

**INFORMALISATION OF LABOUR AND ITS IMPLICATIONS
FOR HEALTH: A STUDY WITH SPECIAL REFERENCE TO
EXPORT PROCESSING ZONES IN INDIA**

*Dissertation Submitted to the Jawaharlal Nehru University in Partial
Fulfilment of the Requirements for the Award of the Degree of*

MASTER OF PHILOSOPHY

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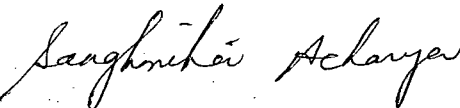
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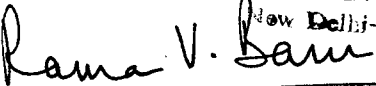
This dissertation entitled **Informalisation of Labour and Its Implications for Health: A Study with Special Reference to Export Processing Zones in India**, is submitted in partial fulfilment of six credits for the award of the degree of **Master of Philosophy (M. Phil.)** of this university. This dissertation has not been submitted for the award of any other degree of this university or any other university and is my original work.


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We recommend that this dissertation be placed before the examiners for evaluation


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CONTENTS

Acknowledgment

List of tables

Abbreviations

INTRODUCTION	1-10
Rationale of the Study	
Objectives of the Study	
Methodology	
Universe and Sampling Procedure	
Methods and Tools of Data Collection for the Primary Study	
Chapterisation	
2 INFORMALISATION OF LABOUR: SOME EVIDENCES	11-36
Understanding Informal Sector	
Informalisation: Extent and Reasons	
Impact of Informalisation on Labour Force: A General Trend	
The Indian Situation - Some Empirical Evidences	
Informalisation and Employment Growth	
Structure of Work Force	
Casualisation of Labour	
Feminisation of Labour	
Impacts on Wages and Working Conditions	
3 INFORMAL ECONOMY: WORKERS AND THEIR HEALTH	37-59
Informal Employment and Ill Health	
Informal Workers and Poverty	
Informal Wok and Health Conditions	
Labour Standards Pertaining to Working Conditions	
Labour Standards in India	
Informal Sector and Labour Laws in India	
The Minimum Wages Act, 1948	
The Factories Act, 1948	
The Industrial Disputes Act, 1947	
The Workmen's Compensation Act, 1923	
The Contract Labour (Regulation and Abolition) Act, 1970	
Informal Sector and Social Security	

4	WORK CONDITIONS AND WORKERS' HEALTH IN EXPORT PROCESSING ZONES AND SPECIAL ECONOMIC ZONES	60-84
	Export Processing Zones -A General Understanding	
	EPZs and SEZs in India	
	Units and Employment	
	Workforce Composition	
	Social Profile of the Workers	
	Wages of Workers	
	Unionisation and Organised Activities of Workers	
	Enforcement of Labour Laws and Labour Standards	
	Working Conditions and Health Hazards	
	Discussion	
5	INFORMALISATION AND ILL HEALTH: LINKAGES IN A GARMENT EXPORT UNIT, COCHIN SPECIAL ECONOMIC ZONE	85-106
	Cochin Export Processing Zone: An Overview	
	General Profile of the Workers	
	Employment Details	
	Wages and Living Conditions	
	Food Accessibility and Intake Pattern	
	Working Conditions	
	Disease Pattern and Health Seeking	
	Level of Organisation of Workers	
	Discussion	
	CONCLUSION	107-112
	REFERENCE	113-117
	<i>Appendix-1</i>	

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Sobin George

LIST OF TABLES

2.1	Annual average rate of growth of employment	17
2.2	Share of casual workers (15-59 years old) in total waged workers (current weekly status)	26
2.3.	Casual average wages as percent of regular average daily wages, Urban India, 1987-88 to 1993-94 (Casual wage as a percentage of regular wage)	30
3.1	Real wages in unorganised sectors in some states	41
3.2	Average annual inflation (percentage)	42
3.3	Informal sector employment and poverty	43
3.4	Social determinants of workplace health	48
3.5	Risk factors of health associated with informal employment	49
3.6	International labour standards pertaining to workplace health	51
3.7	Labour standards ratified by India	52
3.8	Scheduled employment fixation of minimum wages in some selected states as on 1.10.2000	54
4. 1	EPZ Area, Units, and Employment in India as on 31.07.2001	64
4.2	EPZ Workforce for 1998 and 2001	65
4.3	Male/Female employment in EPZs in India as on 31 st October 2001	67
4.4	Comparison between Wage Rates inside and outside EPZs	70
4.5	Details of the Special Inspection of EPZ units by the Development Commissioners	78
5.1	General profile of the workers	89
5.2	Employment Details	90
5.3	Wages as reported by the DGM and Workers	91
5. 4	Reasons for not bargaining for better wages	92
5.5	Disease problems as reported by the workers	98
5.6	Reasons for not taking treatment	100
5. 7	Present condition of diseases of workers who have not sought treatment	101

ABBREVIATIONS

AL	Agriculture Labourers
CAG	Comptroller and Auditor General
CEPZ	Cochin Export Processing Zone
CITU	Centre of Indian Trade Union
CPI	Consumer Price Index
CSEZ	Cochin Special Economic Zone
EPZ	Export Processing Zone
FDI	Foreign Direct Investment
FEPZ	Falta Export Processing Zone
IDA	Industrial Dispute Act
ILO	International Labour Organisation
INTUC	Indian National Trade Union Congress
IW	Industrial Workers
KAFTZ	Kandla Free Trade Zone
MEPZ	Madras Export Processing Zone
NEPZ	NOIDA Export Processing Zone
OAE	Own Account Enterprises
OHS	Occupational Health and Safety
PDS	Public Distribution Shop
SEEPZ	Santa Cruz Electronic Export Processing Zone
SEZ	Special Economic Zone
SNA	System of National Accounts
UNIDO	United Nations International Development Organisation
VEPZ	Visakhapattanam Export Processing Zone
WDR	World Development Report
WIEGO	Women in the Informal Employment Globalising and Organising
WPI	Wholesale Price Index

1

INTRODUCTION

Informal sector is an integral part of every economy, which accounts for a significant share of employment. The rate of growth of informal sector has been on an upward trajectory since the time immemorial. However, informal sector, irrespective of its nature and mode of production, has recorded an unprecedented growth in all parts of the world, particularly in the developing world. Similarly, a change in the employment pattern, mainly from formal to informal, is also appeared in many sectors. The number of labourers in the informal working conditions is significantly increased in many countries due to this development. Thus a larger form of informalisation of labour prevails in many part of the world.

Growth of informal sector is an ongoing phenomenon and is highly influenced by economic growth and transition. It is a wellknown fact that societies, irrespective of its nature are converging towards industrialisation. As per this understanding, whether capitalist or socialist or mixed, economies are converging towards industrialisation. This process is gradual and a significant period involves in this process of transition.

This transition of economies from agrarian to industrial is accompanied by many structural changes in the economy. Growth of informal economy is one among them. This is mainly due to the entry of large unskilled labour force into the informal sectors who lost their employment by the break down of the traditional economy. The transition of British economy from traditional agriculture to industrial capitalism in the early nineteenth century is the classic example of this situation. Doyal (1979) depicts the painful experience of informalisation of labour and its impact on the working and living conditions of the labouring population of Britain in the period of economic transition. British example showed that the development of industrial capitalism deteriorated the traditional agriculture

economy and brought about massive unemployment.¹ The newly emerged working class, who were agriculture labourers, were forced to migrate to urban centres in search of work.² The abundant supply of labour force decreased their demand in the labour market and the industrialists took advantage of this situation. This enabled the employers to hire labour at low costs without any extra efforts of retaining them with incentives and benefits.

This has created a highly exploitative and unhealthy working and living conditions. Engels (1973) observed that prevalence of this situation in Britain was mainly due to the rapid expansion of British economy to industrial capitalism.³ As per his observation the problems of work and its impact on health amongst the working class was the effect of capitalism prevailed in the nineteenth century. Engels found that the root cause of illness and death of the working class people lay in the organisation of economic production and social environment.

Another major transition, which facilitated the growth of informal sector, is the shift of thrust of production from import substitution to export promotion in many countries. This is accelerated by the process of globalisation and introduction of subsequent trade and labour policies. Similarly there is a trend of erosion of labour intensive employment from developed to the developing world by the relocation of industries and lower end manufacturing.⁴ All these factors contributed to higher informalisation of labour in many ways. First is through the flexibilisation of labour market by the dismantling of labour laws and providing freedom for the enterprisers to implement their own norms for hiring the labour, fixing wages and termination of their service.⁵ Policies like export promotion and

¹ Doyal, Lesley. (1979), *The Political Economy of Health*, Ch-2, London, Pluto Press, pp. 49-96.

² Ibid, p. 50.

³ Engels, F. (1973), *Conditions of the Working Class in England*, London, Penguin.

⁴ A.J, Mc Michael. (2000), "The Urban Environment and Health in a World of Increasing Globalisation; Issues for Developing Countries", *WHO Bulletin*, Vol. 78, pp. 1117-1124.

⁵ Nath, G.B. (1994), "Flexibility of Labour Market: Theoretical Approaches and Empirical Evidences from India", *Indian Journal of Labour Economics*, Vol. 47, No. 4, pp. 513-521.

trade liberalisation declined the domestic import substituted sector in the developing world, especially agriculture and allowed the entry of low end manufacturing units through industrial outsourcing from the developed world.⁶ There is also a trend of increasing sub-contracting of work from factories and formal establishments to small workshops, homes and other informal situations where there are no labour regulation or social security entitlements.⁷ In precise, the present decade has witnessed an expansion of informal sector and informalisation of labour, which are facilitated by the specific policies of trade, process of globalisation, export oriented industrialisation and relocation of industries from the developed to the developing countries.

These developments have accelerated the pace of growth of informal sector and informalisation of labour in India. Informal economy in India has been persisting from the time immemorial and a large part of the employment is composed of this sector. Nevertheless, informal sector in India has recorded a rapid growth during the last decade.⁸ There are various factors accountable for this rapid growth of informal sector in India. First is the normal growth of informal economy in India, which has always been on an upward fashion. India has historically inherited a large informal economy. It has expanded with the episodes of economic growth that the country adopted. Economic growth based on the export of raw materials like cotton and jute in the pre-first world war period⁹ was largely with the involvement of informal sector, which constituted farmers and industrial labourers. It recorded a steady growth and expansion in the post independent period, when the country adopted the import substituted

⁶ Papola, T. S (1994), "Structural Adjustment, Labour Market Flexibility and Employment", *Indian Journal of Labour Economics*, Vol. 37, No. 1, pp. 3-16.

⁷ Unni, Jeemol and Rani, Uma.(1999), "Informal Sector, Women in the Emerging Labour Market", *The Indian Journal of Labour Economics*, Vol. 42, No.4, pp 625-639.

⁸ Gupta, S. P (1995), "Economic Reforms and Its Impacts on Poor", *Economic and Political Weekly*, June, 1995, pp. 1295-1311.

⁹ Patnaik, Prabhat (1998), "Political Strategies of Economic Development", Chatterjee, Partha (ed.), *Wages of Freedom, Fifty Years of Indian Nation State*, New Delhi, Oxford University Press, pp. 37-60.

growth strategy. The informal economy further expanded in the mixed Indian economy in the post independent period.¹⁰

The mixed economy brought about the persistence of a developed industrial economy in some areas and relatively under developed agriculture economy in some pockets, especially in rural areas. This coexistence of industrial market and agriculture rural economies led to labour market dualism in India.¹¹ The dual labour market in India consisted a large scale industrial and service sector with capital-intensive mode of production in the formal sector and small-scale economies with labour intensive modes of production in the informal sector.¹²

The rapid of growth of informal sector and informalisation of labour in India featured after the introduction of economic reform measures, which changed the area of thrust of production from import-substituted to export promotion. Policies such as privatisation, export promotion, trade liberalisation and deregulation of labour market have made remarkable impacts on the labour market structure. Privatisation and disinvestments of Public Sector Undertakings (PSU) made many workers jobless. Similarly dismantling of labour laws facilitated the closure of many public and private sector enterprises and retrenchment of workers without proper compensations.¹³ Most of these workers found their means of livelihood in the informal sector.

Trade liberalisation and export promotion policies allowed large-scale industrial outsourcing from the developed world to India.¹⁴ These have mainly gone to the home-based sector and other informal working arrangements through sub-contracting. This has facilitated the expansion of informal export oriented

¹⁰ Ibid, p. 39.

¹¹ Labour market dualism is the coexistence of modern sector with traditional sector, for details see Nath, G.B (1994), op cit, p. 515.

¹² Ibid, p. 517.

¹³ Breman, Jan (2001), "An Informalised Labour System, End of Labour Market Dualism", *Economic and Political Weekly*, Vol. XXXVI, No.52, pp 4804-482.

¹⁴ Ghose Ajit. K.(2000), "Trade liberalization and Manufacturing employment", *Employment paper 2000/3*, <http://www.ilo.org/public/english/employment/strat/publ/ep00-3.htm>, 30-9-02.

manufacturing sector and the establishment of special zones for export promotion in India.

Along with the expansion of informal sector, India has witnessed informalisation, casualisation and feminisation of labour in many sectors, including formal sector. (Gupta: 1995, Unni & Rani: 1999). This period also has witnessed a decline in the real wages of the working class in general and informal workers in particular and a decline in the food consumption of the working population in India.¹⁵ Therefore it can be assumed that higher informalisation, casualisation and feminisation, which have come up as the larger policy implications of labour market deregulation and labour market flexibilisation have considerable impacts on the working and living conditions of the labour force.

Rationale of the Study

There are different views on the impact of expansion of informal sector, especially export oriented manufacturing on employment and wages in developing countries. First argument is that the growth of trade has a large positive effect on manufacturing employment and wages in developing countries, which emerged as important exporters to developed countries.¹⁶ As per this view, trade induced expansion of informal sector brings large employment opportunities for unskilled workers and women. So labour intensive country like India will have a positive impact in the long run. Another view is that though expansion of informal export oriented sector generates some employment opportunities, it is very much associated with low wages and poor working conditions and adversely affects the working and living conditions of the labourers. These two arguments are to be examined in the wider realm of the impacts on workers health in terms of their social and economic determinants and working conditions.

¹⁵ Swaminathan, Madhura (2000), *Weakening Welfare, The public distribution of Food in India*, New Delhi, Left Word publications.

¹⁶ Ghose Ajit. K.(2000), *op cit*, f. no. 15, p. 11.

The relationship between informal working conditions and ill health is well-established in the context of industrial employment (Engels: 1973, Doyal: 1979). In the present context, this association between informal employment and ill health is operated through the marginalisation and deprivation of workers of their rights and entitlements. The specific policies of structural adjustment such as trade and institutional reforms largely limit the accessibility of workers to food, infrastructure facilities and health care and their right to entitle the labour standards and statutory benefits. Exposure to the intrinsic features of the informal sector such as low wages, lower social security entitlements, statutory protections, low level of organisation and powerlessness, increase their vulnerability to ill health. These factors have a significant role in determining the quality of the living and working conditions of these workers.

Therefore it becomes relevant to study the impact of expansion of informal sector on labour relations, wages and working and living conditions of the labourers, which largely determine their health. The present study tries to examine the linkages of export promotion, informalisation, casualisation and feminisation of work and its consequences for health in terms of the living and working conditions of the labourers.

Objectives of the Study

The study tries to locate the linkages of informalisation of labour and ill health in the present context by studying the risk factors associated with informal employment in general and export oriented sector in particular, which are assumed to have a role in determining the health of the workers. The objectives of this study are as follows.

1. To analyse the extent of informalisation of labour in various sectors in India after the introduction of economic reforms and trade policies.
2. To identify the linkages of informal employment and ill health by viewing the wage structure, labour standards, regulatory mechanisms, social

security entitlements, level of organisation and statutory benefits in the informal sector in India.

3. To analyse how export promotion and labour reform measures resulted in the informalisation of labour and increased the risk factors of health of workers in Export Processing Zones and Special Economic Zones in India.
4. To assess how the linkages of informal employment and ill health are manifested in export oriented sector and
5. To assess the impacts of informal working conditions on the health of the work force in this sector.

Methodology

The present study is based on both primary and secondary information, however; most of the analysis is based on secondary. Major sources of data for this study are research works published in journals and magazines such as Indian Journal of Labour Economics, International Journal of Health Services, Economic and Political Weekly and other research works and publications of the Government. Details of the reports and various publications, which are used as the sources of information, are given below.

1. Annual Report, Ministry of Labour (2000, 2001).
2. Statistics on Closure, Retrenchment and Lay-offs in Industries During, Labour Bureau, Ministry of Labour, 1999.
3. Report of the Study Group on Umbrella Legislation for Workers in the Unorganised Sector, National Commission on Labour, Ministry of Labour, 2001.
4. Labour Statistics, Ministry of Labour, 1998.
5. Indian Labour Year Book, Labour Bureau, Ministry of Labour, 2001.
6. Annual Report, Ministry of Commerce and Industry, (2001).
7. Report of Planning Commission on Poverty, 1993

8. Economic Survey, Ministry of Finance, 2001.
9. Report on Export Processing Zones and their Workers in India, Conditions and Framework for Promotion of Social Dialogue, CITU, 2002.
10. Report on Export Processing Zones in India, Experiences of Centre of Trade Unions in Organising Workers, CITU, 2002.
11. MPEZ Unit (2002), Report Presented at the All India EPZ's Union Convention at Visakapattanam on 29 June 2002.
12. Policies of State Governments for Special Economic Zones.

A primary study is also carried out among the workers in one of the garment export units in Cochin Special Economic Zone (CSEZ) from 4th December 2002 to 24th January 2003 to examine the findings of the secondary research.

Universe and Sampling Procedure

There are 52 industrial units operating in CSEZ in which two are garment export unit. Of these two, one unit is selected by using lottery method. There are five hundred workers, up to the level of supervisors, working in various sections of the unit. Out of them, forty-two workers were interviewed using purposive accidental sampling method. The workers were interviewed at their home by using a semi-structured schedule (appendix, 1). Two case studies were also conducted to get some qualitative inputs regarding the working conditions and health of the workers.

Methods and Tools of Data Collection for the Primary Study

Interview, case study, discussions and observation are the methods adopted for data collection for the primary study.

Interview: Interview is carried out with a semi-structured schedule among the workers in the garment export unit. All the fortytwo workers were interviewed at their place of residence. Information regarding social and economic

background, wages, working conditions, living environment, occupational health hazards and disease problems are collected from the workers.

Case study: Two case studies were conducted to get an insight into the qualitative aspects specifically regarding the working and living conditions and health hazards of the workers.

Discussions: Informal discussions were carried out with the Assistant Development Commissioner of CSEZ, Deputy Labour Commissioner of Ernakulam District, Deputy General Manager of Leela Lace (garment unit, which was selected) and Trade union leaders and members of CITU and INTUC to get an idea about the functioning of CSEZ, labour relations, wages structure, enforcement of labour laws and labour standards and labour dispute settlements in the zone.

Observation: Observation as a method was helpful to understand the living conditions of the workers, their ailment and the working environment. This could help to get a vivid picture, which helped the qualitative analysis.

Chapterisation

The entire study is presented in five chapters. First chapter is the introduction and description of methodology of the study. Second chapter tries to examine the extent of informalisation of labour, its causes and consequences. This chapter identifies the various policy decisions and national and international developments that took place in the field of trade and industry and its contribution to informalisation of labour in the developing world. This is specifically analysed in the context of and the large informal sector prevailing in India. Developments in the informal sector in terms of the labour relations, working environment, social security and wages taken place after the introduction of policy changes are also a matter of concern in this chapter. The sector wise growth of employment, informalisation and wages are also tried to place in this chapter.

Third chapter is an attempt to develop a framework of analysis of informalisation of labour and its implications for health. Various risk factors for health of the informal sector workers such as social and economic entitlements, level of organisation, labour regulation, occupational risk factor and psychological pressures of work are examined in this chapter. Some of the labour laws and its enforcement pertaining to the informal sector and social security measures for the workers in the informal sector in India are also discussed in this chapter.

Fourth chapter gives an overall idea of Export Processing Zones and Special Economic Zones in India and its promises in fulfilling the objectives of employment generation, earning foreign exchange reserve and technology transfer. Of these thrust is given to employment generation in the analysis. This chapter discusses the general working conditions, labour standards, wages, workforce composition, labour regulation, social security entitlement and occupational health and safety and level of organisation of the workers in EPZs and SEZs in India.

Fifth chapter examines the linkages of informalisation of labour and ill health of workers in the EPZs and SEZs through a primary study conducted in a garment export unit in Cochin Special Economic Zone. Aspects such as casualisation, feminisation, wages, working conditions and living standards of the workers, occupational hazards and disease problems of the workers, which are the common observations in EPZs and SEZs, are analysed in this chapter.

This chapter reviews informalisation of labour and its consequences on employment, wages and working and living conditions of the labour force engaged in it. It tries to explain informalisation in the context of globalisation and subsequent economic and trade policies. The analysis is presented in the form of a review and research studies on various informal sectors are incorporated to understand the general situation prevailing in this sector.

Informal sector has a significant share in the employment and economic output of every country. This accounts for a major share of employment in many countries. There are many kinds of activities, paid or unpaid, income generating or not come under the broad definition of informal sector. It ranges from unpaid home works and agriculture work to casual jobs in the formal sector.

Understanding Informal Sector

The identification of informal sector in an economy is a difficult task due to its heterogeneous nature and complexities. Attributes like mode of production adopted in the sector, applicability of state regulations, supportive and promotional mechanisms, organizational structure and labour market structure are some of the criteria put forward for the identification of informal sector.¹ As per the UN System of National Accounts (SNA), 1993, informal sector refers to institutional units characterised by low levels of organisation, little or no division of labour and capital and relationships based on casual employment/ or social relationship.² As per this definition, informal sector comprises informal Own Account Enterprises (OAE) and enterprises of informal employers within the

¹ S.S. Suryanarayana. (2001), "Information Base for the Informal Sector", in Kundu, A and Sharma, A.N. (eds.), *Informal Sector in India, Perspective and Policies*, New Delhi, Institute for Human Development, pp.10-31.

² Kulshreshtha, A.C. and Singh, Gulab. (2001), "Informal Sector in India, Its Coverage and Contributions", in Kundu, A. and Sharma, A.N. (eds.), *Informal Sector in India, Perspective and Policies*, New Delhi, Institute for Human Development, pp. 32-48.

household sector.³ The definition of informal sector adopted by the 15th National Conference of Labour Statisticians includes the category of informal waged workers mainly employees of informal enterprises. Women in the Informal Employment Globalising and Organising (WIEGO) recommends an employment based definition for the informal sector that would include all non-standard wage workers who work without minimum wages, assured work, or benefits, whether they work in formal or informal firms.⁴

Lot of efforts have been made to define informal sector in the context of its linkages with the formal economy. In many cases, informal sector is referred as informal economy because of its large size and share in the economy of the country. Therefore more attempts have been made to define informal economy rather than informal sector regarding its linkages with the formal economy.

There are three important schools of thought regarding the links between the formal and the informal economies.⁵ These are, the dualists, the structuralists and the legalists. The dualist view informal economy as a separate marginal –not directly linked to the informal sector–that provides income or safety net for the poor.⁶ According to this school of thought, informal economy exists because economic growth or industrial growth has failed. The structuralists view informal economy as being subordinated to the formal economy.⁷ Their argument is that capitalists in the formal economy seek to erode employment relations in the formal sector and subordinate the workers in order to reduce their labour costs and competitiveness. The legalists view informal sector and its working

³ Unni, J. and Rani, U. (1999), "Informal Sector, Women in the Emerging Labour Market", *The Indian Journal of Labour Economics*, Vol. 42, No.4, pp 625-639.

⁴ Carr, Marilyn. and Martha, Chen. (2001) "Globalisation and the Informal Economy. How Global Trade and Investment Impact on Working Poor", <http://www.ilo.org/public/english/employment/infeco/wp.pdf>, 22-07-02.

⁵ Ibid, p.14.

⁶ Ibid, p. 14.

