COMPETITIVENESS AND LABOUR STANDARDS IN SPECIAL ECONOMIC ZONES: A STUDY OF COCHIN SPECIAL ECONOMIC ZONE

Thesis submitted to the

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

in partial fulfillment of the requirements for

the award of the degree of

DOCTOR OF PHILOSOPHY

in

ECONOMICS

Under the Faculty of Social Sciences

By

ANUPA JACOB

Under the supervision of

Dr. MARTIN PATRICK

RESEARCH CENTRE IN ECONOMICS

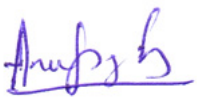
MAHARAJA'S COLLEGE

ERNAKULAM

July 2013

Declaration

*I, Anupa Jacob, do hereby declare that the thesis entitled "**Competitiveness and Labour Standards in Special Economic Zones: A Study of Cochin Special Economic Zone**" is a record of bona fide research work carried out by me under the guidance and supervision of Dr. Martin Patrick, Research Supervisor, Research Centre in Economics, Maharaja's College, Ernakulam. I further declare that this thesis has not previously formed the basis for the award of any other degree, associateship, fellowship or other similar titles of recognition.*



Anupa Jacob

Research Centre in Economics,
Maharaja's College, Ernakulam.
22nd July 2013

Dr. Martin Patrick
Research Supervisor

Research Centre in Economics
Maharaja's College, Ernakulam.

Certificate

*Certified that the thesis entitled "**"Competitiveness and Labour Standards in Special Economic Zones: A Study of Cochin Special Economic Zone"** is a record of original studies and bona fide research carried out by **Smt. Anupa Jacob** in Economics, under my supervision and guidance for the award of the Degree of Doctor of Philosophy in Economics in the faculty of Social Science. The work presented in the thesis has not been submitted earlier for the award of any other degree, diploma, title or recognition.*

Ernakulam
22nd July 2013

Dr. Martin Patrick

Acknowledgement

I thank God, the Almighty, who has been the invisible guide and strength in my research work. "I can do everything through Him who give me strength" (Philippians 4: 13).

The research called for the participation, contribution and guidance from many sources. I take this opportunity to extend my sincere gratitude and appreciation to all those who made this PhD thesis possible.

With special and profound sense, I express my sincere gratitude to my Guide Dr.Martin Patrick, for accepting me as a PhD student, for encouraging me and initiating me into the research work. His supervision, support, guidance and advice throughout the research project inspired me and brought me to a higher level of thinking. His valuable instructions and directions helped me in the completion of this research work. Thank you Sir.

A special heart-felt thanks to the Management of St. Teresa's College, Ernakulam and Sr. Christabelle, the former Principal of the College, during whose tenure I ventured into the research work. Words are inadequate to extend my deep indebtedness and gratitude to Dr. Sr. Teresa, the Principal of the College for the support throughout the period of this work.

I acknowledge with thanks the valuable support received from the staff of St. Teresa's College, Ernakulam, especially, of the Department of Economics. I'm deeply thankful to Dr. Nirmala Padmanabhan, the Head of the Department of Economics and all my teachers and colleagues of both the Department of Economics and other Departments of the College, for their timely assistance.

I'm deeply obliged to the staff of the Research Centre in Economics, Maharaja's College, Ernakulam for the timely cooperation extended. I express my sincere thanks to Dr. S. Muraleedharan and Dr. G.Vishakha Varma, Research Guides of the Centre, for their priceless suggestions and comments on the area of my research. I also thank Dr. Sunil Kumar S. Menon, Head of the Department of Economics and other teachers of the Department, for the help offered when needed.

I wish to acknowledge the information on the topic provided by Dr. Francy T.V, Associate Professor in Statistics and Principal, Govt College, Kodencherry. I express my special thanks to Dr. D. Rajasenan, Professor, Department of Applied Economics, CUSAT for his valuable suggestions. I also wish to thank Mr. Jose M. C., Associate Professor in Statistics, S. B. College, Changanassery for providing help in the analysis of data required for this research.

I would like to place on record my thankfulness to Mr. Sunil Kumar V. S., Assistant Development Commissioner, Cochin Special Economic Zone (CSEZ) and other officials in CSEZ for giving valuable data and other information related to my research work. I'm very thankful to the workers and the industrialists of CSEZ for sparing their time for answering the questions related to the research.

Thanks are also due to the library staff of Centre for Development Studies, Trivandrum, Department of Applied Economics, Cochin University of Science and Technology, RBI, Kochi, M. G. University, and St. Teresa's College, Ernakulam for the valuable source of information offered in completing the research.

This thesis is heartily dedicated to my family members. I owe my deepest gratitude towards my husband Mr. Samuel Mathews, who has been a constant source of love, support and strength. I honour the material and spiritual support shown by my parents, Mr. K.V. Jacob and Mrs. Elizabeth Jacob who have aided and encouraged me throughout this endeavor. I cherish the warmth and emotional support extended by my parents-in-law, Mr. Mathews Paulose and Mrs. Annie Mathews, which kept me going ahead. In particular, the patience and understanding shown by my five-year-old son, Johan Samuel require deepest appreciation. The generosity and sacrifice of my family members will remain my inspiration throughout my life.

Anupa Jacob

Contents

List of Tables

List of Figures

List of Charts

List of Abbreviations

AITUC	All India Trade Union Congress
APR	Annual Progress Report
BRICS	Brazil, Russia, India, China, South Africa
CAS	Combined Average Score
CEPZ	Cochin Export Processing Zone
CEPZIA	Cochin Export Processing Zone Investors Association
CII	Confederation of Indian Industries
CITU	Centre of Indian Trade Unions
CSEZ	Cochin Special Economic Zone
CWU	CSEZ Workers Union
DGCIS	Directorate General of Commercial Intelligence and Statistics
DTA	Domestic Tariff Area
EFZ	Export Free Zone
EOU	Export Oriented Unit
EPI	Relative Export Price Index
EPZ	Export Processing Zone
ESI	Employees State Insurance
EXIM	Export-Import
FDI	Foreign Direct Investment
FEPZ	Falta Export Processing Zone
FEZ	Free Economic Zone/Free Export Zone
FSZ	Financial Services Zone
FTZ	Free Trade Zone/Foreign Trade Zone
FTWZ	Free Trade and Warehousing Zone
FZ	Free Zone
GCR	Global Competitiveness Report
GDP	Gross Domestic Product
GVA	Gross Value Added
ICFTU	International Confederation of Free Trade Unions
ICI	Industrial Competitiveness Index

ICT	Information and Communication Technology
IE	Industrial Estate
IFZ	Industrial Free Zone
IIMD	International Institute for Management Development
ILC	International Labour Conference
ILO	International Labour Organisation
IMD	Institute for Management Development
IMF	International Monetary Fund
INTUC	Indian National Trade Union Congress
IPZ	Information Processing Zone
IT	Information Technology
ITES	Information Technology Enabled Services
ITI	Industrial Training Institute
MEPZ	Madras Export Processing Zone
MFA	Multi Fibre Arrangement
MNCs	Multi National Companies
NEPZ	Noida Export Processing Zone
NGO	Non Governmental Organisation
NPC	National Productivity Council
OECD	Organisation for Economic Co-operation and Development
OT	Over Time
PEI	Relative Profitability of Exports
R and D	Research and Development
RCAI	Revealed Comparative Advantage Index
RPI	Relative Export Price Index
SEEPZ	Santa Cruz Electronics Export Processing Zone
SEPZ	Special Export Processing Zone
SEZ	Special Economic Zone
TDZ	Trade Development Zone
TII	Trade Intensity Index
TPI	Index of Import Price Competitiveness
UN	United Nations

UNIDO	United Nations Industrial Development Organisation
UPA	United Progressive Alliance
USD	US Dollar
VEPZ	Vishakhapatnam Export Processing Zone
WCY	World Competitiveness Yearbook
WEF	World Economic Forum
WEP	World Employment Programme
WPI	Relative Wholesale Price Index
WTO	World Trade Organisation

Abstract

The present study tries to examine the export competitiveness and labour standards prevailing in Cochin Special Economic Zone (CSEZ) and analyses the inter-relationship between them. CSEZ is selected as the area of research as it is a multi-product Zone with many production activities and varied labour standards.

The analysis of the competitiveness of sectors reveals that all the sectors have improved their competitiveness performance over the years aided by SEZ Act, 2005, increase in investment etc. The sector which has been most competitive in terms of the competitiveness measures is the Gem and Jewellery sector followed by the IT and ITES sector assisted by government policies and lower cost advantage. Another sector that is maintaining a relatively higher Revealed Comparative Advantage (RCAI) and Industrial Competitiveness Index (ICI) is the Electronics sector. The total exports of the Engineering sector have increased, but relative position among other sectors is not better. The competitive position of Plastic and Rubber industry is aided by higher labour productivity and growth of exports, despite its lower share in the Zone exports. Agro and Food sector is also competitive in terms of its ICI, productivity and growth of exports. The firm in the Service sector, being a new entrant, shows comparatively lower competitiveness in terms of various indicators. Textiles and Garments sector is also showing lower level of competitiveness affected by volatility in the European markets.

With regard to the labour standards at CSEZ, it is found that unmarried workers with moderate education and lesser years of service are present in the Zone. But, Engineering, Electronics Hardware and Service sectors require the service of professionally qualified skilled workforce. In Textiles and Garments too, about half of the workers have more than 15 years of experience. Preference to employ temporary workers is seen in all the sectors except Textiles and Garments. The average wage in the Zone is reported to be Rs.11,974 per month. Wages in all the sectors vary according to the skill level as well as nature of employment. Discrimination on the basis of gender in the payment of wages is reported in sectors like Plastic and Rubber, Electronics Hardware, Engineering and Textiles and Garments. Overtime work and shifts are optional, usually opted by junior male

contract staff while women are generally exempted from shifts. Only workers in Electronics Hardware, Engineering, Plastic and Rubber and Agro and Food sectors have trade union membership. Workers in all the sectors suffer from occupation related health issues.

The study of inter-relationship between competitiveness and labour standards establishes that the sector maintaining high competitiveness and better labour standards is IT and ITES. In highly competitive sectors of Gem and Jewellery, Electronics Hardware, Plastic and Rubber and Agro and Food sectors, even though the Combined Average Score (CAS) of labour standards is 'moderate', individual labour standard of wage is rated low. Gem and Jewellery sector, with very high competitiveness, records the lowest provision of labour standards. The sectors with 'moderate' labour standards and lower competitiveness are Engineering and Textiles and Garments. Competitiveness is low in the Service sector. Even though, salary and absence of discrimination are rated high in this sector, absence of trade union participation and social security measures have made this sector's CAS 'moderate'.

In the backdrop of the findings of the study, the policy measures and suggestions suggested include, provision of more incentives to the investors to remain competitive, simultaneously ensuring the welfare of labourers.

Chapter 1
INTRODUCTION

Contents

Globalisation has brought about expansion of trade and investment across national borders. Developing countries view globally integrated production networks as means for rapid economic growth. They emphasise export-led-industrialisation strategy as an important driver of economic growth in place of import substitution. The export oriented policies undertaken by the governments are favouring cluster industrial structure in order to reap economies of scale, logistics benefits, etc. The economic success of such industrial clusters led to the establishment of Special Economic Zones across the world. They act as mechanisms for expanding export growth, generating FDI, boosting specialisation, creating employment, upgrading production standards to world levels and thus ensuring stronger and sustainable growth. Efforts of countries to capture higher share in the export market has made export-oriented units more competitive.

Special Economic Zones (SEZs) are viewed as an important policy instruments to facilitate export manufacture, promote industrialisation, generate employment, improve balance of payments, absorb advanced technology and bring about regional development. Governments of developing countries find SEZs as means to absorb excess labour through employment creation, and large companies find it as means of investment by gaining preferential trade and input-price conditions, liberal profit repatriation, lenient labour standards, etc. (Milberg and

Amengual, 2008). SEZs are set up as enclaves and are separated from the Domestic Tariff Area (DTA)[1]. They are built with the purpose of providing an internationally competitive duty-free environment for export production at low cost. The competitive environment in the Zone helps to produce quality output at lower cost (Kumar, 2006).

1.1 Special Economic Zones (SEZs) in India

India followed the step of establishing Export Processing Zones (EPZs) way back in 1965, at Kandla, Gujarat, when the economy was in a highly regulated regime. With the progressive opening up of the economy, India liberalised its Export-Import (EXIM) policies, replaced import substitution with the policy of export promotion and made the country export-friendly. EPZs were given special thrust by the government so as to promote competitiveness and thereby export. The EXIM Policy (1997-2002) introduced a new scheme from April 1, 2000 to revamp existing EPZs and to establish Special Economic Zones (SEZs) in different parts of the country.

The new SEZ policy initiated as part of export policy provided an appropriate direction to the SEZ Act 2005[2]. It involved a drastic change in the direction and approach, regarding notion of 'multi-product' and 'single product' SEZs and minimum areas for each. Before the new SEZ policy, Zones were set up by the State governments. The SEZ policy 2000 allowed the private sector too to participate in its activities. All the existing EPZs were converted into SEZs and a number of new SEZs were allowed.

Both SEZ units and SEZ developers were bestowed with more incentives and concessions. This include infrastructural facilities, preferential tax treatment, preferential duty treatment, subsidies, export promotion services and thus a more liberalised and hassle free operating environment for the firms in the Zones. More powers including the authority of the bodies like Labour Commission, Pollution Control Board were delegated to the Development Commissioner[3]. The administrative set up was reduced to a three tier system with the Ministry of

[1] SEZs need not always be confined to enclaves. Units on which SEZ status is conferred are also regarded as part of SEZ
[2] A brief version of SEZ Act 2005 is attached to appendix.
[3] The Development Commissioner (DC) is the nodal officer for SEZ.

Commerce and its SEZ cell at the top, followed by the Board of Approvals and finally the Development Commissioners of the particular Zones (Gopalakrishnan, 2007).

The liberalised SEZ policy intends to make the firms operating in the Zones export competitive. Competitive strategy intends to maximise the production for exports. The products produced for exports have to be cost competitive and price competitive without a compromise on quality. Such a competitive strategy enables not only economic development, but also helps to generate linkage effects in the economy. The competitive strategy has also established an association between international trade and labour standards.

1.1.1 Implications of the Competitive Strategy on Labour Standards at SEZs

Export competitiveness involves the country's share in world exports. It may be analysed in terms of quantity, value of trade, global trade or trade with respect to certain countries or areas, or in terms of share in imports, total consumption, etc. (Sharma, 1992). The export competitive strategy followed by Zones under liberalised regime can turn out to be a boon as well as a bane to the workers in SEZs.

The competitive strategy of the firms in SEZs appears to have certain implications on provision of ILO labour standards. With the objective of making the goods manufactured at SEZs more competitive in the export market and to meet labour standard requirements as per foreign buyer, the companies at SEZs are providing better working atmosphere and working facilities to their workforce. Firms try to improve speed and quality of production in order to improve productivity, and thereby competitiveness. This is done by means of better technology, innovation, better design, etc. Talented work force, if provided better labour standards, enhances productivity and will produce goods of better quality. Firms provide better wages, job enrichment programmes, training and ensure the supply of basic necessities like accommodation, transportation, canteen, crèche, etc. Involvement of labourers in the day to day management of the company is ensured and the best performances in the company are rewarded.

As against this, it is reported that the competitive strategy is pushing labour standards down and leading to massive exploitation. To comply with the foreign buyers' requirements of better quality, environmentally friendly, socially responsible products, the producers may be forced to use an expensive technology or an expensive method of production. Lower cost of production is maintained by offering lower labour standards in the forms of lower wages, poor working conditions, and lower allowances. The labour-management relations are very weak and there is absence of any labour-skill development programmes. Productivity is ensured by putting pressure on workers to work fast, to work over-time and to meet production targets. Restrictions are placed on trade union activities in the firm. In the absence of any form of association, the bargaining power of labourers tends to be very weak. The companies find it advantageous to employ women, whose employment in Zones is increasing over the years. They are less organised, their bargaining capacity is weak and discrimination in the payment of wages on the basis of gender is also found here. Thus labour standards are sacrificed in the name of competitiveness. Such firms fail to realise that, by providing lower labour standards, they, infact, are weakening their ability to remain dynamic and competitive in the international export market.

The competitive strategy followed by the SEZs in India, has its bearing upon the labour standards. All labour laws including Minimum Wages Act, Trade Union Act, Employees State Insurance Act, Contract Labour Regulation and Abolition Act, etc., laying down health and safety conditions and minimum amenities are applicable to SEZs in India (Hertanti and Laura Ceresna-Chaturvedi, 2012). But the labour rights in the Zones get restricted with the transfer of powers of Labour Department to Development Commissioner and with the provision of public utility status to the Zones. Not all Zones in India or firms in the Zones have been following labour exploitative measures. But generally public notion is that labour standards are curtailed in the Zones.

Cochin Special Economic Zone (CSEZ) is situated in the state of Kerala where labour legislation is effectively enforced and where trade union activism is stronger. Labour laws have got introduced in the Zone and it has the presence of trade unions too. The workers have rated the working conditions and wages in the Zone as

good. There are arguments that, CSEZ has sometimes been a victim of militancy of workforce and that investment climate has been hampered by it. There are also cases of substandard working conditions reported in the Zone. In some sectors, wages are reported to be low and allowances are absent. This is especially true in the case of contract workers (Kundra, 2000).

1.2 Research Problem

The trade reform process undertaken by most of the developing countries in the late 20th century, in their race for economic development, favoured export-led industrialisation strategy. The export promotion measures of these developing countries established Special Economic Zones (SEZs) in the form of industrial clusters. SEZs produce and export internationally competitive products. If goods are to be export competitive, they have to be cost-competitive, price-competitive and should be quality-competitive too.

Under such a strategy, the governments of the developing countries offer a number of export promotion incentives to the firms in the Zones to attain cost-advantage and efficiency. This includes infrastructural services, tax incentives, subsidies, income-tax and duty exemptions, etc. The Zones are also permitted to follow a liberalised labour regime. China's success of liberal labour legislation in SEZs has made many developing countries emulate them. This has brought in hardships to the labourers in SEZs around the world. In this backdrop, the labour standards insisted by International Labour Organisation (ILO) remain questioned in Special Economic Zones.

The competitive strategy of SEZs can have three main implications on labour standards. Firms in the Zones follow competitive strategy through labour exploitative measures. The increased cost of production instead of being passed on to the buyers is compensated by providing substandard facilities and lower wages to the workers. Not only the wage rate is low but the working conditions are also found to be poor in most of the Zones. The companies target women who form the weakest and unorganised section in the Zones. Employing labourers on contract basis has become rampant in these Zones. The social security measures are also compromised in the

name of export competitiveness. The Zones are also largely absorbing semi-skilled and unskilled workers coupled with women categories in those fields. The government, in order to accelerate the export earnings, extends a supportive attitude to the firms by conferring more powers to the Zones.

Conversely, some firms in the Zones uphold their competitiveness by bringing in measures to improve the productivity of the workforce. Companies offer better salary, training facilities and other monetary and non-monetary benefits to attract new talents and to retain the existing ones. They also offer special facilities to their women work force like transportation, crèche, etc. Thus labour confidence and trust in the management are maintained to motivate workers to work efficiently. All these are provided with the sole objective of enhancing the productivity of workers thereby making their products export-competitive.

Both labour-exploitative and labour-friendly policies are visible in Zones across India. There is also a third category i.e., the labour standards provided can vary across the sectors in the Zone, especially a multi-product one[4]. When the activities in the Zones vary across sectors and firms, labour standards provided in them can also differ. Cochin Special Economic Zone (CSEZ) is one such multi-product Zone with wide variety of production activities. Being in a state with organised labour set up, analysis is to be made about the competitiveness in the Zone and the present status of labour standards in CSEZ. It is also necessary to understand whether the competitive strategy of maintaining higher exports at CSEZ is in anyway posing a threat to the observance and provision of labour standards in the Zone.

1.3 Research Questions

In the above circumstance, certain questions come up.

- Are the firms/sectors in CSEZ remaining export competitive?
- How far the firms/sectors in CSEZ are competitive in export promotion?
- Do the firms/sectors at CSEZ provide good working conditions?

[4] . Commerce and Industry Minister, Anand Sharma announced on April 2013 that for multi-product SEZ, minimum land requirement has been brought down from 1,000 hectares to 500 hectares, and for sector-specific SEZs, it has been brought down to 50 hectares.

- Whether a competitive export strategy helps the workers in the form of better working conditions?
- Are the labour standards sacrificed for the sake of competitiveness?
- If a firm/sector at CSEZ has lower standards, does its exports gain an unfair advantage?
- Does a disadvantage in the export market force the companies to lower their labour standards?
- Are the firms/sectors able to be competitive while still providing better working conditions?

To answer these questions an in-depth study is essential.

1.4 Research Gap

Based on the review of literature, it is found that a good number of studies, both national and international, have got conducted to analyse various aspects of SEZs – exports, employment, labour issues, labour standards, human capital formation and so on. Many international studies have been held to explore the trade-off between labour standards and competitiveness in SEZs. Scientific studies on this matter are yet to take place. Not many studies have been made in India on the same issue nor they have been analysed rigorously. Also, studies on Cochin Special Economic Zone (CSEZ) are very few in number. Hence there is a gap that shows the relationship between competitiveness and labour standards for detailed investigation.

1.5 Objectives of the Study

- to study the export competitiveness of firms in CSEZ over the years.
- to analyse the present status of labour standards in CSEZ.
- to analyse how export competitiveness and labour standards are interrelated to each other.

1.6 Theoretical Framework

A number of theories have been devised to explain the export competitiveness. Some of them include Adam Smith's Absolute Cost Advantage,

David Ricardo's Comparative Cost Advantage, the Heckscher-Ohlin model and so on. The latest one is the National Competitive Advantage of Michael Porter (1990). But in the present study, the framework used to analyse competitiveness are, Industrial Competitiveness Index (ICI) and Revealed Comparative Advantage Index (RCAI) of Balassa, devised in 1965. When ICI is used to compare the export performance of sectors in CSEZ, RCAI will assess the competitiveness performance of each sector's export compared to the particular product's export from the nation.

In the calculation of ICI, competitiveness is considered as a function of profitability, productivity and growth. Profit represents the effectiveness of a firm in realising its goal. It defines the income earning capacity of the firm. Hence, it is an effective way of assessing the performance of a firm. Value added per employee is taken as the productivity measure. Value added based labour productivity measure is influenced by capital, technical, organisational factors, economies of change, etc. The third variable of output growth is assessed by considering the annual change of production value. The single composite index of ICI is calculated by using the methodology for the calculation of the United Nations' Human Development Index[5]. After estimating the ICI, the firms are ranked based on their individual index. Based on the ICI ranking, competitiveness of firms is analysed (Fischer and Schornberg, 2006).

Revealed Comparative Advantage Index (RCAI) compares the country of interest's trade profile with the world average. The numerator is the share of a country's total exports of the commodity of interest in its total exports. The denominator is share of world exports of the same commodity in total world exports (Nag, 2009). A positive value of RCAI indicates the country's comparative advantage in particular product against the world average of the same product. In the present study RCAI has been adapted to study the export competitiveness of individual sector/product in the Zone with the total export of the same product from India. Detailed measurement technique of both ICI and RCAI is given in chapter 4 (section 4.3).

[5] Detailed method of calculation of HDI is given in Human Development Reports for various years.

Labour standards in the Zone can be related to theories of Positive and Normative Economics. The term Positive Economics deals with 'what is'. The labour standards which are present in the CSEZ can be considered as a study of Positive Economics. Normative Economics deals with 'what ought to be'. The present study tries to prescribe the ideal form of labour standards that ought to have been part of the Zone.

