects the

general tendency for gender discrimination in pay, whereby women are paid less even for similar or identical jobs. This feature, which was quite marked in East Asia, is precisely the feature which tends to be rendered less potent as more and more women are drawn into employment. As women become an established part of the paid work force, and even the dominant part in certain sectors (as indeed they have become in the textiles, ready made garments and consumer electronics sectors of East Asia) it becomes more difficult to exercise the traditional type of gender discrimination at work. Not only is there an upward pressure on their wages, but there are other pressures for legislation which would improve their overall conditions of work.

It is worth noting that the female wage as a proportion of the male wage has been rising in most parts of East Asia in the 1990s up to 1997. Thus, in South Korea, the ratio of average female wages to male wages increased from 50 per cent in 1990 to 56 per cent in 1997, while in Malaysia it moved from 49 per cent to 57 per cent between 1990 and 1995. In Thailand it improved from 63 per cent in 1991 to 68 per cent in 1995. In Singapore it went up from 54 per cent in 1990 to 60 per cent in 1997. Hong Kong is the only economy in the region for which there is evidence of a decline in this ratio over this period, from 69 per cent in 1990 to 61 per cent in 1997. [ILO 1999]

What this narrowing of the wages gap has meant is that women became less cheap as labour in exporting industry. To add to this, over this period there have been several moves towards protecting the interests of women workers, for example in terms of slightly better maternity benefits and some improvement in the nature of contracts. In South Korea, a law which allowed women to be fired once they got married was repealed in the early part of this decade. Other legislation in other countries in the region has allowed for a modicum of benefits which were previously denied to women workers, to be provided. Thus, it has been observed that in several of these countries there were moves to ensure longer maternity leave of upto three months, provide better housing conditions and health care to young women workers and also (after the bad publicity offered by a series of industrial accidents) to work towards better compliance with minimal safety norms. [Lim 1994, 1996]

While this is fundamentally necessary and desirable, such social action reduces the relative attractiveness of women workers for those employers who had earlier been relying on the inferior conditions of women's work to enhance their export profitability. The rise in wages also tends to have the same effect. If this is in fact one of the explanations for the tendency towards reduced employment of women in export activities in the region, then it raises certain crucial questions which will become increasingly important. How is it possible to ensure a minimum provision of basic rights and privileges to women workers, and to improve the conditions of their work, without simultaneously eroding their attractiveness to employers and reducing the extent of female wage employment ? How can such rights and basic labour standards be assured in the coming phase, in which heightened export competition is likely to be combined with a phase of aggregate employment contraction, as the full force of the current adjustment measures and the slowdown of the world economy are felt in the region?

Table 3: Unemployment Rates

	Year	Total %	Male %	Female %
Indonesia	1996	4.0	3.3	5.1
Hong Kong	1996	2.8	3.1	2.3
Pakistan	1995	5.4	4.1	13.7
Philippines	1996	7.4	7.0	8.2
Philippines	1997	7.9	7.5	8.5
Singapore	1996	3.0	2.9	3.1
Sri Lanka	1996	11.3	8.0	17.6
Thailand	1996	1.1	1.0	1.1

Source: ILO Yearbook of Labour Statistics 1998

These are already pressing concerns, as is evident from the growth of unemployment in the region, which is bound to accelerate in the coming period. Already, over the 1990s, female open unemployment rates in the East Asian region were much higher than those of men even in the expansionary phase. This is clear from Table 3 which describes open unemployment rates before the onset of the crisis of 1997. But now, as the exporting industries are hit and as the general economic decline is worsened by adjustment measures which are moving towards a downward harmonisation of labour standards for all workers (men as well as women) the problem is likely to become more acute. Thus, in South Korea as a consequence of economic crisis, the fall in regular employment was much more severe for women than for men. Between 1997 and 1998, regular employment for men workers fell by 7 per cent, but that for women workers fell by 20 per cent. [Korean Working Women's Network, 1998] Out of the 47 per cent of Korean workers employed in temporary capacity in 1998, 55 per cent were women. In addition, the proportion of women who were defined as "economically inactive" increased by 6.4 per cent, indicating a strong "discouraged worker" effect. [Lee, 2001]

Also, as male workers were effectively forced to accept worse employment conditions, the working conditions for all workers deteriorated even as less women found employment at the margin. This process naturally gained momentum as the rate of growth of exports decelerated across the region from mid-1995 onwards, but the important point is that the process had started well before that, in fact during the height of the economic boom in these countries.

Indeed, with the onset of crisis and the recession of 1997-99, there appears to have been a shift to more insecure very small unit-based or home-based employment of women workers, in production chains based on a substantial dependence on outsourcing by large final distributors. Already this was a prevalent tendency in the region. For example, labour flexibility surveys in the Philippines have shown that the greater the degree of labour casualisation, the higher the proportion of total employment consisting of women and the more vulnerable these women are to exploitative conditions. [ILO 1995] This became even more marked in the post-crisis adjustment phase. [Pabico 1999]

In Southeast Asia, women have made up a significant proportion of the informal manufacturing industry workforce, in garment workshops, shoe factories and craft industries. Many women also carry out informal activities as temporary workers in farming or in the building industry. In Malaysia, over a third of all electronics, textile and garments firms were found to use sub-contracting. In Thailand, it has been estimated that as many as 38 per cent of clothing workers are homeworkers and the figure is said to be 25-40 percent in the Philippines [Sethuraman 2000]. Home-based workers, working for their own account or on a subcontracting basis, have been found to make products ranging from clothing and footwear to artificial flowers, carpets, electronics and teleservices. [Carr and Chen, 1999; Lund and Srinivas 2000]

This is of course part of a wider international tendency of somewhat longer duration: the emergence of international suppliers of goods who rely less and less on direct production within a specific location and more on subcontracting a greater part of their production activities. Thus, the recent period has seen the emergence and market domination of “manufacturers without factories”, as multinational firms such as Nike and Adidas effectively rely on a complex system of outsourced and subcontracted production based on centrally determined design and quality control. It is true that the increasing use of outsourcing is not confined to export firms; however, because of the flexibility offered by subcontracting, it is clearly of even greater advantage in the intensely competitive exporting sectors and therefore tends to be even more widely used there. Much of this outsourcing activity is based in Asia, although Latin America is also emerging as an important location once again. [Bonacich et al., 1994] Such subcontracted producers in turn vary in size and manufacturing capacity, from medium-sized factories to pure middlemen collecting the output of home-based workers. The crucial role of women workers in such international production activity is now increasingly recognised, whether as wage labour in small factories and workshops run by subcontracting firms, or as piece-rate payment based homeworkers who deal with middlemen in a complex production chain. [Beneria and Roldan, 1987; Mejia, 1997]

It has been suggested that a larger proportion of such subcontracting in fact extends down to homebased work. Thus, in the garments industry alone, the percentage of homeworkers to total workers has been estimated at 38 per cent in Thailand, between 25-29 per cent in the Philippines, 30 per cent in one region of Mexico, between 30-60 per cent in Chile and 45 per cent in Venezuela. [Chen, Sebstad and O'Connell, 1998]

All this may have special significance in India, where the process of open feminisation of work is evident only in a very limited way in certain specific sectors and regions of export manufacturing. Despite the hype that is heard about the dynamic role of export employment, including in improving the conditions of women, there are few indications thus far that there has been any major shift in either the structure of production or female employment patterns. But there are important changes at the margin, which suggest that there is indeed a growing significance of female participation in export-oriented production in India, even if in ways rather different from the experience of the East Asian economies.

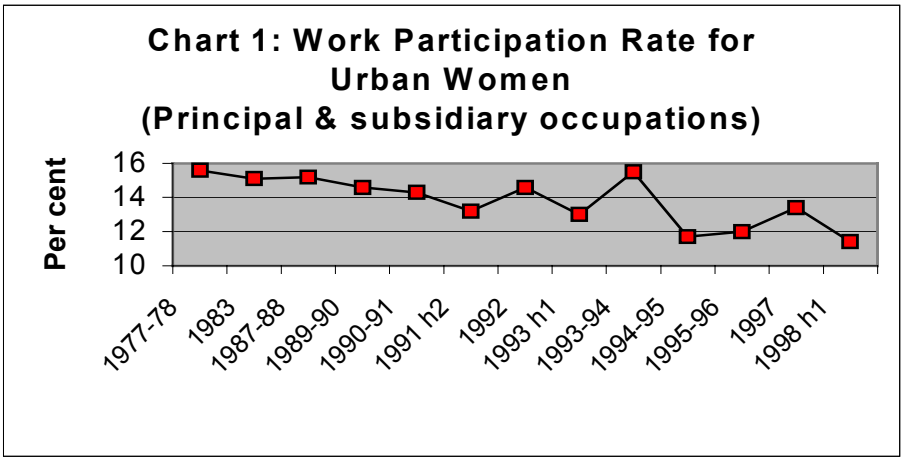
II. Women’s employment in the Indian manufacturing sector, including in export employment

It is useful to begin by considering the overall evidence of the trends in female employment in urban India, and then focus on export-oriented activities, especially in manufacturing. A discussion on the recent developments in women’s employment in IT-enabled services, an area with strong export potential, is also in order, and will be touched on briefly at the end of this section. In terms of aggregate urban employment, we have data from the small samples of the National Sample Survey (a major survey carried out periodically by the Indian government’s Central Statistical Organisation, dealing with employment and unemployment as well as with consumer expenditure in seprate surveys – hereafter NSS) covering the period up to 1998. While these are not adequate to give us state-wise indicators, they do provide some idea of the tendencies at the all India level. All the results from most recent large survey for 1999-2000 have still not been released and so will not be analysed here.