⁷ Ibid, p. 16.

arrangements as a rational response to over-regulation of government bureaucracies.⁸

In precise, the informal economy is characterised by features like less organisation of workers, absence of clear employer-employee relationship, job insecurity, no application of labour regulations, limited or no social security, low wages and bargaining power, filthy working conditions etc. Taking these features into account, informal sector or economy could be grouped into several categories. The broad classifications are employer, self-employed, and wage workers.⁹ Employer includes the owner of informal enterprises and owner operator of informal enterprises. Self-employed includes own account workers, heads of family business and unpaid family workers. They also include own account workers running mainly household enterprises own and operated by own account workers, either alone or in partnership with members of the same or other household, which may employ family workers and employees on an occasional basis.¹⁰ Wageworkers include employees of informal enterprises, casual workers without a fixed employer, home workers or industrial out worker, domestic worker, temporary and part time workers and unregistered workers.

Informalisation of Labour

Flexibilisation of labour market is one of the major after effects of structural adjustment programmes in the labour market that causes the expansion of informal sector. Labour market flexibility implies freedom of enterprises in deciding wages, employment and labour processes unfettered by any institutional and legal restrictions.¹¹ The demand for more flexibility of labour market is due to the logic that any intervention by the state, trade union or any other institutions on wages, employment and work allocation would affect the production and hinder employment generation. Flexibilisation of labour market

⁸ Ibid.

⁹ Ibid.

¹⁰ Kulshreshtha, A.C. and Singh, Gulab. (2001), *op cit. f. No.2*, p. 34.

¹¹ Nath, G.B. (1994), "Flexibility of Labour Market: Theoretical Approaches and Empirical Evidences from India", *The Indian Journal of Labour Economics*, Vol. 37, No.1, pp. 513-522.

leads to the increase in the incidence of casual labour force in the industries of the organised and the unorganised sectors. Another development that followed flexibilisation of labour is sub contracting or out sourcing of production.¹² Labour force in these sectors is working on piece rate, with low wages and earnings and they lack security of employment and other benefits. Increase in the number of labour force in the informal employment settings that are characterised by the above-mentioned features is regarded as informalisation of labour. Casualisation and contractualisation facilitate the process of informalisation of labour market to a greater extent.

As a result of these structural changes in the labour market due to flexibilisation, casualisation and contractualisation, the informal sector or economy in all parts of the world has undergone some rearrangements and changes over last two decades. The noticeable thing is that employment in the informal economy has risen rapidly in all regions of the developing and the developed world. However, the rise in employment is visible only in some sectors of the informal economy like export oriented manufacturing. Sectors like agriculture and other import competing sections remain unchanged or show decline in employment growth. Economic globalisation and change of trade pattern are reported to be attributable for this rise in employment in the export oriented manufacturing sector as it facilitates its linkages with the global economy. In these sectors workers and producers are linked to the global economy through their participation in key export industries, including garments, textiles, electronics etc. and work in export processing zones or under other informal arrangements.

Informalisation: Extent and Reasons

A growing literature reveal that, over the past two decades, employment has grown rapidly in all regions of the developing world and various forms of non-standard employment have emerged in most regions of the developed world

¹² Raj, Ashok. and Kapoor, Rakesh, (2001), "Productive Linkages of Indian Industry with Home-Based and Other Women Workers through Subcontracting System in the Manufacturing Sector", *Alternative Features*, National Commission on Labour.

(Gupta: 1995, Carr & Chen: 2001, Unni: 2001). It is estimated that the share of the informal economy in the non-agricultural work force ranged from over 55 percent in Latin America to 45-85 percent in different parts of Asia to nearly 80 percent in Africa.¹³ The impact of Informalisation is reported to be different in North and South. Reports show that employment growth in the informal export oriented manufacturing sector is increased in developing countries like China and Taiwan and declined in the developed countries like USA and Japan.¹⁴

There is a set of reasons attributable for the rise of Informalisation of labour in the export oriented manufacturing sector. Economic globalisation and global trade pattern are reported to be fuelling the pace of Informalisation. Economic globalisation has caused some structural changes in the world economy, which set a trend of Informalisation of labour on a large scale!¹⁵ First is the sectoral shift from industry to the service sector in the developed countries. This has caused the decline of industries like textiles, footwear, steel etc in these countries¹⁶ and has increased the demand of such products manufactured in the developing countries. It boosted the export oriented manufacturing sector in the developing world and more employment is generated in the informal sector. Second is the international division of labour (Despande: 1999, Mc. Michael: 2000). It is seen that global trade and investment patterns allowed companies of the industrialised countries to enter the labour intensive countries that have low labour cost.¹⁷ Noticeable thing here is that these companies in the industrialised world normally shifts only their production base of low end manufacturing, which need abundant supply of unskilled and skilled labourers. These industrial outsourcing are mainly to the informal sector as production in most cases is either home based

¹³ World Development Report (WDR) 1995, *Workers in an Integrating World*, World Bank, Washington DC.

¹⁴ Ghose, Ajit. K.(2000), "Trade liberalization and Manufacturing employment", *Employment paper 2000/3*, <http://www.ilo.org/public/english/employment/strat/publ/ep00-3.htm>, 30-9-02.

¹⁵ L. K. Despande. (1999), "Labour Standards and Structural Adjustment", *The Indian Journal of Labour Economics*, Vol. 42, No.1, pp. 59-69.

¹⁶ Ibid, p. 64.

¹⁷ Carr, Marilyn. and Martha, Chen. (2001) *op. cit, f. No.4*, p. 19.

or done in other unorganised settings. This could be one reason for the expansion of informal export oriented manufacturing sector in the developing world.

Another factor, which is supposed to be responsible for Informalisation of labour, is the immediate impact of economic reforms and subsequent restructuring of transition economies on the labour market. Available evidences show that, in many countries, during the period of economic reform, the informal economy tended to expand due to the mobility of workers in the formal sector to the informal sector when public enterprises are closed or down sized. World bank surveys in 1994 showed that more than a third of public labour force worked full time or part time in the informal sector in the developing world. In Mexico the informal sector employment amounts 25 to 40 percent of the total employment and grew at a rate of 9.5 percent a year between 1983 and 88. In Brazil employment in informal sector swelled by nearly 30 percent between 1983 to 93.¹⁸ In India, it is reported that casual employment rose to 3.3 percent per annum in the period of economic transition (1990-91 to 1996-97), which fell by 1.1 percent per annum between 1983 to 1990-91.¹⁹ Thus it is evident that informal economy tends to swell during adjustment and transition in many of the developing countries.

Another set of factors of Informalisation of labour relates to economic growth. Some countries have experienced little or no economic growth, while others have pursued capital-intensive growth with no significant employment generation.²⁰ This pushed the job seekers in the formal sector, in both these contexts, to seek job in the informal sector. Another pattern of technology driven export oriented growth tends to create more high skilled jobs than less skilled jobs. In such cases, those do not have skills to compete for hightech formal jobs find work or continue to work in the informal sector.

¹⁸ World Development Report (WDR), 1995, *op cit. f. No. 13*, p. 28.

¹⁹ Pais, Jesim,(2002), "Casualisation of Urban Labour Force, Analysis of Recent Trend in Manufacturing", *Economic and Political Weekly*, Vol. XXXVII No.7, pp 631-652.

²⁰ Carr, Marilyn. and Martha, Chen. (2001) *op. cit, f. No 2*, p. 21.

Impact of Informalisation on Labour Force: A General Trend

The trend of Informalisation of export oriented manufacturing sector carries opportunities and risks for the workforce in this sector. Employment it generates is regarded as the major opportunity for the labour force. Though increased Informalisation in the export-manufacturing sector brings about employment generation in some countries it has not made such impacts in some other developing countries. The annual average growth rate of employment in the manufacturing sector in the developing and developed countries reveal that trade can stimulate employment growth in export oriented industries in developing countries while it has an adverse effect on employment in the import competing industries in developed countries.²¹ This seems to be true in the case of developing country like China where employment growth is significantly increased by the growth of export oriented industries (Table, 2. 1).

Table 2.1, Annual average rate of growth of employment

Country	Year	Export oriented	Import competing	Food beverages, tobacco	Other manufacturing	Total
India	1981-86	0.0	0.0	-6.2	0.0	-1.6
	1987-94	1.9	2.5	3.2	2.1	2.44
	1981-95	1.8	6.8	1.2	2.4	2.5
China	1980-86	4.8	2.3	4.0	3.4	3.7
	1987-96	7.2	5.3	6.0	9.3	6.2
	1980-96	7.5	4.5	5.9	7.7	5.9
Japan	1985-89	0.0	-0.9	1.3	0.8	0.0
	1985-93	0.0	-0.7	1.4	0.9	0.7
USA	1981-86	0.0	-2.4	0.0	0.0	0.0
	1990-97	-0.8	-0.7	0.0	1.1	0.0
	1981-97	-0.7	-0.7	0.2	0.2	-0.3

Source: Estimations of Ajit. K. Ghose based on data from UNIDO data base on industrial statistics, p. 28.

²¹ Ghose Ajit. K.(2000), *op. cit.*, f. No. 14, p. 6.

In the same time developed countries like Japan and USA witnessed a decline in employment growth in import competing industries. But table 2.1 shows that in India share of export-oriented industry in total manufacturing employment is declined as compared to the import competing manufacturing industries like food, tobacco and beverages.

The risk of Informalisation in the export oriented manufacturing sector has often come up in the forms of its impact on wages and labour standards. In many developing countries, which undergo economic transition and structural changes there is a fall in aggregate demand for labour and decline of real wages of the workers.²² There are no evidences of increase of wages of the unskilled workers in the export oriented manufacturing sector in any of the transitional economies except the East and South East Asian countries. In India and Indonesia, for instance, wage differential between the skilled and unskilled workers are reported to be increased where as in countries like Taiwan, China and Malaysia and Republic of Korea which have undertaken rigorous reforms reported a decline in wage differential over some period of time.²³

The Informalisation of export oriented manufacturing sector has a negative impact on the labour standards and it adversely affects the working and living conditions of the labourers. Features like labour market distortions demand more flexibility of labour standards. This limits the interventions of state and other regulatory bodies in the enforcement of labour standards. This could be accountable for the prevalence of low wages and poor working conditions of the labourers. It is reported that labour standards such as regulation of work time, standards ensuring occupational health and safety, protection against loss of job, employment and income, minimum wage regulation protection from forced labour and bonded labour are not enforced or maintained in these sectors (Despande: 99, Swaminathan: 02). The reason behind this deregulation of labour standards is that these are often regarded as rigidities and its enforcement affect

²² World Development Report (WDR), 1995.

²³ Ghose Ajit. K.(2000), *op. cit. f. no. 14*, p. 32.

the output of the employer and would close off export opportunities for developing countries.²⁴ Thus the informal export oriented manufacturing sector in the developing countries became more casualised and reports show that employment in this sector is highly feminised and casualised and workers are forced to work long hours in unhealthy working conditions (Ghosh: 01, Carr and Chen:01, Swaminathan: 02).

Export Processing Zones (EPZ) are the typical examples for this casualisation and feminisation of labour force in the export oriented manufacturing sector. Though these zones generate some amount of employment, evidences show that workers in export processing zones are labouring under adverse working conditions with respect to the level of wages, hours and intensity of work, job security, occupational safety, and health etc²⁵

Quinlan. M. et al (2001) categorise the factors linking precarious employment to adverse occupational health and safety outcomes.²⁶ These are economic and reward pressures on precarious workers, association of precarious employment with more disorganised work processes or settings and the weakening or bypassing of conventional regulatory regimes. After cross checking these factors by reviewing the studies conducted in various environments they conclude that precarious employment in the export oriented sectors is linked to inferior Occupational Health and Safety (OHS) outcomes. This is mainly because of workers' pressure in terms of competition for jobs, contracts, pressure to retain a job and liveable income, low level of organisation and non-regulation of labour standards.²⁷

²⁴ L.K Despande (1999), *op. cit*, f. no. 15, p. 64.

²⁵ Ahmadu, Mohammed. (1998), "Labour and Employment Conditions In Export Processing Zones, A Socio-Legal Analysis on South Asia and South Pacific", *Journal of South Pacific Law*, Working Paper 3, Vol. 2, http://www.vanuatu.usp.ac.fj/journal_splaw/Working_Papers/Ahadu1.htm, 28-01-03.

²⁶ Quinlan, M. et al (2001), "The Global Expansion of Precarious Employment, Work Disorganisation and Consequences for Occupational Health, A Review of Recent Research", *International Journal of Health Services*, Vol. 31, No. 2, pp. 335-414.

²⁷ *Ibid*, p. 350.

Thus in precise, the expansion of export oriented informal sector in developing countries has made a mixed effect on employment, wages and working conditions of the labour force in general. World Bank argues that increased trade and informalisation has a large positive impact on employment and wages in developing countries.²⁸ The World Development Report, 1995 tries to substantiate this argument with the success stories of the East and South East Asian countries, which followed a high growth development strategy. But the significant question here is whether this model can be replicable in other developing countries or why export does not make positive impact on working conditions of the labourers rather than deteriorating the same? Here is the failure of the Heckscher-Ohlin model of trade²⁹ and its Stolpar-Samuelson effect, which is the theoretical base for export-oriented growth. It says that trade between a capital intensive and a labour intensive country will benefit both if each country exports goods in which it has a comparative advantage. The Stolpar-Samuelson effect is that this type of trade increases the wage differential between the skilled and unskilled workers in the developed world and increases the labour demand of the unskilled workers in the developing world and their real wages as well. But empirical evidences showed that increased trade and investment have widened the wage inequalities in almost all parts of the world, irrespective of developed or developing and a deterioration in the working conditions of the labour force in the developing countries.³⁰

²⁸ World Development Report (WDR), 1995.

²⁹ Heckscher-Ohlin theory, also referred as factor-proportion theory is developed by two Swedish economists Eli Heckscher and Bertil Ohli. This theory asserts that a country exports the commodity, which uses intensively its relative abundant factor and imports the commodity, which is intensive in the use of its relatively scarce factor. So subject to certain assumption, a capital abundant country has a comparative advantage in capital intensive goods and labour abundant country has comparative advantage in labour intensive goods. This model of trade stresses the relationship between endowments in terms of resources and comparative advantage in countries tend to export goods whose production makes intensive use of their more abundant factors. For more details see Krugman and Obstfeld (200), *International Economics, Theory and Policy*, Addison Wesley Longman (Singapore) Pvt. Ltd. pp 66-85.

³⁰ Acharaya, R. and Marjit, S. (2000), "Globalisation and Inequality, An Analytical Perspective", *Economic and Political Weekly*, September, 23, 2000.

The Indian Situation - Some Empirical Evidences

In India, informal and formal sectors are often referred as unorganised and organised sector. But there are some differences in the concept of informal sector as indicated by ILO and unorganised sector in India.³¹ In the Indian context, unorganised sector is a wide area, which has all the features of informal sector. Therefore, to get information on the informal sector, one is expected to look into the unorganised sector.³² The unorganised sector in India is highly diverse in nature and comprises large sections of the workforce. The categorisation of workers in the unorganised sector is mainly done in four broad heads. These are in terms of their occupation, in terms of nature of employment, in terms of specially distressed categories and in terms of service categories.³³

A large chunk of workforce in various sectors comes under the category of unorganised sector as per this classification.³⁴ As per the 1991 census, the total workforce both in the organised and unorganised sector in India was estimated as 314 million. Out of this 27 million are in the organised sectors and rest 287 million are in the unorganised sector. Thus the organised sector employment accounted for 9.4 percent of the total workforce where as unorganised labour accounted for 90.6 percent. The NSSO 1997 estimations reveal that the total workforce in India grew to 355 million up to 1997, in which organised accounted for 27 million with zero growth. In the meantime unorganised sector grew to 328 million.

³¹ Kulshreshtha, A.C. and Singh, Gulab. (2001), *op. cit.*, f. No. 2, p. 39.

³² Ibid, p. 52.

³³ GOI (2001), *Annual Report*, Ministry of Labour, pp-85-90.

³⁴ Unorganised sector in India includes small and marginal farmers, landless agricultural labourers, share croppers, fishermen, those engaged in animal husbandry, in beedi rolling, labeling and packing, building and other construction workers, leather workers, weavers, artisans, salt workers, workers in brick kilns and stone quarries, workers in saw mills, oil mills etc. may come the first category. Toddy tappers, scavengers, carriers of head load, drivers of animal driven vehicle, loaders and un loaders, belong to the distressed category. Midwives, domestic workers, fishermen and women, barbers,, vegetable and fruit vendors, news paper vendors, etc. come under the service category.



Informalisation and Employment Growth

It is evident from these estimations that informal economy in India is expanding and formal employment is shrinking. There are enough reasons to link this development with the broader aspects of economic reforms initiated in the country. Disinvestments and the downsizing of the public sector enterprises cause the entry of workforce into the informal sector in India. Policies like deregulation of labour markets, dismantling of labour legislations, which provide a minimum protection of workers in the informal sector such as Industrial Relations Bill, Contract Labour (Regulation and Abolition) etc. led to massive informalisation of urban labour force. Textile sector witnessed the worst form of informalisation. The new textile policy removed the restrictions on the organisation of production. It is also accompanied by the removal of government regulations.³⁵ This led to the closure of many textiles mills in the country. It is estimated that in Ahmedabad itself the closure of textile mills accounted for the loss of 10,000 jobs in the nineties.³⁶ The sacked workers in these industries enter into the informal labour market. These types of developments as the consequences for policy change bring about large form of informalisation of labour market.

Mahadevia (2001), reports that all through later half of eighties, continuing in the nineties, there has been a gradual industrial decline in Ahmedabad district.³⁷ This has considerably decreased employment in the formal sector and increased the employment in the informal sector. The employment scenario in Mumbai reveals that the employment situation has undergone a drastic change over a period of thirty years. The closing down of the textile mills in Mumbai has led to the expansion of the informal sector to some extent as job losers from the textile

³⁵ Breman, Jan. (2001), "An Informalised Labour System, End of Labour Market Dualism", *Economic and Political Weekly*, Vol. XXXVI, No.52, pp 4804-4821.

³⁶ Ibid, p.4804.

³⁷ Mahadevia, Darshini. (2001), "Informalisation of Employment and Poverty in Ahmedabad", Kundu, A. and Sharma, A.N. (eds.), *Informal Sector in India, Perspectives and Policies*, New Delhi, Institute for Human Development, pp. 125-142.

industry started finding employment in the informal sector.³⁸ In 1961, the organised workers in Mumbai accounted for 65 percent of the total work force in the city and the share of unorganised sector in the total employment was 35 percent. In 1991 this situation was reversed and unorganised sector constituted 65 percent of the total workforce of the city and organised sector employment diminished to 35 percent.³⁹

Specific policies of centre and states for export promotion account for the rapid growth of informal sector in some states. In some states like Tamil Nadu, state sponsored incentive schemes have boosted the informal industrial sector.⁴⁰ Incentives like concession on capital investment, tax relaxation and flexibilisation of labour regulations help the expansion of informal sector in some key areas. Power loom sector of Karnataka is another example of this trend.⁴¹ Typical export oriented industries like information technology and software production also show some amount of informalisation in India. The informal economy in this sector includes self-employed persons, who are not covered by government regulations concerning employment and work. Their activities include providing data entry services, graphic designing and desktop publishing services.⁴²

Even though, overall informal sector tends to expand, there exist some asymmetries across various sectors in employment growth. Unorganised agriculture, for example shows a negative growth in terms of employment. There are evidences of a sectoral shift in employment from the primary sector, which largely encompasses agriculture to tertiary sector. Shariff and Gumber (1999)

³⁸ Bhowmik, S.K. and More, N. (2001), "Coping with Urban Poverty, Ex-Textile Mill Workers in Central Mumbai", *Economic and Political Weekly*, Vol. XXXVI, No. 52, pp. 4822-4835.

³⁹ Ibid, p. 4823.

⁴⁰ Vanamala, M. (2001), "Informalisation and Feminisation of a Formal Sector Industry, A Case Study", *Economic and Political Weekly*, June, 30, 2001, pp. 2378-2389.

⁴¹ Chowdhury, S. R. (2001), "Power looms in Silk Weaving: Case Studies from Karnataka", in Kundu, A. and Sharma, A.N. (eds.), *Informal sector in India, Perspectives and Policies*, New Delhi, Institute of Human development, pp. 216-229.

⁴² Kumar, Nagesh. (2001), "Small Information Technology Services, Employment and Entrepreneurship Development: Some Exploration into Indian Experience", in Kundu, A and Sharma, A.N (eds.), *Informal Sector in India, Perspectives and Policies*, New Delhi, Institute for Human Development, pp. 230-241.

report that the share of workforce in the primary sector fell to 65 percent in 1993-94 from 74 percent in 1972-73.⁴³ As per their observation these workforce probably have shifted to the tertiary sector, which has grown from 15 percent to 21 percent during the same period of time. This has added to the process of expansion of informal urban manufacturing sector. It is estimated that the employment growth in different industrial categories in the unorganised sector is increased compared to the organised sector. Non-agriculture unorganised sector employment has grown at the rate of around 4.5 percent during the 21 years period ⁴⁴(1973-94).

Even though non-agriculture employment showed a trend of growth, it marked some fluctuations during the period of 1973-94. In the 1988-94 period, it has declined to 3.2 percent.⁴⁵ Employment growth in the informal trade and manufacturing sector also witnessed a decline in this period.

Kundu. et. al. (2001) reports that the share of urban informal manufacturing sector in the total informal sector employment in India is decreased.⁴⁶ They observe that the annual growth rate in the number of enterprises and employment in urban areas decreased from 4.1 percent and 2.8 percent respectively during the period 1980-89 to 2.3 percent and 1.1 percent respectively during 1990-98. Nevertheless, they noticed that employment in informal manufacturing industries recorded a marginal improvement during 1990-98 after a significant fall during 1980-90. The growth rate in this sector rose up to 2.7 percent in 1990-98 from 1.1 percent in 1980-90.⁴⁷ Many researchers observe that this has happened due to the acceleration in the growth rate of employment in areas like Delhi, where growth rate has jumped from 3.7 percent to 11.1 percent

⁴³ Shariff, A. and Gumber, A. (1999), "Employment and Wages in India Pre and Post Reform Scenario", *The Indian Journal of Labour Economics*, Vo. 42 No.2 pp. 195-215.

⁴⁴ Ibid, p. 201.

⁴⁵ Ibid, p. 202.

⁴⁶ Kundu, A., Latita, N. and Arora, S.I. (2001), "Growth Dynamics of Informal Manufacturing Sector in Urban India: An Analysis of Interdependencies", in Kundu, A.N. and Sharma, A.N. (eds.), *Informal Sector in India, Perspective and Policies*, New Delhi, Institute for Human Development, pp. 84-93.

⁴⁷ Ibid, p. 90.

during this period. This implies that expansion of industrial manufacturing sector is not being taken place uniformly across the country but concentrated to some urban centres only.

This is due to the rapid increase of export processing units in these areas. Thus it could be inferred that employment growth attributable to economic reforms and trade policies in the informal manufacturing sector is a characteristic centred on highly industrialised urban areas and urban suburbs and it has not positively contributed to the employment generation in this sector in India.

Structure of Work Force

The period 1990 show a trend of change of structure of workforce in the informal sector in India. It is more visible in the informal export oriented manufacturing sector in India. Sub-contracting and outsourcing of work are two major changes occurred in this sector. These have contributed to the process of casualisation and feminisation of work to a greater extent in this sector.

Casualisation of Labour

This period shows a steady decline in the share of self-employed and regular wage/ salaried employees and increase in the share of casual wage labour⁴⁸ This increase in the number of casual labour force is often referred to as the casualisation of labour by the researchers. The concept of casualisation of labour has come as a means of labour market flexibility that allows the employer to hire and fire labour force when he needs. Labour laws and unions restrict this freedom of employer in organised and formal employment settings.⁴⁹ Contracting and casualisation of labour enables the employer to avoid this intervention and reduce the cost of production significantly.

⁴⁸ Shariff, A. and Gumber, A. (1999), *op. cit.*, f. No.43, p. 200.

⁴⁹ Despande, K.L. and Despande, S. (1998), "Impact of Liberalisation on Labour Market in India, What do Facts from NSSO's 50th Round Show", *Economic and Political Weekly*, May, 30, pp. L-31-L-39.

It is reported that the share of casual labourers in the urban industrial sector in India has increased overtime. The share of casual male workers in the urban labour force increased from 59.42 percent in 1987-88 to 64.02 percent in 1993-94. Simultaneously the percentage share of female urban casual workers in the industries rose to 75.54 in 1993-94 from 73.43 in 1987-88 (Table 2.2). Table 2.2 shows that industries such as agriculture and allied, manufacturing-2, construction, transport and services showed an increase in the share of both male and female casual labour force.