The working conditions existing in the Zone have been analysed in the framework of ILO labour standards. Labour standards are the conventions and recommendations drawn up by representatives of governments, employers and workers from around the world, setting out basic principles and rights at work. They cover all matters related to work including, minimum wages, working time, freedom of association, equality of opportunity, job security, promotion and training, matters related to child labour and forced labour, occupational safety and health, social security, industrial relations, labour inspection, etc. Compliance with labour standards improves the dignity and quality of life, productivity and economic performance and thus economic development of the nation (www.ilo.org, referred on March, 2012)

1.7 Methodology

It is necessary to analyse the hypothesis that India's SEZs have become places of labour exploitation. An analysis of export competitiveness is also helpful in finding out to what extent the competitive export strategy of enterprises has made the labour standards deplorable in these Zones. The study being Kerala specific, the first and the main SEZ in Kerala, in strategically located port city, Cochin Special Economic Zone (CSEZ) is chosen, to do a thorough analysis on export competitiveness and labour standards.

SEZ authority has classified the enterprises in the Zone into 10 sectors. They form; Agro and Food, Electronics Hardware, Engineering, Gem and Jewellery, IT and ITES, Miscellaneous, Plastic and Rubber, Services, Textiles and Garments and Trading. From this, all major sectors except the Miscellaneous sector and Trading sector are selected for the study. Since nature of activity of enterprises in the Miscellaneous sector is rather heterogeneous, this particular sector is avoided in the study. The enterprises registered in the Trading sector are all non-producing enterprises constituted primarily to take advantage of the concessions and subsidies

offered for trading under SEZ Act. Hence this sector too has been avoided in the study. All the other eight sectors are selected for the study.

1.7.1 Analysis of competitiveness

Significant quantity of secondary research is conducted for analysing competitiveness. The sector-wise data about exports, employment, etc. made available by CSEZ Authority is made use of for calculating export competitiveness. The data pertaining to the years after the introduction of SEZ policy 2000 has been chosen for the analysis. To conform to the privacy policy of the enterprises, the Authority publishes only sector-wise details and never reveals the data related to individual firms. Sector-wise data is compiled by the CSEZ Authority on the basis of the APR (Annual Progress Report) submitted by the SEZ units to the authority.

Various measures are used to assess competitiveness of the Zone. When Industrial Competitiveness Index (ICI) is used in the study to calculate and compare the competitiveness of each sector in the Zone, adapted version of Revealed Comparative Advantage Index (RCAI) is used to analyse the export competitiveness of each sector in CSEZ compared to the exports of the same product/sector from India. These two competitive measures are supported by Total Exports, Percentage Annual Growth Rate of Exports, Percentage Share of Exports and Labour productivity (Output-Employment Ratio). Discussions have also been held with company authorities to assess the reasons for fluctuations in the exports from sectors.

1.7.2 Analysis of Labour Standards

Analysis of labour standards is done through a primary survey of working conditions at the enterprises in the Zone. For this, a two-stage sampling technique is adopted. In the first stage, selection of enterprises is done from the selected sectors. In the second stage, selection of workers is done. This is followed by survey of working conditions.

1.7.2.1 Selection of Enterprises.

The first stage involves the selection of number of enterprises from each of the selected sectors. The total number of enterprises (according to www.csez.com, in the year 2012) happens to be 133. However, discussion with Cochin Export Processing Zone

Investors Association (CEPZIA) reveals that, out of this, only ninety-eight enterprises are found to be fully operational in the Zone in 2012. The total number of enterprises in the selected eight sectors is 79. Remaining enterprises are no longer operational.

While selecting the enterprises, care is taken to obtain a mix of small enterprises, medium enterprises and large enterprises in the sample, in terms of their size of employment. As the enterprises in SEZ are established to cater to the needs of foreign nations, UNIDO approach for industrialised nations has been used for the classification of enterprises into small, medium and large. This means, large enterprises are those with more than 500 workers, medium firms are those with 100 to 499 workers and small firms, those with less than 99 workers.

Proportionate random sampling technique without replacement is used for the selection of enterprises from each sector. This means that once a small enterprise from a sector gets selected, it nullifies the chances of other small enterprises in the same sector to get selected. The same happens in the case of the medium group and large group. From each sector a representative size of 30 per cent of the enterprises is selected. This will reduce the sample size of enterprises to 24.

The total number of fully operational enterprises and the number of sample enterprises selected are presented in table: 1.1

Table 1.1 Total Number of Enterprises and Sample Enterprises Selected

Sectors	Total Number of Fully Operational Enterprises	No. of Enterprises Selected
Agro and Food	11	3
Electronics Hardware	6	2
Engineering	11	3
Gem and Jewellery	10	3
IT and ITES	27	8
Plastic and Rubber Products	9	3
Services	2	1
Textiles and Garments	3	1
Total	79	24

Source: CEPZIA (2012)

1.7.2.2 Selection of Workers.

Second stage involves the selection of workers from the selected units. Since the exhaust list of the total number workers in each enterprise is revealed neither by

the enterprise nor by the CSEZ Authority, Cochin Export Processing Zone Investors Association (CEPZIA) is to be approached for the data. The approximate data on the total number of workers in each enterprise, made available by CEPZIA, is used to select the sample workers. The data pertaining to workers do not relate to the nature of employment (permanent and temporary), gender (male-female), skill (skilled and unskilled), etc., and hence such classifications are beyond the capacity of researcher.

When there is no list of workers, but data regarding the total number of workers alone is available, probability sampling method cannot be resorted to. Then the question is: which method under non-probability sampling method may be apt in the present context? Purposive sampling technique is considered as the right method for the selection of sample. As the number of workers varies from sector to sector (or enterprise to enterprise), non-proportionate sampling has been employed. From the sectors with more than 2,000 employees, two per cent is fixed as the sample size (IT and ITES and Electronics Hardware). Three per cent samples are taken from sectors with workers ranging between 1,001 and 2,000 (Engineering and Gem and Jewellery). From the sectors with workers less than 1,000 workers and above 200 workers, five per cent samples are chosen (Plastic and Rubber Products and Agro and Food). From the sectors with less than 200 workers but more than 100 workers, ten per cent (Service sector), and from those with less than 100 workers, 20 per cent samples are selected (Textiles and Garments). In short, a non-proportionate purposive sampling technique is used to select the sample workers. The sample size of workers selected is given in table 1.2

Table 1.2 Total No. of Workers in the Enterprises Selected

Sectors	Total No. of Workers	Sample of Workers
IT and ITES	3,402	68
Electronics Hardware	2,673	54
Engineering	1 225	37
Gem and Jewellery	1,030	31
Plastic and Rubber Products	555	28
Agro and Food	467	23
Services	200	20
Textiles and Garments	75	15
Total	9,627	276(2.8%)

Source: Computed from the discussion with CEPZIA

Table 1.2 makes it clear that the total sample size constitutes three per cent (3%) of workers in the selected enterprises. It must be noted that care has been taken to include all type of workers while selecting the sample such as permanent and temporary, male and female, and skilled and unskilled workers.

1.7.2.2.1 Survey of Working Conditions

An understanding of the working conditions in the CSEZ is the most important part of the study. For this, a pretested structured interview schedule is used to elicit reliable, precise and detailed information about the working environment in the Zone. Since the enterprises never permit any direct assessment of employment details from labourers, interview is held at their place of stay. Confidence of the workers is gained by assuring them confidentiality of their identity.

1.7.3 Analysis of Competitiveness and Labour Standards

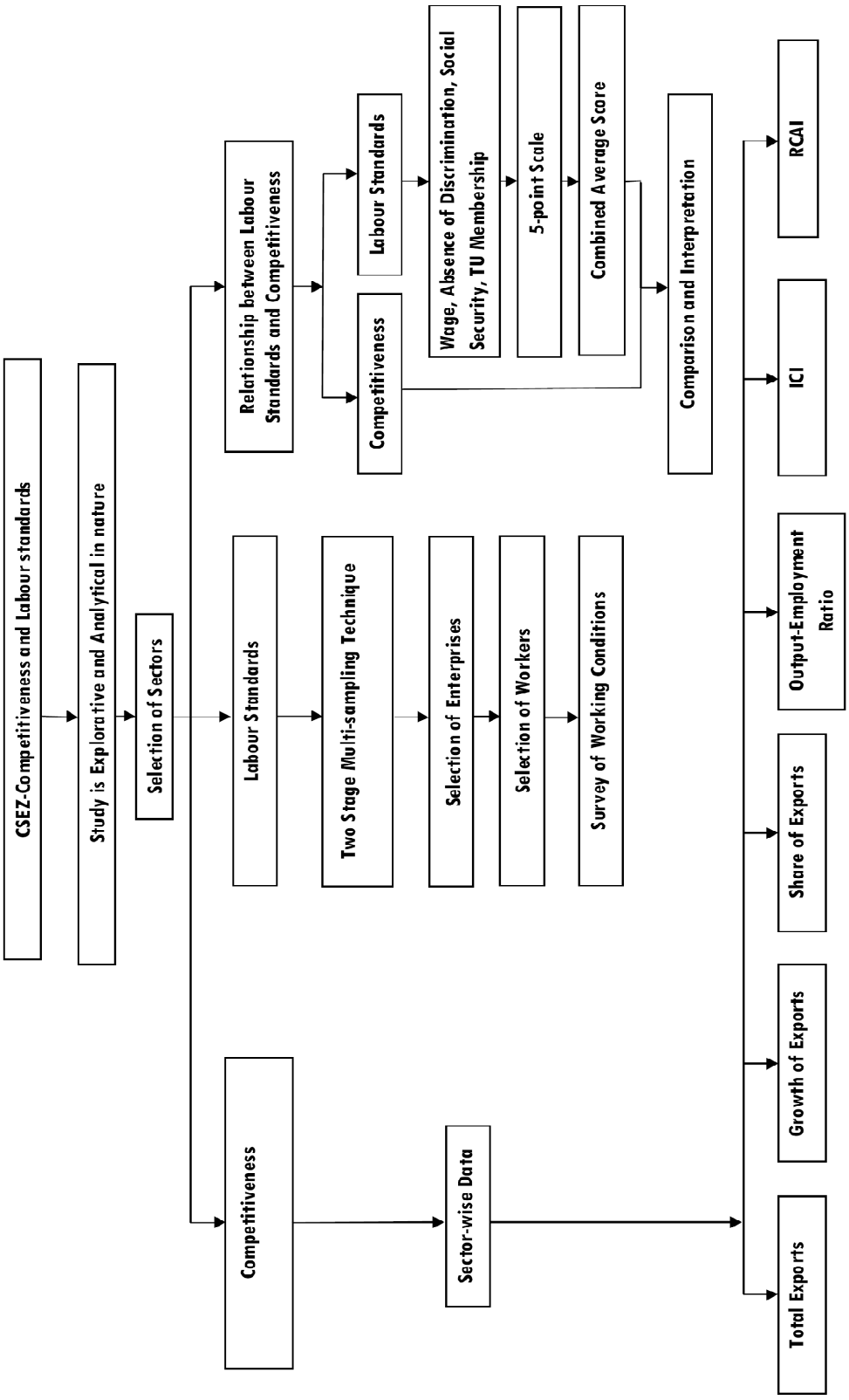
In this section, each sector's export performance has been compared with the labour standards provided. The export competitiveness found using various measures for the year 2011-12 is used to compare it with the current labour standards existing in the Zone.

An attempt to quantify the labour standards is made to make it comparable with competitiveness. Worker's response towards satisfaction derived from four most important labour aspects - Wage, Absence of Discrimination, Social Security Measures and Trade Union Membership is considered. The chosen labour standards existing in each sector in the Zone have been reduced to five-point scale, five being the highest and one being the lowest. Average Score for each labour standard and Combined Average Score (CAS) for all the four selected labour standards, for each sector are then computed. CAS obtained is then rated from 'very high' to 'very low'. By comparing labour standards and competitiveness of each sector, interpretations are drawn.

1.8 Research Design in a Nutshell

The schematic chart presented chart 1.1 summarises the research design in a nutshell.

Chart 1.1 Research Design



1.9 Scope and Significance.

The present study has great relevance in a highly globalised world of today. SEZs account for an increasing share of international trade. Their share in the total exports in India is ever increasing with the government giving approvals to more number of Zones year after year, especially in the private sector. It will investigate into the implications of a competitive strategy of firms on the labour standards maintained in the Zone. It will explore the realities about the labour standards in the Zone. Hence, findings of the study can prove to be useful for policy makers and the government to frame appropriate strategies aimed at promoting the interests of not only the firms but also the working class in the Zone.

1.10 Limitations of the Study

- Export competitiveness has been analysed at the sector level. Individual firm specific study on competitiveness is not attempted due to lack of access to data.
- List of workers in each enterprise is not published by the enterprises or by the CSEZ. Hence the approximate number of workers working in each enterprise is obtained from the discussion with CEPZIA.
- Unavailability of data has inhibited the possibility of developing models suitable for analysing the relationship between competitiveness and labour standards.
- Lack of publications (other than online publication of elementary statistics) by CSEZ has affected the availability of secondary data.

1.11 Chapter scheme

The first chapter gives an introduction. In this chapter research questions, research gap, research problem, objectives of the study, hypothesis, scope of the study and limitations are presented. The second chapter provides the review of literature related to the study. The related studies are classified into three groups namely, i) Competitiveness, ii) Labour Standards at SEZs and iii) Labour standards and Competitiveness. Chapter three presents an over view of Special Economic Zones. It

gives a historical analysis of SEZs, both within and outside India. It gives a special discussion about CSEZ too. Chapter four analyses the concept of Competitiveness. It tries to give a wider meaning to the term 'export competitiveness'. It also examines the determinants of competitiveness and measures for the assessment of competitiveness. The chapter also presents the competitiveness enjoyed by the SEZ India. Chapter five deals with ILO Labour Standards. The significance of labour standards, its evolution, different Conventions and Declarations have been discussed in this chapter. The chapter also presents the nature of relationship India maintains with ILO.

The analysis begins with the sixth chapter. In this chapter sector-wise export competitiveness over the years is studied on the basis of several indicators. The seventh chapter analyses the present status of labour standards at CSEZ. In the eighth chapter the interrelationship between competitiveness and labour standards is analysed. The major findings and conclusions are summarised in chapter nine. Based on the findings, some recommendations which can protect the interests of both entrepreneurs and labourers are also summarised in this chapter.

1.12 Glossary

Competitiveness

Competitiveness involves the ability of the firms to produce goods and services at lowest cost, simultaneously maintaining a lower price and higher quality, enabling them to capture major share in the international market.

Domestic Tariff Area

Domestic Tariff Area means the whole of India, but does not include the areas of the Special Economic Zones.

Contract Labourer

A person who is employed in a firm for a time period.

Employer

A person, business or a firm which controls the labourers in a firm for getting a work done in a given time and pays the labourer a remuneration.

Enterprise/Firm

A unit which is employing workers for production

Export

Goods and services sold to a foreign country

Labour Standards

Labour Standards indicate the ideal terms and conditions of work, which specify the basic rights of workers involving nature of work, hours of work, wages, welfare, occupational health and safety, freedom of association, freedom from forced labour, etc.

Labourer/Worker/Employee

A person who is actively involved in working in a firm for the purpose of earning remuneration.

Multi-product SEZ

SEZ units set up to manufacture two or more goods in a sector or goods falling in two or more sectors or trading and warehousing or for rendering of two or more services in a sector or services falling in two or more sectors

Permanent Employee

A person who is likely to continue in the same employment in the normal course. He has been hired for a position without a pre-determined time limit.

Sector Specific SEZ

SEZ-units set up to manufacture one or more goods in a sector or for rendering of one or more services in a sector

Semi-skilled worker

A semi-skilled worker is one who does work generally of defined routine nature wherein the major requirement is not so much of the judgment or skill, but for proper discharge of duties assigned to him and where important decisions are made by others.

Skilled worker

A skilled worker is one who is capable of working efficiently by exercising considerable independent judgment and discharges his duties responsibly. He must possess a thorough and comprehensive knowledge of the trade or industry in which he is employed.

Social Security Measure

It is the periodical payment offered by the employer to the employee, apart from the wages, to protect a worker from a state of distress due to accidents, illness, old age, medical care, etc.

Special Economic Zone/Export Processing Zone

Special Economic Zone (SEZ)/ Export Processing Zone, is an industrial enclave which offers tax and financial incentives to the units operating in the Zone and carries on production at low cost principally for the purpose of export.

Trainee

Trainee is a person being trained especially in a vocation, receives only a stipend for the apprenticeship done and who does not enjoy any social security measure.

Unorganised workers

Workers who have not been able to organise themselves in pursuit of their common interests due to certain constraints, such as casual nature of employment, ignorance and illiteracy, pressure from management, etc.

Unskilled worker

An unskilled worker is one who does operations that involve the performance of simple duties, which require the experience of little or no independent judgment.

Wage

Money that is paid or received for work, as by the hour, day, or week.

Working conditions

Terms and conditions of employment which include wages, nature of work, hours of work, welfare, occupational health and safety, etc.

.....

Chapter 2
REVIEW OF LITERATURE

Contents

Many studies have been carried out to explore the relationship between the observance of labour standards at SEZs and export competitiveness of SEZs. Most of the studies presume that the countries, especially developing nations are lenient towards labour rights at SEZs with the intention of remaining competitive in the international market. There are also studies which emphasise that the observance of labour standards has little effect on exports and many firms at SEZs offer good working conditions and better wages to its labourers assisting to improve the productivity and thereby competitiveness of countries.

This chapter is divided into three sections. The first section deals with the concept of competitiveness. Section two deals with labour standards at SEZs. National and international instances of labour law violation and endorsement in SEZs are examined here. Section three involves those studies which illustrate a positive as well as negative relation between competitiveness and labour standards.

2.1 Competitiveness

The term competitiveness is different from the term competition. Kathuria (1999) distinguishes competitiveness from competition. Competition is based on free markets to ensure free and fair competition. Competitiveness is defined as the capabilities of a firm or a sector or a nation to compete successfully. It involves enhancing the strength, of a firm, an industry or a nation to compete relative to foreign competitors or other nations. The relation between both is that competition is a prerequisite for enhancing competitiveness.

Competitiveness, regarded as the urge to compete in the export market is considered a pre-requisite for the firm's survival. Price is no longer an important factor to ensure export competitiveness. The emphasis is entirely on quality encompassing safety, reliability, guarantee, performance, maintainability, durability and acceptability by the customer. As Indian companies recognise that they can survive in the competitive export market only by offering goods and services which meet global standards, they are trying to upgrade quality and reputation to meet global market requirements. Under this strategy, the exporters are at a disadvantage, because if consumers find the local brand to be of satisfactory quality, they may not try an imported product. "Quality has been the biggest competitive issue of the late 20th and early 21st centuries" (Das and Bandyopadhyay, 2003). Firms have to pursue competitiveness cautiously. If they follow the common notion of competitiveness of downsizing, they will have to bear long run consequences. By such a measure, the improvement in productivity or competitiveness at the firm level will be offset by reductions in percapita income associated with rising unemployment and loss of earnings at the national level (Kathuria,1999).

Veeramani (2007) argues that a country's exports, in a given period, may grow faster than the world average for one or more of the following three reasons. First, the country's exports will be concentrated in commodities for which world demand is growing relatively faster during the period (commodity composition effect). Second, the country's exports will be going, primarily, to the fast growing regions of the world (market distribution effect). Third, the country will be able to improve its overall competitiveness (possibly due to policy changes) and therefore, can expand its exports faster than the world average (overall -competitiveness effect).

Competitiveness for India at the international level has been assessed by several institutions. United Nations Industrial Development Organisation (UNIDO) has placed India at the forty-first position in competitiveness among 100 countries. Several other institutions like World Bank, International Institute for Management Development (IIMD) have evaluations of like nature. They have measured competitiveness as the ability to produce export quality goods competitively and make more advanced products by keeping abreast of changing technologies as well as

the intensity of industrialisation, necessary to attain further export growth. India's weakest areas in the field of competitiveness are : unpredictability of government policies, infrastructural deficiencies, unsatisfactory corporate and financial management, pliant corporate boards, low productivity, undependable quality of product or service, fitful observance of delivery commitments, inadequate customer orientation, insufficient attention to human development and negligible investment in research and development (Raghavan, 2008).

Studies have also been made to understand the reason for the export competitiveness India experienced during the post-reform period. In the pre-reform period India's growth of export was much lesser than the potential due to negative competitiveness effect and negative commodity composition effect. But in the post-reform period actual growth rate of exports of India, both merchandise and services, has been much above the potential growth rate. This is due to the positive competitiveness effect which is more prominent in case of export in services (Veeramani, 2007). Price-competitiveness in the world market has also been held as a factor to explain India's competitiveness. Price competitiveness has been subject to deterioration in some years due to appreciation of exchange rate. But improvements in non-price factors like product differentiation, scale economies also explain the export competitiveness of India (Joshi and Little, 1994).

As a means of enhancing export turn-over, Special Economic Zones (SEZs) have been set up around the world. Aggarwal (2006) defines Special Economic Zones as industrial clusters where external economies of scale and other advantages help the operating firms in reducing costs, developing competitive production systems and attracting foreign investment. This makes many developing countries to promote Zones with the expectation that they will propel the engine of growth to boost industrialisation.

In the export market, SEZs provide an option for corporations to earn large profits out of low wages paid to workers. This is so in countries with large populations of uneducated, poor or educated-unemployed people. India, being a country with large population provides a platform for large corporations to reap the benefits of a competitive wage rate. To extend India's competitiveness in the global

market, the United Progressive Alliance (UPA) government enacted the Special Economic Zones (SEZ) Act in 2005[6] (Sampat, 2008). In view of the declining competitiveness of the manufacturing sector of India, the focus of the SEZ Act is to make it a preferred destination for manufacturing. At the same time, the competitiveness of SEZ which offers the easy option of competing on the basis of cost minimisation, can be sustained only when there is an improvement in the investment climate of the entire country (Aggarwal, 2006).

India has emulated the export competitive strategy of China. China has always remained competitive in the international market even with its lesser outward-orientation. The SEZs set up in China aided its march towards export competitiveness. DN (2001) attributes the reason for China's competitiveness as higher labour productivity which in turn is made possible by high level of education of Chinese workers. Lower wages in China has helped the country to develop itself into a manufacturing hub. In addition, the absence of a land market, production for export, an educated labour force have all helped China to gain higher productivity and thus export competitiveness.

In contrast with Chinese Zones, SEZs in India do not have elastic supply of labour. A large percentage of the labour force in India is unskilled and the labourers in the unorganised sector lack job mobility too. This is despite having a big size of labour force. Moreover, the absence of adequate labour legislation to protect labour force has encouraged the employers to keep the labour costs low and also to incline towards capital-intensive technology (Palit and Bhattacharjee, 2008).

But, following labour-exploitative strategy as a means of maintaining competitiveness has always been against the norms of International Labour Organisation (ILO). In the Tripartite Meeting of Export Processing Zones Operating Countries, it was reported that apart from financial incentives, infrastructure, market access and other facilities to attract investors, a major incentive offered by EPZs is cheap supply of labour and relatively low labour costs and a trade union free environment. As international competition intensifies, firms try to improve speed and

[6] SEZ Act 2005 is backed by several Rules and Amendments which have been enacted subsequently in 2006, 2007, 2008, 2009 and 2010.

quality of production as measures to improve productivity. So production process is more knowledge and skill-intensive, requiring educated and trained labour force. To substitute the higher wages of trained labour force, firms use expensive technology and materials to enhance productivity, thus reducing unit labour costs. On the other hand, those firms which rely on labour intensive and low technology production process have very high labour costs and have a negative view of workers organisation. Such firms compete on the basis of price rather than on quality or innovation (ILO, 1998).

2.2 Labour Standards in SEZs

2.2.1 Violation of Labour Laws.

As a measure of improving competitiveness, several authors have argued that violation of workers' rights, compulsory overtime, job insecurity, poor working conditions, use of pressure tactics to meet deadlines, and in consequence, depletion of human capital are widespread in the Special Economic Zones (Aggarwal,2007). A number of studies points to the exploitative nature of working conditions at Special Economic Zones in the country. In this section, working conditions, both national and international scenario related to SEZs are analysed.