It should be noted that the definition of economic activity used by the NSS is quite restrictive, and does not include the full spectrum of economic activities defined in the UN System of National Accounts, even though it now tries to take account of involvement in some household enterprises such as farm activities or small-scale artisan production or transacted service provision. It therefore excludes a significant amount of unpaid or non-marketed labour within the household, especially by women, including the processing of primary produce for own consumption, basic domestic handicraft

production, services such as cleaning, child care and so on, which are undertaken within the household and not marketed. This means there is a likely underestimation of economic activity within the household, as well as of the work participation rates especially of women.

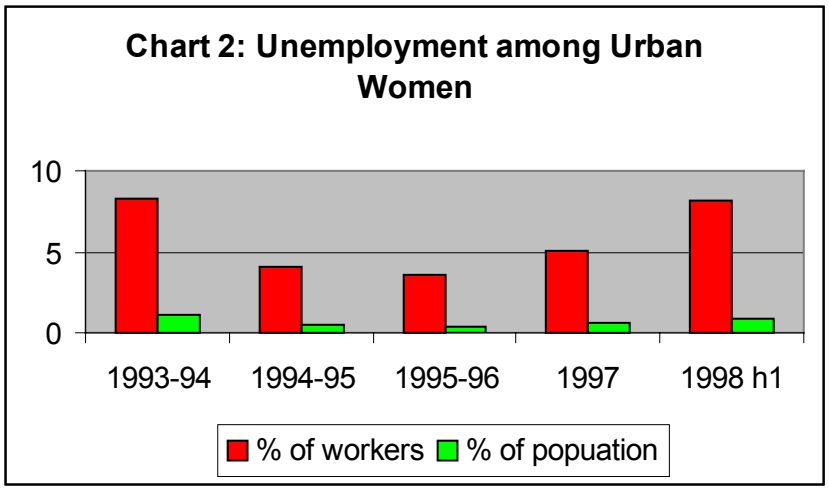
Given this caveat, Chart 1 provides an estimate of the overall work participation rate of urban women over the 1990s. Notwithstanding the amount of fluctuation, the overall trend appears to be one of decline. Indeed, the decline, on a point-to-point basis, is a very significant one for just a decade, by more than 4 percentage points from 15.2 per cent in 1987-88 to 11.4 per cent in 1998. This is extremely interesting, for it suggests that the picture that was being painted in the early 1990s, of a process of "feminisation" of employment, especially export-oriented manufacturing at the margin, has not been substantial enough to counteract other forces which have made for downward pressure on work participation rates.



Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India.

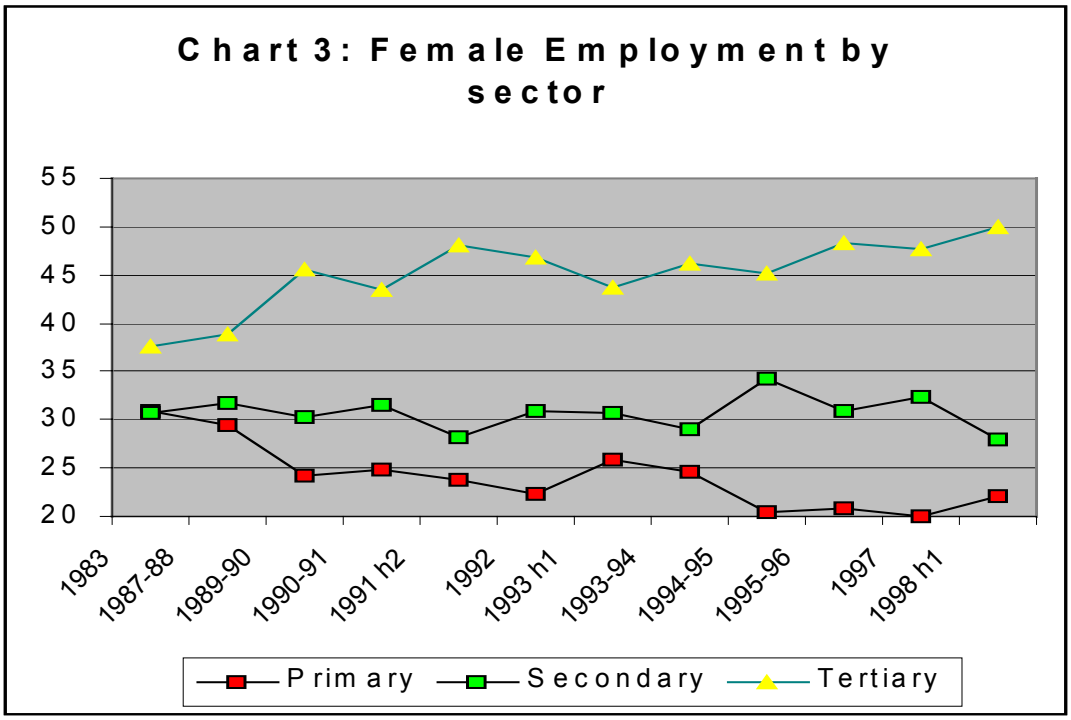
It also emerges that this decline in work participation has been associated with a rise in unemployment rates. It should be remembered that in countries like India, open unemployment rates are very poor indicators of the actual levels of job availability, because the material circumstances and absence of public social security systems mean that most workers have little choice but to find some employment, however unremunerative. Underemployment or disguised unemployment, which is far more difficult to estimate and measure, is therefore the most common tendency. It is true that there is more likely to be recognition of open unemployment in urban areas where surplus labour is less easily disguised as work in the fields. However, even here, the proliferation of informal activities, mostly in the service sector, can serve as a way of camouflaging the actual extent of underemployment.

This is why the significant increase in open unemployment rates over the course of the 1990s, as evident from Chart 2, is quite remarkable. Already at the start of the decade, the rates were relatively high, indeed 50 per cent more than the average rates of the previous decade. Subsequently, they have dipped slightly and then come back to the previous high level of more than 8 per cent open unemployment. It is possible that this has actually been combined with the well-known “discouraged worker” effect, since aggregate labour force participation rates have also come down over this period.



Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India.

Chart 3 shows that there is no evidence of shift towards employment in the secondary (or industrial) sector over the period since 1983. Indeed, there has been a slight decline in such employment relative to the total, while tertiary (services) sector employment has grown at the expense of both primary and secondary employment.



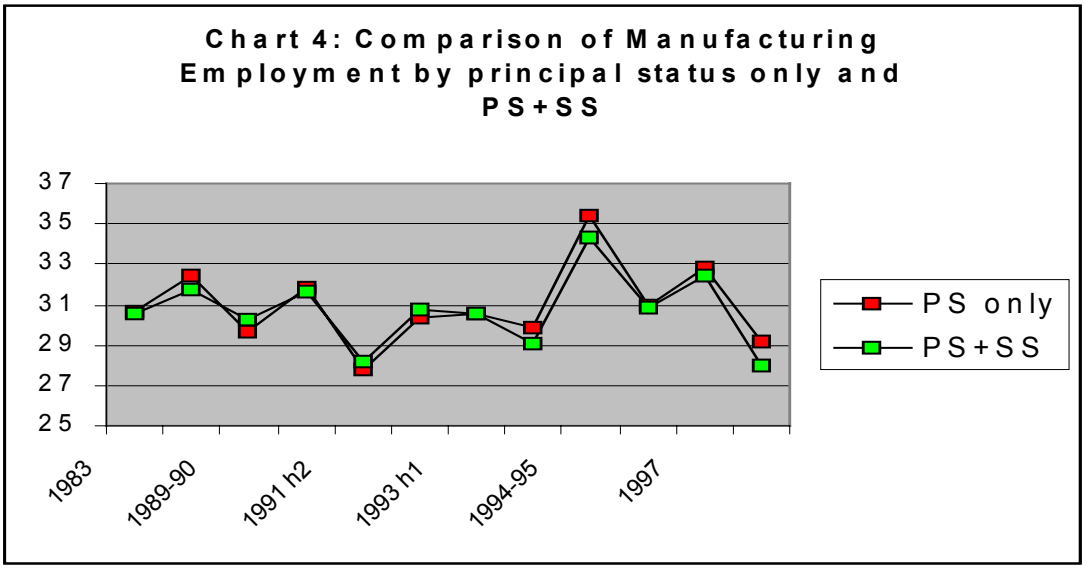
Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India.

A word about the nature of definitions of work activity is again in order. The NSS data on employment is based on the distinction between "principal" and "subsidiary" status of activity as well whether the person is "usually" engaged in the activity. Thus, a person is classified as "usual principal status" according to the status of the activity (or non-activity) on which the person spent a relatively longer time of the preceding year. The activities pursued by a person are grouped into three broad categories: (a) working or employed (b) seeking or available for work (i.e. unemployed) and (c) not in the labour force.