*Table 2.2, Share of casual in total wageworkers (current weekly status), 15-59 years old
(Percentage share of casuals in total wageworkers)*

Industry Division	Males		Females	
	1987-88	1993-94	1987-88	1993-94
Agriculture and allied	94.95	97.14	99/04	99.22
Mining and Quarrying	58.59	49.39	84.67	80.66
Manufacturing 2	65.85	68.70	86.87	90.21
Manufacturing 3	49.37	48.06	76.32	76.87
Utilities	22.42	26.16	40.35	33.33
Construction	95.32	96.03	98.30	98.56
Trade	56.20	61.19	80.69	76.29
Transport	59.09	66.57	51.33	61.20
Finance, insurance	17.79	14.86	18.43	12.95
Services	29.92	34.64	43.32	47.75
All	59.42	64.02	73.43	75.54

Source: National Sample Survey Organisation, 1990; appendix table 81 Despande and Despande (1998), p. L- 34.

There is a growing literature in India, which link economic reforms and trade policies with the process of casualisation and feminisation of labour force. Gupta (1999) estimated that casual employment in India fell by 1.1 percent per annum between 1983 and 1990-91 and rose by 3.3 percent per annum in the period 1990-

91 to 1996-97.⁵⁰ On the basis of this empirical evidence, he argues that trade policies such as deregulation of labour market, export promotion and trade regulation have led to increased casualisation of labour in the post reform period. Pais (2002) estimates the extent of casualisation of labour force in urban manufacturing in India with different rounds of NSS data.⁵¹ He reports that the percentage of casual workers in the male urban workforce increased from 10.1 percent in 1972-73 to 15.4 percent in 1983 and then declined to 14.6 percent in 1987-88. It again increased to 19.3 percent in 1990s.

Feminisation of Labour

Another noticeable trend is that the share of casual labour in the female labour force is much higher than male labour force.⁵² This increase in the incidence of casual female labour force, especially in the fields where men are largely employed is known as feminisation of labour. It is argued that increasing informalisation or higher flexibility of labour market leads to the feminisation of labour force.⁵³

In the urban industrial division the share of casual female labour increased significantly in industries like transport, services and manufacturing and marginally in agriculture and construction (Table, 2.2). Noticeable thing is that in all these industrial divisions, the share of female workforce compared to male is very high. This indicates the extent of feminisation in the casual urban employment.

Recent available literature also supports this argument. The share of casual workers in the female urban work force showed a sharp increase over two decades. This increase in women's employment in the informal sector is

⁵⁰ Gupta, S. P. (1999), "Globalisation, Economic Reforms and Role of Labour", Chairman Society for Economic and Social Transition.

⁵¹ Pais, Jesim. (2002), "Casualisation of Urban Labour Force, Analysis of Recent Trends in Urban Manufacturing", *Economic and Political Weekly*, Vol. XXXVII No.7, pp. 631-652.

⁵² Ibid, p. 202.

⁵³ Unni, Jeemol. (2001), "Gender and Informality in Labour Market in South Asia", *Economic and Political Weekly*, June, 30 2001, pp. 2360-2377.

attributable to various reasons. Unni (2001) observes that with the adoption of the structural adjustment programmes, women tend to lose grounds in the formal sector economy.⁵⁴ She reports that stagnating and falling income of the households forces the women to enter into the labour market. The process of globalisation, export oriented industrialisation, and industrial outsourcing from developed to the developing countries also lead to the higher participation of women in the informal export oriented manufacturing sector.⁵⁵ Empirical evidences show that the share of casual workers in the female urban labour force increased to 36.3 percent in 1993-94 from 24.9 percent in 1977-78.⁵⁶

Banerjee (1999) argues that increased feminisation in India is a part of the general increase in the size of the workforce following the overall expansion of the economy.⁵⁷ She notes that women ready to accept poor wages and working conditions because of their disadvantageous position in the labour market. In her view women workers are preferred in the export-oriented industries as they are willing to accept low wages and are less organised. This enables the employer to move the capital whenever they find a greater cost advantage elsewhere.⁵⁸ Ghosh (2002) identifies that there is an increase in the female informal urban labour towards regular work in the form of subsidiary activity also.⁵⁹ This shift towards regular employment is due to the increase in certain type of regular service activities, including domestic services and increase in home based and works in other informal settings for export and domestic manufacturing.⁶⁰ She argues that feminisation of work may have taken a regressive form in India in the export oriented manufacturing companies. She views this as a disturbing trend as

⁵⁴ *ibid*, p. 2361.

⁵⁵ *Ibid*, pp. 2360.

⁵⁶ Pais, Jesim. (2002), *op cit. f. No. 51*, p. 636.

⁵⁷ Banerjee, N. (1999), "How Real is the Bogey of Feminisation", in Papola T. S et al (1999, eds.), *Gender and Employment in India*, , New Delhi, Vikas Publishing House, pp. 299-317.

⁵⁸ *Ibid*, p.301.

⁵⁹ Ghosh, Jayati. (2001), "Urban Indian Women in Informal Employment, Macro Trends in the Nineties", in Kundu, A. and Sharma, A.N. (eds.), *Informal Sector in India, Perspectives and Policies*, New Delhi, Institute for Human Development, pp. 277-301.

⁶⁰ *Ibid*, p.298.

employment through subcontracting in the export-oriented sector is generally based on piece rate and workers are poorly paid.

Impacts on Wages and Working Conditions

It is proven that informalisation is associated with features like low wages and low earnings, long working hours, less regulation of labour laws, absence of social security and health hazards. Therefore in the context of informalisation of the labour market, the formal institutions of social security such as the state and trade unions have a marginal role to play.⁶¹ As a result of this, precariousness in the working and living conditions of the labour force is found to be increasing in the informal sector in India.

Expansion of informal sector has made mixed impact on the wages and incomes of the labour force in these sectors. There is a slight increase in the casual wages of male and female urban casual labourers as a percentage of regular wages as a whole (Table, 2.3). But the increase in the wage of casual labourers in this period is very less. Wages for the urban male casual labourers is decreased in Sectors like mining and quarrying, manufacturing trade finance insurance and services in the period 1987-88 to 1993-94. For female urban labourers, the wage decrease is marked in industries like agriculture and allied mining and quarrying, manufacturing and transport.

The sector wise growth of wages of workers like regular employees, non-agriculture casual labourer, home-based workers and workers in all other informal settings are reported to be less in the post reform period than in the pre reform period in India. The increase of wages of regular employees was 56 percent in pre-reform period (1983-88) where as it is only 12 percent in the post

⁶¹ Vijay, G. (1999), "Social Security of Labour in New Industrial Towns", *Social Security in India*, Seminar paper, Institute for Human Development, New Delhi.

reform period (1988-94).⁶² The male female wage differential is also reported to be increasing in the category of regular employees in the post reform period.⁶³

Table 2.3 Casual average wages as percent of regular average daily wages, Urban India, 1987-88 to 1993-94 (Casual wage as a percentage of regular wage)

Industry Division	Males		Females	
	1987-88	1993-94	1987-88	1993-94
Agriculture and allied	47.44	49.61	40.05	35.34
Mining and Quarrying	37.73	31.30	36.97	35.24
Manufacturing 2	60.52	59.94	63.40	53.57
Manufacturing 3	39.30	41.57	26.84	28.10
Utilities	33.73	39.02	24.02	25.91
Construction	49.63	53.24	43.04	64.99
Trade	68.60	66.21	46.65	49.47
Transport	42.71	46.65	32.01	25.88
Finance, insurance	28.20	22.86	34.55	49.83
Services	36.87	32.18	25.82	30.62
All	40.70	43.25	25.81	31.31

Source: National Sample Survey Organisation, 1990; appendix table 81 Despande and Despande (1998), p. L-35

The share of female home-based workers in the informal sector employment has increased in the post reform period. But most of these employments are seasonal in nature and wages in this sector is mainly piece-rate based. A study conducted among the piece-rated home workers in Ahmedabad city reveals that all the piece rate workers get daily wage below the poverty line daily wage of Rs. 52 compounded for 1998, except dress, pants-shirt, mattress cover stitching and shirt cutting.⁶⁴

⁶² Shariff, A. and Gumber, A. (1999), *op. cit.*, f. No. 43, p.200.

⁶³ *Ibid*, p.204.

⁶⁴ Unni, Jeemol (2001), "Wages and Employment in Unorganised Sector: Issues in Wage Policy", in Kundu, A. and Sharma, A.N. (eds.), *Informal Sector in India, Perspective and Policies*, New Delhi, Institute of Human Development, pp. 94-124.

A study by Raj and Kapoor (2001), on the home-based women workers reveals that, the earnings of women in this sector are far below the minimum wages.⁶⁵ They found that the average monthly income in technical trade was Rs. 450. These works are not on a regular basis and it affects their effective average monthly earning.⁶⁶ In many cases the value of effective average monthly earnings was estimated at Rs. 250.⁶⁷ Therefore the income of workers engaged in homebased work through sub-contracting is very low in effect. The study also shows that majority of the workers have heavy workloads and they function in unhygienic conditions with poor lightning and ventilation. It is also reported that workers suffer from health hazards like back ache, eye strain, breathing problems and headache.⁶⁸

Reports from handicraft sector in India, which has undergone structural changes in the post reform period show that wages in this sector is not increased in commensuration with the general increase in the price levels.⁶⁹ Raj and Kapoor note that if the current wage levels of 1990-91 are deflated by the present cost of living index, it is found that handicraft artisans are in no way better off, at present as compared with the situation obtaining ten years earlier in respect of real wages.⁷⁰ The male female wage differential also is very high in this sector. The average daily wage rate of women workers is reported to be half the wages of the male craft workers.⁷¹

⁶⁵ Raj, Ashok and Kapoor, Rakesh (2001), "Productive Linkages of Indian Industry with Home-Based and Other Women Workers through Su-Contracting Systems in the Manufacturing Sector", *Alternative Features*, National Commission on Labour, March 2001.

⁶⁶ Effective Average Annual Income is the average annual income from seasonal work. It is calculated as monthly earnings multiplied by numbers of month the work was available divided by 12.

⁶⁷ Raj, Ashok and Kapoor, Rakesh (2001), *op. cit*, f. No. 65, p. 19.

⁶⁸ *Ibid*, p. 20.

⁶⁸ *Ibid*, p. 20.

⁶⁹ Raj, Ashok. and Kapoor, Rakesh. (2001), "Globalising Handicraft Market and Marginalisation of Women Craft Workers" *Alternative Features*, National Commission on Labour.

⁷⁰ *Ibid*, p. 7.

⁷¹ *Ibid*, p. 9.

It is reported that workers in this sector are appointed on contract basis and are not covered by labour laws and regulations. The study findings show that there are no enforcement of laws regarding the regulation of work, precautions against accidents and provisions of medical facilities, leaves in case of serious accidents or illness and compensation for workers for accidents existing in this sector. The working condition in this sector is similar to the general conditions prevailing in informal sectors like long hours of work, inadequate provision of basic facilities and health hazards.

A study conducted in the surgical instruments manufacturing industry, which is operated through the family based household units, at Jalandhar, Punjab, shows that wages of workers in these sectors are extremely poor and based on piece rate.⁷² It is reported that a wageworker in this industry earns between Rs. 1800 per month depending upon the nature of job and the amount of skill involved. It is far less than the statutory minimum wages⁷³

The working conditions in the industry are also reported to be appalling. It is reported that the workers are highly at the risk of accidents, when they forge red hot iron piece with hammer.⁷⁴ The prolonged sedentary work in the dustflying atmosphere increases the possibilities of getting TB and other respiratory diseases. Singh (2001), identifies three reasons accountable for the existence of this precarious working conditions and low wages. First is the abundant supply of skilled cheap labour in this sector that enables the employer to hire and fire the worker easily. Secondly the workers are highly unorganised and lack collective resistance due to the scattered distribution of the workforce. Thirdly, the industry tries to insulate itself from the implementation of labour legislation meant for the protection of workers. It is reported that in the surgical instrument manufacturing

⁷² Singh, Manjit (2001), "Political Economy of Labour, A Case study of Surgical Instruments Manufacturing Industry at Jalandhar, Punjab", in Kundu, A. and Sharma, A.N. (eds.), *Informal Sector in India, Perspectives and Policies*, Institute of Human Development, New Delhi, pp. 197-215.

⁷³ Ibid, p. 218.

⁷⁴ Ibid, p. 227.

industry more than 90 percent of the workers do not have the legal status of a worker.⁷⁵

Vanamala (2001), notes that the wages and working conditions are extremely low even in the informal industrial sectors that are protected by state incentives and concessions.⁷⁶ In any cases, though state provides concession as capital investments; it does not enforce them to provide statutory benefits and good working conditions for the workers. The case study of an engineering unit in Tamil Nadu shows that the cost reduction is accomplished in such industries is largely through feminisation and casualisation of labour. It is reported that minimum wages are not provided to the workers in this sector and the percentage short fall from minimum wages for the trainees and casual workers is 25 and 38 respectively.⁷⁷ The work in this sector is highly hazardous in nature and the workers are often met with accidents. These types of industries, for profit maximisation, push the workers into health hazards.

Das (2000) gives some information about the wages and working conditions of the workers in the ceramic ware industry in Gujarat.⁷⁸ He notes that the minimum wage level in this sector is much lower than that is prescribed under the Minimum Wages Act and workers, especially women, are paid much lower than the stipulated minimum wages. He also reports that jobs in these units like packing of the fragile cups and saucers with straw in the poorly lit and unclean surroundings could severely affect the health of the labourers.⁷⁹ Breman (2001), notes that the entry of retrenched workers into the informal sector of Ahmedabad city subsequent to the closure of textile mills caused the decline of their wages and living standards.⁸⁰ It is reported in his study that the income of exmill

⁷⁵ Ibid, p. 226.

⁷⁶ Vanamala, M. (2001), *op cit*, f. No. 40, p.2380.

⁷⁷ Ibid, p.2383.

⁷⁸ Das, Keshab. (2000), "Workers and Earnings in the Informal Manufacturing: Evidences and Issues in Estimation", *The Indian Journal of Labour Economics*, Vol. 43, No. 2, pp. 261-276.

⁷⁹ Ibid, p. 273.

⁸⁰ Breman, Jan. (2001), "Informalisation of Labour System, End of Labour Market Dualism", *Economic and Political Weekly*, Vol. XXXVI, No. 52, pp. 4804-4821.

workers who had found a job in informal sector varied from Rs. 900 to 1, 200 a month-about half to four-fifth or less than their formal earnings.⁸¹

Another study by Mahadevia (2001), among the ex-mill workers in the Ahmedabad city reveals that the living standards of the affected families had declined considerably.⁸² She finds that of the 14 trades listed by the study, in 12 actual wages were more than 50 percent below the minimum wages⁸³ The reasons, according to Mahadevia, accountable for these conditions are over supply of labour and non-registration and non-unionisation of the workers.

Kumar (2001), reports that the affluent, fast expanding software and service industry in India is also undergoing informalisation and workers' salaries are reduced to a greater extent.⁸⁴ Workers in the informal IT service sector are generally paid on piece rate basis and their income is lower compared to the organised sector enterprises. Working hours in this sector is generally very long and is reported that majority of the labourers are working more than ten hours per day.⁸⁵ G. Vijay (1999) gives an account of the conditions of the workers in the industrial townships, which have come up recently⁸⁶ He notes that the non-availability of social security measures, low level of organisation of workers and absence of trade unionism plunge the workers into poor working and living conditions.

Reports from the Export Processing Zones (EPZ) in India also show the same situations. There are not much exhaustive studies done on the wages and working conditions of the employees in the Export Processing Zones in India.

⁸¹ Ibid, p. 4811.

⁸² Mahadevia, Darshini (2001), "Informalisation of Employment and Poverty in Ahmedabad", in Kundu, A and Sharma, A.N (eds.), *Informal Sector in India, Perspectives and Policies*, New Delhi, Institute of Human Development, pp. 142-159.

⁸³ Ibid, p. 156.

⁸⁴ Kumar, Nagesh (2001), "Small Information Technology Services, Employment and Entrepreneurship Development: Some Explorations into Indian experience", in Kundu, A. and Singh, A.N. (eds.), *Informal Sector in India, Perspectives and Policies*, New Delhi, Institute of Human Development, pp. 230-241.

⁸⁵ Ibid, p. 239.

⁸⁶ Vijay, G. (1999), *op cit. f. No. 61*, p. 220.

Available literature shows that manufacturing units of export commodities in EPZs are highly informalised and feminised. In a recent study of the NOIDA EPZ, it was found that women constitute a substantial section of the workforce.⁸⁷ The women participation is found to be higher in industries like garments, gems and jewellery. The wages for the women workers in these units are very low. The general conditions of the workers are found far from satisfactory levels and many of the statutory benefits are denied to them.⁸⁸ Swaminathan (2002) reports the situation in Madras Export Processing Zone.⁸⁹ She notes that most of the workers are women and they are paid very less wages mostly based on piece rate. The precarious working conditions and job pressures prevailing in these units increases the risk of health hazards of the labour force. She reports that most of the workers in these units develop health problems like cough, asthma, skin diseases, head ache etc.⁹⁰

The above analyses show that informalisation of labour, which has increased sharply in all parts of the developing world has a mixed impact on employment, wages and working and living conditions of the labour force. The new trade pattern and investment policies that aim large labour market flexibility fuel the pace of informalisation in many developing countries. The consequences of these changes are different in different countries. In India, policies such as trade liberalisation, export promotion and deregulation of labour market account for the informalisation of labour to a great extent. It has significantly added to growing informal sector in India. Employment generation due to this expansion of informal economy is negligible mainly because; in most cases job losers in the formal sector take over the job in informal sector. Nevertheless, some sectors like export oriented manufacturing industries in the informal sector show some increase in employment generation. But this is limited to the urban centres only.

⁸⁷ Rajalakshmi, T. K. (1999), "The Woes of a Workforce", *Frontline*, April 23, pp. 119-120.

⁸⁸ Ibid, p. 119.

⁸⁹ Swaminathan, Padmini (2002), "Labour-Intensive Industries, But Units Without 'Workers'; Where will ILO's Social Dialogue begin?", *Working Paper No. 168*, Madras Institute of Development Studies.

⁹⁰ Ibid, p. 46.

The labour market structure witnessed a reshuffling due to these developments. Sub-contracting and work outsourcing has led to the casualisation and feminisation of work. The opportunities out of these developments and the falling family income of the retrenched male workers due to the downsizing and closure of formal sector jobs pushed more female workers into these sectors.

Expansion of export oriented industries and informalisation of labour is not significantly contributed to the increase of wages of the labour force in these sectors. Though some sectors like manufacturing, construction etc marked some increase in wages it is not found to be in commensuration with the general increase in the price levels. The Workers are getting wages far below the respective minimum wages set by the state in many informal sectors. The wage differential between men and women is also found to be increasing or remaining the same. Many studies showed that the incidence of poverty is increasing in the households of informal sector workers.

Another noticeable thing is that the state regulation in terms of enforcing labour laws is absent or relatively law in these sectors. Most of the informal sector industries are not providing social securities measures and adequate labour standards for the work force. This increases the hardships of the labourers and makes them vulnerable to health hazards. The workers in these sectors are less organised due to the scattered distribution and fear of loss of jobs. It is found that in many of these sectors trade union activities are very limited. This limits their collective resistance against exploitations.

It can be summarised from the available evidences that informalisation leads to exploitation of the labour force in many way. The precarious nature of work prevailing in these sectors plunge the work force into health hazards. The low level of income, absence of health care facilities and lack of social security measures increase the health burden of the work force. Next chapter tries to locate these factors in the informal sector and conceptualise the associations between informal employment and ill health.

3 . INFORMAL ECONOMY: WORKERS AND THEIR HEALTH

The concept of workplace health was evolved in the context of industrialisation. So the major focus of health of the workers in the earlier period was on the hazardous physical environment that they come across at the workplace. Thinkers like Engels, Chadwick and Rosen tried to view workplace health in the context of the social, economic and political determinants. As per their understanding, health of workers is determined by factors like economic production and social environment such as position of workers in the work hierarchy, subordination, level of organisation and their control over workplace. These factors vary across societies according to its nature of production and strategy of economic growth. In the present context of export led mode of production and growth, health of the working class has greater significance due to deregulation of labour laws and flexibilisation of labour market. Change of employment pattern from a highly protected to a less protected and regulated one and its implications for the working and living conditions of workers is a major debate in labour health. This chapter is an attempt to view health of the working population in the informal sector in the light of the present reform measures in terms of their economic and social entitlement and tries to conceptualise informal employment and ill health by studying its linkages with poverty and working conditions.

Informal Employment and Ill Health

The relationship between informal employment and ill health is a well-established one. This relationship, initially, was established mainly identifying the unhealthy working conditions and occupational health hazards prevailed in the period of industrialisation in the developed world. There are quite a large number of evidences of deterioration of the health of the labouring population

because of their exposure to unhygienic and hazardous working environment. The industrial revolution in Europe witnessed the expansion of informal sector and precarious employment and its consequences for ordinary working people.¹ Thus in the nineteenth and early twentieth centuries the focus on ill health and informal employment confined to the concept of work place health and deterioration of living conditions.

The last two decades of the twentieth century witnessed an unsymmetrical form of expansion of informal sector, highly towards the tertiary sector, largely fuelled by liberalisation and economic reforms in the developing world. The linkages of informal employment and ill health have become stronger and appropriated through external interventions and macro policies such as labour market reforms and health sector reforms. The manifestations of labour market reforms such as deregulation of labour market, increased competition, labour market flexibilisation and sub-contracting are linked to excessive hours of work, the use of stimulants and other hazardous work practice and low wages.² Health sector reforms and its implications such as user fee public-private partnership and cut down of public expenditure on health decrease the health accessibility of the poor in general and the informal workers in particular.

Therefore health consequences in informal sector employment are to be studied by viewing the working and living conditions of the labour force in the context of these macro policies. Workers' health in the informal sector is determined mainly by their income, nature of work, working conditions and social security measures entitled to them. But it is often seen that the intrinsic features of informal sector such as low level of organisation and powerlessness, absence of employer-employee relationship, lack of coverage of social security and enforcement of

¹ Wilkinson, Carol. (2001), *Fundamentals of Health at Work: The Social Dimension*, London, Taylor & Francis, Ch-2, p 29.

² Quinlan, M., Mayhew, C. and Bohle, P. (2001), "The Global Expansion of Precarious Employment, Work Disorganisation and Its Consequences for Occupational Health, Placing the Debate in a Comparative Historical Context", *International Journal of Health Services*, Vol. 31; No. 3, pp. 507-536.

labour standards and low regulation of this sector through legislation put them in a disadvantageous position to accomplish or fight for this health determinants. As per this assumption the relationship between informal employment and ill health is much stronger and manifested through the impoverished condition of workforce, precarious nature of work, filthy working environment, low social security and statutory provisions. The following analyses try to locate this relationship in India by studying the wages, work nature, enforcement of labour standards, legislative provisions and social security measures for the informal sector workers.

Informal Workers and Poverty

The association between poverty and ill health is very strong and well established. Poverty in the informal sector is related to the availability of employment days, income or wages they get out of employment and their purchasing power. Informal sector employment, mainly agriculture and other rural wage work are seasonal in nature and therefore do not promise full time employment for workers in these sectors. For agriculture wage workers employment is limited to the seasonal agriculture activities such as ploughing, sowing, weeding, transplanting, harvesting and winnowing.³ Similarly the rural wagers also do not get employment for the full year. Other sections of informal sectors such as casual wagers and contract labourers in the organised and unorganised sector get employment some period of time only, say, six months, one year etc. It is therefore inferred that the availability of employment days for an informal sector worker is uncertain and largely depends on the seasonal nature of the job.

Wages and income also depend many factors. In a market economy, income and wages of self-employed and wagers in the informal settings are mainly determined by the demand and supply factors. For wagers, employed both in organised and unorganised settings, determination of wages is the freedom of

³GOI, *Indian Labour Year Book* (2001), Labour Bureau, p. 14.

the enterprise even though minimum wages are fixed by the state. These factors increase the uncertainty in wage earning of the workers in the informal sector.