2.2.1.1 International Scenario

Stringent labour laws deter investment, output and employment. So many countries around the globe are trying to be investment friendly by liberalising their respective labour markets and labour laws. It is also found that to surpass stringent labour laws, new form of employment created is largely contractual in nature. The contract labourers earn much less than the regular employees engaged in similar jobs. Contract employees work harder than regular employees and they are discriminated in terms of wage and they can be hired and fired easily. They have no canteen facilities, medical facilities and get no bonus or other incentives as regular employees get. They receive minimal training and skill formation is also negligible (Rajeev, 2006).

Labour laws are violated more when the firms have targets to meet. This is especially true in case of Special Economic Zones. Many studies have drawn

attention to the intensity of violation of labour laws at SEZs around the world. Elliott and Freeman (2003) argue that, often firms at EPZs are gated colonies to keep the workers in. The managers prevent 'activists' from disclosing information about poor working conditions. Sometimes workers live in factory-run dormitories making it difficult for them to protest. Outsiders seeking to interview workers may be arrested, deported, or physically attacked. Workers who report bad conditions may be assaulted by company guards or fired and blacklisted by local firms.

Success of Chinese SEZs has made many countries model them. But, it has been highlighted that there are acute labour problems and inequities associated with the development of Chinese SEZ (Gopalakrishnan, 2007). Abuse of labour is rampant in Chinese SEZ. The workers, especially migrated workers, get no legal or social protection. There are also high death rates among industrial workers and many child labourers are being employed. While the owners owe their employees wage arrears, many of them are being paid less than the minimum wage. They also are not organised in any independent unions, but strikes are rampant among Shenzhen workers. Quite often labour abuse is cited as a reason for increased crime rates in Shenzhen.

In another study prepared for Council for Social Development, Gopalakrishnan (2007 b), clarifies that the presence of MNCs in Malaysia, South Korea, etc. has enabled the wages in EPZs to be slightly higher than outside. However there are workers in Chinese, Sri Lankan and Philippines Zones who receive wages less than the stipulated minimum. Women workers are employed as the manufacturing process based on cheap labour is monotonous, repetitive and exhausting. More over women are put through various restrictions, including termination of employment upon marriage, restrictions on freedom of movement, sexual harassment, lower payment, etc. This allows the corporations to set lower price for finished goods and reap higher profits, thus contributing to economic growth. In addition to the violations of women's rights in the Zones, frequent retrenchment, arbitrary dismissals, failure to pay minimum wages, violations of the right to form unions, and physical violence such as beatings and killings are very common. Improvements in working conditions at the Zones are limited by government laws

prohibiting worker agitation at Zones, the uncertain nature of investment of foreign firms and the complete territorial isolation of the Zones from the world outside. Thus, the nature of EPZ investment and production create a particular 'labour regime' with low skill levels, high turnover, extreme insecurity and repression of workers.

Lang (2010), in view of the low and deteriorating labour standards at EPZs, comments that the human rights violations that take place in EPZs are more serious than labour issues. Under the assumption that union-free-EPZs attract greater investments, most governments do not confer collective bargaining rights to its workers. Some examples of suppression reported by the International Confederation of Free Trade Unions *(*ICFTU*)* include the use of dogs to attack insistent workers in Namibia, death threats issued to Bangladeshi workers by the managing director of a factory, and removing union representatives from a workplace at gunpoint. Though it is true that the wages earned by the workers at EPZs are better than elsewhere in the domestic market, they are not sufficient to ensure decent living. In order to meet the peak in demands, most workers have to toil which has effects on health and safety at EPZs. Mistreatment of workers in the form of locking employees within factories in order to combat a perceived risk of theft is present in the Zones. All these are in the name of extreme competitive pressures which developing countries face in attracting FDI.

2.2.1.2 National scenario

Similar to the international scenario labour abuse is visible in India too, especially during the post-reform period. There has been a shift in the long protected 'non-competitive' to the 'competitive' markets which involve a change from the high-profit and low-output scenario to scale expansions and low profit margins. This meant cost reduction, quality improvements, and productivity growth with labour bearing the burden. This involved the use of labour-replacing productivity-enhancing technology and recruitment of labour on short duration contractual basis. Contract workers are more hard pressed than permanent union workers in terms of wage, hours of work, PF and gratuity (Sen and Dasgupta, 2008).

Absence of freedom of association is another matter as far as labour laws are concerned. Management finds it easier to employ large number of contract labourers

in the firm under highly flexible conditions of work and lower cost. In export-oriented firms, the use of contract labour is higher than domestic market-oriented firms. In the new generation firms, trade unions are almost absent and the management has been keeping the trade unions at bay, where the wage rates are related to productivity, where there are only a few permanent workers. Thus trade unions are on the verge of a decline in power. However, the trade unions can remain in power by bargaining for a higher wage for the permanent workers and can develop a patron-client relationship with contract workers by getting involved in matters like recruitment of contract workers, renewal of contracts, help the retrenched workers find some other work, etc. (Chakravarty, 2010).

In India, though labour laws are applicable across the country, their enforcement is very bad in the SEZs as a result of government's policy to reduce labour-right-protection at Zones. The SEZ Act, 2005 gives more authority to the industries located at the Zones, by transferring the powers of the Labour Commissioner and the Chief Inspector of Factories to the Development Commissioner in the SEZ, who has the right to declare a SEZ as a public utility service. In such a situation strikes and lockouts cannot be declared without prior notice in Zones (Palit and Bhattacharjee, 2008). The non-execution of labour laws at SEZs deprives labourers of wage benefits, non-wage benefits and unionisation. The SEZ workers undergo flexible working time, high work intensity beyond the physical and mental capacity of workers, earn wages below subsistence levels, work under unsafe conditions, endure suppression of labour rights, and fear job-loss more than non-SEZ counterparts. The exploitative nature of labour process at Indian SEZs is often compared to experiences of labour during Industrial revolution in England (Sen and Dasgupta, 2008; Murayana and Yokata, 2009).

While the wages, working conditions, non monetary benefits (such as transport, health and food facilities), incentive packages and social security systems offered by SEZs are better than those outside the Zones, the bargaining power of SEZ workers remains weak due to limited trade union activity. Moreover, there are many young unmarried women working in these Zones who are easily being exploited as their bargaining power is weak. Even though most SEZs offer on-the-job training to

its workers, this training does not upgrade their skills substantially as they are employer-driven and lasts for short durations thus contributing very little to human capital formation. But, they are exposed to learning by working under strict time schedules, high quality standards and sophisticated machinery which help in upgrading their capability of learning further (Aggarwal, 2007).

In fact, in contrast to South Korea and Bangladesh, the wage levels of workers in Indian SEZs are not much higher than those outside them and breaches of labour laws are also widespread. Also, Indian SEZ workers are deprived of protection from abuses by employers. But, India's labour laws allow formation of trade unions in SEZs and there have been cases of trade union movements in Madras SEZ, Vishakhapattanam SEZ and Noida SEZ. But public utility status of SEZs by state governments prohibits recourse to strikes without conciliation. As a result of violation of labour laws, the performance of Indian SEZs is not satisfactory and there are a number of sick units. Exports began to pick up only recently and very little employment opportunities have been generated (Murayana and Yokata, 2009).

There is an overwhelming presence of females in sectors like textiles, electronics and garment units, who are by nature low-skilled. Wage rates and other fringe benefits are provided to them by a lesser amount compared to male workers. Moreover the hours of work are longer than the norms set for industrialised countries. Though the wage rates are low compared to international standards, it is this phenomenon which gives the firms a comparative advantage over developing countries. If the wage rates were comparable with developed countries, the very competitive advantage of low labour costs would vanish (Kundra, 2000).

Quite a number of cases have proved that, the reason for success of SEZs in India has been the labour sacrifices. Dutta (2009) accuses that though Nokia telecom SEZ near Chennai is held up as a stellar success, a deep study reveals that the company employed lower number of people than it required and contract labour has been found to be prevalent in all non-manufacturing forms of work in Nokia SEZ. There was 2,893 contract labourers hired in 2008. Nokia SEZ claims that its employees are paid 70 per cent higher than the minimum wage in TN. But it pays to

its employees globally, 45 times higher than what the Tamil Nadu Nokia SEZ workers receive.

In Santa Cruz Electronics Export Processing Zone (SEEPZ) Mumbai, employment generation is higher than that of other Indian Zones. Activities are labour intensive in nature. It offers low remuneration in order to attract FDI in labour intensive activities. Over the years, there has been an increase in the female proportion of the total workforce at SEEPZ, who concentrates in semi-skilled and unskilled jobs. Women are preferred as they are hard working, easy to control, willing to accept tedious work and easier to lay-off. Low labour cost as the competitive advantage is sought by the Zone. But as a public utility status is conferred on SEZ, labour problems do hamper production and escalate the cost of export orders. (Ghorude, 2004).

Firms at Zones are also never eager to employ workers for more number of years. Generally, workers in Zones do not have more than 15 years of experience. Workers of Noida EPZ are employed on a short-term contract basis as long term workers' wages rise with seniority. Thus the cost of hiring and firing workers is very low for employers where as the cost of providing on-the-job training is very high. High rates of labour turnover, casual and short–term nature of employment and labour flexibility, discourage firms from offering training and skill upgradation. Workers also find education irrelevant. This results in decreasing profitability and closure (Neetha, 2004).

Thus the studies prove that labour standards are chosen considering the firm's choice ignoring the benefit to workers. As the provision of labour standards puts a higher cost on firms, they provide labour standards in such a way that the marginal benefit in terms of higher output equals the marginal cost of improving working conditions. But the firm will provide only the minimum of such standards if it does not improve firm's productivity, even if such a provision will entail a higher utility to its workers (Singh, 2003).

The cases of violation of labour laws in SEZs are many. The violation often takes place in the absence of proper enforcement mechanism. In the absence of resources to enforce labour laws at SEZs, there are reports of absence of freedom of

association. Over time work continues to be a major problem at SEZ, workplaces are less safe and less healthy environment. Firms should be made aware that non-compliance to labour standards would bring in less gain. For this, the firms should implement the best labour practices and better labour conditions. Labour conditions in EPZs can be improved only through better education, of both workers and management (Milberg and Amengual, 2008). To make the Zone have more value added per employee and more competitive, employment in the Zone should be accompanied by an improvement in the quality of employment. This requires investment in human skills and knowledge and necessitates better wages and working conditions (Ghorude, 2004).

2.2.2 Endorsement of Labour Laws

Lower labour costs of developing countries alone would not suffice to attract FDI as investors venture to make investments which are productive. Data for the year till 2000 has proved that more than 80 per cent of FDI was received by USA and Europe. There are investors who view labour standards as means of building human capabilities. To them higher wages help in raising output and welfare by lowering shirking and raising productivity.

Better labour standards stimulate R and D, enable progress in technology, reduce pressure on workers to earn a subsistence income and reduce child employment which will be substituted by employment of an adult productive worker. Improvement in labour standards in organised sector alone can ensure labour standards in the unorganised sector. Developing countries like India can afford better labour standards without fear of losing competitiveness or export as they have the advantage of low currency exchange rates and a lower unit labour cost. Thus viewing labour standards as a development strategy would bring economic and social objectives close to each other (Banerjee, 2005).

Some managements in the Zones have realised the long run benefits of higher wages and have implemented them. The employers in SEZs offer higher incentives and better salaries to attract qualified employees, to retain them and also to counter-act the tarnished image of SEZs with respect to working conditions. Foreign firms operating in SEZs also follow better labour standards to preserve their image, as per

instruction from their head-office. Thus, measures to increase productivity lead to higher salaries. This has made wages being offered at SEZs higher than what are available to their counterparts in the domestic economy (Cling and Letilly, 2001). This helps the firm to tackle competitive pressures, to entice skilled workers to produce quality products, to avoid shirking and so on (Maskus, 1997).

Some are of the view that labour laws impose bond on SEZs by imposing restrictions on recruitment, retaining and retrenchment of workers by the firms. This trend may affect the operations of business when there is a down turn in the international market, thus distracting investment. Even in such situations, the hi-tech industries in SEZ attract educated and skilled workforce by not only offering a handsome wage but also by providing wide variety of facilities to enable them to lead a better quality of life. Some of the facilities include, better physical infrastructure, good social infrastructure (parks, clubs, educational-facilities), access to entertainment centres, reliable power supply, less pollution, less crime rates, reasonable tax structures, etc. Good transportation network is also provided for time-critical, hi-tech and high value industries in SEZ in order to avoid delay in reaching destinations across the world (Nallathiga, 2007).

Firms should realise the importance of provision of labour standards. Working class, trade unions, government and the consumer organisations should also negotiate for better labour standards. Bargaining power of working class has been enhanced by globalisation of production networks as any disruption in the supply of the product affects the company's worldwide operations. Opening to international trade makes it necessary for linking of workers' demand for decent work with the issue of productivity. For firms to remain competitive in the market, for profits not to fall with increasing wage demands, there is pressure to increase productivity. Alternately, improvements in productivity do create conditions for labourers to press for improvement in labour standards. Unions should play active role in drawing non-unionised workers, especially women into their fold. Action on part of the government is also equally important. Non-compliance with ILO's core labour standards by producers may lead to the threat of consumer boycott of products. So

consumer organisations can pressure brand-names for implementing labour standards (Devnathan, 2009).

2.3 Relation between Labour Standards and Competitiveness

A number of recent studies have investigated the relationship between competitive strategy of firms and working conditions. Very relevant ones are reviewed below.

2.3.1 Negative Relationship

There are studies which mention that a regulation of labour market with trade unions and other pro-labour legislations are market distorting agents which only help to reduce investment (Sharma, 2006). Focusing on 18 OECD countries and labour standards, a study used a combined index of standards that include employment protection rights, fixed-term contracts, working time, minimum wages, and employees' representation rights. It found that higher labour standards result in higher labour costs in industries that use relatively more high-skilled labour. This is because employers have to invest in education and skills of their workers. The demand for high-skilled labour is relatively inelastic. An increase of labour costs as a result of more stringent labour standards reduces demand for high-skilled labour less than for low-skilled labour. This results in the loss of competitiveness for high-skilled labour-intensive export industries more than that of low-skilled labour-intensive industries. Low-skilled labour-intensive exports are not affected due to the high elasticity of low-skilled labour demand (Beers, 1998).

Busse (2001) through his study, in a Heckscher-Ohlin framework, analyses whether countries can derive comparative advantage in unskilled-labour-intensive goods from low labour standards, and thereby influence trade flows. He opines that the country has comparative advantage in unskilled-labour-intensive goods if there are more of forced labour and child labour, which add more to endowment of unskilled labour. Also, weaker union rights are associated with a stronger comparative advantage in unskilled-labour-intensive goods.

Rising labour costs make EPZs and domestic exports less competitive in the world market and may even make footloose EPZs chose cheaper shores. Mauritius

EPZ had to pay workers high wage rate after 1994, due to tight labour market conditions. Wage increases put Mauritian EPZs at a competitive disadvantage and encouraged foreign firms to relocate to countries with lower labor cost. Senegal EPZ became unsuccessful due to many government mandated labor market rigidities which made hiring and firing of workers difficult (Madani, 1999).

In India too there have been cases where strong labour market regulations reduced investments. Modifications in labour market regulations took place in different Indian States in manufacturing between 1958 and 1992 to increase the bargaining power of workers. It reduced incentives for capital accumulation and lowered output employment and investment in the registered manufacturing. It also led to investment in unregistered manufacturing (Besley and Burgess, 2004). In India over the period 1999-2000, inflexibility in the labour market raised the labour costs of enterprises and hindered investment. Stringent labour laws enhanced the productivity and also the capital intensity of the economy. But the employment content of growth also decelerated as a result of both policy level and technological changes. Accompanied with this trend was the increase in unorganised sector employment. Hence, latter half of 1990s saw massive retrenchment of workers, employment of contractual workers and reduced wage rates as part of bringing about flexibility in the labour market (Sharma, 2006).

But lower labour standards cannot be justified from human rights angle. So business friendly labour laws without abuse of workers' safety and labour rights are beneficial (Madani, 1999).

2.3.2 Positive Relationship

There are also oppositions to the argument that sacrifice of labour standards will help to gain a competitive advantage. Export oriented firms which compete in the dynamic international market can sustain their output only by considering labour productivity and worker welfare. If the firms stick to offering low wages and low labour standards for remaining competitive, they will never be motivated to improve productivity. It is when a floor to the labour standards is set by improving wages and working conditions that firms get motivated to improve productivity by means of innovation, modern technology, better design, etc. Moreover, the flexibility in labour

practices erodes the collective bargaining capacity of trade unions because of the shift from permanent to temporary employment. This will affect the welfare of workers (Sharma, 2006). Absence of security standards only increases firms' health expenses. Existence of child labour only helps to produce and export low-skilled items and can hamper growth of human capital. It would even lead to consumer backlash. All these would impede national development too.

Export success in many developing countries is not due to deficient core labour standards, but due to provision of better labour standards. Integration to the international markets requires export oriented firms to have international levels of efficiency and product quality. Developing countries that do not follow the strategy of lowering prices remain competitive in the export market. They concentrate more on product quality, product varieties, etc. which require improvements in technology, constant training and education. To cite a case, US firms may prefer lower labour costs, but its decision to invest abroad depends on factors like efficiency, product quality, productivity, etc., that is, countries with better labour standards will get more share of US's FDI (Aggarwal, 1995). Imports to USA are also more from countries with high labour standards. As global investors now prefer locations which are large, rich and dynamic with highly skilled workers, innovations and modern infrastructure, countries which strengthen core labour standards can increase economic growth and efficiency by raising skill levels of the work force (OECD, 1996, 2000).

There is evidence of high labour standards being provided at EPZs by Multi National Companies (MNCs), because advanced industries like electrical equipment manufacturing, automobile parts making require skilled quality labour (Maskus, 2004). Moreover, MNCs rate political and social stability as more important determinants of FDI location than labour costs. They enable domestic firms to export more facilitating access to world markets.

There are a number of cases where in more labour protection has improved the competitiveness in an economy. When the labour standards improve, child labour ceases as parents value education and human capital for their children and for themselves. Labourers will also demand better rights to safeguard themselves against any insecurity at work. Employers follow better labour practices to retain skilled

labour and also to prevent output losses. Rapid growth attained from higher human capital accumulation increases the demand for better labour standards. Moreover, a democratic structure in a country is also an important determinant for enforcing labour standards efficiently (Hanson, 2001).

The efforts by workers would only increase by enforcing certain labour standards like, writing labour contracts, providing well-lit work places, canteens, etc. Cost of enforcing expensive labour standards is spread over a number of items and unit cost is likely to be modest, at the same time it gives the firm a marketing advantage too (Elliott and Freeman, 2003). The foregone resources associated with 'work injuries' can instead be invested in measures aimed at enhancing productivity. Higher levels of labour standards such as freedom of association, collective bargaining, right to organise, safety conditions in the workplace, amplify export performance, stock of human capital, productivity gains, competitiveness, and improve trade relations between countries. They help to improve development process and thus the standard of living (Bonnal, 2010).

Collective bargaining rights enhance the sense of job security among workers and makes them engage in productivity enhancing measures. They help to avoid shirking and stealing, and sustain wages and employment. The firm in a unionised environment concentrates less on wage cutting and more on training, innovation, etc. The greater economic and social stability brought about by strong trade unions and collective bargaining rights bring about trade competitiveness and contribute to increased exports and economic performance for the country. Even if an inducement package for EPZs includes limited labour standards, the indirect effect of an improvement in growth performance will eventually necessitate EPZs to implement labour standards (Maskus, 1997; Kucera and Sarna, 2004).

OECD (1996, 2000) studies, which focus on only two core standards, freedom of association and the right to collective bargaining, prove that the observance of core standards would improve allocative efficiency, support the expansion of trade and strengthen long-term economic performance of all countries. In fact, these rights can help upgrade production processes, while also raising workers' motivation and productivity through investment in physical and human capital.

Adoption of new labour standards may force the employers to reduce the wage content in the total remuneration, but it will force the employees to work more to prevent any deterioration in the standard of living. Along with this, the increase in marginal utility associated with its adoption will shift the supply curve of labour and of goods to the right. This leads to fall in wages. If prices of goods increase with implementation of labour standards, it will be offset by the benefits such measures would bring to the country as a whole. Thus labour standards will not result in unemployment or loss of competitiveness for firms or countries (Raynauld and Vidal, 1998).

The wages can be suppressed only for a short term. In the long run, wages would catch up eliminating previous competitive gains. Initially if wages paid are less than the value of marginal product, it would be an incentive for firms to increase employment. Eventually as certain labourers become scarce, along with productivity gains, and wages tend to match the value of marginal product (Raynauld and Vidal, 1998; Banerjee, 2005). Rampant use of substandard labour conditions never helps the countries to maintain their competitive advantage in the long run. In the long run, the economic costs associated with low labour standards will offset short term gains. Labour standards need to be separated from trade and should be viewed as a means of building human capabilities (Banerjee, 2005).

As there are benefits derived out of provision of labour standards, how can they be ensured in a country? This is where the significance of international organisation, ILO lies. But ratification of ILO labour standards need not result in any change in the domestic policies to improve labour conditions. The ratification of labour standards by a country is an endogenous political act. A non ratification of labour standards also need not improve export performance or attract FDI. A number of factors like relative price of a country's exports, its sources of comparative advantage, and the costs of conducting trade, human capital investments, policies that emerge from WTO would influence export performance. Thus countries need not gain a competitive advantage by their ratification choices (Flanagan 2003). The policy makers, the governments, the managements, the trade unions, the workers and even the consumers should work together for its execution.

2.4 Summary

The term competitiveness is associated with the ability of a firm or a nation and its product to capture the international market. Price of the product being no longer crucial, quality and reputation are the global requirements. Cost minimisation, simultaneously upholding productivity is important. A branch of literature argues that competitive strategy of SEZs has often led to compromise of labour standards in Zones in the form of low wages, absence of trade union participation, compulsory over-time, etc. Rigid labour laws can only deter investment and compromise competitiveness. Increase in labour costs associated with better labour standards can even reduce demand for skilled work force. As against this view, some studies also point out that labour standards are means of enhancing worker's motivation and productivity and improve export competitiveness. Improvement in labour standards reduces child labour, enhances human capital formation and ensures a democratic style of functioning. Good wages, transportation, entertainment facilities, etc. are provided to them to enhance their productivity. Higher labour standards stimulate research and development and technology on part of the firms as means of cost-minimisation. For attracting FDI, political and social stability of a country, high skilled labourers, innovations, modern infrastructure, etc. are more important than labour costs. They are provided to avoid consumer backlash against products produced under substandard conditions.

The literature review done thus establishes that there exists a relationship between competitiveness and labour standards. Cases of human rights violation are visible in very competitive Zones of Noida, SEEPZ, Nokia telecom SEZ, etc. Often, women workers have to bear the brunt of the competitive strategy in the form of frequent retrenchment, failure to pay minimum wages, sexual harassment, etc. In the context of this relationship, several research issues about SEZs in India emerge. Cochin Special Economic Zone (CSEZ), being a multi-product zone with different types of production activities has been chosen as a platform for a deep investigation. The study on the Zone situated in the state where workers are regarded to have awareness about their rights is more relevant. To begin with, an over-view of SEZs, both in general and in India, is presented in chapter 3.

.....ꕥ.....

Chapter 3
SPECIAL ECONOMIC ZONES

Contents

Developing countries see export-led-industrialisation strategy as a means to achieve economic growth. This has led to an increase in the number of SEZs across the world, providing access to world markets, raising industrial output, and upgrading production standards to world levels. They find SEZs as means to absorb excess labour through employment creation; and large companies find it as means of investment by gaining preferential trade and input price conditions, liberal profit repatriation, lenient labour standards, etc. (Milberg and Amengual, 2008).