A "non-worker" (on the basis of the usual principal status) is someone whose major part of time in the preceding year was spent as either unemployed or not in the labour force. However, he or she could still be involved in some economic activity in a subsidiary capacity - when this is usually the case the person is referred to as a "subsidiary status worker". The two categories together - usual workers by both principal and subsidiary status - constitute "all usual workers".

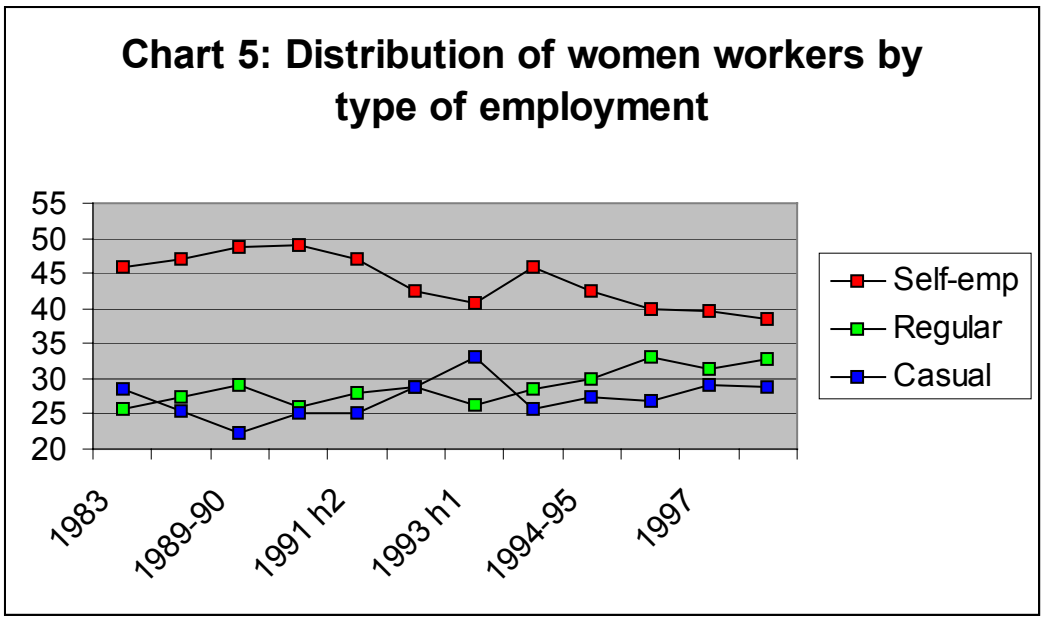
This detail can make quite a difference in the case of women workers - not only because much of their activity goes unrecognised, but because it is possible that they are classified as “usually working” when in fact it may reflect underemployment or engagement in a subsidiary activity only. Indeed we shall find that there can be substantial variation in the type of employment contract depending upon whether the activity is a “principal” one or a “subsidiary” one.

Chart 4 is provided to allow for examining whether this makes any difference to the relative significance of manufacturing employment for urban women. It is possible, for example, that because of certain types of labour arrangements, women are utilised in manufacturing employment in more of a subsidiary status capacity. However, Chart 4 suggests that this is not actually the case, since the two indicators (principal status only and principal and subsidiary status taken together) move approximately together.



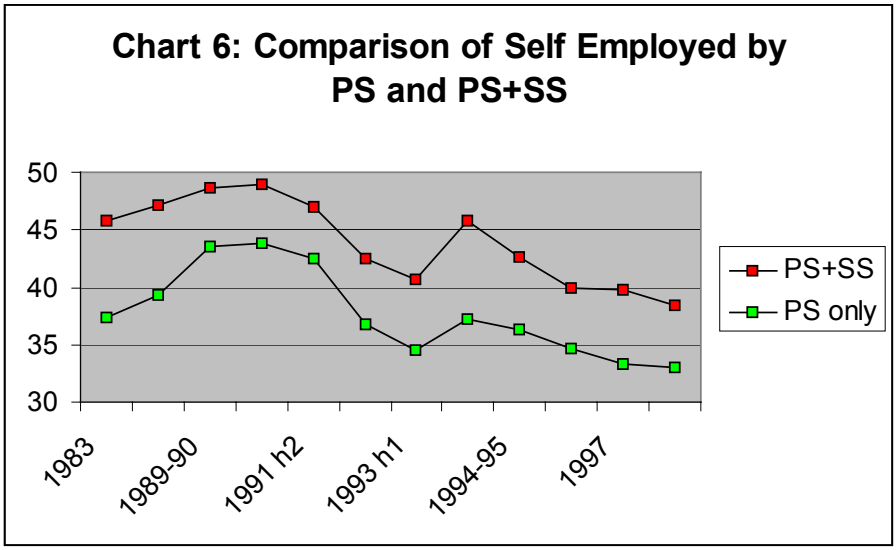
Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India.

The data on type of contract suggests that there has been a gradual shift away from self-employment towards regular employment, with a share of casual employment fluctuation within the range of around 24-28 per cent. This is evident from Chart 5. In itself, this a is positive sign, since usually in urban India, except for a few cases at the very high income levels, regular employment suggests higher wages and better conditions than either self-employment or casual work.



Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India.

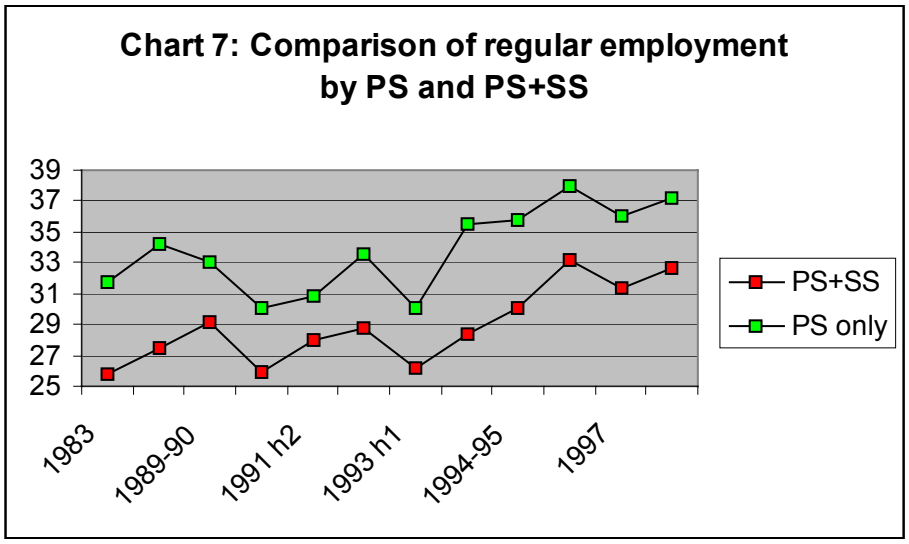
Note, however, that this chart covers “all workers’, that is those with both principal and subsidiary status, and a more disaggregated look suggests that this may be misleading. Thus, as is clear from Chart 6, all workers together show a generally higher rate of self-employment than principal status workers only. And when only the latter are considered, then the decline in self-employment is much less substantial. Thus the shift away from self-employment could largely be a phenomenon that is significant only in terms of subsidiary activities, for a reason that will be considered later.



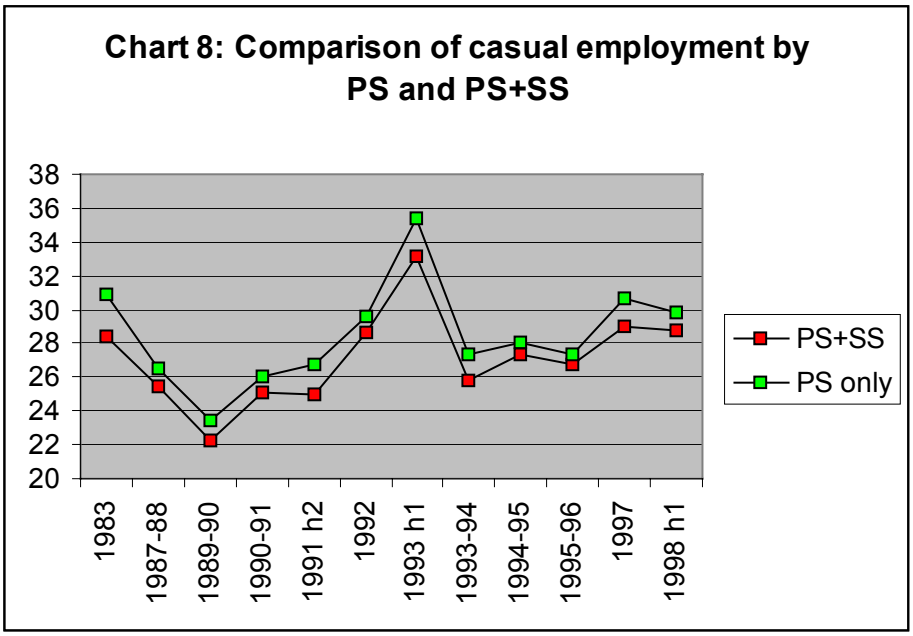
PS= Principal Status
SS= Subsidiary Status
Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India.