It is a well-established observation that rate of increase of wages is declined in general in the post economic reform period in India.⁴ The post reform period also marked a deterioration in the consumption level of the population and increase of poverty.⁵ Households depend on the informal sector earnings show the similar trend in the post reform period. The average wages as percent of the regular average daily wages of the casual workers decreased in some sectors, remained same in some other sectors and increased slightly in some segments over period of seven years (1987-1994).⁶ Real wages in the unorganised sector in many Indian states also seem to be declining. Table 3.1 shows that industrialised states of Gujarat and Maharashtra and states like Tamil Nadu and Madhya Pradesh showed a noticeable decline of real wages in the unorganised sector. In Gujarat real wages in the unorganised sector declined to 3.76 in 1996 from 6.70 in 1987, showing a decrease of 43.8 percent in a period of nine years. In Maharashtra real wages declined from 5.34 to 3.84, showing a decrease of 28.46 percent between 1989 and 1996. Tamil Nadu recorded a decline of 16.52 percent in real wages between 1987 and 1994 and showed a slight increase in 1995 and then declined in 1996. The percentage decline of real wages of the unorganised sector in Madhya Pradesh between 1987 and 1996 was 16.02. Karnataka, Uttar Pradesh and West Bengal were the states, which showed an increase in the real wages of the unorganised sector workers between 1987 and 1996. The percentage rises of real wages in these states were 46 (1987-95), 13.62 (1987-94) and 21.88 (1987-96) for Karnataka UP and West Bengal respectively.

⁴ Shariff, A. and Gumber, A. (1999), "Employment and Wages in India Pre and Post Reform Scenario", *The Indian Journal of Labour Economics*, Vol. 42 No.2 pp 195-215.

⁵ Gupta, S. P. (1995), "Economic Reforms and Its Impacts on Poor", *Economic and Political Weekly*, June, 1995, pp. 1295-1311.

⁶ Please see table 1.4 Chapter 2, p. 20.

Table 3.1, Real wages in unorganised sectors in selected states

States	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Gujarat	6.70	6.50	6.03	5.39	4.34	5.03	4.35	3.66	3.29	3.76
Maharashtr	-	-	5.34	4.27	4.06	-	-	4.39	4.45	3.82
Karnataka	2.16	-	3.07	3.10	2.47	-	4.08	3.64	3.16	-
Tamil Nadu	3.39	3.34	3.22	2.97	2.83	2.92	2.97	2.83	3.62	3.35
M. P.	3.87	3.67	3.35	3.33	2.18	3.22	3.16	3.17	2.80	3.25
U. P.	4.26	3.74	4.02	3.91	-	4.48	3.57	4.84	-	-
W. B.	3.20	3.87	3.74	3.76	4.09	4.36	3.99	3.64	4.33	3.90

Source: Unni Jeemol (1999), Wages and Employment in Unorganised sector, p. 128.

The changes in real wages in the unorganised sector over a period of nine years give a general picture of the income of informal sector workers through their employment. Since the informal sector covers a wide spectrum of employment of which many sectors are unidentified, calculation of overall change of wage is impossible. The available data from the states mentioned in table 3.1 is of scheduled employment and there could be remarkable wage disparities between sectors. Nevertheless, the overall change of real wages is not on an upward trajectory even in the industrialised states of Gujarat and Maharashtra and many other states. The significant point here is that there was considerable decline in the real wages of the identified unorganised sectors in many states and marginal increase in some other states between 1987 and 1996. The situation of workers in the unidentified sectors could be worse than this.

The risk of being poor for the working population in the informal sector can be assessed in the context of the general annual inflation of commodities over this period of time. During the last two decades (1980-2000), the average annual rise in price level has been around 8-10 percent. But a double-digit inflation is observed

in 1980-81, 1991-92, 1992-93 and 1994-95.⁷ Table 3.2 shows that the period 1985-90 to 1990-95 registered a substantial increase of price rise of all commodities. The average annual inflation of all commodities based on the Consumer Price Index (CPI)⁸ of the industrial workers and agricultural labourers rose from 6.7 percent in 1985-90 to 11.0 percent in 1990-95. The average annual inflation based on Wholesale Price Index (WPI) of the primary articles rose from 5.5 percent to 12.3 percent during this period of time. The striking thing is that this was the period when the real wages of the unorganised sector workers declined in many states. This implies that the burden of accessibility of all commodities in general and food in particular have increased for the unorganised sector workers.

Table 3.2, Average annual inflation (percentage)

Year	Based on CPI			Based on WPI		
	IW	AL	All commodities	Primary Articles	Fuel Group	Manufactured
1980-85	9.8	7.3	9.3	10.0	12.5	8.2
1985-90	8.0	7.5	6.7	5.5	6.0	7.5
1990-95	10.4	10.9	11.0	12.3	12.8	10.1
1995-00	8.6	7.7	5.2	6.5	8.3	4.1

IW-Industrial Workers, AL-Agriculture Labourers

Source: Economic Survey, 2000-01, p. 91

The decline of real wages and increase in the price of food articles and other essential commodities lower the purchasing power of the workers. This may change their consumption pattern and increase poverty and result malnutrition. The report of the expert group of Planning Commission on poverty estimation gives some picture of poverty among the informal sector employees in some states. It shows a positive association between poverty and informal sector employment (Table 3.3). The table shows that states where informal sector

⁷ GOI, *Economic Survey* (2000-01), p. 90.

⁸ Consumer Price Index (CPI) numbers is the measure of change of prices over a period of time for a given bracket of goods and services.

employment is high, poverty is high. In Bihar and Orissa, incidence of poverty in 1987-88 period were 45.0-49.99 percent and more than 55 percent respectively and the corresponding informal employment was 60-64.99 percent and above 65 percent respectively. Haryana, Punjab, Andhra Pradesh and Rajasthan were the states that showed less incidence of poverty and large informal employment compared to other states. But incidence of poverty in the informal sector in these states ranged between 30 to 34.99 percent, which is not a low value compared to other organised sectors. As per the estimations of NSSO 1993-94 survey the incidence of poverty across all organised sector activities for rural area was 33 percent and it was 27 percent for urban areas in 1993-94.⁹

Table 3.3 Informal sector employment and poverty in selected states.

Incidence of poverty (%), 1987-88	Informal Sector Employment, 1990 (%)				
	Less than 30	50-54.99	55-59.99	60-64.99	65 and above
Less than 30			HAR, PUN	A. P.	
30.0-34.99	Gujarat			Kerala	Rajasthan
35.0-39.99		Assam		Karnataka	
40.0-44.99	Maharashtra			W. B.	M.P., U.P.
45.0-49.99				T. N.	
50.0-54.99				Bihar	
55 and above					Orissa

HAR-Haryana, PUN-Punjab, AP-Andhra Pradesh, MP-Madhya Pradesh, UP-Uttar Pradesh

Source: Mitra, A, *Employment in the Informal Sector*, P. 90, please see Table 3, Planning Commission, 1993.

⁹ NSSO (1993-94).

The wages and income of informal sector as a whole till the year 2002 is not available. But micro studies conducted among different sections of the informal sector employees give a picture of the wages and incidence of poverty there. Recently conducted micro studies on homebased workers, piece-rated home workers in Ahmedabad, women workers sub-contracted to manufacturing sector in India, craft workers, surgical industry in Jalandar etc reveal that wages in these sectors are below the minimum wage fixed by the states and in many cases minimum wages are not fixed.¹⁰ The workers do not get employment and wages on a regular basis. Reports from industrial wageworkers such as ceramic industry in Gujarat, industrial town ships, power looms in Karnataka, state protected informal industries in Tamil Nadu, ex-mill workers in Gujarat and Bombay and Export Processing Zones all over India reinforce this observation. In general it can be inferred that wages in the informal sector employment have not increased in commensuration with the general price rise. Another thing is that there is no job guarantee or protection of work in these sectors and income from these sources do not promise them any economic security. Therefore earnings from informal employment may not cater their need for food consumption of the entire household, which largely depend upon this income. Subsequently they fall into poverty. Similarly the financial accessibility of health care facilities to the workers also decline.

There are some gender implications in the association between informal sector employment and poverty. It is generally observed that the link between working in the informal sector and being poor is stronger for women than for men and stronger for female-headed households than male-headed households. Feminisation of labour is found to be concentrating largely in the informal sector. There are obviously a higher percentage of women than men work in the informal economy. This is found to be higher in sectors like homebased handicraft sector, sub-contracted manufacturing and export oriented sectors

¹⁰ See *Chapter 2*, pp. 20-21.

where wages are relatively low. Women mostly are willing to accept these poorly paid jobs because of their disadvantageous position in the labour market in terms of skills and education.¹¹ Thus women are shifted to the lower income statuses in the informal sector such as casual wageworker, industrial outworker and unpaid worker. Another noticeable thing is that there is an established gender gap in wages in the informal sector in India. Wage differential between men and women for the same job is reported to be high in many sectors of the informal employment. In general women workers in the informal sector get relatively low wages than men and their risk of being impoverished is higher than men. Similarly poverty could be higher in female-headed households than male-headed.

Informal Work and Health Conditions

Working conditions have a significant role in determining the health of the people. In other words, healthy working conditions formulate the health of the workers. There are number of factors such as nature of work, workplace safety and hygiene, welfare facilities and job security affecting the health of the workers. Among these, nature of work determines a variety of aspects of workplace health. It varies across sectors depending upon the nature of work such as casual, contract and sub-contract. Normally, in a working environment working conditions such as hours of work, shift working, welfare facilities and occupational health and safety are taken care of due to regulation and protection of state and worker's organised activities. But in unregulated and unprotected informal working environment these could be worse due to the low regulation and low levels of organisation of the workers. There are some social entitlements that determine the nature of work and workplace health. Carol Wilkinson (2001) interprets it as social determinants of work place health. He writes

¹¹ Banerjee, N. (1999), "How Real is the Bogey of Feminisation" in Papola, T. S. et al (eds.), *Gender and Employment in India*, Indian Society of Labour Economics, Institute of Economic Growth, , New Delhi Vikas Publishing House, pp. 299-317.

“The social determinant of workplace health is a position developed from the understanding that a health potential can be maximised through the reorganisation of the individual and organisational needs. The wellness-illness dichotomy can be balanced if needs of both are balanced in terms of desires and expectations. At the same time emphasising the fact that specific requirements and situations need to be created in order for the individual to achieve optimal health and maintain an equilibrium as a result of work and enhance their quality of working life” (Wilkinson (2001), p. 9.)

As per his findings one of the social determinants of health is the control of the workers over working systems and own work (Table 3. 4). Control of the working systems and own work may provide freedom for the workers to regulate his/ her working conditions and minimise pressure. Therefore it has importance in terms of health and well being of the workers. But the thoughtful question here is what does entitle a worker to get control over his working system and own work. To answer this question it is imperative to examine the position of the worker in the work hierarchy and the social and economic opportunities that determined the particular position. It is a well-identified fact that workers in the lower strata such as unskilled and manual labour are largely from the lower social and economic background and these backgrounds have a significant place in determining the skill, education and adaptation to technology of the worker. For these workers labour is not a means of creativity and selfexpression, but a means of mere livelihood.¹² Due to the lower position in the work hierarchy, informal sector workers have no control of the nature and conditions of the working system and own work. Another factor that determines the control of workers over own work is the collective resistance they exert through organised activities. Trade union activities in the organised sector help workers to get hold of the control of own work to a certain extent. But for majority of workers in the informal sector, whose level of organisation is very low, scope of collective resistance is limited. Therefore in a workplace, a small minority enjoys control of the working system and own work and the large chunk of the informal workers are deprived of it.

¹² Navarro, V. (1976), *Medicine Under Capitalism*, New York, Neal Watson Academic Publication, Part II, pp. 103-134.

Second social determinant of workplace health is one's skills and the ability to demonstrate the use of the skill. It is observed that the process of deskilling and fragmentation of tasks at work has been linked to health problems¹³ In the informal settings work is usually monotonous and it may deskill the worker. Therefore chances of stress and work pressure associated with deskilling and fragmentation of tasks is higher in informal sector. This may diminish their work performance also.

Another important social determinant of workplace health is the participation of workers. This implies organisation of workers for the collective resistance against exploitation at the workplace. Participation is often considered as a political goal for dealing with work problems.¹⁴ Informal sector workers are mostly scattered, unidentified and therefore unorganised. So participation of the workers in the organised activities is very less in the informal work settings.

Interaction of workers with others and support with work process/problems are another important social determinant of health. It is proved that passivity and social isolation has an impact on the psychological and physiological functioning.¹⁵ In the informal work settings degree of interaction with others in the workplace is varying site wise depending upon the nature of work. It may be high for self-employed and home-based workers and comparatively low for contract workers and workers in an informal organisational set up.

Another important social determinants of workplace health are equity and fairness. Factors like hierarchy, class, power and control have significant role in determining equity and fairness at the workplace. Workers in the lower strata are generally powerless and have no active role in decision-making.

Wilkinson (2001) identifies freedom from personal injury also as a social determinant of workplace health. Enforcement of occupational health and safety

¹³ Gardell as cited in Wilkinson. C (2001), *Fundamentals of Work at Health, The Social Dimensions*, London, Taylor and Francis, p. 9.

¹⁴ Johnson et al as cited in Wilkinson. C. (2001), p. 9.

¹⁵ Gardell as cited in Wilkinson, C. (2001), p. 10.

through legislation is limited to the formal work settings only. The collective activities through trade unions assure prevention of injuries and occupational health hazards to a certain extent in the formal sector. But in the informal sector there is no collective action to enforce and monitor such measures.

Table 3.4, Social determinants of workplace health

Exercising control over working system and own work

Demonstrating ability to use skills

Ability to unwind and freedom of expression

Participation

Reduce emotional labour

Interaction with others

Support with work problems/ work process

Equity and fairness

Freedom from personal injury

Source: Wilkinson. C (2001), Table 1, p. 11

In precise, it is found that both psychologically stressful and physically dangerous conditions are affecting the health of people at workplace. These are related with the working conditions such as position in the work hierarchy, workload, frustration at work and powerlessness and job dissatisfaction. In the informal sector it is reported that the risk of workplace health is very high in terms of the above-mentioned conditions. The possible risk factors associated with informal working conditions that affect health are economic and reward factors, disorganisation and regulatory failures.¹⁶ In the informal sector, wages are usually based on the work done and payment is by result. Workers, therefore have to achieve the targets set by the enterprises for gaining reasonable income. This forces them to intensify work, take over loads and work long hours (Table

¹⁶ Quinlin, M. et al. (2001), "The Global Expansion of Precarious Employment, Work Disorganisation and Consequences for Occupational Health, A Review of Recent Research", *International Journal of Health Services*, Vol. 31, No. 2, pp. 335-414.

3.5). Workers fall into ill health by prolonging these precarious work practices. The inability or difficulty of the workers in the informal sector to organise and protect themselves hinder the worker to fight for enforcing measures for occupational health and safety and equity and fairness at the workplace. Regulation of labour laws and enforcement of labour standards are also reported to be less in the informal sector. Many laws and regulations pertaining to OHS, minimum wages and welfare are applicable to large enterprises with permanent employees only.

Table 3.5, Risk factors of health associated with informal employment

<i>Economic and reward factors</i>	<p>Competition for work/ underbidding of tenders</p> <p>Task work/ Payment by result</p> <p>Work Intensification, Overload, Rushing and Long hours</p> <p>Lack of Logistical Resources and</p> <p>Off loading High Risk Activities</p>
<i>Disorganisation</i>	<p>Exacerbation of complexity, ambiguity in rules and procedures and hidden changes to work practices</p> <p>Fracturing of OHS knowledge and interference with inter worker communication or task coordination</p> <p>Attenuated lines of management control and fracturing of OHS management (including surveillance or reporting and provision of OHS</p> <p>Under qualification, inadequate training and inexperience</p> <p>Inability or greater difficulty for contingent workers to organise/ protect themselves</p>
<i>Increased likelihood of regulatory failure</i>	<p>Multi-employer worksite, situations with complex webs of legal responsibilities, and difficult to locate/ monitor work places/ workers for which conventional regulatory regimes are not designed and, which require substantially more logistical resources</p> <p>OHS laws focussing on permanent employees in large enterprises and agencies and slow to produce new support material and modify compliance strategies</p> <p>Weakening of conventional surveillance and reporting system</p> <p>Problematic coverage by minimum employment standards laws</p> <p>Problematic coverage by, knowledge of, and access to workers' compensation.</p>

Source: Quinlan. M et al (2001), p . 350.

In precise it is found that informal sector workers are more vulnerable to ill health in terms of the low entitlements of the social determinants of workplace health and precarious working conditions at the workplace than organised sector workers.

Labour Standards Pertaining to Working Conditions

Labour standards have a significant role in the enforcement of healthy working conditions and workplace health. Labour standards are some set of recommendations and conventions, which tell the actual norms of employment, quality of work and well-being of workers, specify rights and stipulate normative rules.¹⁷ Sengenberger (1994) classifies labour standards as standards of protection, standards of participation and standards of promotion (Table 3.6). Standards of protection include some ILO conventions and recommendations relating to the protection of rights and protection from exploitations. Standards of participation provide the rights and the means required for joint setting and implementation of labour standards by the employers, workers and government and for the active involvement of workers in the process of restructuring.¹⁸ Standards of promotion are defined as those, which further the productivity of the labour, promote creation of employment, combat unemployment and under employment and finance functioning of the labour market.¹⁹

¹⁷ Despande, L.K (1999), "Labour Standards and Structural Adjustment", *The Indian Journal of Labour Economics*, Vol. 42, No. 1, pp 59-69.

¹⁸ Ibid, p. 60.

¹⁹ Ibid.

Table 3.6, International labour standards pertaining workplace health

Standards of Protection	Regulation of duration and scheduling of work time
	Standards ensuring occupational health and safety
	Protection against loss of jobs, employment and income
	Protection of income through minimum wages regulation
	Protection of equality of opportunity and treatment
	Protection of particular groups of workers
	Protection from forced labour and bonded labour
Standards of participation	Freedom of association and protection of the right to organise
	Protection of organised workers from employer work interference
	Protection of workers' and employers' organisation against acts of interference by each other
	The promotion of voluntary collective bargaining
Standards of promotion	Improvement of qualifications of labour through education, vocational training and on the job training (ILO Convention No. 142)
	The active promotion of full, productive and freely chosen employment (ILO Convention No. 122)
	Provision of public services to promote employment and improve the functioning of the labour market information systems, vocational guidance, placement and training (ILO Convention No. 160, 142 and 88)
	Active policies of vocational rehabilitation (ILO Convention No. 159)
	The establishment of effective labour administration with the participation of the employers, workers and their organisations

Source: Deshpande. L. K (1999), pp. 60-61.

Labour Standards in India

ILO has adopted 172 conventions and 179 recommendations regarding standards of protection, participation and promotion so far. Outthat India has ratified only 39 conventions (Table 3.7). It is notable that India has not ratified conventions on occupational health and safety, social security, freedom of association and

protection of right to organise and collective bargaining, and worse forms of Child labour, which have higher implications for workplace health.²⁰

Table 3.7, Labour standards ratified by India

Convention 1	Hours of work
Convention 4	Night work for Women
Convention.5	Minimum wages in the industry
Convention 6	Night work for young persons in the industry
Convention 14	Weekly rest in industry
Convention 15	Minimum wages
Convention 16	Medical examination of young person as sea
Convention 18	Workmen's compensation and occupational diseases
Convention 19	Equality of treatment in accident compensation
Convention 21	Inspection of immigrants
Convention 26	Minimum wage fixing machinery
Convention 29	Forced labour
Convention 32	Protect against accidents (Dockers)
Convention 41	Night work by women revised
Convention 42	Workmen's compensation for occupational disease revised
Convention 45	Underground work by women
Convention 89	Night work by women revised
Convention 90	Night work by young person revised
Convention 100	Equal remuneration
Convention 107	Indigenous and tribal
Convention 111	Discrimination in employment and occupation
Convention 115	Radiation protection
Convention 118	Equality of treatment in respect of social security
Convention 123	Minimum wages for underground work

Source: Pocket Book of Labour Statistics, 1998, pp. 99-103 .

The enforcement of labour standards is limited to the registered and organised large enterprises in India. This has also undergone some changes in the context of structural adjustment in India. The neo-classical economists regard labour

²⁰ Ibid, p. 67.

standards as rigidities.²¹ Therefore to avoid the cost of production due to the enforcement of labour standards, the organised enterprises restructure organised nature of production and transfer production to informal settings through subcontracting and outsourcing. This connotes that enforcement of labour standards is absent in informal work settings. In this context it becomes imperative to overview the applicability of labour laws, which intends to enforce labour standards pertaining to unorganised sector in India.

Informal Sector and Labour Laws in India

There are number of labour laws enforced in India for the interest of the workers. But most of the labour legislations protect the interest of the organised labour only. Labour legislations covering unorganised sector in India is very few. Some of them are discussed here in the context of the applicability to the working conditions of the informal sector.

The Minimum Wages Act, 1948

This is the most important legislation for the benefit of the unorganised sector workers. It is enacted for fixing, reviewing and revising the minimum wages in the scheduled employment where workers are engaged in the unorganised sector. But most of the informal sector employments are unidentified in India due to its heterogeneous nature. Therefore informal employments do not come under the purview of minimum wages. Moreover in the present context of labour market reform, nature of informal sector is undergoing fundamental changes. There is a movement from permanent to casual, contractual and temporary employment, establishment based to home-based production, time rate to piece rate work, male dominated to female-intensive work situation, regulated to unregulated forms of labour and unionised to un unionised labour.²² Minimum wages are not revised and fixed with respect to these changes in India.

Another thing is that minimum wages is not fixed for all the identified scheduled employment in many states (Table 3.8). It is reported that only fifteen states or

²¹ Papola, T. S. (1994), "Structural Adjustment, Labour Market Flexibility and Employment", *Indian Journal of Labour Economics*, Vol. 37, No. 1, pp. 3-16.

²² GOI (2001), *Report of the Study Group on Umbrella Legislation for Workers in the Unorganised Sector*, National Commission on Labour, Ministry of Labour, p. 57.

union territories have made provision for variable dearness allowance as a part of minimum wages for few or all of scheduled employments²³ In Maharashtra, out of the 78 scheduled employments identified, minimum wages are fixed only for 65 as on 1st October 2000. In Madhya Pradesh the fixation of minimum wages is only for 36 out of 47 scheduled employments identified. It is noticeable that in Kerala there are 11 scheduled employments in which minimum wages are not fixed as on 1.10.2000. In Sikkim, the minimum wages Act not extended and enforced yet. It implies that enforcement of minimum wages act do not ensure minimum wages for informal sector workers.

Table 3.8, Scheduled employment fixation of minimum wages in some selected states as on 1.10.2000

Centre/ State/ UTs	No. of Scheduled employment	No. of scheduled employment in which minimum wages are fixed
Central sphere	44	41
Andhra Pradesh	66	61
Delhi	29	29
Gujarat	53	50
Kerala	47	36
Maharashtra	78	65
Tamil Nadu	60	59
Uttar Pradesh	68	62
West Bengal	45	45
Sikkim	Minimum Wages Act, 1948 has not yet been extended and fixed	

Source: Annual Report (2001), Ministry of Labour, Table 5.4, p. 50.

The Factories Act, 1948

Factories Act 1948 is designed to protect workers in the factories. It has provisions for better work environment and for safety and contingencies. These include restrictions on employment of women in factories during night and long working

²³ Ibid.

hours for women. But the contract and ad-hoc workers, whose work is highly informal in nature, do not come under the purview of this act.²⁴

The Industrial Dispute Act, 1947

This act is enacted to make provisions for investigation and settlement of industrial disputes. It has special provisions to lay-off, retrenchment and closure of enterprises. Initially, this law, in terms of getting permission to lay-off workers and closure was applicable for firms with more than 300 workers. But recently in the light of labour market reform and demand for more flexibility, the number has been reduced to 100 workers. It helps the enterprises to use contract labour, prevent trade unionism and retrench the surplus labour. Thus IDA catalyses the pace of informalisation of labour. It is reported that during the year 1999, 159 units were closed and 15, 707 workers were retrenched all over India due to the reorganisation of IDA.²⁵ Thus it is clear that IDA does not protect the interests of the informal sector in terms of compensation of loss of jobs. On the other hand it largely contributes to the expansion of informal sector by the retrenchment of workers.

The Workmen's Compensation Act, 1923

This Act is to provide compensation to the workers for injury by accidents. This Act is amended in 2000. As per the new amendments, the worker has to prove the loss of earning capacity if the injury is not a scheduled one as listed in the Act. Since most of the workers in this category belong to unorganised sector, it becomes very difficult for them to prove who is their employer is.²⁶ Therefore informal and unorganised sector workers are not benefited by this Act.

The Contract Labour (Regulation and Abolition) Act, 1970

This Act is to regulate the employment of contract labour in certain establishments and provides for its abolition in certain circumstances. The contractor, who employs twenty or more workers in his contract work, shall be

²⁴ Ibid, p. 30.