The category 'SEZ' covers a broad range of titles used for different types of Zones around the world. While these terms indicate some important differences in terms of concessions and regulations, the generic term SEZ is used (in this study the differences are irrelevant) to incorporate a wide array of Zones around the world like Special Economic Zones(SEZ) (China), Free Trade Zones (FTZ), Export Processing Zones (EPZ), Free Zones (FZ), Industrial Estates (IE), Industrial Free Zones (IFZ) (Ghana, Cameroon and Jordan), Free Ports, Trade Development Zone (TDZ), Information Processing Zones (IPZ), Financial Services Zones (FSZ), Export Free Zones (EFZ), 'Maquiladora'(Mexico, Costa Rica and El Salvador), Foreign Trade Zone (FTZ), Special Export Processing Zones (SEPZ) (Philippines), Free Economic Zones (FEZ) (Russia), etc. In India, they are called Special Economic Zones (SEZs)

(Lang, 2010; Singa, 2007; Milberg and Amengual, 2008; Aggarwal, 2007; Johansson, 1994). All the terms signify industrial clusters and the general concept of all these terminologies is basically the same.

SEZs were traditionally geographically self-contained entities carrying assembly and light manufacturing and simple processing activities such as textiles, foot wears, etc. In recent years they got transformed to include high tech science parks, finance zones, logistics centres and tourist resorts. Zones set up recently concentrate on high technology industries, electronics and chemicals companies, financial services firms, IT and software services companies; and some firms within the Zones specialise in providing services of all kinds to the companies and its employees. SEZs may include enclave-type zones, single-industry zones (jewellery zone in Thailand), single-commodity zones (tea in Zimbabwe), single-factory zones (Export Oriented Units in India) and single-company zones (such as in Dominican Republic) or sometimes the governments may confer Zone status to companies operating within the country. Permission to operate a Zone is conferred by the government, the public agencies, private agencies and often foreigners also establish units in the Zone. Though set up on exclusive export orientation, countries have relaxed their rules with respect to Zones allowing domestic sales (Lang, 2010, Milberg and Amengual, 2008; Gupta, 2008). There are also countries like Brazil (The Manaus Free Zone of Brazil) which permit the firms in the Zones to process the imports with the purpose of selling the final product in the domestic market. A distinction is also made between high-end Zones and low-end Zones depending upon the quality of management and facilities provided (Madani, 1999).

SEZs may have area demarcated as:

a) Those for setting up units for production of goods and rendering of services; and

b) Non-processing areas (Gupta, 2008)

3.1 Special Economic Zones

Over the years, there has been an increase in the number of SEZs around the world, operating in a country with a variety of purposes. Many developing countries set up Zones to manage a larger strategic transition from a highly protected, inward-

oriented domestic economic policy, to a liberalised, globally integrated, outward-oriented domestic economy (Lang, 2010). A variety of definitions have been provided to explicate the features of Special Economic Zones (SEZs).

The International Labour Organisation (ILO) has defined EPZs as Industrial Zones with special incentives, set up to attract foreign investors, in which, imported materials undergo some degree of processing before being exported again (ILO, 1998).

In a publication of the London School of Economics, SEZs are defined as geographically delimited areas created by a host state, which offer certain economic incentives to export-oriented businesses to physically locate within the Zone (Lang, 2010).

World Bank defines EPZs as fenced-in industrial estates specialising in manufacturing for exports that offer firms free trade conditions and a liberal regulatory environment (Madani, 1999).

SEZ is a specifically delineated duty-free enclave and shall deem to be a foreign territory for the purposes of trade operations and duties and tariffs. All trade inflows into the Domestic Tariff Area (DTA) are treated as imports and all outflows from the DTA are treated as exports[7] (Gupta, 2008).

The International Confederation of Free Trade Unions (ICFTU) defines the Export Processing Zones as a clearly demarcated Industrial Zone which constitutes a free trade conclave outside a country's normal customs and trading system where foreign enterprises produce principally for export and benefit from certain tax and financial incentive (Das, 2009).

There is no single definition which incorporates all the features of a Special Economic Zone. The main features of a SEZ can be summarised by the following points.

a) A defined industrial enclave in a state's territory constituted for the purpose of trade.

b) Provides certain benefits and incentives to export–oriented businesses which operate within the area.

[7] SEZ units can sell goods and services, in the domestic market on payment of customs and excise duties applicable to them.

c) Trade inflows into SEZs are treated as imports and trade outflows are treated as exports.

The traditional definitions which limit SEZs into a geographical area is slowly disappearing into 'free enterprises' or 'free points' scattered throughout a territory.

3.2 History of SEZs

Conventional EPZs had its genesis in its two predecessor's industrial estate or industrial park and Free Zone or Free Trade Zone.

Industrial Estates - The world's first complete Industrial Estate was established in the private sector in 1896 in England. The growth in the number of Zones became vigorous with United States taking the lead in setting up a number of Estates by 1940. It gathered further momentum around the world by 1950s and 1960s. United Kingdom, France and Canada too joined the pursuit.

Puerto Rico became the first developing economy to set up a publicly funded Industrial Park with its 480 factories with suitable infrastructure. The first public Industrial Estate in Asia was set up in Singapore in 1951. Malaysia and India followed soon. India set up the first Industrial Estate by 1955 at Rajkot, Gujarat. The United Nations held many conferences on Industrial Parks as they viewed such Parks as instruments of economic development.

Free Trade Zones - Free Zones in the sense of a place for stocking goods to avoid customs duties has existed for 2500 years. These Zones were used to hold goods meant for distribution and to delay the payment of import duties or to avoid or reduce indirect taxation on them. By nineteenth century, Free Ports got established in Britain as well as in Asian countries like Hong Kong and Singapore. By twentieth century, many general-purpose Free Trade Zones got established in the developed countries like United States, Spain, Switzerland, etc., as well as in the developing world like Argentina, Chile, Syria, etc.

Export Processing Zones - One of the first EPZs, combining the features of both Industrial Estates and Free Trade Zones, was set up as Shannon Free Zone in 1959 next to Shannon airport in Ireland. Its employment potential became 4000 by 1966. Spain's Barcelona Free Zone whose sale was oriented towards the domestic market

started manufacturing for exports too. By 1965, Dominican Republic, India and Taiwan (China) built their EPZs to attract industrial investment, promote foreign trade, create jobs and to introduce modern technology. Taiwan (China) was the first to use the term 'Export Processing Zone' officially. Massive investment, huge employment generation and excellent administration made EPZs popular in Asia. Mexico's in-bond plants 'Maquiladoras' and Taiwan's EPZs were highly influential around the world and were widely imitated. In 1970, Mauritius passed an EPZ Law allowing firms specialising in exports to access duty free import of inputs, regardless of their location in the country. The Republic of Korea established its Masan Free Export Zone in 1970 and its Iri Zone in 1974; Malaysia launched its Zones in 1972; Philippines, its Bataan EPZ in 1972; Indonesia launching its Zone in 1973 and many other countries followed suit. South American countries like Gautemala, El Salvador, etc. and Middle Eastern and African countries like Jordan, Senegal, Liberia, etc. also soon joined them. Setbacks in the functioning of these Zones never prevented countries like Costa Rica, Sri Lanka, Bangladesh, Thailand, Pakistan, Bulgaria, Kenya and also high income countries like UAE and Bahamas from establishing the Zones. Attracted by massive benefits, many more countries around the globe are setting up more and more number of Zones (World Bank, 1992).

Though earlier SEZs were found more in industrialised countries, after 1970, its spread stretched across the developing world from East Asia and Latin America to South Asia, the Middle East and sub-Saharan Africa. With the liberalisation of many economies during 1990s, its spread further extended to over 100 countries across the world, with Asia, particularly China, managing bulk of the SEZ activity. SEZs developed during 1980s in the developing economies confirming a shift from inward looking and protectionist policies towards liberal, outward oriented trade policies, a step towards integrating the domestic market with the global market. China and Korea are the best examples for this transition, where in China is experimenting with SEZs and its market oriented reform measures (Lang, 2010).

3.3 Types of Zones

In order to boost economic development, large number of and different types of trade Zones performing variety of activities have been introduced in many

countries around the world. Though there isn't any standard definition or explanation to elucidate a particular type of Trade Zone, ILO provides a reasonable guide on the types of Trade Zones, variations in policy prescriptions and objectives (Palit and Bhattacharjee, 2008).

Table 3.1 Types of Zones

Type	Features	Objectives	Activities	Incentives	Domestic sales	Examples
SEZ	Covers a larger area - a province, a region	A deregulated environment to boost exports	Industry and services	Duty free imports on certain goods reduced taxes , foreign exchange controls, liberalised labour laws with restricted trade union activity	Restricted	China (Hainan and Shenzhen) India (Surat)
EPZ/FTZ/ Industrial Free Zone	Enclave or industrial park	To enhance exports	Light industry and manufacturing, labour intensive and low-skill industries	Duty free imports of inputs and capital equipment, 15 years exemption from taxes, foreign exchange controls and restricted trade union activity	Limited domestic sales	Ireland, Taiwan (China),
Free port	Covers entire city	Expand trade and economic base	Industry, service, trade, etc.	Duty free imports, unregulated business environment, preferential interest rates, repatriation of capital, profits and dividends, etc.	Allowed within Free Port	Hong-Kong (China), Singapore, Bahamas Free Port
Enterprise Zone	An entire city or found within the city	Meant for the upliftment of small scale and medium enterprises in backward areas	Performs all types of commercial activities	Liberalised license norms and labour laws with restricted trade union activity and minimal tax rates.	Limited domestic sales	Indonesia, Japan
Information Processing Zone	Part of the city or part of the Zone	Boost to information processing	All forms of information processing related activities	Duty free imports of capital, Liberal labour laws, use of satellite technology (INTELSAT)	Limited domestic sales	IT parks in India

Source: www.ilo.org referred on January, 2012

There are also a variety of Zones like Financial Service Zones, Commercial Service Zones, etc. providing financial services, warehousing, storage and transshipment services under a liberalised business environment. Zones can play a long term dynamic role in the country's development process if they are appropriately

well managed and used as integrated part of a national reform and liberalisation program (Madani, 2009).

3.4 Objectives of Special Economic Zones

Special Economic Zones (SEZs) have been set up with a wide variety of objectives. The earliest SEZs had very limited objectives to attain such as lessening unemployment pressure and generating foreign exchange (Lang, 2010). Today, SEZs are not just instruments of export promotion alone but with a multiplicity of expectations to generate a flow of domestic and foreign investment, infrastructure development, creation of productive capacity, technology transfer to generate additional economic activity and creation of employment opportunities thereby stimulating economic growth. Main objectives of the SEZs are:

a) generation of additional economic activity
b) promotion of exports of goods and services particularly in the key sectors
c) promotion of investment from domestic and foreign sources
d) creation of employment opportunities
e) development of infrastructure facilities
f) generation of additional foreign exchange reserves
g) promotion of transfer of technologies and skills
h) development of deprived regions
i) raising the living standards of the people

(Cling and Letilly, 2001; Lang, 2010; Madani, 2009).

The ultimate aim of SEZs should be to raise peoples' standard of living and to initiate economic development (Milberg and Amengual, 2008).

3.5 Role of SEZs in a Developing Economy

There are different views on the role that the SEZs play in a developing economy.

SEZ is a boon for a developing country to become outward oriented when it is reeling under distortionary trade, macro and exchange rate regulations and other government controls. However, as a country opens up its trade and with its industrial exports becoming competitive, the share of SEZ's exports and employment in the country's total exports and employment falls. Eg: Taiwan, S. Korea. SEZs also provide foreign exchange to the country for meeting its import needs. They also help to reduce the unemployment and underemployment problem of the country. But only if the rest of the economy gets liberalised in due course, the SEZs can contribute more towards the economy.

SEZs are seen as viable sources of employment. But direct employment impact of Zones is marginal. ILO's estimate is that SEZs account for less than 0.5 per cent of total global employment, and for less than 3 per cent of employment in most individual countries with SEZs. Estimates suggest that indirect employment might amount to up to 77 million jobs worldwide (Lang, 2010). SEZs are also seen as laboratories to experiment with outward-oriented policies related to new production, labour and financial relations. Example: China.

There are also countries which have established SEZs for attracting FDI, for receiving technological transfers and for human capital development which will cause a demonstration effect on the domestic private industries. Besides providing a well managed industrial structure to the nation, the labour also benefits from technical training and learning by doing (Madani, 1999).

3.6 Incentives Received by SEZs

The incentives received by Special Economic Zones (SEZs) vary from country to country, most important ones can be summarised under the following headings.

- **Infrastructure**- Infrastructural facilities enjoyed by the companies at Zones include certain basic amenities like roads, telecommunication including data networks, water and sanitation services, local housing, postal services educational institutions, etc. at comparatively less-than-market rates.

- **Preferential tax treatment**- Zones would provide its firms tax exemptions (some or all export taxes), tax holidays, tax sops, rate reductions or rebates on income taxes, sales taxes on both inputs and outputs, taxes on capital, and other forms of direct and indirect taxation.
- **Preferential duty treatment**- Firms within the Zones are exempt from export duties, both in respect of their products and their by-products. Moreover, they get concessions or exemptions from duty on imports of raw materials, intermediate goods, capital goods, spares parts, etc. used in the production of exports.
- **Direct subsidies**- Based on the performance of firms, Zone offers various subsidies, education and other training facilities.
- **A liberal regulatory environment**- A hassle free operating environment is granted to the Zones as part of its preferential treatment to its firms. A firm in a SEZ is granted exemptions on restrictions on the repatriation of profits and on foreign exchange convertibility and foreign exchange controls. Stringent labour rights and standards and environmental regulations have got relaxed as a step towards promoting SEZs. The rules with respect to foreign ownership and on the leasing or purchasing of land have also been relaxed. Some countries offer a special incentive of keeping their currencies undervalued to facilitate less costly imports and to raise export competitiveness.

Other incentives such as export promotion services and smooth administrative procedures for making imports to and exports from the area are often available to firms in SEZs. The Zone also offers modernised administrative services especially to facilitate import and export (Lang, 2010; Milberg and Amengual, 2008).

3.7 Elements Required

The three elements required for a developing country's entry in to the export market are,

(a) A rational trade policy regime, an appropriate exchange rate, an adequate and liberal, legal and regulatory environment suitable to business.

(b) Suitable physical infrastructure and financial resources along with adequate physical trade infrastructure in the form of sea, air and road connectivity.

(c) Adequate links with the international trade network with suitable technical, marketing and managerial know-how (World Bank, 1992).

3.8 Evaluation of SEZs

A proper evaluation of the success of SEZs requires it to be estimated by comparing its benefits with costs involved. However, this is not practical in full sense as detailed information is unavailable in case of most Zones. But information regarding direct employment, number of firms in the Zones and other details will provide an indication about the success of Zones. Nevertheless, low occupancy rates, high initial costs and continuing need for subsidies, etc. represent failure of SEZs (World Bank, 1992).

An appropriate and detailed assessment of the impact of SEZs have been summarised in World Bank study 'A Review of the Role and Impact of Export Processing Zones' by Madani (1999). His findings are summarised in table 3.2.

Table 3.2 Arguments For and Against SEZs

Arguments for SEZs	Arguments against SEZs
Foreign Exchange Earnings Potential. 1. Increased foreign currency earning potential to meet their export needs.	• Works only if the foreign firms convert their foreign currency earnings at the official rate than shadow exchange rate. • Even when total exports is positive, net export can turn negative when firms import huge quantity of inputs weakening the backward linkage effects of SEZs units.
Tax Revenue/losses effect. 1. Tax-revenue- losses are offset by the various benefits like employment, exports , etc. brought by the units in the Zone	• High opportunity costs of tax incentives and related investments. • Providing tax credit by the home country for the taxes paid in host country may lead to net transfer of resources from host country to home country if the tax rates in the host country is lower than the home country. • It discriminates against domestic firms excluded from the Zone. • Tax incentives for firms in SEZs may act as import subsides encouraging SEZ firms to import inputs rather than procuring it locally thereby discouraging backward linkages. • Restrictions on domestic sales for SEZ units by curtailment of tax incentives eliminate creation of forward linkages.

Foreign Direct Investment (FDI). 1. FDI at SEZs makes export–oriented firms flourish into development as the potential entrepreneurs learn and copy from it (Demonstration effect).	• The importance of SEZ in an economy declines as it becomes 'outward-oriented', but it's worth as an industrial estate remains.
Technology transfer and linkages 1. Technology transfer brings about industrial development and modernise traditional ones. 2. Backward linkage effects upon the domestic firms as suppliers of inputs to units in SEZs	• If there are variations in the technology of firms in SEZs and domestic firms, backward linkages would be limited due to low absorption capacity of low-tech, labour intensive firms in the Zones. • Poor quality, non-competitive pricing on domestic raw material may make backward linkages weak. • If the domestic firms are not sophisticated enough to provide necessary inputs to SEZ-firms, the creation of linkages would be absent. • Foreign firms may tend to prefer supplies of inputs from abroad. • If the foreign firms keep their research finding as high-tech secrets, transfer would not arise.
Employment creation 1. The most important goal as well as the most important contribution the SEZ makes to the economy is employment generation	• If the labour markets are tight, the incomes would rise and also the cost of production, which tend to make SEZ exports less competitive and would discourage investment in the Zones. • The growth rate of employment in SEZ in developing countries is not enough to alleviate unemployment. • More jobs in SEZ are held by females.
Female Employment 1. The employment gives women an independent source of income. 2. Women are preferred as they are diligent and dexterous, at the same time, can be employed at lower wages and never get unionised too.	• Lower wages represent their lower skills and productivity. • They are categorised as 'production workers' with little scope for growth and promotions. • They are assigned low –skill and low-pay jobs. • Women's jobs at SEZs tend to be less secure as they are not unionised and are employed on contract basis.
Human Capital Development 1. Workers in SEZs become skilled through training and learning-by-doing process which contribute to productivity and help the workers to earn better. 2. Employees receiving managerial, production, organisational, marketing and supervisory skills create entrepreneurial capital.	• Skills which the employees receive are not very sophisticated and they get only basic training. • Creation of human capital depends on the absorption capacity of the workers with new technology.

Labour standards 1. Absence of stringent labour standards with ease in hiring and firing workers reduces the cost of production in a situation when the export market is highly volatile. This encourages FDI in the Zone	• Labour protection and good working conditions would encourage enhancement of workers' living standards and productivity reducing absenteeism and labour turn-over. • A strong positive correlation exists between provision of better labour standards and foreign investment. • Stringent labour regulations will demonstrate less costly, safer work environment to domestic firms.
Environmental damage	• Environmental damage has been caused by SEZ activities as a result of its lax attitude towards environmental protection laws.
Economic Policy 1. The success of SEZ depends on macroeconomic policies, political continuity, and sound exchange rate policies 2. SEZs demonstrate the benefits of implementing outwards oriented and export promotion policies thereby reforming the trade policies of the country.	• Non-liberalising countries may use SEZs as means of creating employment and earning foreign exchange, but continue to follow protectionist policies. • For attracting FDI more serious concerns like private property, labour laws, labour education and productivity, natural resources, etc. are to be considered than establishing SEZs.

Source: Madani (1999)

The establishment of SEZs does not lead to a broader development of the skills of the local workforce since they specialise on simple assembly operations. Pressure on country's finance is immense with huge initial costs in building infrastructure. With this, when the duty free goods are leaked in to the domestic economy it again undermines the objectives with which the Zones are built. At this juncture arises the significance of privately run Zones with the initial costs, operating costs, etc. being met by them and also managing to run the Zones on a profit basis with public agencies retaining the regulatory characteristics (Lang, 2010).

3.9 Special Economic Zones in India

Globalisation has transformed most of the developing economies across the world by bringing in a shift in their development strategy, from the policy of import substitution to that of export promotion. As part of such a strategy, India too has been promoting SEZs to enhance exports, to earn foreign exchange, to accelerate

technology transfers, investment and employment thereby stimulating overall economic growth (Aggarwal, 2007). Special Economic Zones are given special thrust by the government so as to promote competitiveness and thereby export.

3.9.1 Pre-Liberalisation Era

Following Shannon in Ireland in 1956 and Mayagaez at Puerto Rico in 1962, India was the first country in Asia to set up an Export Processing Zone (EPZ) in the name Kandla Free Trade Zone in 1965 at the port town Kandla in Gujarat. Kandla Zone was set up for the rapid industrialisation and creation of employment opportunities in the region *(*Kundra*,* 2000; Palit and Bhattacharjee, 2008).

In its initial years, the Zone was never a success in terms of FDI or exports. Policies relating to the Zones lacked clarity and customs regulations were also very tight and incentives given too were limited to taxes and infrastructure (Gopalakrishnan, 2007).

The second was Santa Cruz Electronics EPZ (SEEPZ) established in Mumbai in 1974, a single-product zone for processing electronic goods for export which was made a two-product Zone in 1986 to deal with the growing demand for gem and gold jewellery. This Zone too was expected to create employment opportunities and transfer technical know-how (Kundra*,* 2000*;* Das*, 2009*). Between 1975 and 1985, the Zones in India registered an upward trend in terms of production, exports and foreign currency (Gopalakrishnan, 2007).

Though there was demand for similar Zones from other states, the Cabinet Committee on Economic Policy did not favour additional Zones as the performance of Kandla and Santa Cruz Zones was not quite encouraging. In 1980, Tandon Committee set up to improve the progress of Free Trade Zones and 100 per cent EOUs, observed the progress of the existing Zones. It suggested establishment of six or seven more Zones in the country. The Committee specifically mentioned that the new Zones should be located only after evaluating their closeness to an airport or sea port, with proper industrial and financial infrastructure, insurance and warehousing, communication, housing, health, municipal services, potential linkage with the

domestic area for the supply of inputs and services and the attitude of the state governments in proving necessary infrastructure *(*Kundra*,* 2000*)*.

In 1983, four more Zones got established at Madras (MEPZ) in Tamil Nadu, Falta (FEPZ) in West Bengal, Cochin (CEPZ) in Kerala and Noida (NEPZ) in Uttar Pradesh. MEPZ and FEPZ commenced their operation in 1985-86 and CEPZ and NEPZ in 1986-87.

The expansion of EPZ had no significant effect on share of Zones in the total exports even under a pro-business regime of Indira Gandhi and Rajiv Gandhi, that exports continued to grow at a slow rate (Gopalakrishnan, 2007). In 1989, seventh Zone got established at Vishakhapatnam (VEPZ) in Andhra Pradesh and became operational in 1994-95 (*Das*, 2009). All the four Zones except the Falta Zone's location confirmed with the requirement of Tandon Committee.

Earlier, India's exports constituted engineering goods and drugs, with very little proportion of electronics and textiles, mainly to Soviet Union and European countries. Thus the export related activities till 1990 were almost stagnant and the employment levels also remained very low (Gopalakrishnan, 2007). However between 1987 and 1991, their share in the total exports of the country increased from 3.67 per cent to 5.17 per cent *(*Kundra*,* 2000*)*.

3.9.2 Post–Liberalisation Era

After the liberalisation got administered in the country, a number of wide ranging measures were adopted to revamp and restructure EPZs. A series of measures was adopted to decentralise and delegate power to Zonal authorities, to simplify policies and customs regulations, to grant additional incentives and infrastructure and to broaden the sectoral coverage of EPZs *(*Kundra*,* 2000*);* Gopalakrishnan, 2007) in order to permit agriculture, horticulture, aqua-culture and trading, reengineering and re-conditioning units in it (Aggarwal, 2004).

Till that time, EPZs were developed, owned and managed by the Central government. In 1994, the government modified the rules to enable state governments, autonomous agencies and private sector to participate in the development of Zones (Kundra*,* 2000*)*.

These changes could not improve the performance of EPZs. Aggarwal (2004) finds that the amount of exports generated per employee grew faster around the early 1990's, but then returned to its earlier growth rate. Foreign exchange earnings were only approximately USD 1.04 billion in 1998. Value addition in India's EPZ's had a trend growth rate of 1.5 per cent and foreign investment was constant (Gopalakrishnan, 2007).