Similarly, consider the evidence of Chart 7: once again, regular employment by principal status alone is much less significant than it is when principal and subsidiary work is taken together, and again the increase is much less marked for principal activity alone than it is for all work. This suggests that much of the “regular” employment is occurring in terms of subsidiary status activity. By

contrast, as shown in Chart 8, casual employment remains much the same whether principal status is taken alone or whether all work is taken together.



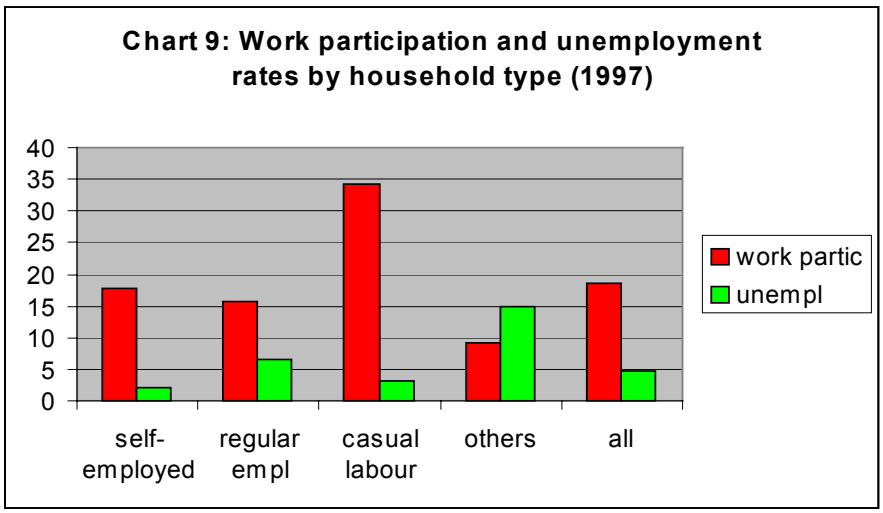
PS= Principal Status
SS= Subsidiary Status
Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India.



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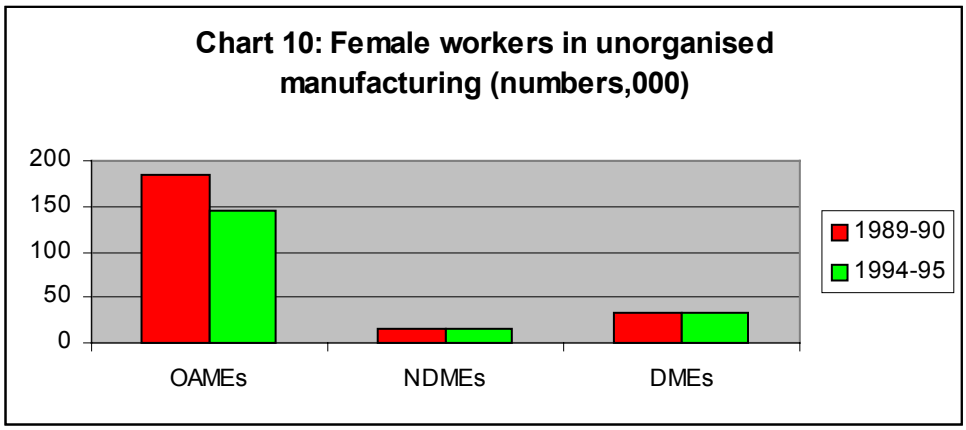
So the big shift, apparently, in recognised work by urban women in India, is an increase in regular work in the form of subsidiary activity. What could be the form of this increase? It is argued in this paper that this has really taken two forms: the first is the increase in certain types of regular service activity, including domestic service; the second - and the important one for our purposes -is the increase in putting out home-based or other work as part of a subcontracting system for export and domestic manufacturing. Such work does not get incorporated in the employment statistics which are based on employers' records, and this may explain the paradox that even while women's share of employment in manufacturing has not increased, the dependence of the sector - and especially of export-oriented manufacturing - on the productive contribution of women may well have increased.

This is considered below. But note first of all, that the composition of work and unemployment differs quite sharply across women from different household categories, as Chart 9 shows. The households here are categorised according to the work status of the head of household rather than the women workers in them. Predictably, female work participation rates are highest among casual labour households, who are typically the most likely to require outside earnings from as many family members as possible for sheer survival. But it turns out that unemployment rates are highest among women of regularly employed households, which is interesting.

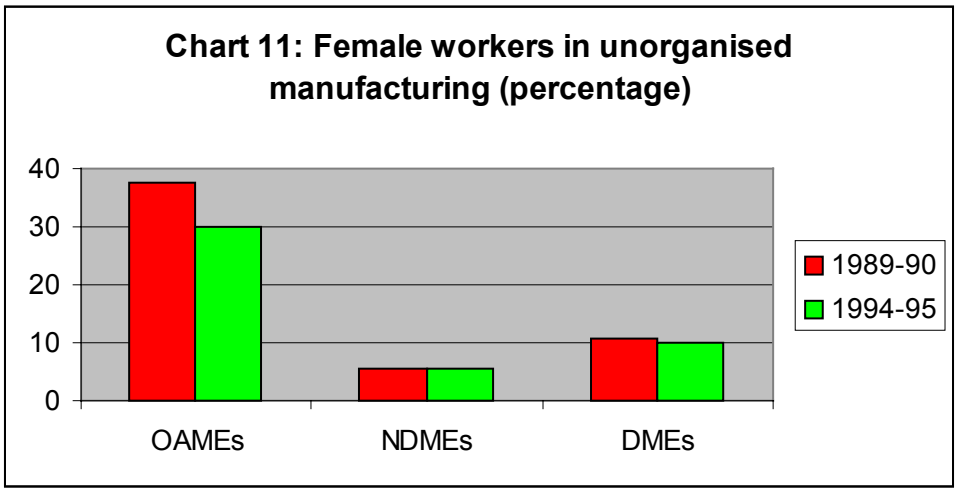


Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India.

The data on women's employment in manufacturing in terms of category of enterprise confirms the picture that direct and formally recognised involvement of women has if anything come down in the period of the relative higher growth of exports in the early 1990s. This is shown in Chart 10, which reveals that there has been a fall in absolute numbers of women workers, as well as in Chart 11, which indicates a substantial decline in women's share of employment in Own Account Manufacturing Enterprises (OAMEs) in the period between 1989-90 and 1994-95. Employment in Non-Directory Manufacturing Establishments (NDMEs) (less than six workers) and in Directory Manufacturing Establishments (DMEs) (six or more workers) has remained broadly stagnant, which is itself significant considering that manufacturing output more than doubled over this period. Indeed, the overall stagnation of total employment in this area means that the absolute number of women employed in these enterprises declined.



Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India.



Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India.

However, while overall women's employment in manufacturing has decreased over this period, there are important variations across particular industries. These can be gleaned from Table 4, which shows that the share of women employed and the trend over this period have varied quite remarkably across sub-sectors. In jute and beverages industries, the proportion of women was very high (as much as 80 per cent in jute) at the end of the 1980s, while in some others such as cotton and chemicals it was also quite high at nearly half the work force.

Table 4: Female workers to total workers by sector of urban unorganised manufacturing (in percent)

	1989-90	1994-95
Food	20.4	17.2
Beverages	64	65.1
Cotton	41.9	36.1
Jute	80.4	67.4
Textiles	30.5	22.9
Wood	16.7	19.0
Paper	16.1	16.1
Leather	12.9	6.9
Chemicals	47.8	57.6
Rubber	13.5	12.9
Non-metals	25.9	28.5
Basic metals	2.9	6.3
Metal products	3.9	3.0
Non-electricals	5.5	1.7
Electricals	6.8	11.8
Transport	3.8	6.6
Other manuf	14.2	11.1
All industries	21.3	17.5

Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India, as quoted in Lalitha [1999]

Table 5: Share of women in total employment by type of manufacturing enterprise (in percent)

	OAMEs	NDMEs	DMEs	Total
Food				
1989-90	31	7.3	14	20.4
1994-95	26.6	5.7	12.8	17.2
Beverages				
1989-90	70.2	11.6	20.9	64
1994-95	69.4	11.2	44.2	65.1
Cotton				
1989-90	59	19.2	25.4	41.9
1994-95	55	18.7	23	36.1
Jute				
1989-90	88.8	57	60	80.4
1994-95	71.5	52.7	78.6	67.4
Textiles				
1989-90	47.7	10	17.1	30.5
1994-95	46.8	9.8	12	22.9
Chemicals				
1989-90	74.7	10	26.6	47.8
1994-95	81.3	14.3	43.6	57.6
Non-metals				
1989-90	50	13	12.5	25.9
1994-95	39.3	16.3	18.7	28.5
All industries				
1989-90	37.5	5.4	10.6	21.3
1994-95	30	5.4	10.1	17.5

Source: National Sample Survey Rounds on "Employment and Unemployment in India", Department of Statistics, Government of India, as quoted in Lalitha [1999]

But the basic point remains that in most of these sectors the share of women declined over the first half of the 1990s, in some cases quite substantially. Only in the chemicals and non-metal manufacturing sectors was there any increase in the proportion of women employed. It is worth noting that these two sectors are also among the more hazardous industries. The involvement of women in own account small scale activity in the chemicals industry in particular may become problematic because of the numerous health hazards associated with such production especially (but obviously not exclusively) on a small scale.