²⁵ GOI (1999), *Statistics on Closure, Retrenchment and Lay-offs in Industries During 1999*, Shram Bureau/ Labour Bureau, Ministry of Labour.

²⁶ GOI (2001), *Report of the Study Group on Umbrella Legislation for Workers in the Unorganised Sector*, National Commission on Labour, Ministry of Labour, p. 32.

covered under this Act. There are sufficient measures in the Act for the welfare safety of contract labour. But normally it is seen that contractors employ less than twenty workers and exempt from the application of the law²⁷ Therefore, the coverage of workplace in the informal sector under this Act is insufficient. Acts such as Payment of Wages Act, 1936, Payment of Gratuity Act, 1972 and Maternity benefit Act, 1961 are not applicable to majority of the informal sector workers like self-employed, home-based workers and contract labourers. It is mainly due to the absence of a clear employee-employer relationship.

In precise, it is found that most of the labour laws and the enforcement of labour standards intended for the promotion of workplace health are not covering the informal sector. Besides, legislations, which are exclusive for unorganised sector, are also insignificant for a large chunk of informal workers due to the manipulations of the employers. Therefore it is inferred that informal sector is less regulated against the exploitative and unhealthy working conditions persisting there. This strengthens the link between working in the informal sector and being ill healthy.

Informal Sector and Social Security

The International Labour Organisation (ILO) defines social security as the "protection, which society provides its members, through a series of public measures, against economic and social distress that other wise would be caused by the stoppage or substantial reduction in earnings resulting from sickness, maternity, employment injury, unemployment, invalidity, old age and death, the provision of medical care and other provisions of subsidies with children".²⁸ Social security schemes help workers to supplement their income for medical on accidents, injuries and often occupational diseases, education, livelihood in the old age etc.

Social security measures such as Employment State Insurance Scheme, Pension Scheme, Maternity Benefit, Provident Fund, Gratuity etc are not applied to a wide

²⁷ Ibid, p. 34.

²⁸ Cited in *Report of the Study Group on Umbrella Legislation for Workers in the Unorganised Sector*, National Commission on Labour, Ministry of Labour, p. 85.

spectrum of workers in the informal sector. Report of the study group on "Umbrella Legislation for Workers in the Unorganised Sector" reveals that social security measures for informal sector are constrained by the following reasons. First is the lack of permanent linkage between employer and employee that precludes schemes based on employer's contribution. Second is the low and unstable wages and lack of round the year employment, which precludes schemes based on employer's contribution and thirdly the casual nature of the employment, which precludes benefits like sick leave, maternity leave etc.²⁹

However, some limited social security interventions exist at the central and state level for some sections of the informal sector workers. Government of India has set up welfare funds for workers in six classes of mines-mica iron ore, manganese ore, chrome ore lime stone and dolomite. Welfare funds exist also for beedi, cine, dock and construction workers.³⁰ At the state level Kerala and Tamil Nadu have notably enforced some statutory and non-statutory welfare measures for informal sector workers. Kerala has set up more than twenty welfare funds for the benefits of the unorganised sector workers.³¹ Tamil Nadu has enforced welfare measures such as The Tamil Nadu Manual Workers Social Security and Welfare Scheme, Tamil Nadu Labour Welfare Fund Act, 1972, Welfare for tailoring scheme etc. States like Assam, Gujarat, Maharashtra, Karnataka and Punjab also have made some development towards enforcing welfare to some segments of the unorganised sector workers.³² It is observed that social security measures in the informal sectors that are enforced by the centre and the states cover only an identified minority of workers. Of these many measures are nonstatutory and therefore its enforcement lies with discretionary choice of the employer.

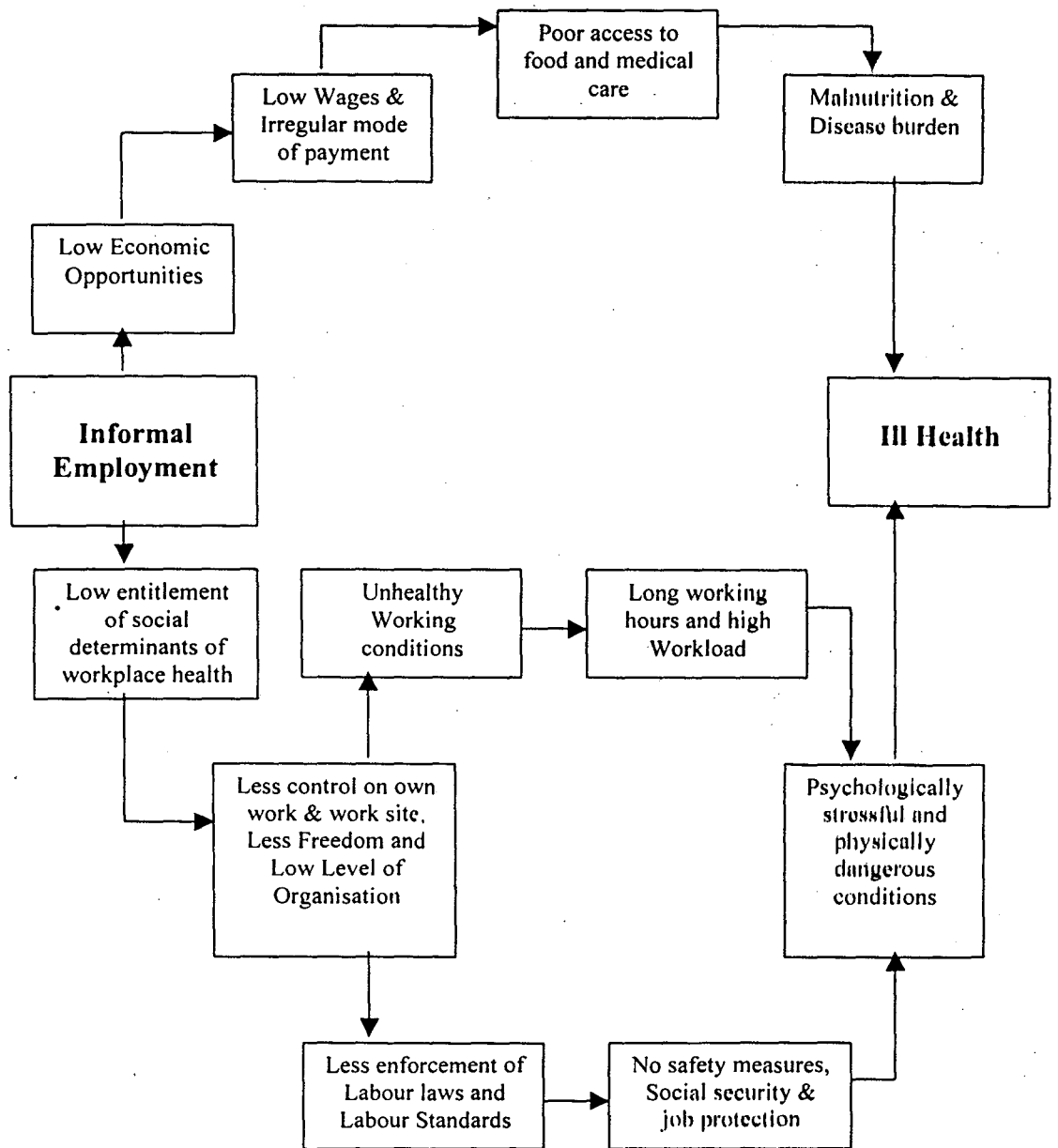
²⁹ Ibid.

³⁰ Subrahmanya, R.K.A. (2000), as cited in *Report of the Study Group on Umbrella Legislation for Workers in the Unorganised Sector*, National Commission on Labour, Ministry of Labour.

³¹ Welfare measures cover workers in abkari/ toddy works, agriculture, handloom, autorikshaw, cashew, coir, construction, motor transport, artisans, fishermen etc. For details see Subrahmanya R.K.A (2000), *Strategies for Protective Social Security* in Jhabvala et al (ed.2000), pp. 38-44.

³² See Subrahmanya, R.K.A. (2000), *Welfare Funds, An Indian Model for Workers in the Unorganised Sectors* in Jhabvala et al. (ed.2000), pp. 65-73.

Diagram 4. 1, Linkages Between Informal Employment and Ill Health



Thus it can be understood that informal sector employment and ill health is associated through a variety of factors (Diagram 4. 1). Low economic opportunities of the workers from the informal employment affect their food intake and other expenditure of health and medical care. This increases their disease burden and chances of being ill. Low entitlements of the social determinants of workplace health such as less

control over own work and workplace, low levels of organisation make them work in unhealthy and exploitative working conditions. Similarly absence of proper occupational health safety measures increases their vulnerability to accidents and occupational health hazards. The stress due to work and pressure of retaining the employment is a potential factor of the psychologically stressful conditions and disorders associated with it. All these plunge the workforce in the informal sector to ill health.

In short, it can be inferred that informal sector employment and ill health is strongly associated. This association is manifested through workers being poor by working in the informal sector, low entitlement of social determinants of workplace health, physical and psychological work hazards and low levels of protection and enforcement of welfare. The association of informal employment and ill health is reported to be stronger for women than for men. It is mainly because of the large participation of women in the informal sector, mostly in the level of unskilled waged workers and unpaid workers, wage differential and decline in income, health and food security standards, low levels of organisations and compulsion to work in the unhealthy working conditions and their low levels of education and skills.

Informalisation of labour is reported to be increasing in the context of structural adjustment and economic liberalisation in India. It is discussed that informal employment is expanding in export-oriented sectors as a result of the trade policies such as trade liberalisation, export promotion and deregulation of labour. Export Processing Zones and Special Economic Zones are the evidences of this trend. Informalisation and its impact on health in these zones are examined in the context of the working and living conditions of the workers in the next chapter.

4 WORK CONDITIONS AND WORKERS' HEALTH IN EXPORT PROCESSING ZONES AND SPECIAL ECONOMIC ZONES

The informal export oriented sector has marked an expansion subsequent to the introduction of trade policies in India. Export oriented production in India is mainly taking place through sub-contracting in home-based settings and other unit based production centres. Export Processing Zones (EPZ) and Special Economic Zones (SEZ) have emerged as significant centres of export oriented production as a result of export promotion measures. EPZs and SEZs are established in India with the objective of export promotion and for increasing the foreign exchange reserve of the country through attracting foreign and domestic investors. This is also intended to generate employment, raise the living standards of the people and facilitate technology transfer and economic development. Role of these zones in contributing towards the foreign exchange reserve, technology transfer and economic growth of the country are not the scope of this study. Its role in employment generation and impacts on the living standards of the people are matters of concern of this study especially in the context of the nature of work, working conditions and the level of protection of the workers in these zones.

The previous chapter discussed that factors like wages, entitlements of social determinants of workplace health such as control over own work and level of organisation of workers, enforcement of labour standards and working and living conditions have significant role in determining the health of the people. It is also observed that in an informalised system of labour, wages are comparatively low and standards are absent and living and working conditions of the labour force is very poor. This chapter tries to examine these linkages between informalisation and ill health in the Export Processing Zones and the Special Economic Zones in India in general.

Export Processing Zones-A General Understanding

EPZ is defined as "a delimited geographical area or an export-oriented manufacturing or service enterprise located in any part of the country, which benefits from special investment-promotion incentives, including exemptions from customs duties and preferential treatment with respect to various fiscal and financial regulations". EPZs are established with the objective of fostering economic growth through industrialisation and export oriented production. With this objective export processing zones are generally engaged in production for the world market aiming foreign currency.¹ It encourages Foreign Direct Investment (FDI) by providing tax exemptions and incentives to the units set up in these zones for economic growth. Other considerations that push the governments to set up EPZs are foreign exchange earnings, upgrading of workers' skills and fostering of linkages between foreign and local enterprises and industries. Another rationale for establishment of EPZ is employment generation.

The establishment of export processing zones is fuelled in the developing countries by the need for change from import-substitution-industry to export-led industrialisation programmes.² EPZs have emerged as a significant element in the programme of industrialisation and sudden economic growth of several Asian countries in the past decades. Share of EPZs in employment generation is found to be varying from country to country. It is reported that in Mauritius EPZ programmes have contributed to the attainment of almost full employment in 1990s.³ Mexico, Dominican Republic, Egypt, Tunisia, Mauritius, Republic of Korea, China and Sri Lanka are the countries, which reported significant employment generation by the establishment of EPZs. Countries like Cameroon,

¹ Lee, E. (1984), "Export Processing Zones and Industrial Employment in Asia":- *Papers and Proceedings of a Technical Workshop*, Bangkok, ARTEP, p. 3.

² Ahmed, M. (1998), "Labour and Employment Conditions in Export Processing Zones, A Socio-Legal Analysis on South Asia and South Pacific", *Journal of South Asia and South Pacific Law-Working Papers*, No.3, Vol. 2.

³ Romero, A.T. (1996), "Export Processing Zone: The Social and Labour Issues" http://www.transnationale.org/anglais/sources/tiersmonde/zones_franches_epz_multi2.htm accessed on 22-03-03.

Kenya, Madagascar and Togo also have some positive results in terms of employment generation.⁴

It is notable that most of the employments in EPZs are feminised and their proportion in the workforce is higher than men. In many host countries the zones have made it possible for unpaid homemakers, women who are heads of households, those in the agricultural sector and schoolleavers with very few job prospects, find paid employment in industry.⁵ Employers have a strong preference for women production workers, since they are less organised and willing to work for lower wages and are less likely to press demands for better pay and working conditions.

Even though EPZs generates some employment for some sections it is reported that employment in these zones is highly casualised and informalised. Employment in many of these zones is contractual and wages are relatively low in most of the countries except countries like China. It is reported that minimum wages are not fixed for all categories of work by all the host countries. Working conditions in these zones are reported to be precarious and unhygienic in general because of the low enforcement of labour standards for reducing cost of production. Standards concerning normal working hours, shift work and overtime are not generally respected in the factories of EPZs. Normal hours of work and the working of double shifts are exceeded in a number of plants and reports of compulsory overtime are numerous. Casual workers, contract labour and workers with no job security because they have no written contract, feel constrained to work overtime and double shifts, even when such requirements become excessive.⁶ Another noticeable feature of EPZs in general is that the enforcement of Occupational Safety and Health measures are very little in many of these units. It changes from country to country depending upon the regulatory and enforcement mechanisms prevailing there. Enforcement of OHS norms and

⁴ Ibid, p.3.

⁵ Ibid, p.5.

⁶ Ibid, p.8.

safety-related concerns are usually enhanced by the setting up of well-functioning safety committees at enterprise level. In a number of EPZ enterprises such committees do not exist.

In precise it is observed that employment in EPZs is generally informal in nature and features like feminisation, casualisation and contractualisation of work are common in most of the EPZs in the world. All these increase the risk of ill health of the workers in these zones.

EPZs and SEZs in India

Export Processing Zones and Special Economic Zones are established in India to foster export growth. It has been envisaged as a rational response to take advantages of the economic liberalisation and trade reforms. Ministry of Commerce and Industry reports that EPZs and SEZs in India are established with the objectives of attracting foreign investment to the country, improving the foreign exchange reserve through export promotion, employment generation and technology transfer. With these objectives the Government of India offers many exemptions and incentives to the units in these zones to attract investment from both foreign and domestic investors. Excise duty exemption on import and export, income tax exemption and tax holidays, incentives for export of goods, bank loans at low rate of interest, infrastructure facilities like uninterrupted power and water supply, strategic location and market access and less labour regulation are some of them. At present there are four EPZs and three EPZs in India. These are Madras Export Processing Zone (MEPZ), Falta Export Processing Zone (FEPZ), NOIDA Export Processing Zone (NEPZ) and Visakhapatnam Export Processing Zone (VEPZ). The Kandla Free Trade Zone (KAFTZ) in Gujarat, Santa Cruz Electronic Export Processing Zone (SEEPZ) in Maharashtra, Cochin Export Processing Zone (CEPZ) in Kerala have been converted into Special Economic Zones through a notification issued on 1.11.2000. The private sector EPZ at Surat has also been converted into a SEZ. Besides that the Central Government has granted approval in principle to set up 13 SEZs in the country.

Units and Employment

Kandla Free Trade Zone (KAFTZ) is the first export-processing zone started in India. It covers an area of 700 acres and there are 12, 518 employees working in 98 units as per the estimations in 2001. (Table 4.1) There are 215 units operating in Santacruz Electronic Export Processing Zone (SEEPZ) and provide employment for around 40, 000 workers. In Noida Export Processing Zone (NEPZ), around 20, 000 employees are working in 137 units. Madras Export Processing Zone (MPEZ) provides employment for around 13, 000 workers through 100 units operating there. Cochin Export Processing Zone, Falta Export Processing Zone and Visakapatanam Export Processing Zone provide employment for around 5000, 2500 and 3300 employees respectively. The total operational units in all EPZs in the country as on September 2001 were 703, according to the Annual Report of the Ministry of Commerce. The number of persons directly employed in all the EPZs is around 80,000 as per government figures. But this includes only the permanent workers and those in the record books of the companies. If the contract workers and the thousands of others who are not entered in the record books are also included, the number will be far more.

Table 4. 1, EPZ Area, Units, and Employment in India as on 31.07.2001

Zone	Set up in	Area in Acres	Number of Units	Employment	Govt investment (Rs million)
KAFTZ*	1965	700	98	12518	269.3
SEEPZ*	1975	93	215	38525	487.7
NEPZ	1986	310	137	19937	660.9
MEPZ	1986	261	100	13171	542
CEPZ*	1986	103	52	4869	525.6
FEPZ	1986	280	80	2604	405.1
VEPZ	1994	360	21	3340	245.4
Total		2107	703	94964	3136

* Now designated Special Economic Zones

Source: Ministry of Commerce, GOI

The share of EPZs in organised manufacturing employment alone in India is less than 1 percent.⁷ The employment potential of Export Processing Zones in India is also found to be less when the growth of workforce over a period of 3 years is considered. Table 4.2 reveals that the Export Processing Zones could generate only 15, 187 additional jobs between the period of 1998 and 2001, which is less compared to the employment potential of countries like, Mauritius, Dominican Republic and China. Another thing is that the average number of workers per unit is decreased to 139 in 2001 from 150 in 1998. Job insecurity is a common feature of these zones because of the industrial sicknesses and competitions in the export markets.⁸ This implies that employment in these units are unstable and insecure and do not guarantee a stable growth of employment.

Table 4.2, EPZ Workforce for 1998 and 2001

Zone	Workforce 1998	Average number of workers per unit, 1998	Workforce 2001	Average number of workers per unit, 2001
KAFTZ	10000	103	12518	132
SEEPZ	32105	204	38525	179
NEPZ	14500	124	19937	150
MEPZ	17349	212	13171	137
CEPZ	4700	104	4869	106
FEPZ	1096	38	2604	33
VEPZ	27	7	3340	209
Total	79777	150	94964	139

Source: Annual Report, 2001, Ministry of Commerce and Industries, GOI

In precise, Export Processing Zones generate some amount of employment both directly and indirectly. In the context of the unemployment situation in India, this is not a considerable amount. Therefore it can be ascertained that the

⁷ CITU (2002), *Report on Export Processing Zones and their Workers in India, Conditions and Framework for Promotion of Social Dialogue*, p. 5.

⁸ Ibid.

objective of employment generation is not adequately fulfilled in the Export Processing Zones in India.

Workforce Composition

One of the characteristic features of the EPZs around the globe is the prevalence of the young women workers. Women of the age group of 20-25 years constitute almost 75 percent to 80 percent of the employment in the EPZs around the world.⁹ It is observed that Indian EPZs do not exactly follow the same trend. Table 4.3 reveals that female workers as a percentage of total workers are decreasing in all zones. It declined to 36 percent in 2001 from 48 percent in 1992. But in some zones like Madras Export Processing Zone and Cochin Export Processing Zone, the participation of female workers is high. The percentage of female participation was higher than male in the periods 1992 and 1997-98 in both MEPZ and CSEZ. It may be due to the higher number of 'female labour intensive' units such as ready made garments, perfumes, semi-precious stones, leather goods, stuffed toys, artificial flowers, video cassette manufacturing, precision rubber components etc and the higher educational and skill levels of women in these states. It is reported that single women are preferred in these units 'because they are more obedient. They work hard and do not get involved in union activity. It is also noted that young women from far from the zone area even from out side the state work in these zones. For example, in the MEPZ, around 30% of the workers are from Kerala and around 20% from Andhra Pradesh. The others are from Tamil Nadu. In the NEPZ, there are a large number of workers belonging to far off states like Tamilnadu, Kerala, Orissa and Bihar and other states.

It can be inferred from the work composition of EPZs in India that feminisation of labour is not so predominant and their participation has been gradually decreasing. Nevertheless, units like garment, gem, toys, lace and other lower

⁹ CITU (2002), *Report on Export Processing Zones in India, Experiences of Centre of Trade Unions in Organising Workers*, pp. 4-5.

work strata female employment is significantly high. In most of these units more than 90 percent are female employees.

Table 4.3, Male/Female employment in EPZs in India as on 31st October 2001

Zone	Male	Female	Total	Female workers as % of workers		
				1991-92	1997-98	2000-01
KSEZ	7985	4533	12518	47	31	36
SEEPZ	24763	13762	38525	48	36	36
NEPZ	15098	4839	19937	16	25	24
MEPZ	7104	6067	13171	60	70	46
CSEZ	2476	2393	4869	63	58	49
FEPZ	1595	1003	2604	36	37	39
VEPZ	2200	1140	3340	-	-	34
All zones	61221	33737	94958	48	42	36

Source: Ministry of Commerce and Industries, GOI

Social Profile of the Workers

It is observed that in most of the EPZs and SEZs, workforce constitutes migrant labourers from neighbouring states or rural areas or close suburbs of the city. In NEPZ, the vast majority of the workers are from rural areas of the state such as Uttar Pradesh, Bihar and Kerala.¹⁰ A survey of 204 women workers in the year 1997-98, revealed that the workforce in NEPZ were from 30 districts across eight states and most of them were rural areas. In MEPZ, workforce constitutes migrant labourers from other states like Orissa, Andhra Pradesh, Bihar and Kerala and the suburbs of Madras. In CEPZ, it is reported that the participation of workforce from the locality is very less and in most of the units labourers are from other districts such as Idukki, Kottayam, Alappuzha etc. In the latex processing and manufacturing units of CEPZ, unhygienic work such as cleaning of crump, which

¹⁰ CITU (2002), *Report on Conditions and Possibilities for the Promotion of Social Dialogue in the Noida Export Processing Zone*, p. 27.

involves long hour work in the filthy water is being done by the workers from the states like Bihar. Most of the workers are either migrated from other states or from rural and other suburban areas in other zones also.

Employers get advantage by appointing women workers and migrant labourers from other states and rural areas. The possibilities of union activities are low among this work force since they are from different areas and they speak different languages. This work force is also reluctant to join unions and form associations because of fear of lose of job, which is not affordable for the labourers who have come from far way places through sub-contractors. Employers also get advantage of low cost labour by appointing labourers from other states.

Industrial Migrant Workers (Regulation of Employment and Conditions of Services) Act, 1979 enforces that the migrant labourer must be paid the minimum wages set by the state where they are coming from for the same work they do in another state. This gives advantage for the employers of EPZs that workers from states like Bihar, Orissa and UP are required to be paid less wages than the wages prevailing in the states where EPZs are located for the same job. It is also notable at this point that the workers are paid only minimum wages as fixed the state governments where EPZs are working if the respective minimum wages are more than in their own states. It is reported that women working in the food processing units of VEPZ from Kerala get wages less than the minimum wages fixed by the Government of Kerala for this job. Thus the workforce in EPZs mostly is vulnerable sections like women from poor social and economic background, contracted labourers and children who have no scope of organisation and collective resistance. Factors such as anonymity, fear of loss of job and less awareness about labour rights restrict them from unionisation and it increase their possibilities of being exploited in these zones. Therefore employers have no pressure for retaining their labour force with social security and other benefits.