3.9.2.1 A new Beginning: SEZ Policy 2000

The EXIM Policy (1997-2002) introduced a new scheme from April 1, 2000 to revamp and convert existing EPZs to SEZs and to establish more Special Economic Zones (SEZs) in different parts of the country. The SEZ Act, 2005, which followed, further liberalised the rules and norms regarding SEZs. It included more incentives and concessions to encourage investors. According to the new SEZ policy, private sector ownership and even foreign investments were also allowed. The powers of the Labour Commissioner were transferred to the Development Commissioner. The administrative set up was reduced to a three tier system with the Ministry of Commerce with its SEZ cell at the top, followed by the Board of Approvals and finally the Development Commissioners of the particular Zones (Gopalakrishnan, 2007).

There are Zones built by the state governments and private developers prior to SEZ Act, 2005. SEZs at Indore (Madhya Pradesh), Surat (Gujarat), Jaipur and Jodhpur (Rajasthan), Moradabad (Uttar Pradesh) and Salt Lake (W.Bengal) are promoted by State Governments and those at Surat (Diamond and Gem Development Corporation Ltd.), Chennai (Mahindra IT SEZ, Mahindra apparel SEZ and Mahindra auto SEZ), Sriperumbudur (Nokia SEZ) and Salt Lake (Wipro SEZ) are by private developers (Palit and Bhattacharjee, 2008). A total of 19 SEZs were established prior to the promulgation of the SEZ Act (Dohrmann, 2008).

By 2003, the overall investment in SEZ increased by 73 per cent and the proportion of FDI by 24.3 per cent, though the increase in FDI was much below international standards. But the complexities involved in the approval and clearing mechanism still prevailed. Exports grew by an average of only 7 per cent per year between 2000 and 2003 and the growth in output was fairly stagnant. As a result of a shift towards more capital intensity at SEZs, the workforce in SEZs grew by only

13.7 per cent and their export productivity declined. In 2002, the number of units in Kandla, Falta and Santa Cruz SEZ remained less than half of the expected capacity (Aggarwal, 2004).

3.9.2.1.1 SEZ Act, 2005

SEZ Act, 2005 passed by the Parliament with effect from 1st April 2005 was to provide a uniform framework for the creation of SEZ in the country (Gopalakrishnan, 2007). It received Presidential assent on 23rd June 2005 and came into effect on 10th February 2006 supported by the SEZ rules.

The main objective of setting up SEZ is spelt in the SEZ Act, 2005 (Section 5 of the Act).

- Generation of additional economic activity,
- Promotion of exports of goods and services,
- Promotion of investment from domestic and foreign sources,
- Creation of employment opportunities,
- Development of infrastructure facilities,
- Maintenance of sovereignty and integrity of India, the security of the State and friendly relations with foreign States.

SEZ is being projected by the government as a single window clearance mechanism. The SEZ Rules provide for:

- Simplified procedures for development, operation and maintenance of the SEZs and for setting up units and conducting business in SEZs,
- Single window clearance for setting up of a SEZ,
- Single window clearance for setting up a unit in a Special Economic Zone,
- Single Window clearance on matters relating to Central and State Governments,
- Simplified compliance procedures and documentation with an emphasis on self-certification (www.sezindia.ac.in referred on October, 2011).

The SEZ Act which got enacted in 2005, with SEZ rules to hold up the Act and with the laws enacted by each state government concerning SEZs, together support the requirements of all the stakeholders of SEZs: the developer and operator, occupying enterprises, external SEZ suppliers and residents.

3.10 Some Issues with Indian SEZs

It is pointed out that there is an increase in the number of SEZs in the country. (Lakshmanan, 2009). There are also a number of problems related to the SEZs. One among them is the size of Indian SEZs. Zones in India are small in size compared to Chinese SEZs. Large number of units cannot be set up in the small Zones so as to have larger impact on the total exports (Kundra, 2000). Moreover, only bigger size multi-product SEZs can provide the required infrastructure.

Total area for the notified SEZs constitutes a miniscule share of the total land area of the country, which is not more than 0.014 per cent of the total land area of India. If agricultural lands are converted into SEZs, it would pose a problem to the vast majority of population in India. Moreover, farmers are paid a lower value for their land, much below the market value and rehabilitation and compensation package are also inadequate (Lakshmanan, 2009).

Administrative hassles also create problems with the smooth operation of SEZs. Provision of infrastructural services like telecom connections and clearance by pollution control board may take long time. Although Zone administration claims to provide single window facility for granting approvals and reimbursement, the degree to which this works out depends on the effectiveness of Zone administration in monitoring issues with departments concerned. Sub-contracting by SEZs is seen as an important instrument to establish backward linkages with the domestic economy. However, permission procedures for sub-contracting involve many complexities and formalities. As a result of such operational difficulties, exporters who wish to set up garment units, leather manufacturing units and light engineering units involving sub-contracting in the DTA, won't set up units in SEZs unless they are dependent on imported raw materials and capital goods. Units in the SEZs also face problems as the operational procedures are rigid, flexible and cumbersome, causing delays and

inconveniences. Sometimes, the central government may have exempted the units from payment of local taxes and levies, but most state governments insist on payment of sales tax on purchase of inputs.

Certain Zones in India undergo Zone-specific deficiencies. As in the case of Cochin SEZ, militant trade unionism is a deterrent factor which inhibits investment. Kandla Zone suffers from locational deficiencies as it is located in the backward region with poor industrial culture and has poor social infrastructure (Lakshmanan, 2009).

There are also apprehensions about the ultimate authority that the Development commissioner of the Zone enjoys. Powers of regulatory authorities of various state bodies like Labour Commission and Pollution Control Board have been transferred to the Development Commissioner. The Act makes a provision for setting up of special courts in SEZs for both civil and criminal matters. No investigation of non-notified crimes is possible without the involvement of the Development Commissioner. All these tend to produce a separate judiciary for the SEZ where, the Development Commissioner plays a key role (Gopalakrishnan, 2007).

Another problem with regard to the labourers working in the Zone is the absence of stringent labour laws. Article 49 of SEZ Act, 2005 specially mentions that all labour laws relating to trade unions, industrial and labour disputes, welfare of labour including conditions of work, etc. are applicable to SEZs. However, with the transfer of powers from Labour Commission to Development commissioner, the labour law enforcement in Zones is very lax. This makes working condition in the Zones miserable for the workers.

3.11 SEZ - India Statistics.

3.11.1 Number of SEZs and Approvals

Prior to SEZ Policy 2000, there were only seven EPZs which were set up by the central government. Their details are given in table 3.3. Country's first private sector EPZ also was developed in 2000 in Surat in Gujarat. Seven Export Processing Zones set up by the Central Government and the Surat SEZ were converted to SEZs upon announcement of the SEZ Policy. After the introduction of SEZ Policy and SEZ

Act the quantity number of investments in SEZ in the country increased, with state governments and the private developers taking the lead.

Table 3.3 Details of Central Government SEZs in the Country

Sl. No.	Name of the SEZ	Type	Name of the Developer	Year of Establishment	Area(in acres)
1	Kandla Special Economic Zone	Multi-product	Central Government	1965	1000
2	SEEPZ Special Economic Zone	Electronics and Gems and Jewellery	Central Government	1975	93
3	Noida Special Economic Zone	Multi-product	Central Government	1986	310
4	MEPZ Special Economic Zone	Multi-product	Central Government	1986	261
5	Cochin Special Economic Zone	Multi-product	Central Government	1986	103
6	Falta Special Economic Zone	Multi-product	Central Government	1986	280
7	Visakhapatnam SEZ	Multi-product	Central Government	1994	360

Source: Compiled from data base of SEZ India available in www.sezindia.nic.in referred on May, 2013

During the period 2000-2005, 11 more SEZs were established in the country by the respective State governments as well as the private sector, in the States of West Bengal, Gujarat, Madhya Pradesh, Uttar Pradesh, Rajasthan and Tamil Nadu. Among them only two are of multi-product type category, others are specialising in IT, apparel, gem and jewellery, handicrafts, etc. Thus, prior to implementation of SEZ Act, 2005, 19 SEZs got established in the country.

Under the SEZ Act, 2005, 139 SEZs got notified and became functional. Thus, currently, there are 158 operational SEZs in the country. After the coming into force of the SEZ Act, 2005 on 10th February 2006, 588 formal approvals have been granted for setting up of Special Economic Zones, out of which 386 SEZs have been notified and are in various stages of operation (www.sezindia.nic.in referred on May, 2013).

Table 3.4 Number of Approvals Over the Years

Year	Formal Approvals	In-principle approvals	Notified SEZ	Operational SEZs
2006-07	386	-	149	-
2007-08	439	138	201	-
2008-09	568	144	315	90
2009-10	573	147	347	104
2010-11	580	155	374	130
2011-12	583	45	380	154
2012-13	588	49	386	158

Source: Compiled from data base of SEZ India available in www.sezindia.nic.in referred, on May 2013

The SEZs established in the country are not confined to any particular region; they are spread over 20 states and three Union Territories. The state-wise distribution of approvals is given in table 3.5.

Table 3.5 State-wise Distribution of Approved Special Economic Zones

State	Formal Approvals	In-principle approvals	Notified SEZ	Exporting SEZs (Central Govt. + State Govt./Pvt. SEZs + notified SEZs under the Act, 2005)
Andhra Pradesh	109	6	76	37
Chandigarh	2	0	2	2
Chhattisgarh	2	1	1	0
Delhi	3	0	0	0
Dadra and Nagar Haveli	2	0	1	0
Goa	7	0	3	0
Gujarat	47	7	32	17
Haryana	46	3	35	3
Jharkhand	1	0	1	0
Karnataka	62	1	41	20
Kerala	29	0	20	6
Madhya Pradesh	19	2	6	1
Maharashtra	103	16	64	18
Nagaland	2	0	1	0
Orissa	10	1	5	1
Pondicherry	1	1	0	0
Punjab	8	0	2	1
Rajasthan	10	1	10	5
Tamil Nadu	69	6	53	33
Uttar Pradesh	34	1	21	8
Uttarakhand	2	0	1	0
West Bengal	20	3	11	6
GRAND TOTAL	588	49	386	158

Source: Compiled from data base of SEZ India available in www.sezindia.nic.in referred on May, 2013

It is understood that Andhra Pradesh is the state with the largest number of operational SEZs followed by Karnataka and Maharashtra. With increase in the approvals, there has been increase in the total land area involved. The total land area involved in the formally approved SEZs including notified SEZs is around 44,966 Ha

which is not more than 0.013 per cent of the total land area of India (www.sezindia.nic.in referred on May, 2013).

3.11.2 Export Performance

After India embarked on the export oriented industrialisation strategy, it can be observed that there is continuous increase in the exports from the SEZs units in India. The share of exports from SEZs in the total manufacturing exports has also been found increasing. The year-on-year growth rates varied from 7.5 per cent to 121.4 per cent.

Table 3.6 Export Performance of SEZ units

Year	Value (Rs. Crore)	Percentage increase
2001-02	9,190	-
2002-03	10,057	9.4
2003-04	13,854	37.8
2004-05	18,314	32.2
2005-06	22,840	24.7
2006-07	34,615	51.6
2007-08	66,638	92.5
2008-09	99,689	49.60
2009-10	2,20,711	121.4
2010-11	3,15,869	143.1
2011-12	3,64,477	15.4

Source: Compiled from data base of Ministry of Commerce, GoI available on www.commerce.nic.in referred, on May 2013

3.11.3 Employment Generation

SEZs have been enclaves which offer labour friendly policies to the investors, attracting them to make investments in the Zone. Since most of the activities in the Zone are labour-intensive in nature, it offers direct employment to a number of persons. Table 3.7 shows the direct employment generated by the SEZs in India. There has been an impressive expansion in employment opportunities in SEZ especially after the SEZ Act, 2005.

Table 3.7 Employment Generation in SEZ

Year	No. of persons (in lakhs)
1999-2000	0.81
2005-06	1.01
2006-07	1.35
2007-08	2.81
2008-09	3.8
2009-10	4.90
2010-11	6.44
2011-12	8.15
2012-13	10.19

Source: Compiled from data base for various years of Ministry of Commerce, GoI available on www.commerce.nic.in referred on May, 2013

3.11.4 Investment

As a result of the policies adopted by the government to boost investment in SEZs in the country, the total investment including both domestic and foreign investment has increased over the years.

Table 3.8 Investment in SEZ

Year	Amount Invested(in Rs. crores)
2006-07	47,732
2007-08	67,347
2008-09	98,498
2009-10	1,24,000
2010-11	1,95,000
2011-12	2,31,159
2012-13	2,38,990

Source: Compiled from data base for various years of Ministry of Commerce, GoI available on www.commerce.nic.in referred on May, 2013

Thus Special Economic Zones initiated in the year 1965 have grown in terms of number, exports, employment as well as investment. SEZs have emerged not only as means of export promotion but also they assist in the overall economic, social and regional development of the country.

3.12 Cochin Special Economic Zone (CSEZ)

CSEZ, situated in the port land of Kochi city, was established in the year 1985 as a multi-product EPZ. Spread over 103 acres of land with fortified walls; it became operational in 1986 and was given SEZ status in 2000. CSEZ is the subordinate office functioning under the Ministry of Commerce, Government of India. CSEZ has under its jurisdiction, SEZ units and 100 per cent Export Oriented Units (EOUs) in Kerala, Karnataka, Lakshadweep and Mahe. Apart from the main office located at Kakkanad, Kochi, it has a sub-office functioning in Bangalore to cater to the needs of 100 per cent EOUs located in Karnataka (www.csez.com, 2013 referred on August, 2012).

The total exports from CSEZ have registered an impressive growth, from Rs. 203.6 crores in 2000-01 to Rs. 28,725 crores in 2011-12. Remarkable performance of Cochin SEZ has been in terms of total exporting units, total investment and employment generation. The labour productivity of the Zone is also rated good (Tantri, 2010, 2011). CSEZ has also been able to make use of the latest technology in production processes through collaborations with countries like USA, UK and Hong Kong. CSEZ has created backward linkage effects by drawing raw materials and other inputs from the local economy (Manoharan, 1996).

3.12.1 Infrastructural Facilities at CSEZ

It provides good infrastructure to its investors. Some of its infrastructural facilities include, power generation system, an integrated water management system, common Effluent Treatment Plant, internet connection through optical fibre cable, a 1000 line telephone exchange, a video conferencing studio, a Foreign Post Office, SBI Off-shore banking unit, and branches of State Bank of India and IndusInd Bank with ATM facilities. With the establishment of Muthoot Technopolis, the Zone has initiated public-private participation in building infrastructure in the Zone. Spread over an area of 103 acres, top MNCs and Indian corporates have set up their units in the Zone. The Zone provides a number of benefits to the units in the form of single-window clearance, 100 per cent exemption from income tax for the first five years, exemption from routine customs checking, etc. (www.csez.com referred on January, 2012).

3.12.2 Operational Units in CSEZ

Cochin Special Economic Zone (CSEZ) is one of the seven Special Economic Zones of Central Government. Located on the Cochin Seaport-Airport Highway, it is well connected to the National Highway network. It is a multi-product Zone with units in sectors as diverse as software, hardware, engineering, readymade garments, food processing, rubber products, gem and jewellery, manufacturing, etc.

According to SEZ authority, as on January 2012, there are 133 operational units in the Zone. Though the Authority claims that there are 133 units in the firm, a discussion with Cochin Export Processing Zone Investors Association CEPZIA reveals that the operational firms in the Zone form only 79.

Table 3.9 Sector-wise No. of Units in CSEZ

SECTORS	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Agro and Food	7	6	7	7	8	10	11
Electronic Hardware	7	7	9	9	8	8	8
Engineering	5	5	8	9	9	10	9
Gem and Jewellery	2	1	3	4	6	7	7
IT and ITES	11	12	16	15	16	19	24
Miscellaneous	12	13	14	14	15	16	17
Plastic and Rubber	6	6	6	6	8	8	10
Services	0	0	0	0	0	0	0
Textiles and Garments	3	3	3	3	3	3	5
Trading	3	4	4	4	5	6	7
Total	**56**	**57**	**70**	**71**	**78**	**87**	**98**

SECTORS	2007-08	2008-09	2009-10	2010-11	2011-12
Agro and Food	10	9	10	10	10
Electronic Hardware	9	5	4	4	5
Engineering	10	15	15	14	18
Gem and Jewellery	7	8	6	9	22
IT and ITES	25	29	27	28	31
Miscellaneous	18	17	15	19	21
Plastic and Rubber	11	8	8	9	9
Services	0	1	1	2	2
Textiles and Garments	5	4	4	3	3
Trading	10	10	9	9	12
Total	**105**	**106**	**99**	**107**	**133**

Source: CSEZ Authority (2012)

3.12.3 Labour Issues at CSEZ

The advantages generated by the CSEZ are often offset by labour relations, which are not very cordial. Trade Unions actively involved in the labour issues at the Zone are CITU, INTUC and AITUC. Public utility status conferred up on the Zone has not been able to prevent militant trade unionism in the Zone. There have been issues of strikes and lockouts reported at the Zone (Kundra, 2000). Many companies at the Zone have concerns on this. Frequent labour issues and non delivery of products on time can create heavy loss to the business and may even force the units to move out of the Zone (Nair, 2000).

CITU is the prominent trade union in the Zone. In spite of being in a land of alert labour class, the unions have not been able to get all the workers enrolled nor have they been able to effectively protect the interest of the workers. There are exploitative labour practices followed in the Zone. Employees with seventh standard qualification are also seen in the Zone. Firms prefer to employ contract workers. More often, they are forced to work beyond eight hours a day. The tedious work makes them tired and most of them have work related illness. Though the Minimum Wages Act is applicable to the Zone, it offers no protection to the workers. Even in the case of permanent employees, exploitation is visible. They are appointed as trainees on meager wages. After the contract gets over, they are reappointed as trainees (Jacob and Patrick, 2012). Such labour exploitative measures often make the labourers declare strikes and lockouts.

3.13 Summary

SEZs have emerged as mechanisms for developing countries to have access to world markets. Origin of SEZs starts with industrial estate in 1896 in England. Puerto Rico became the first developing economy to set up a publicly funded industrial park. Combining the features of both Industrial Estates and Free Trade Zones, the first EPZ, was set up as Shannon Free Zone in 1959 in Ireland. Many more countries like Dominican Republic, India and Taiwan (China) built their EPZs very soon. The main objectives of SEZs are promotion of exports, promotion of investment, creation of employment opportunities, development of infrastructure facilities, creation of

foreign exchange, transfer of technologies and skills, etc. Attracted by the massive benefits, India also set up its first EPZ in 1965 at Kandla in Gujarat. More Zones at Santa Cruz, Madras, Falta, Cochin, Noida, and Vishakhapatnam were soon started. SEZ policy 2000 and SEZ Act, 2005 brought about a drastic change by revamping existing EPZs into SEZs. More liberal regulatory environment, private sector participation, transfer of powers from Labour Commissioner to Development commissioner are its important features. Currently, there are 158 operational SEZs in the country. Andhra Pradesh is the state with the largest number of operational SEZs followed by Karnataka and Maharashtra. Cochin SEZ got established in the year 1985 as a multi-product EPZ. CSEZ have under its jurisdiction, SEZ units and 100 per cent Export Oriented Units (EOUs) in Kerala, Karnataka, Lakshadweep and Mahe.

Some of the problems faced by Indian SEZs include small size, administrative hassles, loss of agricultural land, labour problems, revenue loss for the government, etc. But in the year 2011-12, the total exports from SEZs in India stand at Rs.3,64,477.73 crores. The total exports from CSEZ also registered an impressive growth, from 203.6 crores in 2000-01 to Rs. 28,725 crores in 2011-12. SEZs in the country are thriving in terms of export competitiveness. But it is also reported that, there is massive exploitation of labourers by paying low wages, employing labourers on contract basis, etc. so as to remain cost-competitive. To understand the relationship, the term competitiveness and labour standards require detailed discussion. The term competitiveness is a very complex and broad with many meanings under different situations. Conceptual analysis of the term is dealt with in detail in Chapter 4.

.....ꕥ.....

Chapter 4
COMPETITIVENESS

Contents

The countries around the world are increasingly concerned about their competitiveness as the developing countries have started to open up their economies. When rich countries bother about keeping ahead of the newly industrialising countries, in terms of each other as well as in terms of cost, middle income countries want to catch up with the advanced countries in new technologies, skills, and the least developed countries try to be technologically updated, at the same time maintaining their low wage advantage (Lall, 2001). Competitiveness has become a crucial word in economics not only due to its connection with economic success in the market place but also due to its close association with economic growth. Countries, especially developing countries, are in a constant race to achieve competitiveness in order to close the existing gap with their developed counterparts (Sharma, Nair and Barman, 1999).

Competitiveness is necessary for improving the growth and the living standards of a nation which requires the creation of high skills, high productivity and a high wage economy. This in turn requires investment in machines, people and ideas, the freedom to grasp new opportunities and also benchmarking the activities of a nation against the best of its competitors (UK Cabinet Office, 1996).

In such a situation, the competitiveness itself has taken hold of a new outlook wherein the new pattern of competition is based on technologically-oriented factors rather than inherited factor-endowments, on new organisational structures embedded in dense technological and productive networks rather than on hierarchical concepts, and on technical changes which involved restructuring of old industries, creation of

new ones and framing policies to shape new industrial locations. With a steep fall in the transport and communication costs across countries, competitiveness has intensified between them. Hence, the performance of the nations, industries and firms and also the determinants of competitiveness such as technological effort, human resource development, physical infrastructure investment, financial and labour market flexibilities, economic and non economic factors, etc. are constantly compared and benchmarked. A new model which places market imperfections at the centre place, with more realistic assumptions, is necessary to make sense of the competitiveness issue. The Asian Tigers (Hong Kong, Republic of Korea, Singapore and Taiwan), which were 'poor economies' during the post-Second World War era with very few development prospects, are experiencing a transformation of their economies due to their ability to compete in the world market. They have shifted their production focus from simple products with a competitive labour costs to complex ones where competition is on the basis of advanced skills, quality and technology (Lall, 1999).

4.1 Competitiveness: Concept

With the liberalisation of economies around the world, the term competitiveness has received much attention. Competitiveness is plainly defined as the ability to compete. Nations, firms, business units, products have all been trying to remain competitive in the market place. But it is also a multifaceted concept which assumes different meanings when defined at different levels - national level, industry level and firm level, regional level, etc. Here, national level and firm level competitiveness are considered.

4.1.1 National Competitiveness

Competitiveness has been defined as the ability of a national economy to achieve sustained high rates of economic growth on the basis of sustained policies, institutions and other economic characteristics. Ranking of countries according to their overall performance is what national competitiveness is. There are several types of indices formed to measure national competitiveness. Many countries like Australia, Singapore, UK, etc. publish reports on their competitiveness position. These reports

rank the countries on the basis of their national competitiveness computed by taking in to account various socio-economic factors (Sharma, Nair and Barman, 1999).

Competitiveness at the national level is not a well defined concept as a nation's competitiveness depends on the competitiveness of its industries. But it is not possible for all the industries in the nation to remain competitive always. The overall competitiveness of a nation is defined in terms of its trade balance. This means if a nation has many competitive firms, then it would have a trade surplus (Dollar and Wolff, 1993). Another narrower definition of national competitiveness is a country's ability to compete in trade, particularly exports. However, improved performance in exports as a result of factors like exploitation of cheap unskilled labour cannot be regarded as improvement in competitiveness (Lall, 2001).

4.1.2 Firm-level Competitiveness

Defining competitiveness at the firm level is not an easy task though everyone seems to understand it. It is the ability to do better than comparable firms in sales, market share, or profitability (Lall, 2001). When firms produce high quality, low cost items, it is considered to be competitive (Dollar and Wolff, 1993).