Table 5 shows the same data disaggregated across types of enterprise, for the sectors in which women's employment has been 20 per cent or more. It is evident that in most such industries, the decline of women in the share of employment has been most marked for Own Account Manufacturing Enterprises (which fits in with the pattern noted above) and Directory Manufacturing Establishments.

It is being argued in this paper that home-based subcontracting activities, or work in very small units that do not even constitute manufactories, often on piece rate basis and usually very poorly paid and without any known non-wage benefits, may to some extent have substituted for both self-employment and more regular employment on a regular wage or salary basis. This is supported by some micro-evidence relating to certain manufacutirng sectors in particular towns and cities (Mukhopadhyay [1999]; Neetha [2001]; Shah and Gandhi [1998] Deshpande [2001]) found an

increase in putting out tailoring activities in three Mumbai slums. Das [2001] reports an increase in the involvement of women in unregistered piece-rate payment based manufacturing in the ceramicware industry in Gujarat. Anand [2001] has documented the pattern of integration of homebased work with wider marketing channels in handicrafts such as applique and coir products in parts of Orissa. Mahadevia [2001] finds an increase in the informalisation of employment and greater participation of women in homebased self-employment dealing with middlemen and contractors in Ahmedabad city of Gujarat, even though the city's role as a major centre of textile export is on the decline. Both the general pressure of industrial capitalist production and the particular external pressures faced by exporting industries which have to respond to international competition, operate to increase this tendency rather than to increase a more regular and secure form of women's involvement in manufacturing work.

This perception is supported by the evidence on increase in subcontracting in Indian industry, especially in terms of export-oriented manufacturing companies and multinational companies operating in India. [Suri, ed., 1988; Bose, 1996; Ramaswamy, 1999.] One particular estimate of subcontracting intensity for Indian manufacturing (defined as the ratio of the value of goods sold in the same condition as purchased, to value added) found that it had increased from 9.46 per cent in 1970 to 25.3 per cent in 1993-94, for all manufacturing sectors taken together. [Ramaswamy 1999, pp 165-66, also for following data.] Certain industries, especially consumer non-durable goods, were found to have very high subcontracting intensities in excess of 100 per cent by the early 1990s. These included weaving and finishing of cotton textiles on powerlooms (110 per cent), stationery articles (180 per cent) canning and preparation of fruits and vegetables (178 per cent) and even white goods such as refrigerators and air conditioners (115 per cent). Ratios in excess of 100 per cent indicate that the value of subcontracted production which forms part of the input, is even higher than the value addition involved in the final output.

This particular study by Ramaswami [1999] identified both technology and labour regulation as factors behind the higher subcontracting activity of factories that used more labour per unit of output. Thus, technological changes that are oriented towards higher labour productivity obviously reduce the requirement of many kinds of unskilled labour in particular, but they also allow a break-up or physical disintegration of the production process which greatly facilities outsourcing. Similarly, labour regulation that puts requirements on worker pay, conditions or safety on employers who gather workers together in factory or workshop settings tends to encourage more use of putting out systems, since these are efffectively free from all such labour regulation and the chances of self-exploitation by homebased workers are greater. So, those activities or parts of production processes that involve more labour use per unit of output are more likely to result in organisational forms dependent upon subcontracting at various levels.

This conclusion is also supported by other work on women workers in "informal" economic activities. Thus, for example, the well-known case of workers in the *beedi* (local leaf-based cigarette) industry, where approximately 90 per cent of the total workforce consisted of women and children working at home. [Labour Bureau, 1995] The *beedi* industry is not an export industry, but this suggests that home-based work is already a common manufacturing practice. These are not export-oriented units, but they indicate that such labour practices are widespread and therefore are available for use by export-oriented producers who naturally require even more "flexibility" in their functioning. Similarly, studies of the export-oriented industries of cashew and coir processing in Kerala found that male workers with higher reservation wages often stayed unemployed while women from the same household worked both at home and in small outside units at very low rates of remuneration. [Quoted in Mukhopadhyay, 1999.].

If the macro data combined with the micro evidence that is available are accurate representations of current trends, then the feminisation of export-oriented employment may have taken a particularly regressive form in India, whereby the marginal utilisation of women workers is at the lowest and poorest paid parts of the production chain, and such women are therefore effectively

deprived of all the benefits that may accrue from outside employment except for the meagre nominal returns that they receive from piece-rate work.

This in turn constitutes an important challenge for social policy. Thus, if workers are collected at a work place, then it is likely that there can be greater social control over both general employment conditions and specific factors affecting them. But if the nature of outsourcing is such that it is mediated through a chain of intermediaries, then the final user of the outsourced material - typically a large and even multinational company - can claim that it has no knowledge of the working conditions or remuneration at the bottom of the chain, and need not be responsible for them. Further, even legislation designed to improve conditions of such work, along the lines of the Home Workers Convention of the ILO, is difficult to implement because of the near impossibility of monitoring and ensuring compliance. (These and other issues are discussed in more detail in section IV.)

An important question, of course, is why this should be so much more the case for Indian women workers. In other words, why is the feminisation of work taking this particular form and why is Indian manufacturing so increasingly prone to this type of organisational structure ? From the point of view of employers or suppliers of goods, at one level the advantages of home-based production are quite obvious. When industry outsources part or even all of its production processes, it effectively transfers to the workers' households the responsibility for important costs of production: the site, machinery, inputs such as electricity, spare parts, maintenance, health and safety at work, pensions, healthcare, etc. A piece rate system of payment not only does away with supervision costs because of the worker's tendency for self-exploitation under such circumstances, but it also allows for very low rates of remuneration, often below minimum wage levels. Home-based workers' opportunities for any kind of organisation or collective bargaining are limited and therefore they are rarely in a position to demand better contracts from middlemen.

However, these are quite universal features of home-based work, and indeed they have been used to explain its prevalence in countries from Chile to Vietnam. What is probably significant in India is the fact that open employment of women in export-oriented factores, while it is certainly growing and has been quite significant in a number of industries, is less apparent than it was in the Southeast Asian countries during their phase of major export boom. Instead, perhaps a greater role has been played in Indian manufacturing by drawing in women working in very small or tiny units, effectively in the informal sector, or even actually within their own homes. To some extent, I believe this can be explained by the relatively low position of many of India's export commodities in the international value chain, such that there is greater emphasis on very low wages rather than skill and quality considerations. It is noteworthy that even in domestic market oriented manufacturing, this rendency for outsourcing to home-based work is more pronounced in relatively low value and low skill content goods, in a range of sectors ranging from textiles, garments and leather goods to plastic processing. To that extent this tendency could even be seen as part of a phase of industrial development and export involvement, in which the focus in on maximising profit through squeezing costs rather than increasing productivity, and supplying low-end goods or low-value parts of the production process.

This hypothesis tends to be quite starkly confirmed by a recent study of the involvement of female labour in the export-oriented knitwear industry of Tirupur, Tamil Nadu [Neetha 2001]. For this reason, it is worth considering the results of that study at some length. Tirupur, a small town in Tamil Nadu, is an old centre of textile production which from the mid-1980s turned into a growing centre for knitwear production for export. It is now actually the largest of the cotton knitwear export centres in India, accounting 20 for per cent of exports directly and nearly half of all such exports if the re-exported sales to Delhi, Mumbai and Chennai are included. Knitwear exports from such centres go dominantly to the developed markets of Western Europe and the United States, and are often sold under famous brand names. The industry is dominated by small and very small producers, who are really subcontracting units for direct exporters and merchant exporters who in turn negotiate with international suppliers. There are also ancillary units and job workers (including home-based workers) all of whom are integral to the aggregate production.

Neetha's study shows that in the early phase of modern industry in Tirupur (1925-70) when organised production was the norm, the mills were mostly composite units carrying out all operations, and employing *only* males workers. In the next phase, between 1970-85, there were the beginnings of the fragmentation and disintegration of production. Production facilities moved to Yirupur as employers fled Calcutta after a series of strikes, and sought to ensure more pliant workforces also using migrant labour. In this period women workers were involved in the production process as "helpers", in cutting, arranging and folding for the male workers, usually from their own household. (It is worth noting that this was also the period of the decline in the local handloom industry, which left many women workers unemployed or underemployed.) Some of this work would even be done at home as male workers would take the material back with them for the (often unpaid) assistants to work on. The third period from 1985 onwards has been marked by a massive expansion of exports from Tirupur, and this was associated with the rapid acceleration of the processes of subcontracting and informalisation. Female workers have been increasingly absorbed into the industry, to the point where they now constitute around 60 per cent of the total work force.