Wages of Workers

The wages received by workers vary from zone to zone and within zones. Sample surveys conducted by the Development Commissioners of various Export Processing Zones on the wages and working conditions of the labourers provide a comparison of wages existing inside and outside EPZ. It is reported that in some units of some zones wages are higher than the wages as compared to the industrial area outside the respective zone. (Table 4.4) In Kandla Free Trade Zone (KAFTZ), it is reported that out of 89 respondents interviewed from various units, 44 percent of them received wages higher than the wage existing for the same job outside the zone. 39 percent of the workers received wages equal to the wages outside the zone and 17 percent of them were found to be received wages lower than the outside workers. In SEI:EPZ, out of 94 workers interviewed 52 percent of them found to be receiving wages higher than outside workers, 33 percent equal to outside workers and 15 percent received wages lower than the outside workers for the same job. In MEPZ, out of 93 workers interviewed, it was found that 57 percent of the workers received the same wages as outside zone workers, 27 percent lower than the outsiders and 16 percent higher than the outside workers. In CEPZ also trend is somewhat same. Out of 45 workers interviewed, majority of them (60 percent) received wages equal to wages prevailing outside for the same job, 27 percent received wages lower than outside workers and 13 percent received wages higher than the outside zone workers. It is notable that in FEPZ, out of 13 workers interviewed all of them found to be receiving wages less than the wages received by the workers outside the zone for the same job. In NEPZ, out of 79 workers interviewed 62 percent of them received wage same as outside workers for the same job. 27 percent received wages lower and 11 percent received higher wages than the outside zone workers for similar job. The comparison of wages inside and outside the zones shows that almost half of the workers (47 percent) in EPZs receive wages equal to the wages of outside zone workers.

The overall picture from the reports of Development Commissioners of various zones on wages gives an assumption that wage structure in the EPZs more or less conforms to the market rates. It is found to be higher in SEEPZ and equal or lower in other five zones. However, it is important to note that these reports do not give any idea about wage differentials based on skill, gender and other sectoral compositions. So it is difficult to understand which segment of the EPZ workforce conforms to market wage rate. Another aspect, which is not clear, is that whether they are below minimum wages or not.

Table 4.4: Comparison between Wage Rates inside and outside EPZs

Zone	No. of Respondents	Wage Rates* (% of total)		
		Higher	Lower	Equal
KAFTZ	89	44	17	39
SEEPZ	94	52	15	33
MEPZ	93	16	27	57
CEPZ	45	13	27	60
FEPZ	13	0	100	0
NEPZ	79	11	27	62
Total	413	29	24	47

*As compared to industrial areas outside the respective Zones.

Source: Kundra, (1997) as given in CITU Report, p. 14.

The unit wise report of details of wages is not available. However, information about wages of women workers in the garment units of MEPZ and NEPZ are available. It is reported that the average wages received by these workers is around Rs. 800 per month.¹¹ It is less than the minimum wages fixed by the government of Tamil Nadu for garment industry, which is Rs. 1200 per month. It is also reported that MEPZ, workers are made to sign for around RS. 2000 per month as wages while they are paid only Rs. 800 to 1200 per month!² The

¹¹ CITU Report (2002), *op. cit*, f, No. 10, p. 16.

¹² *Ibid*.

average wage that the workers receive in NEPZ is reported to be Rs. 1200. It also reported that 80 percent of the NEPZ workers get less than minimum wages.¹³ In SEEPZ, 30 percent of the women reported to be received wages less than Rs. 1300 per month and remaining received less than 1600 with an average of not more than Rs. 1500 per month. Wages for young entrants are around Rs. 500-800.¹⁴

There is a significant share of contract labourers in these zones and most of them are not enrolled with the units. Employers normally release the salary of these workers to the contractors and they decide the salary of the workers. It is reported that in the garment export unit if MEPZ, majority of the workers are recruited by contractors and they receive a share of the salary of workers.¹⁵

It can be inferred from the above reports and observations that all categories of workers, especially women in the lower level do not receive salary equal to the salary existing outside zone for the same work. Though the respective state governments have fixed minimum wages for most of the industries in these zones, these have been found hardly implemented there.

It is also significant to look upon the cost of living of these workers in the light of wages they receive. It is already observed that majority of the workforce; in EPZs are from other states and far away places. All EPZs in India are situated near to the metropolitan and other big cities. Therefore workers of these zones normally stay in rented houses near to these zones. Salary of the worker is the principal source of income of the household for many of them. It is already seen that the average annual inflation of all commodities based on consumer price index rose to 11 percent during 90s from 6.7 percent in early eighties.¹⁶ This adversely affects their accessibility of food, medical care and other amenities. Since the wages of these workers are more or less to minimum wages and are not increased in

¹³ CWDS Survey as quoted in CITU (2002), *Report on Export Processing Zones and their Workers in India, Conditions and Framework for Promotion of Social Dialogue*, p. 27.

¹⁴ CITU (2002) *Report on Export Processing Zones in India, Experiences in Organising Workers*, P. 4.

¹⁵ Swaminathan, P. (2002), "Labour-Intensive Industries, But Units Without 'Workers'; Where will ILO's Social Dialogue begin?", Working Paper No. 168, Madras Institute of Development Studies.

¹⁶ See *Chapter.3*, p. 9.

commensuration with the general price increase of the commodities, it could be inferred that the risk of being poor and diseased is higher for these workers.

Unionisation and Organised Activities of Workers

It is a well-known fact that trade unions and organised activities of workers have been a pressure on employers and governments for their employment protection, enforcement of labour standards and social security. Since the nineteenth century, workers have organised in trade unions and parties to strengthen their efforts at improving job conditions, working hours, wages, job contracts, social security and health and safety.¹⁷ In the present context of labour market flexibilisation, employment largely shifts from formal to informal situations. In informal working conditions, labourers are less likely to form organisations as they are highly scattered, sub-contracted and have fear of loss of job.

Article 19 (Right to Freedom of Speech and Expression) of the Indian constitution ensures the right to every citizen to form and join associations.¹⁸ The ILO convention No. 87 ensures every worker the freedom of association and protection of right to organise and Convention No. 98 ensures right to organise and collective bargaining. Nevertheless, it is observed that unionisation and organisation of workers is found to be marginal in the EPZs of India. It is found that out of 4869 workers of 52 units in CEPZ around 700 workers have membership in trade unions such as CITU and INTUC.¹⁹ The exact number of employees who have membership in trade unions in other zones is not available.

Unionisation of workers in EPZs and SEZ are found to be hindered by many factors. All EPZs and SEZs have been declared as 'public utility services' under The Industrial Dispute Act, 1947, which imposes restrictions on the right of the workers to initiate collective action in the form of strikes.²⁰ It is also found that

¹⁷ Johnson, Mauri and Partanen, Timo (2002), "Role of Trade Unions in Workplace Health Promotion", *International Journal of Health Services*, Vol. 32, No. 1, pp. 179-193.

¹⁸ Article 19, Part III, The Constitution of India (Fundamental Rights).

¹⁹ As reported in the report presented by CEPZ workers union at the National Conference of EPZs workers at Visakapatnam, October 2002, p. 3.

²⁰ Section 2 (n), (ia), (ii), (iv), The Industrial Dispute Act, 1947.

policy implementations by some of the states Governments like Maharashtra, Andhra Pradesh, Gujarat and Karnataka limit the unionisation and trade union activities in the zones of these states. The Maharashtra Special Economic Zone Act, 2002 permits union activities in the zones on certain conditions. First condition is that not more than one trade union can be set up for each unit in each zone. Second condition is that the participation of the workers in the trade union must be more than 50 percent. Thirdly, the policy directs that all members and office bearers of the union must be the employers of the same unit.²¹ The Trade Unions Act, 1956 and The Maharashtra Regulation of Trade Unions and Prevention of Unfair Labour Practices Act, 1947 are not applicable in the Zones of Maharashtra by this policy. The Policy of Government of Andhra Pradesh on Special Economic Zones excludes outsiders from becoming office bearers of a trade union.²² Similarly policy of Gujarat²³ and Karnataka²⁴ governments for Special Economic Zones also do not allow more than one union in a zone and exclude outsiders from becoming the office bearers.

These policies reflect that unionisation is not encouraged in EPZs and SEZs in India. Clauses such as 'permission for single union', 'participation more than 50 percent etc. seem to be limiting unionisation. In these zones, where labourers are from different areas, speaking different languages, it may be impossible to register a unit with more than 50 percent of workers' participation.

Apart from these government regulations, the strategic location of the zones and the tight security and customs protection prevailing there prevent the interaction and organisation of workers. The experience of a trade union in organising the workers of zones reports, "zones are called enclaves and union organisers are

²¹ Please see The Maharashtra Special Economic Zone Act, 2002, <http://www.kandlasez.com/maharashtra.htm>, 20 June, 2003.

²² Please see Annexure A (7) of Govt. of Andhra Pradesh's Policy on SEZ, 2002, <http://www.kandlasez.com/andharapradesh.htm>, 20 June, 2003.

²³ Please see Policy of Govt. of Gujarat on SEZ, 2002, <http://www.kandlasez.com/gujarat.htm>, 20 June, 2003.

²⁴ Please see Policy of Govt. of Karnataka on SEZ, 2002, <http://www.kandlasez.com/karnataka.htm>, 20 June, 2003.

not allowed inside, only the workers with proper identification are allowed. Workers of different units inside the zones are prevented from interacting with each other. Security checking is needed for the entry and exit of workers and visitors in the zone. The zone authorities also discourage workers' attempt to form organisations because of the apprehension of losing investors".²⁵

Another reason for the low level of unionisation in these zones is the fear of employees of losing their job. Women and contract labourers who mostly constitute the workforce in the zones cannot afford loss of jobs as most of them have obligations to their contracts. It is reported that a strike at a Computer Parts Export Company in SEEPZ resulted in the arrest of around 1500 workers and the dismissal of around 150 among them. Similarly in a Shoe Manufacturing Company in NEPZ, around 50 workers were dismissed immediately after the formation of the union.²⁶ The diversities of the workforce in terms of education, language etc are also limit their interaction among themselves and reduce the scope of organisation.

Thus it is found that organised activities of workers, which is an important element of collective resistance against exploitation, are not significantly carried out in these zones. This makes an atmosphere conducive for the employer to flexibilise the enforcement of labour laws and standards and impose low cost production strategies such as low wages, low social security entitlements and long working hours. This also enables the employer to hire the labour, fix wages and dismiss them without any compensation whenever he/she needs.

Enforcement of Labour Laws and Labour Standards

Labour legislations of Government of India and of the respective States, where EPZs and SEZs are located are applicable in the zones. Factory and labour laws such as The Factory Act, 1948, The Minimum Wages Act, 1947, The Industrial Dispute Act, 1947, Industrial Migrant Workers (Regulation of Employment and

²⁵ CITU (2002), *EPZs in India, Experience of Centre of Indian Trade Unions in Organising the Workers*, p. 13.

²⁶ Ibid.

Conditions of Services) Act, 1979 etc. are some of the Central Acts applicable. Besides, core conventions of ILO²⁷ such as Forced Labour (No. 29), Equal Remuneration (No. 159), Abolition of Forced Labour (No. 156) and Discrimination (Employment and Occupation) (No. 128), ratified by India are also applicable to these zones.

In addition to that some of the State Governments have formulated their own policies for the administration and regulation of labour standards of Special Economic Zones. The Maharashtra SEZ Policy reveals that The Industrial Dispute Act, 1947 is not fully applicable in the zones in Maharashtra.²⁸ Section 9 A of IDA is not applicable for the zone. Acts such as The Contract Labour (Regulation and Abolition) Act, 1970, The Trade Union Act, 1956 and The Maharashtra Reorganisation of Trade Union and Prevention of Unfair Labour Practices Act, 1947 are not applicable for this zone.²⁹ Govt. of Karnataka has some directives in their policy of Special Economic Zone pertaining to labour regulations in the zones. As per this policy, the powers of the Labour Commissioner, Govt. of Karnataka, shall be delegated to the designated Development Commissioner or other authority in respect of the area within the SEZs.³⁰ All industrial units and other establishments in the SEZs will be declared as 'Public Utility Service' under the provisions of the Industrial Disputes Act. As per the SEZ policy of the State of Gujarat, the powers of the Labour Commissioner, Government of Gujarat shall be delegated to the Development Commissioner in respect of the area within the SEZs and all industrial units and other establishment in SEZ will be declared as public utility services.³¹ The SEZ Policy of Govt. of Andhra Pradesh delegates power of Labour Commissioner to the Development Commissioner of the

²⁷ India has ratified 4 Conventions out of the 8 core Conventions of ILO.

²⁸ Please see The Maharashtra Special Economic Zone Act, 2002, <http://www.kandlasez.com/maharashtra.htm> 20 June, 2003.

²⁹ Ibid.

³⁰ Please see Policy of Govt. of Karnataka on SEZ, 2002, <http://www.kandlasez.com/karnataka.htm>, 20 June, 2003.

³¹ Please see Policy of Govt. of Gujarat on SEZ, 2002, <http://www.kandlasez.com/gujarat.htm>, 20 June, 2003.

respective zones and all the units in the zones are given public utility status³². SEZ does not require Environment Impact Assessment (EIA) approval as per this policy directive. There are some exemptions for The Minimum Wages Act, 1948 such as maintenance of registers and records³³ and fixing hours for normal workdays.³⁴ Publication of working time, wage rate and shift working under The Industrial Employment (Standing Orders) Act, 1946 is exempted for the zones³⁵

Other states such as Kerala, Orissa, Uttar Pradesh and Tamil Nadu, where EPZs and SEZs and are located have not enacted any laws specially for these zones yet. (Up to January 2003). These states follow the existing laws and regulations pertaining to labour standards. The administration and regulation of EPZs and SEZs are under the Ministry of Commerce and Industry, Government of India. Matters like labour regulation and grievance redress come under the jurisdiction of the Development Commissioners³⁶ of the respective zones. Labour Commissioner or the Development Commissioner of the zone is the authorities responsible to ensure the enforcement of labour laws and standards in these zones.

Some information regarding the enforcement of labour standards and labour laws is available from the reports of inspection of Development Commissioners of various zones. (Table 4.5) The report of the inspection carried out in the 48 units of Noida Export Processing Zone in 1998 revealed that 1148 workers out of 8085 employed in these units were found to be absent in the role. They were not entitled to receive any benefits such as minimum wages, paid leave, bonus PF etc.

³² Govt of Andhra Pradesh's Policy on SEZ, 2002, <http://www.kandlasez.com/andharapradesh.htm>, 20 June, 2003.

³³ Section 18, The Minimum Wages Act, 1948.

³⁴ Section 13, The Minimum Wages Act, 1948.

³⁵ See ANNEXURE A Labour Framework for SEZ, Amendments to The Industrial Employment (Standing Orders) Act, 1946, Policy of Govt. of Andhra Pradesh.

³⁶ In India, labour law administration falls within the purview of state governments except for railways, mines etc for whom a Central Industrial Relations Machinery is located in the Central Government's Ministry of Labour. By empowering the Development Commissioners to deal with industrial disputes, departments of Labour from both state and centre have been effectively excluded from the EPZs.

970 workers in the various units of NEPZ were paid wages less than the minimum wages fixed. All units inspected were found to be registered under The Factories Act in NEPZ. Out of these, only ten factories got its standing orders (formal service contract) certified. In MPEZ, where the inspections was held from 8th.to 10th October, 1998 by the Development Commissioner, it was reported that minimum wages were not enforced in many of the garment units. Wages for overtime was also not reported to be paid. Some factories were found to have night shifts for women. Out of the sixteen factories inspected in MEPZ all were found registered under Factories Act.

In VEPZ, where the Development Commissioner inspected five units on 10th October 1998, reported that only one Company out of five got its standing orders certified. The State Labour department found irregularities in many units. The Development Commissioner who inspected the KAFTZ reported that the garment and plastic industries units in this zone were not paying minimum wages for employees. In CEPZ where seven units were inspected, it was found that the employees were not paid minimum wages in all these units. In SEEPZ where twelve electronic units were inspected by the Development Commissioners, six of them were found paying less than minimum wages to its employees. Eight units in this zone were found to engage contract labour.

Table 4.5, Details of the Special Inspection of EPZs units by the Development Commissioners

Zone	Inspection	Report
NOIDA EPZ	21 st to 24 th September, 1998	48 units inspected. All registered under Factories Act. 1148 workers out of 8085 employed (1444 women) were found to be not on the rolls. 970 cases of less payments. 10 factories with certified Standing Orders.
Madras EPZ	8 th to 10 th October, 1998	16 factories inspected, all registered under the Factories Act. Some found with valid certificates from Authorised Medical Practitioners. Monthly wages regularly paid. In certain garment industries, some were paid less than entitled overtime. Some factories have obtained exemptions to engage workers beyond the normal working hours. A crèche is provided & maintained by the Export Promoters & Manufactures Association for women workers on payment of subscription. Some violations in respect of canteen & restroom detected.
Visaka-patnam EPZ	10 th October, 1998	5 units inspected covering 908 employees. One had got its standing orders certified. 2 units not yet operational. Action initiated by the state labour dept. wherever irregularities detected.
Kadla Free Trade Zone	15 th to 16 th October, 1998	99 units with 8,650 workers, Many units especially in the garment and plastic industries were not paying minimum wages. Some units have provided transport facility but charging Rs.400 to 500 per month and will be deducted from salaries of workers. An amount of Rs. 2,47,143 has been disbursed to 671 workers under the Minimum Wages Act during the preceding 12 months.
Falta EPZ	-	21 units in existence, State labour department is enforcing labour laws through normal schedule of inspections.
Cochin EPZ	13 th to 18 th May, 1998	37 units with total labour force of 4990 in existence, 7 units inspected. In all the inspected units, non-payment of minimum wages detected. However, the officers of the State Government have not filed any case for non-payment. The violations have been brought to the notice of the Commissioner (CEPZ) and he has been requested for rectification of the irregularities noticed by the State labour inspectors.
Santa Cruz Electronic EPZ	9 th and 10 th February, 1999	Trade Union leaders associated during the inspections. 12 electronics units inspected. Workmen range from 8 to 1,396. 6 units were paying less than minimum wages. Irregularities pertaining to non-maintenance of registers also detected in some other units. 8 units had engaged Contract labour and irregularities detected. All except one establishment have been implementing Payment of Wages Act. Regarding some of the other laws, enforcement is done through normal schedule of inspections.

Source: Report of Development Commissioners as given in CITU report P. 13.

The official reports of the Commissioners of the zones reveal that irregularities like contract labour, low wages, forced night shift without double wages etc are prevailing in these zones. The unofficial reports by the trade unions also confirm this finding. The report of the Centre of Indian Trade Union on Export Processing Zones in India, which was presented at the Mexican Conference on EPZ in 2002, reveals that infringement of labour laws and standards such as forced over time, absence of social security, absence of paid leaves, night shift for women without transportation facilities and absence of grievance redress etc are occurring in large numbers. The report³⁷ more specifically notes that workers are forced to work late with a compulsory over time for two to three hours. In the garment and other labour intensive units of the zones, workers are paid their monthly wages only if they achieve their target set by the employer. The report also reveals that in many units Provident Fund (PF) is deducted from the wages and is not deposited in their accounts. The workers at many places do not get paid leaves. Women do not get maternity leave, as most of them do not have ESI facilities. So women generally lose their job if they get pregnant.³⁸

In short, it could be inferred that enforcement of labour laws and labour standards are not adequately fulfilled in these zones. The workers in many of the EPZs and SEZs are denied the basic rights enjoyed by other organised sector workers such as minimum wages, workmen's compensation, paid leave maternity benefit etc. by the over protection of these zones.

Working Conditions and Health Hazards

It is well-established that working conditions have a significant place in the workplace health. Factors such as level of organisation and collective resistance, interaction with co-workers and management, measures for occupational safety and health etc. are important determinants of workplace health. It is already discussed that workers in EPZs and SEZs are less entitled with these

³⁷ CITU (2002), *op. cit.*, f. No. 25 p. 15.

³⁸ *Ibid*, p. 6.

requirements. Therefore, there is an intrinsic risk of being exposed to poor working conditions and health problems for these workers. It is reported from the MPEZ that “workers are forced to work long hours with out adequate benefits such as extra wage and leave. Minimum Wages Act is not implemented in many of the units in MPEZ. Sanitary facilities are inadequate in many of the units and there are restrictions for using toilets. The employers give tokens to women workers tokens, which are used by sixty members on rotation to limit the use of toilet. Other benefits such as maternity leave, PF and ESI facilities are not given to contract labourers.”³⁹

A study by Swaminathan (2002) among the women workers of a garment unit in MEPZ confirms this observation. She reports that workers are assigned large targets like stitching of 800 pieces a day. If the person is unable to complete the given target she has to work over time and complete it. For many of the workers it leads to reduction of salary. They even skip their meals because of the pressure of meeting targets.⁴⁰

Garment unit workers of MPEZ are reported to be developing disease like respiratory problems such as Asthma, prolonged cough and other upper respiratory infections.⁴¹ Problems such as piles, ulcer, headache etc are also found among the workers due to the sedentary nature of work and unusual diet. Garment industry is one of the major industries in MEPZ and NEPZ and mostly employs women. Many diseases are prevalent in the garment industry. Improper ventilation is a problem in almost all the units. Respiratory disorders are prevalent among majority of workers. They are caused due to inhalation of the fine polymer fibres, which is used in the inner lining of the jackets. These respiratory disorders include asthma, long lasting cough, breathlessness etc. This is particularly seen in ironing section where women have to iron heaps of clothes standing in awkward positions.

³⁹ CITU, MPEZ (2002), *Report Presented at the All India EPZ's Union Convention at Visakapatnam* on 29 June, 2002, p. 3.

⁴⁰ See Swaminathan . P. (2002), *op. cit. f. No. 15*, P. No. 26.

⁴¹ *Ibid*, p. 29.

The employers provide no safety equipment. Only when prospective buyers visit the unit are the workers provided with some masks in the garment-manufacturing units. But after the visitors leave, the masks are taken back. A case from Swaminathan's study quoted here gives more reflection about the health risks of garment units in EPZs.

" I was a sticher in a garment unit in MPEZ for six years. I got piles and it became very serious. I cannot sit on floor at all. The doctor advised me to stop working on the stitching machine and take on some other job. A lot of people have respiratory problems by inhaling the dust from the fabric. Many of them got Asthma and tuberculosis. A lot of people have piles. Many of them have skin problems, dandruff, falling hair, knee pain swelling and eyes problems. Sometimes while stitching, the needle pokes the skin and it becomes septic. Since we are continuously bent over to stitch, we develop neck and back pain. We consume contaminated water and usually suffer from cold, cough and problems like typhoid. We do not get time to take food properly and skip breakfast everyday to reach the unit on time. It caused stomach problems and ulcer. We have stomach ache and weakness during periods as we work without breaks".

Source: Swaminathan (2002), P. 30.

It is reported from NEPZ that 80 percent of the workers get less than the minimum wages, 49 percent are not covered by health insurance or provident fund and 42 percent do not either have earned or casual leave.⁴² More than 51 percent of the workers reported that they are always under the extreme pressure to meet the production target set by the employers. Workers in the garment factories of NEPZ reported to have their target doubled from 300 to 600 pieces per worker per day without any additional payment and apart from that their health is affected by lack of implementation of health stipulations.⁴³ In the latex glove factories in NEPZ for instance, workers are continuously exposed to noxious fumes and no protective mask are provided for them. This has caused chronic bronchial illness to many.⁴⁴ In the heavy engineering industries of MEPZ and

⁴² Centre for Women's Development Survey (CWDS) as quoted in CITU (2002) *Report on Conditions and Possibilities for the Promotion of Social Dialogue in the NOIDA Export Processing Zone*, p. 17.

⁴³ *Ibid*, p. 18.

⁴⁴ *Ibid*, p. 20.

NEPZ, heat is a big problem. Workers perspire heavily, losing salt and water from their bodies. Due to heavy work pressure of work, they do not take adequate quantities of water. Salt tablets are not available. Dehydration of workers is common in these units. Other problems include heat stroke, heat rashes and some gastro intestinal problems due to consumption of contaminated water.⁴⁵ In a freight container-manufacturing unit in MEPZ, there is no safety department as such and the personnel department handles the matters regarding health and safety.⁴⁶ The workplace is very hot and dusty and there is no proper ventilation. The major problem is with the welders, as they have to wear heavy protective equipment to protect their eyes, hands etc. During welding operations the workplace becomes very hot. The management says that fans cannot be provided because they might lower the temperature and welding may not be of the requisite standards. The other problems include rashes due to heat, minor injuries due to falls etc.

Accidents are common and are both minor and major. Minor accidents include minor falls, cutting and bruising, fingers getting trapped in the machines and minor injuries due to splash of chemicals etc. Compensation as per the legal provisions is not paid.