Earlier, competitiveness was thought to be applicable to nations and companies competing in the market place. After the revolutionary work by Michael Porter (1990), it is observed that competitiveness at the firm level goes hand in hand with improvement in the competitiveness at the macro level in the state. This made many countries frame policies to improve their competitiveness position at the same time to strengthen the efforts of enterprises to become more competitive.

As mentioned earlier, national competitiveness would depend on the competitiveness of firms competing in the domestic as well as international markets. Traditional theory relates firm's competitiveness to lessening its cost of production by reducing labour cost, etc. But modern theorists are of the view that the ability of a firm to compete in the international market depends on non-price factors like human resource endowment, such as skills, technical factors such as research and development capabilities, the ability to innovate, managerial and organisational

factors, relationships with other bodies, customers, suppliers, public and private research institutes, and other firms (Clark and Guy, 1998).

The two types of competitive advantage a firm can possess to get high returns on investment are cost advantage and differentiation. A firm can sustain the low-cost leadership position if it reaps economies of scale, has preferential access to raw materials, technology, etc. If the firm can sustain its low-cost position then it can earn above average profits in the industry. A low-cost firm, at the same time, should also opt for differentiation which allows it to offer unique products, durability, service, etc., the attributes which are unique to the firm. The third strategy is focus, wherein the firm trying to attain a competitive advantage in a particular segment can be a focus either in terms of the cost or differentiation. The firm should make a choice on whether it should chose either a low-cost strategy or a differentiation strategy, as pursuing both may lead firms nowhere (Porter, 1985).

4.2 Determinants of Competitiveness

National or firm level competitiveness depends on a number of factors. Competitiveness is affected by its exports which in turn are determined by factors like price, cost, etc. This is explained in detail in the following paragraphs.

4.2.1 Export competitiveness

Export performance of a country depends on demand for its exportable goods and the ability of a country to supply them at competitive prices. While the former depends on the level of development of the importing country, the latter is related to the ability to supply or being competitive. Competitiveness is a very complex phenomenon which is determined by a number of factors of export performance. This would include country's ability to generate exportable surplus, relative prices of the competitors, quality and design of the product, freight and delivery schedules, packaging, rate of exchange and the trade policy of the exporting country. It also depends on factor productivities, which in turn depend on inter-industry relations and choice of technology of the exporting industry. Wrong industrial and labour policies can adversely affect the competitiveness through a loss in labour productivity. Pressure of domestic demands in the form of increase in population or an increase in

per capita income would reduce the export surplus of a country reducing the export competitiveness (Sharma, 1992).

'Relative manufactured export performance' is a measure used, as the data on exports are easily available, up-to-date, comparable and which are also a matter of interest to most countries. However, using export data to assess competitiveness has its own limitations. It does not show whether the performance is sustainable. It doesn't take into account the structural attributes of the exporting economy, whether the composition of exports is desirable in terms of the local content, technological levels or spill-overs (Lall, 1999).

4.2.2 Price Competitiveness

International prices of products, which determine export competitiveness, are determined by a number of factors like quality of the product, transport costs, tariffs and quotas, domestic policies, product differentiation, etc. It is also determined by several non price factors like delivery, export financing, etc. There are other determinants of price competitiveness. Exchange rate affects export prices directly as well as through domestic wages and prices. Depreciation of currency would reduce the foreign prices of export products. It would also increase the earnings of exporters thereby increasing their profitability. Another determinant of price competitiveness is the trade policy of a country, particularly export incentives like cash incentives, import replenishment, concessional finance, etc. Trade restrictions can sometimes raise the price of importable goods affecting the price competitiveness, thereby operating on exports. Trade disadvantages in the form of marketing infrastructure, transportation, etc. too would determine the price competitiveness of exports of a country (Sharma, 1992).

4.2.3 Cost Competitiveness

For maintaining price competitiveness, cost competitiveness is to be maintained. But this reduction in the cost of production could have repercussions on the factors of production, especially labour. There are a number of views which advocate innovative methods of remaining cost competitive like, Research and Development, quality enhancement, investment in human capital, etc.

Being a low-cost producer and exporter of simple goods cannot be considered as competitiveness. Competitiveness would mean remaining competitive in those activities which produce growth, which is sustainable and have a competitive edge even when incomes or wages rise. The growth should be sustainable which requires technological progress. Countries should also be able to exploit scale benefits, technology, spill-overs and linkages (Lall, 1999). Cost competitiveness in export markets involving changes in the exchange rates, competitiveness in the domestic market even in the absence of protection, would sustain in the long run in a globalised environment only when firms become more innovative. This requires the firms to follow the strategies of 'catch-up' involving learning process, 'keep-up' involving Research and Development, improve in quality and 'get-ahead' involving combination of new generic technologies, scientific research and development (Mytelka, 1999).

Thus improvements in the productivity performance of factors like labour and capital, with adoption of 'high level technology' thereby providing high incomes and high standard of living, simultaneously maintaining a lower cost of production, would define the term competitiveness. Moreover, a country which remains competitive would always export from sectors which have a relative productivity advantage and imports goods in sectors which has least productivity advantage. Also, price levels and exchange rates in a competitive country adjust to ensure that it is a low-cost producer (Dollar and Wolff, 1993).

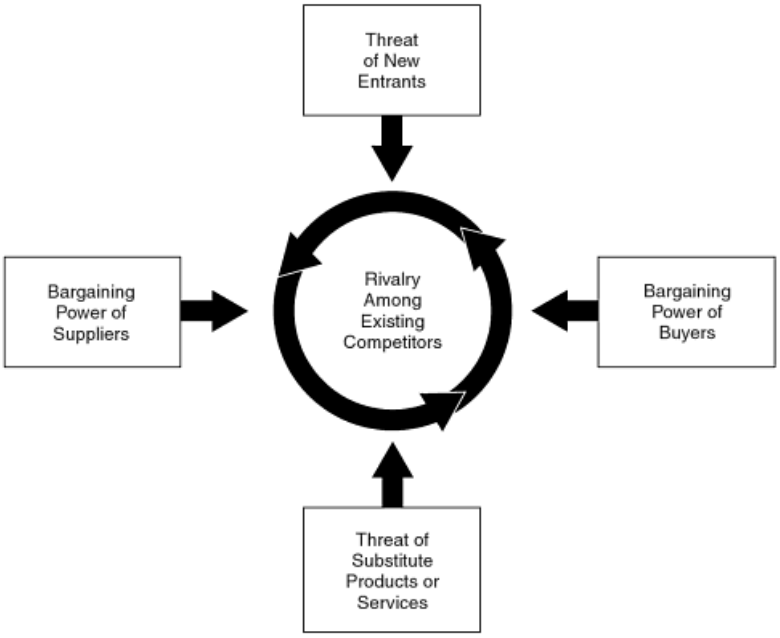
4.2.4 Porter's Model of Industrial Competitiveness – Five Force Model

Michael Porter, who has made a thorough study about industrial competitiveness and nation's competitiveness emphasises five forces of competitiveness that determine the competitiveness of industries: entry of new competitors, the threat of substitutes, bargaining power of buyers, the bargaining power of suppliers and the rivalry among existing competitors. The collective strength of these five forces will determine the competitiveness of an industry or their capacity to earn profit.

New entry expands supply, puts a limit on the prices and profits that the firms earn for the product and also influences the level of investment to be made to deter

entry. Buyer power and the threat of substitutes depress the prices that the firm charges for the product. They also influence the cost of production and investment as powerful buyers demand high quality and costly service. The suppliers with very good bargaining power influence the cost of raw materials as they can push up the price of inputs thus reducing the industries' prospect to earn profits. Rivalry among the competitors influences the price of the product and also the cost of production by way of advertising cost, product development cost, etc. (Porter, 1985).

Chart 4.1 Porter's Five Force Model



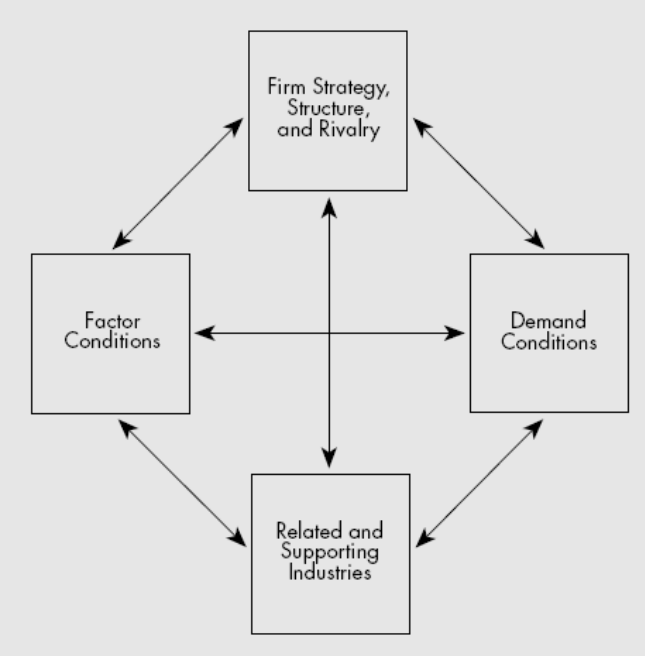
Source: Porter (2008)

Porter finds it very much necessary to avoid certain attributes which may be mistaken as competitiveness. High industry growth rate is often mistaken as competitiveness. But a high growth rate will never lead to profitability if customers are very strong and substitutes attractive. Advanced technology industries too can never be assessed as competitive. Low technology industries with low price sensitive buyers and high entry barriers are found to be profitable. Likewise, government can neither be considered a bad or a good element for profitability. However, government policies can influence entry barriers, supply power (eg. Labour) and trade unions can influence profitability. Like governments, complements can never directly impact the profitability of an industry, but can indirectly influence the five forces of competitiveness (Porter, 2008).

4.2.5 Porter's Diamond Model

In Porter's another model, competitive advantage of companies and nations depends on the presence of four elements within the country. First is firm's strategy, structure, and rivalry. Presence of strong competitors maintains national competitive advantage as firms are in a constant pressure to innovate and improve. Second is factor conditions, wherein the companies gain competitive advantage when their home countries are rich in factor endowments. For example, availability of low-wage knowledge workers has helped India to remain competitive in the software industry. Abundance of labourers with strong engineering skills has helped Germany to remain competitive in the global engineering industry. Another attribute is demand conditions. Presence of highly demanding domestic consumers puts pressure on firms to innovate and produce better quality products which will determine the competitiveness in particular industries. Fourth attribute is the presence of related and supporting industries which refers to the presence of industrial clusters which are competitive. The resulting business environment is highly supportive for the prosperity of firms in the clusters (Cavusgil et al, 2009).

Chart 4.2 Porters Diamond Framework



Source: Porter (1990)

4.3 Measures of Competitiveness

There is no single determinant of competitiveness for a nation or a firm. Competitiveness is a complex concept with large number of determinants which may not be quantifiable or amenable to explanation. Different measures in the form of price, export shares, profitability, unit costs, exchange rates, etc. give different results (Sharma, 1992). There are measures to assess the overall competitive business environment of the nations (GCR, WCY, and BCI); there are also measures to assess export competitiveness of both nations and firms. A few of such measures are discussed in the following paragraphs. The measures show that competitiveness depends on many factors such as internal and external, physical and non-physical, economic, political, administrative, social and educational considerations (UNESCAP, 2009).

4.3.1. World Competitiveness Index

Competitiveness reports for the nations of the world are published by many agencies. A popular report is World Competitiveness Report published by two Swiss institutes, the World Economic Forum (WEF) in Global Competitiveness Report (GCR) and the International Institute for Management Development (IMD) in World Competitiveness Yearbook (WCY). Confederation of Indian Industries (CII) is the partner institute in India for GCR and National Productivity Council (NPC) is the partner institute for WCY (Sharma, Nair and Barman, 1999; Lall, 1999). To construct the indices, two sets of data are combined. Data on country's economic performance, technological capabilities and infrastructure are obtained from published sources including national accounts tables. Opinion surveys based on the perceptions of business community about each country's characteristics are also obtained.

The Business Competitiveness Index (BCI) is another index of the World Economic Forum. The measure determines the quality of the microeconomic business environment of the country. The factors considered to assess the government's role in the creation of business competitiveness include (a) freedom from corruption, (b) efficiency of legal framework, (c) quality of port infrastructure, and (d) prevalence of trade barriers (Bin, 2009; UNESCAP, 2009).

4.3.2 Price Competitiveness

Price competitiveness of a country's exports is used to assess national competitiveness. Relative Export Price Index (RPI) is the ratio of the unit value index of exports of a country to a weighted average of unit price index of exports of its competitors. Unit value of a country's exports of commodities is compared with those of competing countries which are the top 10 exporters. A weighted unit value index is constructed for the competitors with the weights being arrived from the market shares. A rise in the index from the base period shows an improvement in the price competitiveness for the product (Babu, 1999; Bhatt, 1992).

$$RPI = \frac{\text{Unit Value Index of exports for the Country}}{\text{Weighted average of Unit Value Index of Exports of Competitors}}$$

There are other measures of price competitiveness. Relative Wholesale Price Index (WPI) divides a country's wholesale price index by a weighted average of the indices of its competitor's wholesale prices. Relative Profitability of Exports (PEI) is the ratio of a country's export unit value index to its whole sale price index. Index of Import Price Competitiveness (TPI) divides a country's whole sale price index with its unit value index of imports. This helps to know the competitiveness of import substitutes (Bhatt, 1992).

4.3.3 Market Share

Another measure of export competitiveness, is the country's market share. The relative strength of a country in a particular market is known from its market share. A redistribution of world resources and production results in decline in a country's net exports and its share of trade. This measure also nullifies the influences of domestic subsidies, taxes and regulations (Babu, 1999). Movements in market share can be due to changes in the composition of exports, direction of exports or due to competitiveness (price, quality etc.).

For the analysis of market share, value of export rather than quantum of export is used. This is due to problems of aggregation on account of product differentiation. Value share includes both quantity and price.

$$\frac{VI}{VC} = \frac{PI \ . QI}{PC \ . QC}$$

where, V is value, P is price and Q is quantity of export by two countries I and C (Sharma, 1992).

4.3.4 Productivity

Productivity can also be used as a measure of national competitiveness. It measures the value of goods and services produced per unit of the nation's human, capital and natural resources. Other indicators include growth, employment, market share or profitability (Wolff, Schmitt and Hochfeld, 2007).

Productivity is the ratio of a volume measure of output to a measure of input use. There are different measures of productivity like, multi-factor productivity or capital productivity, labour productivity etc. Among these, labour productivity offers a dynamic measure of economic growth, efficiency, competitiveness, and living standards within an economy. Labour productivity is the ratio of a volume measure of output and a measure of input use.

Labour productivity = Volume of output / Measure of input use

The volume of output indicates the goods and services produced by the workforce. It is measured either by Gross Domestic Product (GDP) or Gross Value Added (GVA). The measure of input use reflects the time, effort and skills of the workforce. Labour input is measured either by the total number of hours worked by all persons employed or total employment (head count). Total employment is easier to measure than the total number of hours worked because the quality of hours-worked estimates is unambiguous (OECD, 2008).

Export competitiveness is affected by lower levels of productivity. Factor productivity measurement is usually in respect of capital and labour in a manufacturing enterprise. It can also be measured in terms of all the factors of production. Partial productivity is defined as value added per man hour or per unit of fixed capital. Total factor productivity is the average value added per unit of the weighted combined inputs or the differences between rate of growth of value added and total factor inputs (Sharma, 1992).

4.3.5 Revealed Comparative Advantage Index

Revealed Comparative Advantage Index (RCAI), an Index devised by Balassa in 1965 is commonly used to measure export competitiveness to identify the sectors in which an economy has a comparative advantage, by comparing the country of interests' trade profile with the world average (Nag, 2009). This measure assesses comparative advantage of the trading countries. The economic factors that contribute to changes in RCAI are structural change, improved world demand and trade specialisation. RCAI reveals that the advantage enjoyed by a particular commodity is consistent with changes in economy's factor endowment and productivity (Batra and Khan, 2005).

The RCA index is defined as the ratio of two shares. The numerator is the share of a country's total exports of the commodity of interest in its total exports. The denominator is share of world exports of the same commodity in total world exports. The RCA index of country i for product j is often measured by the product's share in the country's exports in relation to its share in world trade. Balassa's Standard RCA Index is of the form,

$$RCAij = (xij/Xit) / (xwj/Xwt)$$

Where xij and xwj are the values of country i's exports of product j and world exports of product j and where Xit and Xwt refer to the country's total exports and world total exports. If the Index exceeds unity, the country is said to have a revealed comparative advantage in the product (Mukherjee and Mukherjee, 2012).

4.3.6 Trade Intensity Index (TII)

Trade Intensity Index (TII) compares the value of trade between two countries on the basis of their importance in world trade. It is defined as the share of one country's exports going to a partner divided by the share of world exports going to the partner.

$$TII =(xij/Xit) / (xwj/Xwt)$$

where, xij and xwj are the values of country i's exports and of world exports to country j and where Xit and Xwt are country i's total exports and total world exports

respectively. An index of more than unity indicates a bilateral trade flow that is larger than expected, given the partner country's importance in world trade (Chandran, 2010).

4.3.7 The Industrial Competitiveness Index (ICI)

A widely used index for measuring competitiveness of sectors is the Industrial Competitiveness Index (ICI). As per ICI, competitiveness has been defined as a function of profitability, productivity and growth.

$$COMPS = f(PROS, PRODS, GROS).$$

Profits represent the income earning capacity of the firms and hence it is an effective indicator of efficiency. For the assessment of productivity, value added per employee is estimated. Value added based labour productivity is the most frequently used productivity statistic. Labour productivity is influenced by capital, technical, organisational factors, capacity utilisation etc. Labour productivity reflects how efficiently labour is combined with other factors of production. For the assessment of output growth, annual change of production value is calculated.

ICI is constructed using the same methodology employed in the calculation of the United Nations' Human Development Index. Each of the three measures is transformed into individual indices.

The general formula for calculating individual indices is,

$$\text{Indices, } I = \frac{\text{ActualValue} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimum Value}}$$

Individual indices are then combined to form a single composite index, on which a final ranking of the analysed industries and countries is based (Fischer and Schornberg, 2006).

4.3.8 Other Measures of Competitiveness

The variables, money wages, productivity and the exchange rate with its influence on price competitiveness give an index of real efficiency wages (movement in money wages corrected for changes in labour productivity and exchange rate). A broader measure of changes in price competitiveness is to consider changes in relative

output-prices corrected for exchange rate movements (Francis, 1989). However, competitiveness can improve or deteriorate not only on the basis of price competitiveness, but due to a number of non price factors (Babu,1999).

Yet another measure of national competitiveness is 'relative real exchange rate movements' which considers relative inflation and real wage changes. The country whose real exchange rate appreciates compared to its competitors is considered to be less competitive (Lall, 1999).

Sometimes, rate of quota utilisation is used as a measure of competitiveness as low quota utilisation is seen as a result of inadequate export production. However, this measure may not be a suitable measure of competitiveness under certain circumstances. Sometimes, allocation of quota between finer product categories may lead to under utilisation of the quota (Sharma, 1992).

An alternative method of measuring trade success of a particular economy is to consider non-price competitiveness which involves attention to product specification and quality, the marketing of a product, and the provision of a service (Francis, 1989). This points to technological competitiveness, ability to compete on delivery, new production capacity and other technical efforts (Fagerberg, 1998). Technological competitiveness can be assessed by evaluating the research and development expenditure, foreign technology payments, new foreign technology collaborations, etc. (Babu, 1999).

Firm's competitiveness is also assessed from the input side, which includes financial, physical and human capital, R and D expenditure, or stock to turnover ratios. On the output side, the indicators employed encompass profitability, market share, export performance, firm growth, comparative international or relative national productivity performance, and patents (Wolff, Schmitt and Hochfeld, 2007).

Other measures like Effective Rates of Protection (ERP) and Domestic Resource Costs (DRC) are useful to analyse the efficiency of sector. Competitiveness can also be assessed by the average foreign exchange earned by exporting firms as any increase in market share in the world exports would result in more foreign currency (Babu, 1999).

Another frequently used measure of competitiveness is the rise in 'import penetration of manufactured goods'. This measure faces problems as a growing country would definitely need more imports. Decline in the manufacturing sector in GDP and higher share of service sector in a growing economy are also seen as measures of competitiveness (Francis, 1989).

4.4 India's Competitive Position

India has not been performing quite fairly in the Global Competitiveness Index (GCI) of the World Economic Forum (WEF). India's ranking declined by three places to 59th position in the GCI 2012-2013. The GCI ranking was at its peak at 49 for the country in 2009. Once ahead of Brazil and South Africa, India now trails them by some 10 places and lags behind China by a margin of 30 positions. The factors that have been driving down its ranking in the report are transport, ICT, energy infrastructural deficiencies, youth unemployment, weak social safety nets, corruption and bureaucracy. India has public deficits and the highest debt-to-GDP ratio among the BRICS. Poor health and educational standards are cited as the prime causes for the low productivity. The dissatisfaction among the business community, about the inability of the government in pushing forward the economic reforms is also cited as the reason. With these deficiencies, India is highly vulnerable to economic shocks and is reported to be the worst among the BRICS. Despite this, India's strengths noted by the WEF are well developed and sophisticated financial market that can channel financial resources to good use and a reasonably sophisticated and innovative business community (Global Competitiveness Report, 2012-13).

The Revealed Comparative Advantage Index (RCAI) calculated for India reveals its competitive position in terms of service exports and its uncompetitive position in terms of merchandise exports. India's RCAI in service exports improved ever since 1996. For services in particular, India's competitiveness remains higher than that of many other emerging markets. With in the category of services, computer and information services maintain a RCAI of 11 for several years. However, India's merchandise exports have remained low below unity. It has never been able to gain a larger share in world exports compared to countries like Brazil, China and South

Africa whose performance in RCAI is higher (Mukherjee and Mukherjee, 2012; Goswami, Mattoo and Saez (2012).

As far as India's export competitiveness is concerned, ever since the adoption of liberalisation and globalisation policies, India's trade to GDP ratio has increased to 42.9 per cent in 2012. The export to GDP ratio increased from 12.4 per cent in 2006 to 16.5 per cent in 2012. As per WTO's International Trade Statistics, 2012, the share of India in world merchandise export is 1.67 per cent in 2011 and it is the 19th largest exporter in the world. India's merchandise exports recorded a competitive growth rate of 21 per cent a year during 2002-03 to 2010-11. Growth Rates of India's Merchandise Exports is seen in table 4.1. The increasing importance of services exports is evident from the fact that its share in India's total exports increased from about 19 per cent in 1993-94 to 34 per cent in 2010-11 (Economic Survey, 2012-13; Veeramani, C, 2012; www.commerce.nic.in referred on June, 2013).

Table 4.1 Growth Rates of India's Merchandise Exports

Period	Growth rate (Percentage)
1993-94 to 2001-02	8
2002-03 to 2008-09	24
2010-11	37.4
2011-12 (April to November)	33.2

Sources: Data up to 2010-11 from the RBI (BoP statistics) Data for 2011-12 from the www.commerce.nic.in referred on June, 2013)

India has been able to diversify its export market from America and Europe to Asia and Africa. However, USA still forms India's major trading partner, that India's export to USA is 13.5 per cent in 2012-13(April- November). Within Asia, the share of North East Asia (consisting of China, Hong Kong, Japan) and ASEAN (Association of South East Asian Nations) fell from 14.8 per cent and 12.0 per cent in 2011-12 to 13.1 per cent and 10.3 per cent respectively in 2012-13 (April-November). There was a noticeable rise in the share of West Asia-GCC (Gulf Cooperation Council) countries from 14.9 per cent in 2011-12 to 17.7 per cent in 2012-13 (April-November) (Economic Survey, 2012-13).

Table 4.2 Region-wise Share of India's Exports

Region	2000-01	2005-06	2011-12
Europe	25.9	24.2	19
Africa	5.3	6.8	8.1
America	24.7	20.7	16.4
Asia	37.4	46.9	50
CIS & Baltics	2.3	1.2	1

Source: Economic Survey 2012-13

4.4.1 Export Performance of Selected Industries in India

Having described the competitiveness position of India as a whole, the following paragraphs portray the competitiveness status maintained by the sectors selected for the study of competitiveness of CSEZ.