It is interesting to find that by the present time, the division of labour in the Tirupur knitwear industry has become minute and highly specialised, with gender driving most of the changes. The women – typically young women between the ages of 15 and 30 years, and dominantly only 15-20 years - are almost all employed on casual piece-rate contracts which end up providing them with daily incomes which are just above half the official minimum wages in the area. The employment of women is much greater in the lower rungs of of the production chain, where uncertainty in production is higher and there is sharp seasonality or volatility in demand. While the horizontal mobility of women workers across units is quite high because of the uncertain employment contracts, upward mobility is close to zero and there is very little chance of moving up the skill ladder to activities like tailoring which remain the preserve of men. Also, the extent of subcontracting varies, but is so extensive that it goes down to the home-based work level, or to production units that are so small that they cannot be called more than very tiny cottage enterprises. What is surprising is that Tirupur is often described as being on the "high road" of flexible specialisation, because of the fact that many former workers have become producers and suppliers, albeit on a small scale. In fact, as can be seen from this very brief description, it is very a much a "low road" pattern because of its complete depedence on inferior labour contracts using mostly female workers.

This study of Tirupur clearly indicates that feminisation of employment has been the direct outcome of the attempt to create a pattern of "flexible specialisation" to meet shifting international demand requirements and provide the cheapest possible production for international suppliers. Indeed, a similar tendency has also been observed for the small export-production units in certain sectors like garments and plastic processing in Greater Delhi and Ghaziabad [Shah and Gandhi 1998]. It is therefore an accumulation and production strategy which is integral to *a certain phase* of capitalist production for export. It is interesting – if almost predictable – to find that in some more modern units using very recent technology and catering to specific international suppliers on a more stable basis, there has been a shift to time rate wages and also to employing men at the margin. This also suggests that, just as feminisation is a response on the part of employers to the need for a more "flexible" labour force, it may also be a certain stage in a longer evolution, and as production moves up the value chain we may eventually observe the re-masculinisation of the export work force, at least to some extent.

It is also necessary to consider an export sector of more recent vintage, albeit not only in manufacturing industry per se – that of software and IT-enabled services - which in the 1990s emerged as the fastest growing segment of India exports. Much has been made of the growth potential of this sector and its ability to increase educated employment, as well as of the important potential it offers especially for urban educated women to enter employment on relatively advantageous terms. There is no doubt that these new sectors in India offer a very promising combination of employment opportunities and export revenues from hardware, software and IT-

enabled services. Projection by both private industry and government of the likely trends in output, exports and employment, are extremely optimistic.

According to one study [NASSCOM 1999], India has the potential of raising export revenues from software and IT-enabled services from its 1999-00 level of $4 billion to $50 billion in 2008. This would take the size of the industry from $3.3 billion in 1998 to $87 billion in 2008, along a trajectory involving a compound annual rate of growth of 40 per cent. As a result, the IT sector's contribution to GDP growth is expected to touch 7.5 per cent and its share in India's exports to reach 30 per cent as compared with around 5 per cent currently. Such growth is expected to have substantial employment implications, with employment in the software industry alone projected to rise from its 1997-98 level of 180,000 to 2.2 million in 2008. This makes the projected increase in employment in the software sector greater than the increase in total organised public and private sector employment of 181,300 between 1990 and 1998. If these projections are realised, employment in the software sector in 2008 would be around 8 per cent of India's organised sector employment in 1998. To this should be added the projection that direct and indirect employment in the hardware sector is expected to touch 1.6 million and 3.2 million respectively, taking total IT employment to 7 million in 2008. And of course this still does not include the employment potential of a wide range of IT-enabled services, including data entry and processing, medical transcription and back-office work subcontracted by multinational companies, where it is often argued that the scope for job expansion is even greater.

As always, however, there is need for caution in interpreting such optimistic figures. The first problem relates to the digital divide, in terms of both availability of and access to even the hardware necessary, as well as the levels of education required to make use of the technology even at a relatively basic level. Even as late as 1998-99, the penetration of PCs in India was only 3 per thousand and the number of fixed telephone lines to connect to the world wide web through an ISP only 22 per thousand. . Even after taking account of the optimistic projections of IT growth to 2008, PC penetration is expected to touch only 20 per thousand and fixed telephone penetration just 100 per thousand. In the circumstances the impact of IT on the nation as a whole can only be marginal, and generally confined to urban India. [Chandrasekhar 2000]

The ability to make use of the technology is critically determined by levels of education. Even as late as 1997, NSS data revealed literacy among the population above 7 years of age was just 62 per cent. The literacy requirement is set so low that in most cases being literate would be inadequate to be competent enough to become digitally literate, since a minimum of school education would be a prerequisite beyond a point. Here the picture is quite depressing, according to a recent report on the state of public education. According to this report, around the beginning of the 1990s, half of the country's population (61 per cent of women and 36 per cent of men, aged 7 and above) was unable to read and write; less than 30 per cent of all adults had completed eight years of schooling; and one-third of all children aged 6-14 years (about 23 million boys and 36 million girls) were out of school. [Probe Team 1999]

Similarly, since much of the activity is in English, the employment generated by both the software and IT-enabled services sectors is currently concentrated among the richer and English-educated sections of urban (and even metropolitan) India, and is likely to remain so. This creates a clear policy dilemma: Not investing in ICT is to forego what happens to be the leading opportunity in modern economies. But excessive emphasis on IT could result in the diversion of resources away from the much more crucial expenditures on literacy and primary education, which are not just development goals in themselves but a must if the digital divide is not to widen rapidly.

It is also true that the impact of IT on growth and employment is uncertain. As mentioned above, the remarkable rates of growth recently recorded are from very small bases, and the sector typically remains very small relative to the rest of the economy, in India as elsewhere. These rapid rates of growth should be treated with caution, also because gross revenues are misleading in an

industry segment characterised by substantial dependence on imported capital goods, components and software, since this substantially reduces the domestic multiplier effects of such spending.

Chandrasekhar [2000] points out that there are at least three prerequisites for the growth potential in this sector to be fully realised. First, software exports need to diversify in term of sources and destinations. Currently the US market dominates, which is why the recent slowdown in the US has generated apprehensions about the sustainability of the Indian IT boom. Second, software service providers should be able to sustain the quality of services offered by inducting appropriately qualified and skilled personnel to not merely write code but design systems. Third, Indian firms should be able to migrate up the value chain, so as to ensure a growing share of the market as well as enter into segments that offer higher value per employee. In all these areas the availability of personnel is bound to prove a constraint. The inadequacy of training services resulting from the proliferation of poorly-staffed, profit-hungry teaching shops, and the limited base for training and skilled-development in the domestic software services segment are already evident. As a result even as an outsourcer India still remains a lower-end software supplier and a supplier of IT-enabled services. Heeks [1998] points out that international companies mostly outsource low-end and labour-intensive tasks to Indian firms, retaining the more skill-intensive, high-end activities like design and product development for themselves.

Further, it is not clear how much of this export revenue is little more than the sale of cheap skilled and not-so-skilled IT-enabled labour services whose output is transmitted via modern communication technologies to sites where those services are required. The possibility of such service delivery has helped India circumvent the obstacle to service exports created by immigration laws in the developed countries. This means that a large part of software exports is not very different from the exports of nursing, carpentry, masonry and other such services, except for the fact that unlike those exports, the presence of the service provider at the point of sale is not required in the case of IT-enabled services.

Thus, conceptually, India's software thrust of the 1990s is not as spectacular as it appears. It is substantially export of lower end software facilitated by the availability of cheap skilled labour. And it is in large part a technology-aided extension of the earlier waves of migration by service-providers of different descriptions: doctors, nurses, and blue-collar workers of various kinds. An expansion of that kind cannot be self-sustaining. Even in quantitative terms the latter development is not spectacular. The net foreign exchange revenue to the country from migration of the old kind, captured by the volume of remittances into India, is in the range of $10-12 billion. The gross foreign exchange revenue from software exports is just $4 billion. [Chandrasekhar 2000]

Further, the micro evidence suggests that women workers are reasonably involved in this sector, and in particular activities their share of employment is much higher than that for the formal sector as a whole. A survey by Nagesh Kumar of 141 sample establishments in activities such as internet/email bureaus, data entry and processing services and software customisation and content development services, in Delhi, NOIDA and Hyderabad, also examined the gender aspect of employment. [Kumar 2001] It was found that 72 per cent of the establishments did not employ any women workers, but customisation services had a relatively large proportion of women, ranging from a quarter to half of the workforce. In the software industry as a whole the share of women workers is estimated to be 27 per cent. It is interesting that customisation services is the relatively more skill intensive of the activities covered in the survey, but Kumar notes that since back office work, voice mail etc., had been excluded from the survey, some of the activities in which women workers are more significant may have been excluded.

This sector shows clear signs of labour market segmentation by gender, caste and class. Since almost all of those involved are from the urban upper caste English-speaking elite of Indian society, it has been argued that the pattern of development of the software and IT-enabled services sector brings into sharp relief the tendency of the market to reinforce or aggravate existing socio-

economic inequities. [Vijaybhaskar et al., 2000] While it will certainly draw more educated women into paid jobs and reduce the problem of educated unemployment to some extent, it would not bring about any major transformation in aggregate employment patterns in the near future.

III. Export Processing Zones

The most visible sign of the link between feminisation of paid work and export orientation is of course in export processing zones. In India such zones have been both less prominent and less successful than in the Southeast Asian economies, but nevertheless they also bring out the reasons for employers' preference for female workers of a certain age group as well as the need to ensure minimal employment security in such areas.