In one of the Electronic Switch manufacturing unit, in MEPZ, in the manual electroplating unit, workers heat hydrochloric acid in a bath up to 950C. Ventilation in that unit is very poor and one can feel the noxious fumes of the acid from a distance.⁴⁷

Discussion

The major objectives behind the establishment of EPZs and SEZs are export promotion, generation of foreign exchange reserve and employment generation. It is imperative to examine how adequately they serve these objectives. The report

⁴⁵ CITU (2002), *Export Processing Zones in India, Experiences of Centre Of Indian Trade Unions In Organising Workers*, p. 11.

⁴⁶ Ibid, p. 12.

⁴⁷ Ibid, p. 14.

of Controller and Auditor General, 1998 remarked that performance of these zones are very poor in terms of increasing foreign reserve.⁴⁸ According to this report, there had been an under assessment of tax and loss of revenue amounting to Rs. 4108.23 crores in 1996-97.⁴⁹ It is also reported that during the period 1991-92 to 1996-97, the foreign exchange outgo on import made by EPZ units and customs duty forgone amounted to Rs.16, 461 crore, while export against these were Rs. 13, 563 crores. On the basis of this CAG reported pointed out that EPZ scheme is not viable and cost effective.⁵⁰ This questions the overprotection given by the Government to these units in terms of tax exemptions on imports, income tax exemption for five years, high standard infrastructure facilities and market access and public utility service status. It is observed from many zones that the enterpriser in these units avail all these benefits from government for five years and close off the unit after that. The same unit will be started in some other zones in another name. It is also seen that the share of these zones in employment generation is not found significant. The number of workers employed per unit in these zones is lesser than other factories and it normally ranges from 33 to 209. Therefore employment potential of these units is not significant.

The wage system and the working conditions in the units of these zones are found to be highly exploitative. There are reports of prevalence of higher, equal and lower wages in these zones compared to the wages outside the zone for the same work. Problems such as high targets, overload, long working hours, lack of

⁴⁸ The CAG report said of the 513 functional units and 160 closed units; records relating to 167 functional and 139 closed units were tested, which revealed a duty shortfall of Rs 1,897.25 crore, besides interest costs of Rs 1,045.32 crore. Sixty-six units, which have completed five years of commercial production, did not achieve the export obligation/value addition prescribed, and the duty recoverable from them was Rs 1,766.73 crore which includes interest of Rs 694.44 crore. Of these, 14 units recorded negative value-addition on which duty recoverable with interest was Rs 951.39 crore. In 15 units the shortfall exceeded 50 per cent, of which duty recoverable with interest amounted to Rs 461.86 crore. The report also said that the audit of the records of the customhouses and commission rates of customs revealed underassessment and loss of revenue of Rs 1,164.25 crore. For Details see CAG Report (1998), No. 10.

⁴⁹ Ibid.

⁵⁰ CAG Report, 1998 as quoted in CITU (2002), *Export Processing Zones and their Workers in India, Conditions and Framework for Promotion of Social Dialogue*, p. 10.

facilities such as hospitals, insurance, canteen etc are found to be prevailing in many of the units of all these zones Implementation of labour standards and enforcement of labour laws are not adequately fulfilled as per the reports of the Development Commissioners and trade unions in these zones.

Workers are forced to work in hazardous and filthy working conditions in many of the units. Many of the industries in these zones do not have a well-defined health and safety policy. Since all the industries are totally export oriented ones, the entire emphasis is on minimising production costs and to keep the prices competitive in the international market. Providing safe and healthy environment for the workers is perceived as escalating the overhead expenses. Workers are also not aware of the protective measures that they are to be provided as per the international standards for health and safety. Many of the workers do not use protective measures like mask and gloves as they find it lower their speed to meet the huge targets. Another thing is that getting work is more important to them than the work conditions. Even where the unions exist, workers are too afraid to speak about the health hazards in the work place for fear of losing their jobs.

In short, it can be inferred that employment in EPZs and SEZs are highly informal and casual. The intrinsic risk of health of informal sector employment is found to be affected with this sector also. The powerlessness of employees, due to the low level of organisation and lack of collective resistance and absence of protection of labour rights, plunge them into informal working conditions and health hazards. The evidences from export processing zones ascertain that export promotion endeavours do not produce any significant impacts for the economic growth, employment generation as expected. In spite of that it has some adverse effect on the working and living conditions of workers because of less regulations and absence of protective mechanism. In effect though it provides employment opportunities for a limited number of people, the health risks associated with the employment in these zones do not compensate it. Next chapter tries to cross check these observations pertaining to employment and ill health in EPZs and SEZs by analysing the employment situations and working and living conditions of labourers in a garment unit in Cochin Export Processing Zone.

5 INFORMALISATION AND ILL HEALTH: LINKAGES IN A GARMENT EXPORT UNIT, COCHIN SPECIAL ECONOMIC ZONE

This chapter is an attempt to examine the findings of the previous chapters regarding informalisation of labour and health. It merges from the discussion that there is an expansion of export oriented manufacturing sector subsequent to the introduction of economic liberalisation and trade policies in India. This expansion has led to larger informalisation, casualisation and feminisation of labour in this sector. This trend is visible in the informal sector and reported to be contributing to the expansion of informal export oriented manufacturing. It has been discussed in the previous chapters that there is a strong link existing between informal employment and ill health, which is strengthened through factors such as low wages and poor working and living conditions, occupational health risk factors, low levels of unionisation, lower social and employment protection and less regulation of labour standards in this sector.

It is observed that these linkages are strong in the EPZs and SEZs, which have emerged recently as the hub for fostering export growth, and have an impact on the health of the workers. Though units in EPZs and SEZs are formally registered under The Factories Act, informal and casual employment is found to be prevailing in most of the units in these zones. All characteristic features of informal sector such as low enforcement of labour standards, absence of collective resistance and collective bargaining, low wages, long working hours and lack of social security entitlements and employment protection are reported to be prevailing in these units. These are perceived as the potential risk factors of ill health of the labourers due to their lower socio economic entitlements and powerlessness and diminished control over the working system in their working environment. These factors are often translated into their exploitation at the

workplace and exposure to physically dangerous and psychologically stressful working conditions.

This chapter analyses the observed linkages of informal employment and ill health particularly in the EPZs and SEZs by studying a garment unit in Cochin Special Economic Zone (CSEZ).

Cochin Export Processing Zone: An Overview

Cochin Export Processing Zone (CEPZ) was established in 1986 under the Ministry of Commerce and Industry, Govt. of India. This has been recently converted as Special Economic Zone (SEZ) through a notification issued on 1.11.2000 by the Ministry. This is situated in a strategic location, five kilometres away from Kochi, the industrial and commercial capital of the State of Kerala and around thirty kilometres away from the International Airport and Seaport. The zone comprises 103 acres of land and a built-up area of around 600, 000 square feet. This is a multi-product zone and there are fifty five industrial units including electronic hardware and software, engineering, biotech, food and agro-products, garments, latex gloves, ceramics and wood processing.¹ The enterprisers here are offered incentives and concessions such as fast track clearance from all agencies including from the environmental angle, permission for even 100 percent Foreign Direct Investment (FDI) in SEZ infrastructure projects such as integrated townships, airport and seaport development, ten years income tax exemption and duty free imports or duty free purchase from Indian sources of all infrastructure-related materials.²

Some of the workers from Leela Lace International Ltd., a garment-manufacturing unit in CSEZ were selected to cross check the observed linkages of export promotion, casualisation informalisation and feminisation of work and its consequences for health of the workers. Leela Lace International is a garment export unit, which exports ready-made garments to their clients in Europe.

¹ As reported by the unit.

² Ibid.

Production in this unit is completely export oriented and their major client is Wal-Mart, an International Brand. Wal-Mart outsources the production to this unit in CSEZ by supplying the materials (mostly fabric). Works, involving the production of the garment such as sorting, cutting, cleaning, stitching, ironing, packing and checking that need large number of skilled and unskilled labour are being done in this unit.

This industrial outsourcing from developed countries to the developing one is the trend which started after the trade and export promotion policies of the Govt. of India. This gives significant financial benefits for these units and their clients in terms of reducing their cost of production. The lower cost of production in terms of availability of skilled workforce at low costs is the rationale behind this outsourcing. The garment manufactured in this unit is sent back to the client and sold in the international market under the brand name WalMart.

Thus there is a clear link of industrial outsourcing from developed countries and contractualisation of production, which has evolved after the introduction of trade liberalisation, found to be existing in this unit. The workers are also integrated to the world market by working in this unit.

There are around 500 workers, of which 95 percent are women, working in different sections in this unit.³ All the workers up to the level of supervisors in this unit are girls between the age of eighteen and twenty eight. Of these 42 workers were interviewed and two case studies were done to get an understanding of the working conditions and risk factors of workers' health.

General Profile of the Workers

All the workers who had been interviewed were women between the age 18 and 26. Among them 95 percent (40) were unmarried (See table 5.1). Leela Lace prefers to appoint unmarried women as they have less liabilities of home compared to married women like household activities and child rearing and are generally

³ As reported by the management and workers of Leela Lace International, CEPZ, Kakanadu.

willing to work for lesser wages. The possibility of getting involved in employee's union activities is also less among them.

Majority of the workers interviewed were found either educated up to secondary level or higher secondary level. Some of them were found educated up to the level of graduation. All of them (N=42) were technically trained for various jobs associated with the garment manufacturing like tailoring, packing and checking. It was found that the percentage of women employed in Cochin and Madras zones are higher compared to the other zones in India.⁴ In the Cochin SEZ, this could be due to better availability of trained and educated women workers compared to other zones. Moreover, industry like garment manufacturing is more female labour intensive.

The workforce in this unit is mostly from the neighbouring districts of Ernakulam where CSEZ is located. It was noticed that none of the workers interviewed were found to be from within a surrounding of 20 km of the zone. (Table 5.1) Majority of the workers (more than 95 percent) were from other districts such as Kottayam, Alappuzha, Trissur and Idukki. It was reported that more than 70 percent (30) of the workers were from a distance of 30-50 km away from the zone. Seven workers were from 50-70 km away from the zone and some were from more than 70 km away from the zone. These workers are staying in rented houses near the zone. It was found that an average of 5-6 members stay in a single room. Only one respondent was found to be coming for work from her own home.

⁴ See Chapter 4. p. 7

Table 5.1, General profile of the workers (N=42)

			Frequency	Percentage
1	Marital status	Married	2	4.7
		Unmarried	40	95.3
2	Education	Up to Secondary	18	42.8
		Senior Secondary	20	47.6
		Graduation	04	9.6
3	Living Arrangement	Own home	01	2.3
		Rented House	41	97.7
4	Distance to Own Home	20-30 Km	02	4.7
		30-50 Km	30	71.5
		50-70 Km	07	16.6
		More than 70	03	7.2

Employment Details

It was found that majority of the workers interviewed (32) were recruited directly by the employer (Table 5.2). Some of them (10) were recruited through agencies, which charged a months salary from them as commission. Sub contracting of labour was not a practice in this unit. All these workers interviewed were casual labourers and were not given appointment letters. It was reported that, the employer retains the workforce at least for three years, normally till they get married. Almost all the respondents (37) have been working in this unit for 0-2 years. The employees themselves leave the job after some years due to various reasons such as marriage, chronic health problems etc. Therefore the employee turnover is high in this unit.

Employment in this unit is found to be cumbersome for married women. They find it difficult to work nine hours a day, starting from 8. 30 in the morning to 5.30 in the evening. On certain days the working hours exceeds to ten to eleven

hours a day. Since married women have extra responsibilities at their home, it is difficult for them to adjust with these timings.

Though household responsibilities are less for unmarried women than married, they also find it difficult to adjust with the long working hours in the unit. They have to work six days a week. It becomes fifty four hours of work in a week in normal conditions, which is higher than the normal working hours regulated under the Factories Act, which is forty eight hours a week. Under certain circumstances this becomes fifty four to sixty five hours a week.

It was also found that the workers get only one day in a week to rest. They go home only in special occasions or festivals when they get leave. The workers reported that their interaction with their families have been badly affected with this work schedule of the Company. They also complained that they get limited time for recreation and socialisation.

Table 5.2, Employment Details, (N=42)

No			Frequency	Percentage
1	Recruitment	Direct	32	76
		Through Agency	10	24
2	Nature of work	Casual	42	100
3	Period	0-1 year	25	59.5
		1-2 years	12	28.5
		2-3 years	05	12
4	Working days	6 days in a week	42	100
5	Working hours	8-30 to 5.30		

Wages and Living Conditions

Government of Kerala has not fixed minimum wages for garment industry. (Up to June 2003) It enables the employer to take the freedom to fix the wages as per his/her norms. Wages are normally fixed in the unit depending upon the nature of job, level of skill and experience of the worker. There are differences found in

the wages as reported by the Company and the workers. (See Table, 5.3) The wages for cutters as reported by the Deputy Manager of Leela Lace, is Rs. 1200 to 1, 800 where as it is Rs. 1050 to 1600 including Provident Fund as reported by the workers in the cutting section. Similarly there are considerable discrepancies in wages between the official report of the Company and actual wages received by the workers in this section. As per the Company records, wages of stitchers range from Rs. 1200 to Rs.1 800, but the actual wages received by them range from Rs. 1050 to Rs.1650. In the section like ironing and packing there is a difference of Rs. 100 in the minimum salary and a difference of Rs. 400 in the maximum salary between the wages reported by the Company and the workers. It is noted that the workers who have been working for even three years are not paid maximum salary as reported by the Company. Similarly significant wage differences were found between the Company reports and actual wages for checkers and helpers.

All these convey that there is no regulation of wages in this unit. This is prevailing mainly due to the freedom given by the Government for the employer to implement their own wage structure by not enforcing minimum wages for garment industry. Moreover, the wage structure as per the official reports of the Company more or less conforms to the market rates. Therefore, the intensity of exploitation is not exposed.

Table 5.3, Wages as reported by the DGM and Workers

Section	Wages as reported by DGM		Wages reported by the workers	
	Minimum (Rs.)	Maximum (Rs.)	Minimum (Rs.)	Maximum (Rs.)
Cutting	1200	1800	1050	1600
Stitching	1200	1800	1050	1650
Ironing	1100	1600	1000	1200
Packing	1100	1600	1000	1200
Checking	1100	1600	1050	1500
Helpers	1100	1500	1050	1250

The wages are paid monthly for the workers. There were no reports of delay in payments. Though wages are not based on the piece rate, there are daily targets for workers in each section, set by the Company, which is to be fulfilled by the workers at the end of the month. Salary will be deducted if they do not meet the set target at the end of the month.

Even though workers know that they do not get reasonable wages for their work, they do not bargain for higher wages because of various reasons. The reason that maximum number of workers pointed out for not bargaining was fear of loss of job. (Table 5.4) The Second important reason reported by maximum number of workers was that there was no scope of bargaining since the wages were fixed by the management. Reasons such as lack of time and ignorance regarding the wage structure were reported as third and fourth significant reasons for not bargaining for higher wages. It can be inferred from this information that the most significant reasons for absence of bargaining for higher wages are fear of loss of job, which was reported by all the respondents interviewed and the employer's power to fix the wages, which was reported by thirty five respondents. The significant finding here is that, except ten workers, all others had good knowledge about the wages of their job and the corresponding wages in the market. The powerlessness and lack of collective resistance hinders them from bargaining for better wages.

Table 5. 4, Reasons for not bargaining for better wages , (N=42)

No	Reasons	No. of responses	Rank
1	Fear of loss of job	42	1
2	Wages are fixed	35	2
3	No time	22	3
4	Ignorance about wages	10	4

Among these workers interviewed 18 (42.3 percent) of them have reported that salary of the present employment was the principal source of income of their family. Income from present employment was reported to be the supplementary

income of the households of the remaining 24 respondents (57.7 percent). Monthly salary of the workers in this unit is found to be varying between Rs. 1050 to 1650.⁵ Workers' whose principal source of income is this salary, manage their household needs and other expenditure like education of children, clothing and medical care of the family members with this income. The case of a stitcher in this unit gives an idea about the living conditions of these workers.

Case-I

Ms. L. has been working in the stitching section of Leela Lace for one and a half years. She is from Cherthala in Alappuzha district, which is more than 50 km away from CSEZ. She is staying in a rented room with some of her friends. Her family at Cherthala comprises five members, including her mother and three sisters. She is the eldest among the four sisters. Two of her sisters are studying in the school. Her mother was a coir worker and now unemployed because of the poor condition of the coir industry in Kerala.

She started her job in Leela Lace with an initial salary of Rs. 1050. Gradually it was increased to Rs. 1400. The entire family is dependent on her income, which she sends by money order every month, for the household expenditure and education of her two younger sisters. Her mother and one sister do some work at the locality mostly household works, which is not of permanent nature. Her personal expenditure in a month comes around Rs. 700, including room rent, food, travel and other expenses. She sends remaining Rs. 700 to her home every month. When the family has to meet additional expenses like books and fees for school going children, medicine etc they borrow money. She sends this money by adjusting her personal expenditure. She reported that three of her sisters and her mother suffer from problems of anaemia due to malnutrition. The expenditure of her four members family at Cherthala on food is said to be between 400 and 500 only. They buy rice at the subsidised price from the ration shop (PDS shop). They mostly take two meals a day.

⁵ Please see Table 5.3, p. 7.

She has to adjust her personal expenditure to balance the overheads of her family expenditure. She ignores her health problems such as leg pain, swelling of knees and problems such as chronic headache, deteriorating her health day by day. She is not sure about how long she can continue work with these problems.

Food Accessibility and Intake Pattern

All the workers, except one, interviewed from this unit were reported to be buying food grains and other food articles from the open market. They spend an average of Rs. 350 per month on food. They take three meals a day, which sometimes is reduced to two or even one because of workload. Nobody was found to be bothered of spending more money for getting nutritious food items as they find it expensive. They cut short their meals to reduce the cost of living. They mostly take rice as the principal meal.

There are considerable differences found in the food intake pattern of these workers in working days and holidays. Most of them reported that they skip at least one meal a day because of the tight work schedules. Sometimes they miss two meals a day. In holidays they take three meals on time. Many of them developed problems related with digestion and ulcer due to this unregulated food intake.

Working Conditions

Labourers in this unit work continuously for nine hours a day without not more than half an hour intervals. The workers have to report at the workplace by 8.30 in the morning. First break is at 10 o'clock for tea for thirty minutes. Lunch break is half an hour between 12 and 1.30. It is different for different sections. Many of the workers reported that they do not normally have their food in the fixed time due to heavy workload and for many of them it sometimes leads to skipping of the meal. It is normally difficult to complete the dining in 30 minutes. Nevertheless, they manage to complete it in the stipulated time. Most of the workers reported to have developed problems like ulcer, gas trouble and other digestion problems due to this unusual practice of diet.

The atmosphere in this unit is dusty due to the dust particle associated with the fabric. Many of the workers were reported to have respiratory problems due to the continuous inhalation of dust for long time. All the respondents reported that cold and cough was a regularly recurring problem for them. No cases of extreme respiratory problems such as asthma and tuberculosis were found among the workers interviewed. However, the workers reported a case of a worker who left the job due to asthma. The Company has provided mask for the workers, but they hardly use this as they found it diminishing their speed.

There are possibilities of injuries and accidents such as needle pricks, finger injuries, burning etc. in the stitching, cutting and ironing sections of this unit. Stitchers were reported to be suffering from needle pricks frequently, which sometimes found to be septic. Accident associated with cutting section is mostly finger injuries. Workers in this section cut the fabric in high speed motorised machine and a moment's carelessness lead to injuries. There were cases of finger injuries and loss of fingers in this unit. Similarly workers in the ironing section were found to be prone to burning injuries.

Work in some of the sections like stitching and packing involves, long sitting. Workers in these units continuously work in this posture for long hours. Many of them in these sections were reported to have problems like piles, backache and chronic headache. Workers in other sections like checking, ironing etc. were not reported with such problems. Management does not take care of the medical expense of the workers who meet with accidents at the work place. Workers, normally, do not give much attention to the minor accidents like needle pricks, burning and small injuries.

Facilities such as canteen, toilets, drinking water etc. were found to be provided for the workers at the unit. But there were restrictions on the use of these facilities. Other facilities such as clinics, grievance redress bodies, crèches etc were not provided for the workers. The working condition in this unit was found to be unsatisfying for all of the workers who were interviewed. They stick to these

units as they find it as their source of income and livelihood. Once they lose the job, finding of another one is normally difficult for these women. Therefore they tolerate the exploitations and health hazards and adjust with the working conditions. The case of a girl who has been working in the checking section of this unit gives some insights into the working conditions and health risks of the workers.

Case-II

Ms. S. is working in the checking section of Leela Lace. She is twenty two years of age. She is from Kattappana in Idukki district, which is more than ninety km away from Kakanadu, where the zone is located. She is staying in a rented room, two km away from the zone with five of her co-workers.

She has to work six days in a week, with a minimum of nine hours a day. Her work starts from 8.30 in the morning and ends by 5.30 in the evening. The checking section in this unit is with the packing section and around one hundred people working in a hall, where these two sections are operating. The hall is highly congested and she has to work in the sitting posture without the movement of legs for a long time. In her words "it is like legs chained to the table and the movement is virtually impossible as workers sit very closely amongst the garment". This sedentary nature of work, in the dusty and poorly ventilated atmosphere brought about many health problems for her. After a year of work, she has developed backache, and severe leg pain and gradually leg, especially the upper feet started swelling. She reported that she works, even in the extreme state of pain to reach her targets. She has to check 275 to 300 pieces a day, which requires utmost speed and care. She was also reported to have problems like frequent recurring of cold and cough.

She is working always on stress and pressure as a single mistake causes the rejection of the piece and her job as well. She has to ensure everything as per the standards of the client. The pressure of meeting the target is also there. A simple mistake from her part is suicidal for her. She says "I am not getting proper sleep

because I am worrying about my job". She is said to have developed chronic headache mainly because of this pressure. She has limited interaction with the co-workers at the workplace because it invites the scolding of the supervisor. All these make her uncomfortable both physically and mentally. For her, worksite is an unpleasant place, and the only reason that she is still working there is to support her family.

The case of this worker gives some understanding about the working conditions of the unit. The minimum standards prescribed by ILO regarding space per person at the work place is not found to be satisfied in this unit. The workers are closely packed in a hall where they have limited scope of movement. It is a part of the strategy of the management to avoid loss of time and take out maximum of their work.

Disease Pattern and Health Seeking

All disease problems found among the workers in this unit are related with their occupation. Disease problems, reported by the respondents apart from injuries and accidents were piles, ulcer, gas trouble and other stomach problems, chronic headache, frequent cough and cold and swelling of the knee and upper feet. (Table 5.5) Among these reported disease problems, headache ranked first. All the respondents were reported to be suffering from chronic headache. Frequent cough and cold and backache came second with 40 cases. Third important disease problem that was reported by maximum number of respondents was gas trouble and other stomach problems. Problems such as swelling of knee, ulcer and piles came fourth fifth and sixth in the order of prevalence as reported by the workers. When closely analysed it was found that problems such as headache, backache, cold and cough and gas troubles were commonly prevailing among the workers. This could be due to the problems at the workplace such as dust, pressure of workload and unusual diet that were common for all workers.

Piles and swelling of knee and upper feet were found to be occupation specific. All the five cases of piles were reported among stitchers and checkers, who work

in the sitting posture for a long time. Similarly swelling and leg pain were also reported among stitchers and checkers. Another significant finding is that all the respondents were reported with multiple disease problems of which some were headache, backache, cough and cold or stomach problems.