4.4.1.1 IT and ITES Industry

Indian IT and ITES industry is one of the fastest growing industries in India. Indian IT industry is the most favoured destination for global sourcing of IT and ITES accounting for 58 per cent of the global sourcing market size. It is also a major contributor to country's GDP, exports and employment. Indian software and services exports are estimated at Rs.3,32,445 Crores in 2011-12 as compared to Rs.2,68,610 Crores in 2010-11 with a growth of about 23.8 per cent (www.deity.gov.in referred on March, 2013). The liberalisation and globalisation measures and the establishment of Software parks and Special Economic Zones all over India have helped the IT industry of India occupy a dominant position in the world IT export market.

4.4.1.2 Electronics Hardware Industry

India is a major exporter of vast range of electronic equipments to the world market. Total exports from this sector in the year 2011-12 has been Rs.44,400 crores, up from Rs.40,400 in the year 2010-11. This sector has benefited from the liberalised policy regime of the government to boost trade. Low cost of production and large pool of talented labour force have helped this sector to remain highly competitive in the export market. The setting up of Electronics Hardware SEZs has given a boost to its production as well as exports. However, Indian electronics sector's performance is not up to the mark and it has not been able to capture a larger share of the world

export market like China, South Korea etc. This is due to poor infrastructure and technology, poor initiatives in investment, lack of international branding, etc. (www.commerce.nic.in referred on March, 2013).

4.4.1.3 Engineering Industry

Engineering industry of India is one of the booming industries of India both in terms of domestic production and foreign exchange earner. Lower cost of production and availability of qualified local manpower help it to grow as a highly competitive sector in the export market. Engineering exports have been registering steady growth each year and have registered a growth of 25 per cent during 2007-08 over the previous year. In the year 2010-11, the engineering exports from India were USD 49,692. The average annual growth rate of this industry is 13 per cent. Engineering exports account for 24 per cent of the total exports from India (www.eepcindia.org referred on March, 2013). Engineering specific SEZs have contributed much to the growth of this sector.

4.4.1.4 Gem and Jewellery Industry

The Indian Gem and Jewellery industry is one of the highly internationally competitive industries of the Indian Economy maintaining a high export turn over. The annual growth rate of this sector is 16 per cent (www.cii.in, referred on March, 2013). The exports of this industry during 2011-12 (April-October) increased to USD 27,664.09 million from USD 16,770.33 million during the corresponding period of last year showing a growth of 64.96 per cent. In 2010-11, Gem and Jewellery exports accounted for 15 per cent of the country's total merchandise exports. The sector employs about 3.4 million workers, with the Middle East taking most of the market (www.commerce.nic.in referred on March, 2013).

4.4.1.5 Plastic Industry

The Plastic industry of India consists of over 30,000 units involved in producing a variety of items. The exports from the Indian plastic industry have reached over 3.6 billion US Dollars in 2009-2010. Products from the Indian plastic industry are exported to over 150 countries round the globe with the major trading partners being the European Union, USA, China, UAE, etc. (www.plexconcil.com

referred on March, 2013). However, India's share in global plastic exports is less than one per cent (www. articles.economictimes.indiatimes.com referred on March, 2013).

4.4.1.6 Rubber Industry

The natural rubber production in India is export-oriented. India is the 4th largest Natural Rubber producing country after Thailand, Indonesia and Malaysia. In the year 2011, India produced 890 thousand tonnes of natural rubber, up from 851 thousand tonnes in the previous year. India contributes eight per cent of the world natural rubber production (Mathew, N.M. , www.irrdb.com referred on March, 2013). In July 2011 India exported 779 tonnes as against 24 tonnes in July 2010 (www.business standard.com referred on March, 2013).

4.4.1.7 Agro and Food Processing Industry

The Indian Food Processing industry is primarily export oriented. India's export of Processed Food was Rs.34,864.36 Crores in 2011-12 (www.apeda.gov.in referred on May, 2013). India is one of the world's major food producers with 75 per cent of the processing units in the unorganised category. But its food export share in the world is merely 1.1 per cent. After 1991, the government has made special export promotion incentives for food processing industry. It identified food and agro processing industry as one of the 'sunrise' sectors that has high potential for domestic demand and export markets. Food parks and export zones were promoted which provide benefits like duty free imports, exemption from corporate taxes for profits from export sales, etc. The major challenge faced by India's food processing industry is that its exports are mainly to developing countries as it fails to meet international safety standards (www.nmcc.nic.in referred on March, 2013).

4.4.1.8 Textiles and Garments Industry

Exports of Textiles and Clothing products from India have increased after 2004 when textiles exports quota (MFA) got discontinued. The textiles industry accounts for 14 per cent of industrial production, which is 4 per cent of GDP, employs 45 million people and accounts for nearly 11 per cent share of the country's total exports basket. Exports of textiles and clothing, have grown by 20.05 per cent in 2011-12 over the financial year 2010-11. India's share in the total world textile and

garments exports accounts for 5.13 per cent in 2011-12. America and the European Union account for about two-thirds of India's textiles exports. The volatility in the EU market during the calendar year 2012 affected severely India's Textiles and Garments exports to European Union (www. texmin.nic.in referred on May, 2013).

4.5 Export Performance of the SEZs in India

Though Export Processing Zones were set up in the country as early as 1965, an improvement in its export competitiveness became visible after the introduction of SEZ policy 2000 and the implementation of SEZ Act, 2005. Special Economic Zones in India have registered its export competitiveness as is seen in the growth of exports from Rs. 9,190 crores in 2001-02 to Rs. 3,64,477 crores in 2011-12. They have provided employment to 8.15 lakh persons and have generated an investment of Rs. 2,31,159 crores in 2011-12 (see chapter 3, section 3.11). SEZS have also been successful in attracting FDI. Country is among the top five preferred destinations for FDI from Asian, European and North American investors. SEZs in India have brought in export oriented foreign investment in areas such as hardware, apparel and shoes, which would have normally headed for other Asian destinations in its absence. During 2007 and 2009, FDI amounting to USD 2.4 billions were invested in SEZs (www.ibef.org referred on May, 2013). There are presently 158 exporting SEZs in the country. Andhra Pradesh is the state with the largest number of operational SEZs followed by Karnataka and Maharashtra. The two sectors that dominate production in SEZS in India are Gem and Jewellery and Electronics industries. They account for three-fourths of the total zone exports. With the dominance of these two sectors, USA has emerged as one of the prominent trade partners of the SEZs in India (Tantri, 2010).

Study on Performance of Indian SEZs, made by Tantri (2010 b) confirms the competitiveness position of CSEZ (for details see chapter 3, section 3.12). It reveals that two Zones that have improved its performance, during the SEZ policy regime, due to improvement in the number of total exporting units and thereby in total investment and employment generation are Santacruz SEZ and Cochin SEZ. The improved export performance of Santacruz SEZ can also be attributed to the large number of Gem and Jewellery exporting units in the Zone. The Cochin SEZ, on the

other hand, pushed itself up with higher value of exports, imports, per capita exports and improved its position at the national level. The Madras (Chennai) SEZ is another Zone which improved its performance by increased geographical diversification of exports, higher growth rate of exports, imports, and exporting units.

4.6 Summary

Competitiveness is defined as the ability to compete in the export market. But it is also a multifaceted concept which assumes different meanings when defined at different levels - national level, industry level and firm level. A nation cannot always remain competitive. When most of its enterprises can maintain a trade balance it is said to be competitive. Export competitiveness depends on country's ability to generate exportable surplus, relative to prices of the competitors, quality and design of the product, etc., which in turn depends on price competitiveness. For maintaining price competitiveness, cost competitiveness is to be maintained through factors like, R and D, quality enhancement, investment in human capital, etc. Michael Porter, who has made studies in industrial and nation's competitiveness, through his Five-force model and Diamond model indentifies factors like entry of new competitors, the threat of substitutes, bargaining power of buyers, the bargaining power of suppliers, and the rivalry, factor conditions and demand conditions, etc. determining competitiveness of industries. There are measures to assess the overall competitive business environment of the nations (GCR, WCY, and BCI). There are also measures to assess export competitiveness of both nations and firms - Price competitiveness, Market Share, Productivity, RCA, etc.

Competitiveness status of India is assessed through various measures. India's competitiveness ranking in the Global Competitiveness Index (GCI) of the World Economic Forum (WEF) declined by three places to fifty ninth position in the GCI 2012-2013. The Revealed Comparative Advantage Index (RCAI) calculated for India reveals its competitive position in terms of service exports and its uncompetitive position in terms of merchandise exports. The share of India in world merchandise export is 1.67 per cent in 2011 and it is the nineteenth largest exporter in the world. India's competitiveness performance is also assessed from the growth in exports of sectors like IT, Engineering, Gem and Jewellery, Textiles and Garments, etc. Thus,

India's competitive position over the years has improved. When there is pressure on firms to remain competitive, labour standards are the first to get compromised. This is particularly true in the case of SEZs where labour laws are lenient. In this backdrop, a study on the concept of labour standards especially those prescribed by the ILO is discussed in detail in chapter 5. A study on the labour standards existing in India, in the background of liberalisation measures is also dwelled up on.

.....ꕥ.....

Chapter 5

LABOUR STANDARDS: EVOLUTION, RATIONALE AND ROLE OF ILO

Contents

Labour standards are institutional mechanisms to mediate between the narrow interests of firms and the wider interests of the economy and society as a whole; between the interests of labour and capital; between the interests of the present and future generations of workers; and finally between the interests of different countries. In any case, labour standards are means to resolve such conflicting interests. International labour standards, despite getting justified on human right grounds, face various impediments in getting implemented. Some find labour standards slowing the pace of efficiency, economic growth, employment and competitiveness. The adverse effects prevent the policymakers from implementing international labour standards (Sengenberger, 2005).

5.1 Meaning of Labour Standards

Labour standards form guidelines and guiding principles by which the parties themselves can reach mutually agreeable solutions, so that industrial disputes get settled. The existing facts must be compared with what forms the 'normal' labour standard. This helps to solve the issue amicably thus helping to improve industrial harmony between labour and management, a prerequisite for long term increases in industrial productivity (Bangasser, 1983).

Labour standards stipulate a positive economics connotation of 'what is' i.e., the actual situation of working conditions. They indicate the existing working

conditions, their nature of work, hours of work, wages, welfare, occupational health and safety, etc. The other meaning lays down a normative economics inference of 'what ought to be' which prescribe the responsibilities towards the labourers. It prescribes what should be the ideal terms and conditions of work. It specifies the basic rights of workers like freedom of association, collective bargaining and freedom from forced, compulsory labour, child labour, and gender based discrimination in employment. They also include specific social standards, also called economic and social rights, such as the norms on employment and training; termination of employment; occupational safety and health; minimum wages; maximum hours per day or week; minimum rest periods, paid holidays, maternity leave, protection of workers with special needs, such as migrant workers and home workers; social security; and rules for conflict resolution. The normative rules set at the international level are called International Labour Standards and those set at the national level are called National Labour Standards (Sengenberger, 2005).

5.2 Evolution of Labour Standards

Before nineteenth century, existence of minor forms of labour standard regulations was found only in countries like Russia, (in the early and mid 18th century), but never in the industrial powers which were soon to emerge. With the start of nineteenth century, more countries introduced labour standards though major labour standards never got introduced. Very soon, England introduced labour standards (English Factory Act of 1802) setting workday at 12 hours, prohibiting night work and with provisions of education and religious instruction. This was followed by regulations in Western Europe, Latin America, Africa and Asia.

Labour standards were first applied to children and women. The minimum age for work, the maximum hours of work and prohibition of night work for women and children, restriction on hazardous work like mining, etc. were introduced initially, with little emphasis on hours and wages of adult males at least or until the twentieth century. Most of these labour standards applied to manufacturing and mining industries and agricultural and service sectors. Thus the regulations were applied to relatively small proportion of the total labour force.

The expansion of labour standards around the world can be divided into three 'overlapping in time' categories. Initially, the first labour standards of its kind were introduced by sovereign nations within their country. During the second half of the nineteenth century, efforts were made to introduce labour standards at the international level as a result of a series of international conferences. However, such efforts covered only developed countries of Western Europe and not even the countries colonised by them at that time. Some of these legislations made distinctions on the basis of race, ethnicity, or citizenship status. With the establishment of International Labour Organisation (ILO) in 1919, labour standards got worldwide coverage. Their efforts got supplemented with the introduction of many regional organisations enforcing labour standards discussing a wide range of labour issues. Of late, the enforcement of labour standards by different countries has been made by linking labour standards to international trade (Engerman, 2003).

5.3 Rationale behind Labour Standards

Global mobility of capital and labour, technological innovation, export pressures and elimination of trade barriers have put pressure on the countries to remain competitive (Alston,1994). Countries hesitate to implement labour standards as they fear that their competitive position will be endangered once they are implemented. Rising levels of unemployment and under-employment, growth of informal sector, deepening inequalities, neo-liberal economic policies, weakening trade unionism, etc. are also factors which are threats to the imposition of labour standards in countries. While some argue for standardisation of labour standards across countries, there are others who argue for lower standards for poorer countries as a measure to preserve their competitiveness and further growth (Sengenberger, 1994).

The rationale behind imposing labour standards is to protect the individuals who are legally or economically poor to be treated properly in a market economy or to shelter those individuals who are politically weak to influence any legislation in their favour. With its imposition, they gain more economic and political power for influencing political and government actions (Engerman, 2003). Better labour standards may have a further impact in promoting not only economic growth, it also

leads to individual betterment and productivity enhancement. They ensure human resource development, equity and justice in the work process. They are also measures of certainty and predictability. Labour standards help to increase economic efficiency not only by increasing the skills of workers but also by putting a pressure on employers to improve management, technology, products and work process (Sengenberger, 2005). Unless the employers offer good working conditions and other benefits to workers it would be difficult to retain skilled and experienced workers in the firm (Friedman & Friedman, 1979).

Labour standards are needed owing to two peculiar features of labour and labour market. One peculiarity is that, labour unlike a commodity has a human content with 'productive potential' and the productive capacity depends on the terms of employment and working conditions. The second peculiarity is that workers remain in a disadvantaged, weak position in the absence of labour laws, compared to the employers. In view of such peculiarities which form the deficiencies, the labour standards should embody three factors. Labourers should be provided the right to organise and bargain collectively, thus helping to participate in the productive activity. Labour standards should provide all forms of protection against abusive power or exploitation of the labour class by the employers. Labour standards should provide for all forms of human resource development like training, rehabilitation of disabled persons, etc. A minimum floor on labour standards not only prevents exploitation of the labour class but also facilitates cooperation and peaceful dispute settlement (Sengenberger, 2005).

Other arguments in favour of labour standards are international competition, contribution to the consolidation of peace, social justice, social and human objectives of economic development, international movement of workers and goods, consolidation of national labour legislation, and source of inspiration for national action (Valticos, 1969). Above all, the fundamental reason why labour standards should be offered is that they represent human rights which should be provided irrespective of them being economical or not. If the development process is to sustain for long (sustainable development), focus shifts to the provision of labour standards (Sengenberger, 2005). When standards are implemented internationally, every

country's competitive position will improve and individual countries no longer would fear that their competitive position would be endangered (Sengenberger, 1994; Scherrer, 2007). Thus there are economic benefits (productive population), social benefits (public health, population growth, political stability) and private benefits (better health, more leisure time) of enforcing labour standards (Engerman, 2003).

5.4 Case for International Labour Standards

It is often stated that observance of labour standards can increase costs and can lead to unemployment in the economy. But, firstly, increase in costs of production with the application of labour norms can be absorbed by better work organisation and improved production process. Secondly, improved standards are 'self-financing' as the benefits from implementing standards exceed the cost in the long run. Thirdly, absence of labour standards is not always costless, for example, considering the cost of dismissal and the cost involved in resolving the conflicts. Fourthly, when considering the costs to employers in observing labour standards, appropriate attention should be paid to implications it can have on individual as well as national performance. Fifthly, in most of the cases, costs of implementation of labour standards get transferred to workers in the form of lower wages. Moreover, costs of implementation of labour standards are often exaggerated as these costs are direct and measurable whereas, the benefits out of it are underestimated. Higher pay increases the work efforts, attract qualified workers thereby leading to increased productivity offsetting extra cost. It also increases domestic demand by raising mass purchasing power (Sengenberger, 2005).

Better labour standards lead to lower absenteeism, lower sickness rates, and improved performance because of better health and greater motivation to work. Prevention of accidents and other occupational diseases and provision of safety at work are important for profitability. The absence of such standards entails heavy cost, human and material, to not only the employees but also the employers and the society as a whole. Forced labour and child labour retard the developmental process by preventing skill and knowledge addition, thus lowering labour productivity. Discrimination of any kind is de-motivating and it reduces the productive capacity of the workers. International Labour Standards make possible wage and income

equality, which is conducive to development, social cohesion and democracy. Child labour, low real wages and insufficient social security tend to increase the supply of labour, causing real wages to decline further, raising in turn poverty and culminating in a self-perpetuating trap of low labour standards. Employment protection such as protection from termination of employment, and income protection in case of loss of employment, unemployment, sickness, disability, maternity, and old age are all essential for the efficient functioning of the labour marker. This may help to stimulate savings and to sustain aggregate demand. Labour standards in the form of infrastructure, active labour market policies and social protection arrangements can help to make the FDI inflows sustainable. With better labour standards there are more chances of recruitment and retention of good workers (Sengenberger, 2005).

In an economy where there is the existence of a floor of labour standards, a competitor's urge to produce at lower costs and thus capture larger share of the market prompt him to innovate to raise productivity and profit. Higher profit in turn creates a condition for higher wages which in turn spur demand and higher growth and employment. On the other hand, those firms which opt for lower wages and working conditions will lose their dynamic efficiency and would get caught in the 'low wage and low productivity syndrome'. Low wages discourage labour market participation and promote casual employment and it gives lesser motivation for the labourers to acquire skills and lead to less than full capacity utilisation (Chandra, 2009; Scherrer, 2007).

The disparities in labour costs among countries lead to downscaling of labour standards and thus a 'race to the bottom'. At the same time, provision of labour standards at the elementary level can only help to reduce disparities across countries (Sengenberger, 1994).When labour standards are ratified in countries it not only makes other industries in the country comply with these standards, it also forces other countries in the region to follow suit. It also makes possible the establishment of certain minimum required standards in the future in industrial communities (Feis, 1994). Insufficient labour standards in the form of discrimination of women, absence of old-age welfare measures and falling wages can even lead to impoverishment and increase in population growth of a country (Scherrer, 2007).

Thus, universal application of labour standards is necessary, else 'bad standards would drive out good standards', forcing the countries or firms with good standards to follow the pattern of production in countries or firms with low labour standards, in order to remain internationally competitive (Freeman, 1994; Sengenberger, 2005).

5.5 Case against International Labour Standards

Labour standards are criticised by pinpointing the argument that 'development requires a repressive employment regime' (Scherrer, 2007). They argue that, improved labour standards may increase the cost of production thereby influencing the opportunities of the unemployed workers. It may have an impact on profits as the labourers work for lesser hours for the same pay. Lower employment levelst may even lower the standard of living, and also their political and social position. It may also be difficult to achieve uniform labour standards among different trading nations which are differently situated (Engerman, 2003).

Some people believe that an institutional intervention in a free market economy in the form of labour standards reduces efficiency, increases the cost of labour and lowers the employment, to the benefit of higher-cost competitors. Trade union activity only reduces the ability of firms and workers to compete in the market (Freeman, 1994). Workers press for higher wages which would force the employers to restore child labour (Scherrer, 2007). The losses from its introduction may be in various forms: first, consumers may have to pay higher price for their products; secondly, workers and capitalists may find it difficult to enter industries which yield higher returns; thirdly, lack of freedom to fix labour standards may result in unemployment (Feis, 1994).

Another possible danger of enforcing international labour standards is that, imposition of labour standards may be used as an instrument by the self-interests groups to secure a sanction on countries which do not comply with labour standards (Srinivasan, 1996). Free market economists are of the view that interference with labour market will only do harm to growth, wages, employment and other working conditions which can be improved only thorough economic growth. They are of the

view that, problems which need attention on priority basis are mass unemployment, underemployment and poverty than quality jobs and good working conditions. Labour standards may cause economic loss when the countries lack the power to revise standards downwards to meet a temporary fall in the competitive position (Sengenberger, 2005).

5.6 International Labour Organisation (ILO) and Labour Standards

The origin of International Labour Organisation (ILO) as an organisation promoting the well being of workers can be traced back to the Industrial Revolution which took place in England and North America. Industrial Revolution which contributed immensely to the development of the two regions was infact built at 'the price of intolerable human suffering'. The misery and hardships of workers of Industrial Revolution laid corner stone for ILO as early as 19th Century. The three arguments which provided basis for the establishment of ILO, which got incorporated into the Preamble of the 1919 constitution, are improvement of the conditions of working class, prevention of social troubles in industrialised countries and equalisation of conditions for international competition in trade among countries.

By the end of the First World War it was found necessary to create an agency to bring about social and economic justice to the labourers. ILO was established in 1919 in Geneva along with the League of Nations by the Treaty of Versailles that ended the war. After the Second World War, in 1946, the ILO became a specialised agency of the newly formed United Nations. ILO and United Nations work together as similar issues tend to arise in both (Chaudhary, 1999). ILO which had 42 countries as members in 1919, grown with 58 member countries after the Second World War, has 185 members to date (www.ilo.org referred on June, 2013).

Initially, ILO was controlled by the European nations. Later as the organisation expanded beyond Europe to Asia, Africa and Latin America, international agreements became difficult as these nations had different income, economic, legal, social structures (Engerman, 2003). Many leading powers, with the exception of USA which joined the ILO only much later in 1934, gradually accepted ILO as it always stood for the welfare of the working class (Standing, 2008). It was

complained that ILO provided special treatment to countries with low levels of developments. This made the developed world anxious about the competitive disadvantage they may face with having higher standards, that they never made any waivers to the less-developed world.

In the initial decade, when ILO had been very much successful in providing information about labour issues around the world, its functioning had been affected in certain instances in the absence of effective enforcement mechanism. It could not attract major nations as its members. There had also been instances where ILO was less successful especially during times of depression and World War II. Sometimes ILO found it very difficult to influence the coercive labour policies of Germany, Soviet Union and Japan even during their membership with ILO.

After the World War II, ILO shifted its focus from solving the problems of organised labour in developed countries to improving labour conditions in third world countries. ILO enhanced its enforcement mechanism by linking labour standards with world trade that consumers, labour unions and governments started pressing for more labour standards in less developed countries (Engerman, 2003). ILO advocated labour standards around the world and in 1969 received the Nobel Peace Prize. During this decade, ILO diversified its role by becoming more of a development agency, rather than dealing purely with labour related matters. It set up an International Institute for Labour Studies and a centre for labour-related training in Turin, launched World Employment Programme (WEP) and also has offered many advisory services to member countries. There has been transfer of skills made through ILO's technical departments to the people of Africa thereby enhancing their productivity

The ILO, through its initiatives to implement labour standards, has helped in mutual understanding and alleviation of poverty. It has ensured human and trade union rights, social justice, peace and progress to the workers. It is the most respected agencies among all the UN agencies. Thus, ILO's contributions to the human resource development, particularly of developing countries, are commendable. (Sunmonu, 1994).

5.6.1 Declarations of ILO

Every June, the delegates of the member countries of ILO meet in Geneva in the International Labour Conference (ILC) and discuss the different issues related to labour for two to three weeks (Standing, 2008). The 26th Session of the ILC held in Philadelphia in 1944 adopted a Declaration of the aims and purposes of the ILO. This 'Declaration of Philadelphia' was incorporated in the ILO's Constitution, expanding its role to provide an extensive structure for development (www.ilo.org, referred on September, 2011). To lessen the commodity character of labour relations, the Philadelphia Declaration stressed a one-line paragraph: 'Labour is not a commodity' (Standing, 2008).