The idea of an EPZ - which is also known in other countries of Asia as a Free Trade Zone, Special Economic Zone, and so on, is essentially to provide special incentives to exporters and to allow them to avoid or bypass many of the laws and physical and material constraints which supposedly inhibit export growth in the rest of the economy. as Raman [1989] has pointed out, "whatever be the terminology, the significance of the Export Processing Zones lies essentially in its physical, social and economic separation from the rest of the country". Indeed, the latest Exim policy announced by the Government of India declares that the new term will be Free Trade Zones (FTZ) to replace Export Processing Zones and these are to be treated as outside the country's customs territory.

In India, the first EPZ was established at Kandla in 1960, which was one of the earliest of all developing countries. At present, there are seven EPZs operational within the country, while two more are planned. Of these, the largest three - Santa Cruz EPZ, Noida EPZ and Madras EPZ - employ the bulk of the workers and account for more than 85 per cent of the exports of all the EPZs out together. However, EPZs themselves are still rather unimportant in quantitative terms: over the 1990s they together accounted for less than 4 per cent of the value of all exports from India, and their share has actually stagnated over the past decade despite the increasing number and value of various economic incentives that have been offered to them.

In aggregate they currently employ around 80,000 directly, but some reports suggest that the extent of indirect and unofficial employment is much larger and may be growing. The three large EPZs account for 80 per cent of all EPZ direct employment according to the official data. However, this includes only those workers who are permanent and are entered on the company record books. There are thousands of other workers, who either do not appear on the company records or may be working as contract workers. Thus, for example, the PRIA [2000] study of EPZs found that in Madras EPZ, the MEPZ workers union which is the only union of EPZ workers in India, did not accept the official total employment figure of the zone of 17,000, but rather put the figure around 36,000-38,000 out of which almost 25,000 are women.

The numerical dominance of women workers is a characteristic feature of EPZs across the world, and the Indian EPZs also follow along the same lines. In both Santa Cruz and Madras EPZs, women workers constituted 70-80 per cent of the work force. NOIDA was somewhat of an exception, with only 30-35 per cent women workers. These women are also typically young - the average age is found to be between 20 and 25 years, with around 10 per cent even younger, in their teens, and only around 1 per cent above the age of 30 years.

Officially, EPZs are also governed by the labour laws of the country, but certain distinctions and loopholes have meant that they are honoured only in the breach. Thus, the law states that union activity is permissible. Work hours as per law have been limited to 48 hours per week. Provident fund contributions by the employer, which are limited to just 8 per cent, become applicable after 3 to 5

years. The Bonus law prescribes a minimum of 8.33% and maximum of 20%, which however, is not obligatory in the first five years if profits are not earned.

However, the critical law which inhibits worker association is that which declares the EPZs to be Public Utilities. Under the Industrial Disputes Act, six weeks' notice is required for a strike in a public utility service. Further, strikes are banned as long as any conciliation proceedings are pending. This makes the use of strikes as a bargaining weapon extremely difficult. It also means that labour laws can effectively be flouted without much resistance from the workers concerned. In any case, the predominant use of young women ensures that tendencies to unionisation are already low.

This is probably why it emerges clearly from virtually all the studies on EPZs [PRIA, 2000; Shah and Gandhi, 1998; Mazumdar 2000] that none of the provisions of the existing labour laws are actually met in most of the units operating in the major EPZs. Minimum wages are rarely if ever actually paid. (in Madras EPZ, women workers in leather and textile factories were reported to receive Rs. 800 per month in 1999, when the official minimum wage declared by the government at that time was Rs. 1200 per month.) Working hours are typically much longer than the specified maximum without any payment of overtime. The statutory benefits and leave rules are systematically flouted by employers. Basic safety and health precautions are also rarely observed within factories.

According to the PRIA study, "Women do not get maternity leave anywhere, in fact women generally lose their jobs if they get pregnant. Surprisingly, some companies employ women on the condition that they won't get married or pregnant in near future. As per the factories law, employers are prohibited from allowing women to work in night shifts, but during the survey the contrary was seen women work in night shifts in many places in MEPZ." [PRIA 2000 page 12]

The questionable working conditions are obviously not confined to women workers alone, and it has been found that male workers in EPZs face very similar problems of low pay (typically lower than the official minimum wage) longer working hours and possibility of being fired without justification or compensation. The basic instrument through which all this is achieved is fear, the fear of loss of job as well as that of continuous harassment on the job.

This harassment, which ensures worker acquiescence, is often aided by the overt collusion of various agents of the government. Thus Mazumdar [2000, page 6] describes the state of affairs in the NOIDA EPZ: "even the tenuous rights available to workers ... are rendered further inoperable by a series of restrictions and practices by customs officials in the Zone. Designated a custom bound area, uniformed customs guards at the Gate screen all who enter the NEPZ. Passes are issued to each worker only at the behest of the management of companies. Similarly, they are immediately withdrawn and entry into the Zone is barred, again at management's behest. Illegally dismissed or victimised workers are thus prevented from even approaching the gates of their factories to lodge any protest. In other words, individual managements are able to use the uniformed customs guards as instruments of denial of workers' rights. Even labour department officials cannot take workers who are illegally dismissed into the zone and there is no system of negotiation between the administrators of the zone and the labour department. Workers are deprived of the fundamental right to assembly. Gate meetings and demonstrations are totally banned in the zone. Although technically law and order fall in the purview of the UP Police, the Customs guards act as an extra-constitutional policing authority and have often displayed marked brutality towards workers. A police chowki is located inside the premises of the NEPZ and the factory managements, the zone administration and the police act in tandem to terrorise the workers."

The use of piece rate payment is another common instrument to ensure high rates of production at low rates of wages. Most studies have found that piece rate strategies of remuneration are increasingly being put into place in all manufacturing activity where this is feasible, and that this has put excessive pressure on workers. In some cases where the wage was not formally piece-rate. production targets were arbitrarily increased without any increase in wages. Thus, in Noida EPZ,

workers in garment factories found that their production targets had been increased from 300 to 600 pieces per workers per day without any additional labour saving device and certainly no increase in wages.

All the studies report a range of work-related illnesses and disorders, ranging from chronic headaches and stress-related fatigue, to back problems, to disturbances of the menstrual cycle, loss of weight and even more serious complaints. In all such cases, it was found that management had declared they were in no way responsible for the problems. As a result, dealing with such illness, with the associated absence from work and medical costs, was entirely the burden of the workers.

It is worth noting that these loopholes and strategies which allow for systematic labour exploitation in the EPZs have not made them more efficient or competitive than exporting units within the domestic tariff area which cannot avail of such benefits. Thus, as noted above, the share of EPZs in total value of exports has stagnated at the very low level of between 3 and 4 per cent, while that of Export-oriented Units (which get some fiscal and tariff incentives but no concessions in terms of labour laws) has tripled to around 11 per cent over the past decade. While employers of course maintain that the labour "flexibility" which is de facto provided in the operations of the EPZs is crucial in maintaining their profitability, this is questionable. In fact it could be suggested that such laws, by suppressing the cost of labour, actually promote more inefficiency in other aspects of the production process and discourage technological innovations which would enhance productivity.

IV. Measures for social protection of women workers

As most researchers in this area know only too well, it is easy enough to provide a catalogue of woes in terms of the working conditions and wages of women in export-oriented employment. It is much more difficult to work out policies and methods of ensuring some amount of work security and basic living conditions in the current global environment where the need to push for greater external competitiveness is systematically used as the basic argument against the provision of any workers' rights.

In particular, the discussion above leads to certain fundamental questions which are extremely difficult to address. How is it possible to ensure a minimum provision of basic rights and privileges to women workers, and to improve the conditions of their work, without simultaneously eroding their attractiveness to employers and reducing the extent of female wage employment? How can such rights and basic labour standards be assured in the current phase of globalisation, in which heightened export competition is actually combined with a phase of aggregate manufacturing employment contraction, as the full force of the adjustment measures is felt in the real economies?

It is probably necessary to define the terms on which such social protection can be ensured. As pointed out by Huber and Stephens [2000], public delivery of a wide range of welfare state services is probably the most significant determinant of the conditions of the citizenry and of women in particular, and is much more significant than what are traditionally seen as straightforward redistributive transfers. Indeed, this argument has resonance in the Indian context, where many of the most basic of welfare state services are untouched by public agencies and expenditure on other has actually declined over the past decade as part of the standard structural adjustment-associated "belt-tightening".

It is also true, as they suggest, that there are strong political economy relationships associated with particular patterns of public spending as well as with the delivery of public services. This means that it would be foolhardy to specify certain social policies, without laying the groundwork for their adoption and efficacy through strong social movements which are able to demand these policies of the state. This is why it is necessary, in any discussion of social policy, to note the crucial

significance of public pressure and social movements in achieving desired social outcomes, and therefore to realise why the ability to organise and the need to mobilise citizens is essential. Without this, even the most carefully thought out government policies and schemes are likely to have very different actual outcomes on the ground,

With this caveat in mind, let us consider the basic requirements of worker protection in a country like India. The earlier discussion has made it clear that it is futile to expect either decent labouring conditions or viable standards of material income from private employers given the overall context of excess labour supply and low to stagnant employment generation. Thus, a significant share of the burden must necessarily fall upon the state, and it is necessary to generate sufficient social pressure to make the meeting of such requirements a basic political necessity for any government.