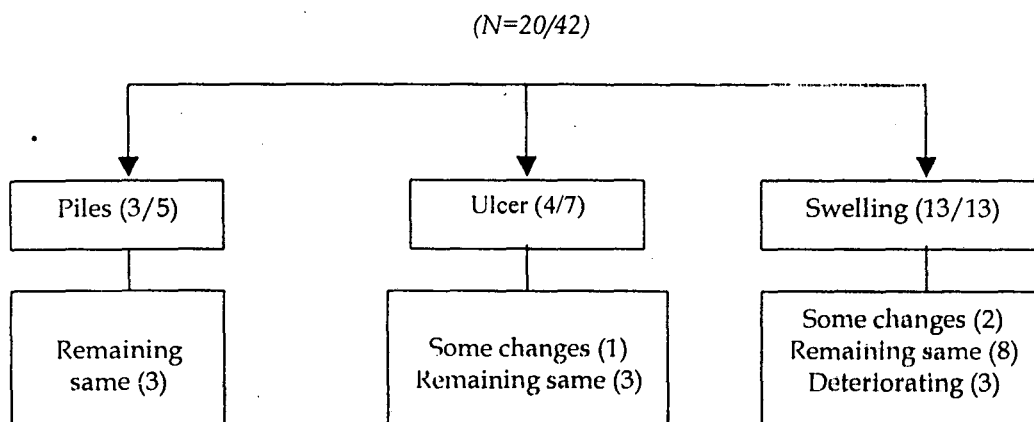
Table 5.5, Disease problems as reported by the workers , (N=42)

No	Disease	Number	Rank
1	Piles	05	6
2	Ulcer	07	5
3	Gas trouble/ stomach problems	36	3
4	Headache	42	1
5	Cough and Cold	40	2
6	Backache	40	2
7	Swelling of knees and feet	13	4

Among these workers, who were reported with various disease problems, majority were not sought treatment. (See diagram 5.1) Workers with problems such as piles, ulcer and swelling, were reported to have taken treatment. It is also notable that all those affected with these problems have not taken treatment. Out of five workers reported with piles, three of them have taken treatment for some period of time. Out of these three one has undertaken allopathic system of medicine for some period of time and defaulted and two others followed ayurvedic treatment. All of them reported that the problem was remaining same for them. These people could not continue their treatment because of various constraints such as time, leave and expenditure. Out of seven respondents reported with ulcer, four of them have undertaken treatment. All of them followed allopathic system of medicine and one was reported to have some positive changes. The situation was reported to be remaining the same for the other three. Out of thirteen respondents who were found to be suffering from problems of swelling of knee and pain of legs, all sought treatment. Out of this

two of them have some positive changes and for eight of them the disease situation was remaining same without significant changes. Disease situation was found to be deteriorating for the remaining three. It was found that most of the workers in this unit, normally, did not pay much attention to disease problems they met with. Those who have undertaken treatment could not continue it in many occasions. Therefore, for most of them disease problems were found to be remaining same or deteriorating. Since these problems are associated with their occupation, they always prone to its consequences and treatment become ineffective. For patients with piles and ulcer, regulation of food habit or change of job was the only remedy suggested by the doctors, which was impossible for them in their present situation.

Diagram 5.1, Details of diseases, treatment taken and present conditions



Those who were reported with problems such as headache, cold and cough, backache, stomach problems etc did not take any specialised treatment from a medical practitioner. Loss of wages, fear of loss of job, lack of money and indifference towards the disease were the major causes reported by the respondents for not talking treatment. (See table 5.6) Among these, loss of wages, lack of money and fear of loss of job were the reasons reported by maximum number of respondents. All the respondents found loss of wages was their major constraint in seeking treatment. Since they work six days in a week (Monday to

Saturday), they have to take leave to go to hospital. If they take more than two leaves they would lose one-day salary. Therefore, normally, they do not take treatment in hospitals for most of the common diseases. Forty respondents, out of forty two, reported that lack of money was a major constraint for them for not taking the treatment. Thirty eight respondents reported that fear of loss of job was a factor restricted them from taking treatment outside. According to them "if we start the treatment we have to continue till it gets cured. By that time we will be jobless". Some of them were found to be neglecting their disease problem because of the above mentioned constraints. They reported that they usually go for 'their own treatment' for these diseases.

Table 5.6, Reasons for not taking treatment , (N=42)

No	Reasons	Number	Rank
1	Not taking seriously	05	4
2	Loss of wages	42	1
3	Fear of loss of job	38	3
4	Lack of money	40	2

It was seen that among the forty respondents, who were found with recurring cold and cough, nobody sought treatment from a medical practitioner. The situation was found to be deteriorating for twenty four respondents out of them. (Table 5. 7) The problem was found to be remaining unchanged for the remaining sixteen. The condition was found to be deteriorating for all the forty respondents who were reported with backache because of lack of proper treatment. All the respondents who had been reported with chronic headache the situation was found to be remaining same for them because of lack of adequate care. Three out of seven respondents, who had been reported with ulcer, were not found to be taking treatment from a medical practitioner. The situation was found to be deteriorating for one respondent and remaining same for the other two. Similarly the situation was found to be unchanged for all the thirty six respondents who

were reported with gas and other stomach troubles. It is found that the disease problems of the workers, who have not taken any treatment, are either remaining unchanged or aggravating.

Table 5. 7, Present condition of diseases of workers who have not sought treatment , (N=42)

Disease	No. of workers	Present conditions (Number)		
		Some change	Remaining same	Deteriorating
Cold & cough	40	0	16	24
Backache	40	0	00	40
Headache	42	0	42	00
Ulcer	03	0	02	01
Stomach problems	36	0	36	00
Piles	02	0	00	02

The workers were found to be in a state of 'dilemma' because they lose their job if they go for treatment and their problem will aggravate if they do not take the treatment. Both will lead to the termination of their job. Thus workers become diseased and unfit for any employment after three four years of employment in these units. It was found that majority of the termination of jobs in these units were on medical grounds. The management neglects this problem and does not give importance to the benefit of the workers. Workers also do not bargain for better wages because of fear of loss of job and there is no pressure from their side through collective activities. Moreover, the management will get labourers easily because of the large supply of cheap labour in the market. Therefore the Company does not retain these workers with additional benefits and incentives.

Level of Organisation of Workers

Workers in this unit do not belong to any trade unions. There were hardly any organised activities found in this unit. Therefore these workers cannot lobby for better wages and benefits. Extremes forms of exploitations such as termination

from the job without proper notice and compensation, long working hours without adequate wages etc were reported to be prevailing in this unit. Workers do not question any of these practices because of fear of loss of job. Union activities of the existing trade unions are not covered in this unit, mainly because of the indifference from the workers. Women, who constitute the workforce, do not take initiatives to form union. Another thing is that they are strictly warned by the management against forming unions. As per the report of the workers, statutory benefits like minimum wages, workmen's compensation, maternity benefits, paid leave etc are not provided for the workers. They recollected that a worker who lost her two fingers in a cutting machine had not been given any compensation or even the expenditure of her treatment. It is clear from this that lack of unionisation in this unit leads to the non-enforcement of labour laws and labour standards and exploitation of workers on a large scale. The labour commissioner, who is authorised to inspect the units and settle the dispute in the Cochin Special Economic Zone (CSEZ), has not conducted any inspection during the last three years.

Discussion

This garment export unit in CSEZ is a typical example of the changing pattern of employment in the formal sector in India after the introduction of trade policies. Development such as outsourcing of production from the developed to the developing countries is followed by the introduction of these policies. Government of India, by the introduction of trade policies such as export promotion, trade liberalisation and deregulation of labour gave way to labour market reform through flexibilisation and dismantling of labour laws for gaining from international industrial outsourcing. Though it helped to get some business from the foreign clients, labour market reform and the resultant flexibilisation of labour led to the informalisation of labour. Similarly developments such as casualisation and feminisation of labour have evolved on a large scale. Impact of these changes is found visible in this garment export unit of CSEZ that was selected for cross checking.

The overall picture of the EPZs and SEZs regarding the work composition gives an indication of casualisation of labour force. Most of the employees in these zones are contract labourers without any written agreement with the enterpriser. This is found to be true for the unit where the cross checking is done. There are many episodes of retrenchment of workers without proper notice and compensation in this unit. Nevertheless, female employment is higher in this unit, which is found to be declining in EPZs and SEZs in general. All employees up to the level of supervisors were female casual labourers between the age of eighteen and twenty eight. Another finding regarding the composition is the high prevalence of inter-state migrant workers in this unit. Though this is reported in many other unit of CSEZ, inter-state migrant workers are not found in this unit. However, the workforce in this unit is mainly from the rural areas of neighbouring districts of Ernakulam, where the zone is located.

The living arrangements of the workers as it is reported generally are found to be true in this case also. The workers all over in these zones stay in congested rented houses near to the city since they are from far away places. Similarly in this unit, majority of the workforce found to be staying in rented rooms with an average of five members in a single room.

The working conditions of the workers in the EPZs and SEZs as a whole were reported to be unsatisfactory. The enforcement of minimum standards of work and labour laws such as occupational and health, facilities such as crèches, canteen, hospitals, toilet facilities, maternity benefits, minimum wages, compensation, bonus etc were found to be prevailing and weakly enforced in many of the units. In this garment export unit of CSEZ, facilities such as crèches and hospitals, benefits such as maternity benefit, compensation and double wages for overtime is not found.

In many of the states where EPZs and SEZs are located the minimum wages are enforced for maximum number of industries. The problem was found with the enforcement of minimum wages. The over all picture of these zones reveal that

workers get wages more or less conform to the market rates. But the notable thing is that minimum wages are not adequately enforced in all the working conditions. In Kerala, minimum wages for garment industry has not been enforced yet. Therefore in this unit wages are fixed by the enterpriser with his/her standards and norms. There was a considerable discrepancy between the actual wages and the wages as reported by the management in this unit.

Piece rate system is found prevailing in most of the units. Workers normally have a target, which is set by the employer. The payment is done on the basis of its achievement. In Leela Lace payment is not found to be done on the basis of piece, but they have daily and monthly targets and a fall in achieving the same lead to the reduction of leave and subsequently to termination of employment.

In the EPZs and SEZs, it is found that the salary of workers is the principal source of income of many families in general. In this unit, most of the workers who were interviewed, (42.3 percent) their salary is the principal source of the income of their family. In normal case salary of workers in EPZs and SEZs ranges between 800 and 2500. Workers whose principal source of income is this salary, expenditure of the entire family is to be met with this amount. This gives the impoverished and deprived picture of the workers in this sector. Similarly the workers in this unit are also living under the constant threat of malnutrition and disease problems.

The work in the units of these zones involves physical deterioration and mental stress due to long hours, huge target and exposure to polluted environment. The enterpriser does not give importance to occupational health of the workers and there is no policy for occupational health and safety in many of the states. In this unit all workers interviewed were reported to be suffering from physical ailments and stress and related diseases. This ranges from acute problems like cough and cold to chronic problems like pile and ulcer. Occupational health hazards like finger injuries, burning, needle pricks etc were reported in this unit.

In addition to that stressful conditions such as pressure of workload, pressure of retaining job and stresses due to diseases were reported with many workers. Inadequate food intake and unusual diet due to their poor access to food and tight work schedule found to be increasing their vulnerabilities to ill health. Financial access to medical care is also found to be less for all the workers interviewed. The social determinants of workplace health such as control over the working system, freedom of expression, interaction with co-workers, equity and fairness and level of organisation were also found less entitled to these workers.⁶

It was seen that workers in this unit have no control over their work. Workers in this unit, like most of the workers in the zones do not belong to any unions and they have no platform for collective resistance and bargaining against the exploitation. Recruitment of labourers, fixation of wages, setting of target and their termination are entirely the complete freedom of the employer and the workers have no role in any of these things. Similarly the chances of healthy interaction of workers are found to be very limited for these workers because of the rush work and the close monitoring by the authorities. Equity and fairness in terms of reasonable wages, provision of facilities such as hospitals, crèches and statutory benefits is absent in this unit. Workers have no freedom of expression of their rights because of the employment insecurity. Absence of organisation of workers is also found to be increasing their vulnerability to exploitation.

Enforcement of labour standards and labour laws are very weak in many of the zones. It is mainly due to the privileges of these zones like public utility status and direct control of the Ministry of Commerce and Industry, Government of India. The Development Commissioner is the authority responsible for the administration and settling of labour disputes. In some other states Labour Commissioner is the competent authority for it. The inquiry conducted by the Development Commissioners and Labour Commissioners of various zones reported large scale violation of labour standards and labour rights in many of

⁶ For details regarding social determinants of health, please see *Chapter, 3*, pp. 14-16.

the zones. The Deputy Labour Commissioner of Ernakulam, who has the charge of CSEZ reported that he has not conducted any inspection in the zone due to the pressure exerted by the enterprisers over the administration and the Government.

All the characteristic features of informalised labour were found to be present in this unit. Feature like overtime without payment, absence of enforcement of minimum wages and labour standards, lack of facilities such as crèches, hospitals, etc were prevailing in this unit. Workers were also disorganised in this unit. Thus the employment in this garment export unit was found to be feminised, casual and informal. All these factors were found to make the workers vulnerable to ill health. Thus it is found from all dimensions of health implications that employment in this garment export-processing zone is adversely affecting the health of the workers.

CONCLUSION

This study, "informalisation of labour and its implications for health", has attempted to explore the linkages between informal working conditions and ill health in the present context of labour market reforms and expansion of informal sector in India. The basic research problem of this study is whether informal working conditions, which have been followed by economic reforms recently, have an impact on the health of the workers in this sector in India. This has been reviewed mainly based on the living and working conditions of the labour force in the informal sector in general and in the export processing zones in particular. Findings of this review are crosschecked with the situation prevailing in a garment export zone in Cochin Special Economic Zone.

Informal working conditions have always been associated with ill health since the time immemorial. There are number of evidences in history reinforcing this association. It is found that informalisation is mainly followed by economic transition. Transition from agriculture economy to industrial capitalism in Europe, which was followed by larger informalisation, supports this observation. Similarly significant policy changes are also found to be facilitating the process of informalisation of labour.

Informalisation of labour has increased sharply in all parts of the developing and developed world during the last two decades. This general trend of informalisation is due to the macro changes such as economic and trade liberalisations and shift from import substituted growth to export promotion, which have occurred recently. This is followed by some developments such as international division of labour, industrial outsourcing of manufacturing from developed to the developing world and change of production bases of the lower end manufacturing of the big Companies to the third world.

The consequences of these changes are found to be different in different countries. In India, policies such as trade liberalisation, export promotion and deregulation of labour market facilitated the inflow of outsourcing of employment from the developed countries. These policy changes also accounted for the expansion of informal sector in India in many ways. Major impacts of these macro policies were on the formal sector in India. The disinvestments policies and subsequent privatisation of public sector companies resulted in the massive retrenchment of workers from the formal sector. This workforce is absorbed in the informal sector. Export oriented industrial production, which has showed an expansion recently is mainly carried out through sub-contracted and home-based productions, which are informal in nature. It has significantly added to growing informal sector in India. Employment generation due to this expansion of informal economy is negligible as whole mainly because; in most cases job losers in the formal sector take over the job in informal sector. Nevertheless, some sectors like export oriented manufacturing industries in the informal sector show some increase in employment generation. But this is limited to the urban centres only.

This trend has brought about significant changes in the employment pattern and labour market structure. Labour market flexibilities, in terms of hiring labour, fixing their wages and firing them has made even formal sector employment informal. The labour market structure witnessed a reshuffling due to these developments. Sub-contracting and work outsourcing has led to the casualisation of work. This also increased the participation of women in the labour force. The opportunities from these developments and the falling family income of the retrenched male workers due to the downsizing and closure of formal sector jobs pushed more female workers into these sectors.

Expansion of export oriented industries and informalisation of labour is not found significantly contributing to the increase of wages of the labour force. Though some sectors like manufacturing, construction etc marked some increase in wages it was not found in commensuration with the general increase in the

price levels. The Workers are getting wages far below the respective minimum wages set by the state in many informal sectors. The wage differential between men and women is also found to be increasing or remaining the same. It is also found that the incidence of poverty is increasing in the households of informal sector workers.

Another noticeable thing is that the State regulation in terms of enforcing labour laws is absent or relatively low in these sectors. Most of the informal sector industries are not providing social securities measures and adequate labour standards for the work force. This increases the hardships of the labourers and makes them vulnerable to health hazards. The workers in these sectors are less organised due to the scattered distribution and fear of loss of jobs. It is found that in many of these sectors trade union activities are very limited. This limits their bargaining power and collective resistance against exploitations.

Thus informalisation leads to exploitation of the labour force in many ways. The precarious nature of work prevailing in these sectors plunge the work force into health hazards. The low level of income, absence of health care facilities and lack of social security measures increase the health burden of the work force.

Informal sector employment and ill health are found to be strongly associated in the entire informal sector in general. This association is manifested through workers being poor by working in the informal sector, low entitlement of social determinants of workplace health, physical and psychological work hazards and low levels of protection and enforcement of welfare. There are also some gender differences in this association. The association of informal employment and ill health is reported to be stronger for women than for men. It is mainly because of the large participation of women in the informal sector, mostly in the level of unskilled wagedworkers and unpaid workers, wage differential and decline in income, health and food security standards, low levels of organisations and

compulsion to work in the unhealthy working conditions and their low levels of education and skills.

Linkages of informal employment and ill health are found to be existing in the export processing zones and special economic zones in India. The major objectives behind the establishment of EPZs and SEZs are export promotion, generation of foreign exchange reserve and employment generation. But it is found that these zones are not adequately fulfilling these objectives. The report of Controller and Auditor General, 1998 remarked that performance of these zones are very poor in terms of increasing foreign reserve and pointed out that EPZ scheme is not viable and cost effective. This questions the overprotection given by the Government to these units in terms of tax exemptions on imports, income tax exemption for five years, high standard infrastructure facilities and market access and public utility service status. It is observed from many zones that the enterpriser in these units avail all these benefits from government for five years and close down the unit after that. The same unit will be started in some other zones in another name.

It is also seen that the share of these zones in employment generation is not found to be significant. The number of workers employed per unit in these zones is also lesser than other factories. Therefore employment potential of these units is not significant.

Features such as informalisation, feminisation and casualisation of employment are found to be prevailing in all most all the EZPs and SEZs in India. This is found to be true for the unit where the primary study was conducted. The overall picture of female employment in these zones is found to be decreasing. But in the unit, which has been taken up for cross checking, it is found that labour is highly feminised.

The wage system and the working conditions in the units of these zones are found to be highly exploitative. There are reports of prevalence of discriminating

practices of wages in these zones compared to the wages outside the zone for the same work. Minimum wages are implemented by the respective states where the zones are located for most of the industries. The major problem was found with the enforcement. Problems such as high targets, overload, long working hours, lack of facilities such as hospitals, insurance, canteen etc are found to be prevailing in many of the units of all these zones. Implementation of labour standards and enforcement of labour laws are not adequately fulfilled as per the reports of the Development Commissioners and trade unions in these zones. This is found to be true in the garment export unit in CSEZ.

Workers are forced to work in hazardous and filthy working conditions in many of the units. Many of the industries in these zones do not have a well-defined health and safety policy. Since all the industries are totally export oriented ones, the entire emphasis is on minimising production costs and to keep the prices competitive in the international market. Providing safe and healthy environment for the workers is perceived as escalating the overhead expenses. Workers are also not aware of the protective measures that they are to be provided as per the international standards for health and safety. Many of the workers do not use and are not encouraged to use protective measures like mask and gloves as these lower their speed to meet the huge targets. Another thing is that getting work is more important to workers than the work conditions. Even where the unions exist, workers are too afraid to speak about the health hazards in the work place for fear of losing their jobs.

It can be inferred that employment in EPZs and SEZs are highly informal and casual. The intrinsic risk of health of informal sector employment is found to be affected with this sector also. The powerlessness of employees, due to the low level of organisation and lack of collective resistance and absence of protection of labour rights, plunge them into informal working conditions and health hazards. The evidences from export processing zones ascertain that export promotion endeavours do not produce any significant impacts for the economic growth,

employment generation as expected. In spite of that it has some adverse effect on the working and living conditions of workers because of less regulations and absence of protective mechanism. In effect, though it provides employment opportunities for a limited number of people, the health risks associated with the employment in these zones far outweigh this benefit.

Thus informalisation of labour in the Indian context is found to be negatively impacting for the work force in this sector in terms of their living and working conditions and health. The situation prevailing in the EPZs and SEZs affirm this finding.

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8. Details of Wages

Present wage	Wage at the time of joining

9. How much was your income from the current job in the previous month?

10. Do you bargain over the wages you receive [Yes/No]

11. If 'no', why?

- 1) No time 2) No knowledge of wages 3) Wages are fixed
4) Fear of losing Job Others (specify)

12. What is the average number of working days in a month?

13. How many months in a year you get work?

14. How long have you been working here?

15. Will you get this job once your contract is over? [applicable to contract and scheduled workers]

V. Working Conditions

1. Are you provided with any of the following safety measures at your work place?

a) Mask [Yes / No]

b) Gloves [Yes / No]

c) Any other (specify)

2. Had there been any episodes of accidents in your section? [Yes / No]

3. If yes how did it happen?

4. What are the risks of accidents in your unit?

5. Do your employer take care of the medical expenses [Yes / No]

6. Do you have the following at your work site?

Facilities	Yes / No	Present Condition
Canteen		
Clinical Facilities		
Grievance Redress Body		
Crèches		
Drinking Water		
Toilets		
Others (Specify)		

VI. Social Security

1. Do you get any of the following benefits from your employer?

Insurance [Yes / No]

Bonus [Yes / No]

Pension Scheme [Yes / No]

P.F

[Yes / No]

Compensation for medical claim [Yes / No]

Compensation on losing job [Yes / No]

Others (Specify)

2. Are you a member / beneficiary of any organization [yes/No]

3. If yes

Organisation	Member [Yes/No]	Name of organization
Trade unions		
NGOs		
Voluntary organizations		
Others (specify)		

4. Do you receive any of the following type of assistance from them?

a) Loans [Yes/no]

b) Training [Yes/no]

c) Lobbying for higher wages [Yes/no]

d) Health care [Yes/no]

e) Educational support for children [Yes/no]

f) Others (Specify)

g) Grievances redress

VII. Food Accessibility

1 Place of purchase of food grain/oil etc.

1) PDS shops 2) Open market 3) Co-operative shops 4) Other

2 If purchasing from PDS.

What all items are you purchasing from PDS.

3 Is your family income sufficient to meet the food requirements of your family? [Yes/no]

4 If 'No' what are the other alternatives [specify]

5 Pattern of the food intake of your family [please tick]

Items	Daily 2 items	Once in a Day	Sometimes	Never
Rice				
Starch food				
Other than rice				
Vegetables				
Pulses				
Fruits				
Milk				
Meat				

Fish				
Egg				
Others				

6. How many times did you and your family members take meals yesterday?

Person	Once	Twice	Three times	Didn't Take
Respondent				
Spouse				
Parents				
Children				
Siblings				

7. Can you roughly say the total family expenditure on food last Month?

VIII. DISEASE PATTERN AND HEALTH SEEKING

1) Have you suffered/been suffering from any of the following acute illness during last month

Fever [Yes/no]

Cough [yes/no]

Gastroenteritis [Yes/no]

Typhoid [Yes/no]

Others (Specify) [Yes/No]

2) How many days have you suffered/have been suffering from the illness

3) Have you sought treatment [Yes/no]

4) If 'No', why, please give reason

Not taking seriously

Loss of wages

No hospitals/Clinics at the vicinity

Fear of loss of job

Lack of money

Others

5) If yes, where did you seek treatment?

Public health centres/Government hospitals

Private clinics/hospitals

Residence of the Govt. Doctor

Charitable hospitals

Others (Specify)

6) Reasons

Less expensive

Near the place of residence

Fast recovery

Others (specify)

7) Were you hospitalised? [Yes/no]

8) If yes, for how many days?

9) No. of working days and amount of Wages lost due to medication/hospitalisation last month:

No of working days:

Wages:

10) Expenditure of hospitalisation/Non hospitalised cases of acute illness last month

Particulars	Amount
Fee & Medicine	
Clinical Tests	
Room rent (if hospitalised)	
Service Charges	
Bribes (if any)	
Transport	
Others	

11) Have you suffered /been suffering from any of the following chronic illness?

Anaemia

Arthritis

Asthma

Cancer (All forms)

Diabetes

Heart Diseases

Hyper tension

Rheumatism

T.B.

Piles

Others (Specify)

Nothing

12) Are you taking treatment [Yes/no]

13) If the answer is 'No' or 'Discontinued' please give reasons:

14) System of treatment taking (Sought)

a) Allopathic

b) Ayurvedic

c) Siddha

d) Yunani

15) Present situation

a) Recovered

b) Recovering

c) Deteriorating

d) No significant Change

16) How often do you consult the doctor?

a) Once in a week

b) Once in a fortnight

c) Once in a month

- d) Once in Three Months
- e) Rarely
- f) Never

- 17) How much did you spend for your treatment last month?
- 18) Have you had any accident at your work place [Yes/no]
- 19) If 'yes', did you get any assistance from your employer for the treatment?
- 20) What are the major health problems you face at your work place?

IX. BEHAVIOURAL PATTERN

- 1) How many hours do you sleep in a day?
 - a) Working Days ----hrs
 - b) Holidays-----hrs.
- 2) Do you have any of the following habits?

Habits	Regularly/ daily	Often	Rarely	Never
Smoking				
Chewing Tobacco				
Snuff				
Consumption of Alcohol				