In India, it is clear that the dominant notions of how to proceed with the task of 'development" have in turn influenced the measures for social security that have been undertaken by the government. [Gayathri 2001] Thus, in the period of the 1950s and 1960s, the need for welfare dominated policy thinking, leading to social security programmes along the lines of community development programmes and welfare institutions being set up for the most vulnerable groups. In the two decades subsequent to that, that is in the 1970s and 1980s, the emphasis was on equality and equity. This led to the addition of programmes like the Integrated Rural development Programme which tried to provide basic assets to targeted rural beneficiary households, and the employment schemes under various titles. In the 1990s, when empowerment became the buzzword, there have also been measures such as reservation to political bodies, special financial assistance to vulnerable groups including widows, supplementary nutrition programmes for girls and pregnant and lactating mothers and more targeted schemes generally. As can be seen from this, there has been a related shift from ignoring the issue of social security (based on the earlier prevalent notions of the family or household as an altruistic unit) to one which recognises the need for gender-specific measures.

The most basic requirement for workers - indeed all citizens - in an economy like that of India is food security, that is access to sufficient basic food at prices which are compatible with the actual minimum household nominal incomes. This can and must be a priority of the state, which is why the implicit agenda of the current Indian government, of effectively dismantling the Public Distribution System for food (through inefficient targeting and higher prices) is so dangerous. Also, such a scheme should be universal in nature, which not only reduces administrative costs associated with "targeting" but also ensures that those who require it actually do have access. Quite apart from the general welfare considerations of such a strategy, it is well known that, given the social construction of gender in South Asia and intra-household consumption distribution, improved access to food for a household disproportionately benefits women and girl children, and the converse is true for reduced food access. [Ghosh 1998]

Similar requirements can be specified for public health programmes, which are not only grossly inadequate in India but are also dramatically underfunded, and have experienced swingeing cuts in expenditure over the last decade. As in curative health, preventive health measures and sanitation, which would be considered part of the most basic economic rights of citizens anywhere are also underprovided to an extent that would be unthinkable even in most other developing countries. The need to ensure adequate public provision of such health facilities is so obvious that it probably does not require restating. So also, public housing remains an important domain of development which can be crucially implemented by the state and its various agencies. [Mahendradev 2001]

Of course, the effectiveness of delivery systems in such public goods and services depends upon the degree of transparency and accountability that the system provides. This is why social experiments such as the move towards decentralised planning in the state of Kerala are so significant. [Isaac 2000] It is essential that local people and their elected representatives be given greater control not only in terms of choice of investments in these areas but also over the administration and delivery of such services.

All this being said, it should be noted that at least on paper, the intentions of the Government of India have been blameless - if singularly ineffective - in the past. There is a plethora of laws, as well as of specific schemes, which are designed to improve basic social security in these crucial areas. But mostly they do not have real operational strength, and this is because of a combination of poor and declining public funding and inadequate social participation and accountability.

This relates to the social security of citizens at large, but of course they affect women workers as well. But clearly, given the peculiar and potentially highly exploitative nature of employment in export manufacturing sectors, special measures need to be directed towards those in such employment, especially the more vulnerable category of young women. Once again, formally they are already covered by a range of announced interventions, as described in Table 6 below.

Table 5: Existing models of social security in India

Model	Nature of benefit	Beneficiaries	Admin/financial setup
Employers liability	Workmen's compensation Maternity benefit Gratuity Retrenchment compensation	Workers in the organised sector	Employers manage and pay exclusively
Social insurance I	Medical care Sickness benefit Maternity benefit Occupational injury	Workers in the organised sector	Administered by Employees' State Insurance Corp; financed out of contrib from employers, employees, state governments
Social insurance II	Old age benefit Invalidity benefit Survivor's benefit Provident Fund	Workers in the organised sector and some workers in the unorganised sector	Administered by central board of trustees; financed out of contrib from employers, employees, state governments
Social assistance:			
(a) Welfare funds of central govt	Medical care Education Housing Water supply Old age benefit Survivor's benefit	Mine workers Bidi workers Cine workers Construction workers	Administered by departments; financed by special levies in the form of cesses
(b) Welfare funds of Kerala govt	Wide range of benefits including all of the above and housing, assistance for marriage, etc.	Workers in unorg sector such as handloom, coir, cashew production	Administered by autonomous boards; financed by contrib form employers, workers and others
(c) Subsidised insurance	Survivor's benefit Invalidity benefit	Vulnerable groups of workers, incl handloom, agri, etc	Administered by LIC and GIC; financed by contrib from state and central govts
(d) Other forms	Old age benefit Survivor's benefit Maternity benefit Employment assistance Training, etc	Persons outside job market and below poverty line, destitutes, orpahs, deserted and divorced women, widows, disabled persons, SC, STs OBCs	Administered by departments; financed from general revenues

Source: Jhabvala and Subramanya [2000] pp 26-27.

It is evident that at least on paper, there is a whole package of different social security measures. Some states (like West Bengal) have also tried to provide some basic unemployment benefit for urban educated youth, and so on. But it is generally acknowledged that the expenditure on

such schemes on the whole is not even a small percentage of the requirement. Also, public management of social security and social assistance schemes has been quite inefficient and has not reached very many people even when the meagre amount spent is taken account of. There is also evidence that contact with a patronage-dispensing lower bureaucracy can be unpleasant and disempowering for the so-called beneficiaries. And then there is the fact, as was obvious in the discussion on EPZs, that many of these schemes are simply inoperational even when they are officially supposed to exist.

The answer may be to push for making these schemes more participatory and accountable even while increasing both public expenditure in this area and monitoring/control over private spending. Also, there may be a case for combining such schemes with a greater role for similar but more effective schemes run by co-operatives and trade unions such as SEWA and Chhattisgarh Mukti Morcha.

There is another question relating to social policy in the broadest sense, and that has to do with the fact that as long as employment conditions remain adverse in the aggregate or aggregate social levels of productivity remain very low (because of underemployment and so on) it is difficult for any targeted social policy to achieve very much, whether for women workers or any other group. This is a point often missed by those pushing for trade-related labour standards: that even when conditions of work and pay in any particular export industry in any developing country are very inferior, the likelihood is that conditions of work and pay in some other sectors would be even worse. It is precisely the relative absence of productive or more remunerative employment opportunities that makes workers (including women workers) willing to accept terrible conditions of work at low wages in precarious and unstable contracts. So the goal of social policy must be to create more productive employment, which is indeed one of the most basic economic functions of the state given the possibility of generalised market failure that is characterised as unemployment.

This particular expansionary and employment creating role of the state was one of the major contributions of the Keynesian revolution in economic thinking; unfortunately, however, the current dominance of finance means that it is apparently no longer something that can be mentioned in polite circles or serious policy discussion. The standard response to a strategy of using Keynesian policies to take up the existing slack in labour terms and putting it to work in productive ventures which would also ease supply constraints to provide important public goods and services, is that finance capital would not approve and this would therefore lead to capital flight. However, this may be one of the greater misconceptions that currently dominate our thinking. Ultimately finance capital, as all capital oriented to profit making, must be interested in real economic growth and effective utilisation of available resources. Whatever the slogans, capital will head to more dynamic economies which show greater evidence of actual or potential expansion, and this in turn is still more likely in countries where state expenditure patterns ensure both higher economic growth and basic conditions of subsistence and work for all workers. In fact, since social policy itself is the result of political economy pressures, as noted above, it can also be changed by public pressure, by social movements and mobilisation that demand the more extensive and effective provision of basic public goods and services.

Finally, it is important to note that for social protection regimes for women workers to be truly useful, they have to move beyond the standard model which underlies most public action - that of the male head of household earning wages that provide incomes for all the other members of the household, including all the women, and determining intra-household resource distribution. This is not only because households may not be uniformly altruistic units. As has been seen above, this model may even be irrelevant for many households in which women effectively are the main breadwinners even when they and other household members persist in seeing themselves as supplementary earners. And even when this is not the case, when for example women working from the home participate in export oriented activities as part of a complex production chain, measures for social protection of such workers need to take a very different form. However, because participation in export activities often (or even typically) takes place under precarious and inferior conditions and

because women may have to deal with the double burden of paid and unpaid work in such circumstances, the employers' preference for such contracts needs to be counterbalanced by effective public recognition of the problem, and by social policy designed specifically for such women workers.

This in turn leads to a larger question: that of the limits of aggregative models of social policy, including Keynesian strategies, in contexts of differentiated populations. Gender concerns are among the most obvious forms of differentiation, and act in more complex ways precisely because the interrelationships *within* households are so important, unlike caste and class based stratification. This calls for a more nuanced approach to social policy in general as well as to specific schemes and programmes, in order to avoid both the pitfalls of excessive aggregation and of targeting that can lead to error of wrong inclusion or exclusion. And it bears repeating that for social policy to be even moderately successful in this respect, it needs to be combined with mobilisation and increased awareness that can only come about through social movements and greater roles for representative institutions.

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