The Declaration endorses the fundamental principles on which the Organisation is based,

- labour is not a commodity
- freedom of expression and association are essential to sustained progress
- poverty anywhere constitutes a danger to prosperity everywhere
- the war against want requires to be carried on with unrelenting vigour within each nation, and by continuous and concerted international effort in which the representatives of workers and employers, enjoying equal status with those of governments, join with them in free discussion and democratic decision with a view to the promotion of the common welfare (www.ilo.org, referred on September, 2011).

After adopting declarations like Policy of Apartheid of the Republic of South Africa (1964) and Declaration on Gender Equality (1981), in 1998 ILO adopted the much acclaimed 'Declaration on Fundamental Principles and Rights at Work'. The Declaration assigns member states to respect and promote principles and rights in four categories: Freedom of Association and the effective recognition of the Right to Collective Bargaining, the Elimination of Forced or Compulsory Labour, the Abolition of Child labour and the Elimination of Discrimination in respect of employment and occupation (www.ilo.org, referred on September, 2011).

5.6.2 Conventions and Recommendations (Labour Standards)

International labour standards are legal instruments drawn up by the ILO's constituents (governments, employers and workers) for framing basic principles and rights at work. ILO which has powerful legislative capacity formulates labour standards which are either Conventions or Recommendations. Labour Conventions are international treaties which set legal binding on the countries which ratify them and thereafter enter into the national law and enforcement procedures, while Labour Recommendations are non-binding guidelines. Over the years, 189 Conventions and 202 Recommendations has been developed on various aspects of labour and social policy (www.ilo.org, referred on June, 2013). Conventions and Recommendations are adopted at the annual International Labour Conference.

In 1998, by adopting the 'Declaration on Fundamental Principles and Rights at Work', the ILO has identified eight core conventions as 'fundamental', covering subjects that are considered as fundamental principles and rights at work:

1. Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)
2. Right to Organise and Collective Bargaining Convention, 1949 (No. 98)
3. Forced Labour Convention, 1930 (No. 29)
4. Abolition of Forced Labour Convention, 1957 (No. 105)
5. Minimum Age Convention, 1973 (No. 138)
6. Worst Forms of Child Labour Convention, 1999 (No. 182)
7. Equal Remuneration Convention, 1951 (No. 100)
8. Discrimination (Employment and Occupation) Convention, 1958 (No. 111)

The eight Fundamental Conventions can be categorised into four: Freedom of Association and Collective Bargaining (Nos. 87 and 98); Freedom from Forced Labour (Nos. 29 and 105), Elimination of Discrimination (Nos. 100 and 111) and the Abolition of Child Labour (No. 138). (www.ilo.org, referred on September, 2011). Convention No. 111 preventing Discrimination in employment on the basis of

personal characteristics like caste, gender, creed etc. is one of the most ratified of all conventions (Standing, 2008).

Freedom of Association and Collective Bargaining give the labourers the right to join union, with the exemption of armed forces and police, without state interference. Right to Organise and Collective Bargaining Convention provide protection against anti-union discrimination. They protect the workers' and employers' organisations against acts of interference by each other and promote collective bargaining. Freedom from forced labour bans all types of forced labour and debt bondage, except 'when it is extracted by the State in an emergency or for military or public service'. Abolition of Forced Labour Convention prohibits the use of any form of forced or compulsory labour as a means of political coercion, punishment for the expression of political or ideological views, workforce mobilisation, labour discipline, punishment for participation in strikes, or discrimination.

Minimum Age Convention lays down the minimum age at which admission to employment is given. Worst Forms of Child Labour Convention abolishes all forms of child labour and calls for including in it all labours that are harmful to the health, safety and morals of children. Enforcing this standards and enrolling children in school can help to increase productivity and thus build up human capital in the long run. Implementing this particular standard is not quite easy as young children engage in work as their economically pathetic condition forces them to do so (Elliott and Freeman, 2003). Equal Remuneration Convention calls for equal pay for both men and women. Elimination of discrimination calls for elimination of discrimination in the form of race, gender, religion, etc. thus promoting equality of opportunity and treatment in employment (Chaudhary, 1999; Sengenberger, 2005).

Apart from the ILO core labour standards there are 'cash standards - minimum wages, working hours and health and safety conditions - which affect the labour costs and thus the competitiveness of the firm. Though there are demands to incorporate these cash standards in the core standards, core standards happen to be the basic framework of the rules for labour market. However, implementing cash standards in

the form of codes of conduct can build up the image of the company and help in getting a marketing advantage (Elliott and Freeman, 2003).

In addition to ILO instruments there are a number of internationally accepted agreements which include, International Covenant on Civil and Political Rights, the International Covenant on Economic, Social and Cultural Rights, the UN Convention on the Elimination of All Forms of Discrimination against Women, and the UN Convention on the Rights of the Child (Sengenberger, 2005).

Enforcement of labour standards by countries around the world and NGOs is through variety of instruments. This ranges from 'social labelling' of products (to ensure child-labour free production) to consumer boycott of products whose production involves lower labour standards (Venkata Ratnam, 2000). The ILO uses various instruments to impose labour standards. It supervises whether the member countries comply with the ILO conventions and publicises the violations by countries in order to make them adhere to standards. It gives technical assistance to labour ministries, unions, employer's groups and other agencies to improve labour standards. It also tries to punish countries through its enforcement mechanism (Article 33 sanctions, Article 24 - worker or employer complaint against the country for not complying with standards, Article 24 – governments' complaint against another country for not complying with standards etc.) for not observing labour standards.

ILO declaration has been criticised on a number of grounds for focusing on 'negative rights' rather than on 'positive rights, as 'negative rights' do not constitute a progressive agenda. There are those who argue that the declaration could have been more binding if they were accompanied by trade sanctions. Since it focused on core and fundamental rights and thus losing its universality, it ignored economic rights such as work safety, health, maternity provisions, disability benefits, pensions etc. Above all, there are doubts about the benefits that these rights have brought about in different countries. Even though in its early years, in closed economies, it could enforce payment of social benefits like sick leave, unemployment benefits etc., in a globalised modern world, the ILO has not been able to find any alternative mechanism to substitute for the absence of social entitlements (Standing, 2008). Moreover, ILO cannot force its member countries to ratify the labour standards and

hence its power to impose sanctions on countries which violate labour standards is very weak (Sengenberger, 2005).

5.6.3 'Decent work'

International Labour Conference (ILC) at its 97th Session, Geneva, on June 2008 adopted the ILO Declaration on Social Justice for a fair globalisation. The Declaration reaffirms ILO values concerning social justice, particularly in this era of globalisation. The Declaration seeks to place full and productive employment and 'decent work' at the centre while framing social and economic policies.

In 1999, the new ILO Director-General introduced the term 'decent work'. The word 'labour' was substituted by the word 'work' to include all forms of work, and not just labour and employment (Guy Standing, 2008). It refers to the observance of all core labour standards including all types of freedoms, equality and social security, basic human rights and trade union rights (Nath, 2008).

In 1999, ILO Director-General, Juan Somavia in his report to the International Labour Conference, wrote "the fundamental goal of the ILO today is to promote opportunities for women and men to obtain decent and productive work, in conditions of freedom, equity, security and human dignity". The ILO, in its focus of decent work has been driven by four strategic points,

- To promote fundamental principles and rights at work
- To secure decent work and employment for all men and women
- To broaden the coverage and effectiveness of social protection for all
- To strengthen tripartism and social dialogue

The ILO calls short comings in the provision of labour standards as 'decent work deficits'. Some important deficits in labour conditions are: a) restrictions on freedom to organise, b) fall in the degree of unionisation in different states, c) limiting the labour standards to a minority of workers, d) forced labour, e) child labour, f) child labour in dangerous work, prostitution, slavery etc., g) unemployment and underemployment, h) gender discrimination in work life, i) absence of social security against illness and invalidity etc. and j) occupational accidents (Sengenberger, 2001).

5.7 Labour Standards, International Trade and Globalisation

International trade has been able to bring prosperity to the capitalist world. But for many emerging economies, especially in export producing sectors, the working conditions, wages, environmental standards have only deteriorated (Scherrer, 2007). The question is whether ILO would be able to remain as an agency of development in the context of changing nature of work and labour under globalisation. (Standing, 2008).

The liberalisation of world trade has brought about benefits to nations in both social and economic terms. But the increased competition among nations to produce at the lowest possible cost has resulted in employment volatility, increased insecurity and wage inequality (Chaudhary, 1999). If the developing countries fail to raise their labour standards, it would lead to a 'race to the bottom' to lower their own labour standards further. The 'social dumping' can also cause job losses in developed countries. The developed country companies even plan to shift their base to developing countries where the labour standards are lower. So there is a demand by developed country trade unions for certain minimum labour standards which consists of the Core Conventions of the ILO. The developed countries are of the argument that incorporating 'social clause' in trade agreements would eliminate unfair trade competition driven by intolerable labour exploitation. To link worker's rights and trade through trade sanctions, penalising the countries which violate labour Conventions are the best measures to ensure that workers rights are protected (Venkata Ratnam, 2000).

However, developing countries perceive this as a 'disguised form of protectionism'. Linking labour standards and trade and incorporating social clause in trade agreements through coercion would only worsen the plight of labour force in developing countries. It would raise the labour costs and reduce the international competitiveness of developing countries. It would adversely affect development, job creation, deteriorating the present condition of poverty and inequality in developing countries. In such a situation, providing technical and financial assistance to strengthen the capacity of developing countries would be a better approach (Chaudhary,1999). Moreover, it is true that low wages constitute a comparative

advantage, but the real issue is whether labour standards across countries, different in many respects like stages of development and other features can be harmonised. What is necessary is a fairer distribution of benefits of trade among nations. Interesting fact is that there are some countries which follow a dual strategy of resisting trade linkage with labour standards at the international level at the same time pressing for improved labour standards at the national level (Venkata Ratnam, 2000).

Economic globalisation, with high mobility of capital, has led to organisational difficulties for labourers and thus on collective bargaining of workers. Most of the Export Processing Zones are kept 'trade union- free' in order to confer competitive advantage to firms. With the absence of trade union activity there is deficiency of an agency to pursue their interests. Moreover, wages fail to rise with increase in productivity. Privatisation, where there is outsourcing and off shoring of work, too has decreased trade union activity (Sengenberger, 2001). Globalisation and the labour market flexibility have informalised the labour market, undermined the trade union activity, increased the work load and working hours and have reduced employment and wages (Nath, 2008).

With the internationalisation of economies, countries engage in competition in two ways: low-wage option and high-wage, high-productivity, high-quality option. Most developed countries have rejected the first option of remaining competitive as low-wage option create unequal income and threaten their social, political and economic existence. The high-wage, high-productivity option, on the other hand, can bring about national development. But the controversial aspect of high-performance production system is that of labour organisations which emphasise the rights of workers to organise and bargain collectively. The challenge is to bring in cooperation among the two parties of workers and managers with adversarial relations.

In the short run, low labour standards may help developing countries to develop. In the long run, good labour practices enhance economic efficiency. It is also not correct to argue that labour standards are unsuited for economic growth. Democratic societies with free labour-movements in fact can help to secure better growth. Absence of labour standards would only make those with low income trapped. This means that there is no ground in the argument that economic

development would automatically improve labour standards. Strategies to gain competitive advantage by suppressing wages and labour standards no longer turn out to be effective (Marshall, 1994).

5.8 India and ILO

India is the founder member of ILO. It has shown dynamic involvement in International Labour Conference and has always been an active participant by holding various positions in the Governing Body of ILO. India has always shown a positive attitude towards labour standards prescribed by the ILO. India uses the ILO Conventions as a standard guide while formulating legislations related to labour. It is very much particular about ratifying ILO Conventions if they confirm with the legal and administrative framework of India (Chaudhary, 1999).

So far, of ILO Conventions and Recommendations, India has ratified 43 Conventions and has denounced - two [C2 Unemployment Convention, 1919 and C41 Night Work (Women) Convention (Revised), 1934]. Out of the eight Fundamental Conventions, India ratified Freedom from Forced Labour (Nos. 29 and 105), elimination of discrimination (Nos. 100 and 111). The process of ratification of Conventions -Freedom of Association and Collective Bargaining (Nos. 87 and 98) and the Abolition of Child Labour (No. 138) is on. (www.ilo.org referred on June, 2013). Mere ratification of ILO Conventions will never ensure labour standards in the production system. Since the subject of labour standards is a matter of Concurrent List in India, there has been a tendency among state governments to pursue competitive labour policies. So, there should be strong support of political will, legislative framework and continuous supervisory mechanism led by consumer groups, NGOs, etc. Nevertheless, it is not to be neglected the high level of labour standards provided by firms in India even before labour standards became part of the national and international legislation. Care should be taken to ensure that excessive labour standards prescribed for a particular sector never drive away the producers from them. Care should also be taken to have a holistic approach towards labour standards than emphasising only the export sector. (Venkata Ratnam, 2000).

5.9 Globalisation, Labour standards and India

After India adopted the policies of liberalisation, globalisation and privatisation, the competitive forces in India have ushered into the economic scene. They have altered the production systems and employee-employer relationships. There has been a shift in the nature of skills and there is neither employment security nor income security. On one hand, while the change in the economic policies has increased the prosperity of labourers on the other hand, inequality has increased. In this era of competition, over-emphasis on social protection can turn out to be counter-productive. At the same time, it would be unjust to leave the workforce to the mercy of market forces. The challenge before the government is to balance the two conflicting situations (Chaudhary, 1999).

In India, economic reforms of liberalisation and globalisation have been adopted only in the product market and labour market has been left out from the reform process. There is a growing demand from the entrepreneurs to reform the labour market from rigid employment laws, protectionist policies of state and trade unions and to be linked with productivity for the efficient functioning of the product market. However, in the globalised scenario, the employment nature has been fast changing as the employers, so as to remain competitive, are resorting to cost reduction and are replacing permanent employees with casual, contract workers. The restructuring of the Indian economy and the job insecurity associated with it has pushed the workers to the informal sector. The cost reduction policies of export-led industrialisation have pushed enterprises to low-wage and low-cost areas. Various industries like food processing, textiles, catering, etc. which require low levels of skills have been shifted to homes with growing number of part-time, home-based female workers with very low wages and consequently making them poor. The industries have become sweat-shops where in the workers, who are 'permanently temporary' and unorganised; categorised as trainees, learners, contract workers, etc. have been provided low wages and other low social security measures. There is also feminisation of the industry with more than 75 percent of the workforce being females with very low wages and poor labour standards (Nath, 2008).

With the adoption of privatisation policies, even though the organised private sector attracts the workers with more wages, the private employers either relocate to union-free areas or prevent the workers from forming unions in the name of retrenchment, voluntary retirement, etc. There has been increase in the demand for skilled, creative, flexible and innovative workers with the advent of globalisation. It is true that, with more MNCs and more flow of capital, more employment generation has taken place in the private sector. However, industrial restructuring, with its emphasis on export oriented industries has increased the number of casual workers and contract labourers. Considering the biological role women plays, a globalised work environment puts more stress on the women workforce. A highly competitive work environment makes child labour with its cheaper wages more lucrative for the employers (Palo et al, 2000). Trade unions, which failed to develop a modern forward-looking strategy to cater to the needs of a globalised working environment face a declining phase. The corporate sector has preceded the trade unions as the new engine of growth and has better influence upon government (Ackers, 2006).

Labour legislation in the country fails to protect the contract labourers and the labourers in the informal sector. The country has a system of labour legislation which puts down that the minimal human rights at work does not apply to enterprises employing less number of workers. The Factories Act and Employees Provident and Miscellaneous provisions Act, Maternity Benefit Act, etc. do not affect employers which employ less than ten number of workers. But, for the adequate empowerment of workers and to ensure social dignity in employment, every worker, men as well as women, formal as well as informal, should be given the right of association and collective bargaining and the industrial laws should be universally applicable irrespective of the number of workers the employer employs (Chandra, 2009).

5.10 Requirements for Effective Implementation of Labour Standards

With the help of research and advocacy, greater knowledge about the positive impacts of implementing labour standards in a country should be projected. International Labour Standards should occupy a priority place in national and international policy design, thereby ratifying the labour standards prescribed by ILO. International agencies like WTO and IMF should exhibit their support to labour

standards of ILO by placing compliance with labour standards as a requirement while advancing loans. While the duty of advancing labour standards lies with the national governments, more agencies like NGOs and consumer agencies can successfully help to promote labour standards. The role of trade unions and the effectiveness of collective bargaining should be widely accepted across countries. Problems associated with financial and other administrative bottlenecks like lack of professional competence should be properly dealt with. The ILO should take serious actions like sanctions when there are serious violations of labour standards in a country. Positive incentives like financial assistance and trade preference can be given to countries which comply with labour standards (Sengenberger, 2005).

WTO should enforce trade-related labour standards and should protect small countries from unjustifiable trade sanctions. When trade sanctions turn out to be costlier, many countries find implementing labour standards to be a better option. Moreover, when labour standards are adequately implemented and are included in trade agreements, it would prevent the protectionists from using trade and labour standards as a trade barrier (Elliott and Freeman, 2003).

Moreover, since the labour legislation covers only a tiny section of the labourers i.e., organised workers, measures should be taken to expand the base of the protective legislation for the unprotected labour market. Education and training as part of skill formation should be provided to facilitate access to the labour market and reduce labour market discrimination (Nath, 2008).

In view of the ILO's ineffectiveness in dealing with violations of labour rights effectively, the international labour movement has called for social clause, i.e., a labour rights provision to be embodied in the World Trade Organisation (WTO) and more recently, in bilateral agreements (Scherrer, 2007). If the countries see labour standards as a powerful means of improving the efficiency of its workforce, they can remain active participants in the process of implementation of labour standards (Hepple, 1994).

5.11 Summary

Labour standards are certain guiding principles through which industrial disputes get settled. They indicate the existing working conditions, their nature of work, hours of work, wages, welfare, occupational health and safety, etc. Labour standards existed in minor forms in Russia in the eighteenth century. In the nineteenth century, countries like England, Western Europe, Latin America, Africa and Asia introduced labour standards. It protects the labourers who are politically and socially weak to argue for their rights and help in human resource development. While some firms have apprehensions in providing better labour standards owing to its cost factor, some firms find productivity potential in its provision. The labour standards got a wide coverage with the establishment of International Labour Organisation in 1919. Out of the 189 Conventions ILO developed, India, a founder member, has ratified 43 Conventions to date.

The liberalisation of trade and the increased competitiveness among nations have brought in consequences upon workers rights. In India too, repercussions in the form of absence of job security and income security to the workers is visible. This has pushed the workers to the informal sector. They have been provided low wages and other social security measures. This is especially true in the case of SEZ where there is a liberal hassle free environment to make its products globally export competitive. In this context, how far the labour standards are upheld or compromised to preserve its competitive position is to be studied. Before analysing the relationship, a detailed study into the export competitiveness maintained by the CSEZ, the area of the present study, is done in chapter 6.

Chapter 6
COMPETITIVENESS OF SECTORS IN CSEZ

Contents

Special Economic Zones (SEZs) are being set up to achieve rapid economic growth. They help not only in the expansion of exports and foreign exchange earnings of the country, but also create infrastructure and employment, attract more foreign investment, enable transfer of technology, etc. Ensuring competitiveness of these 'engines of growth' is a necessity for strengthening the national competitiveness. As the zones are set up with the primary objective of expanding exports, competitiveness in SEZs represents 'export competitiveness'. In the post-liberalisation era, achieving export competitiveness has always been in the agenda of the Government of India. 'Export competitiveness' can be defined as the ability to increase exports (Ketels, 2010). It involves the capability to sell the domestically produced goods internationally.

The present chapter focuses on an in-depth analysis of export competitiveness of the sectors in Cochin Special Economic Zone (CSEZ). It is done with the data made available by the CSEZ Authority. The Authority never reveals the data related to individual firms, in order to preserve the privacy of their enterprises. But access over sector-wise data is permitted by the CSEZ authority. This data is compiled by the Authority on the basis of the APR (Annual Progress Report) published by the SEZ units.

Based on APR data, various measures have been used to analyse the competitiveness of sectors in CSEZ. Industrial Competitiveness Index (ICI) and Revealed Comparative Advantage Index (RCAI) are used for the competitiveness

assessment supplemented by measures like Share of CSEZ exports in total all-India-SEZ exports, Percentage annual growth rate of exports, Share of sectors in CSEZ exports and Productivity (output-employment ratio). Discussions have also been held with company authorities to find out the reasons for fluctuations in the exports from sectors.

6.1 Share of CSEZ Exports in Total all-India-SEZ Exports

Various studies have proved that the export performance of CSEZ is on an upward trend. The Cochin SEZ pushed itself up with higher value of exports, imports, per capita exports and improved its position at the national level. There has been improvement in its contribution to the share of total exports and imports of all-India SEZs. There has also been increase in the number of total exporting units, total investment and employment generation. This eventually has helped to improve its aggregate growth rate of exports and imports (Tantri, 2010, 2011). Table 6.1 throws some light on this by comparing the Zone's performance with all-India level. This can give an idea about the competitive position of CSEZ.

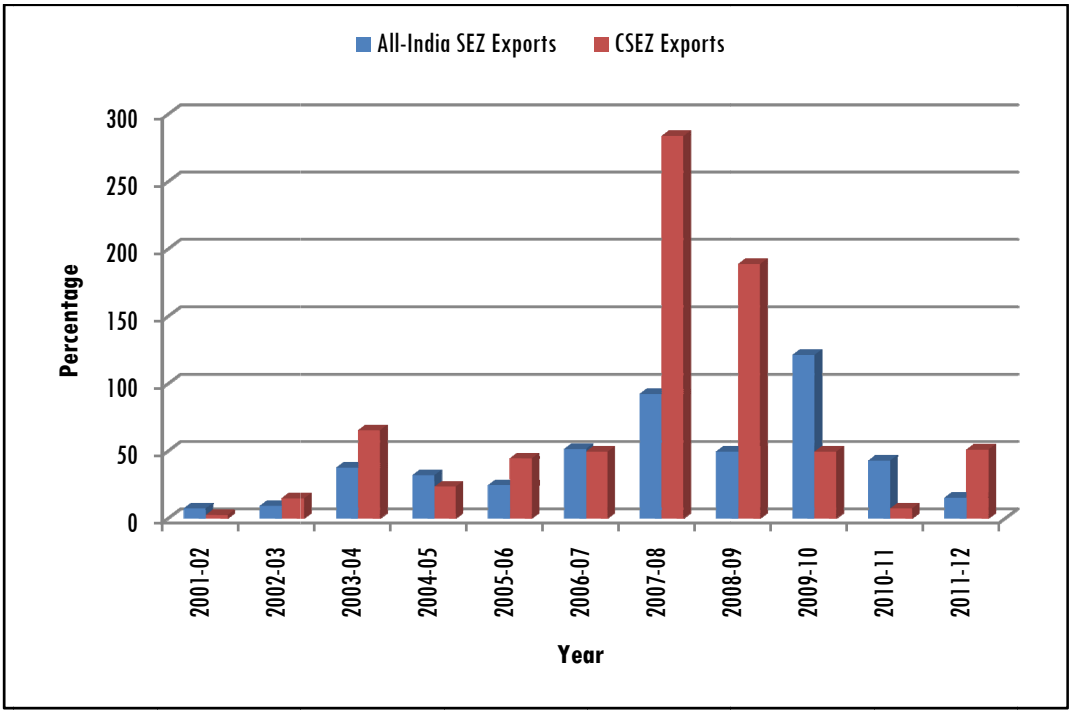
Table 6.1 Share of CSEZ Exports in all-India SEZ Exports

Year	Total All-India SEZ Exports (Rs. in Cr)	Growth (Percentage)	Total CSEZ Exports (Rs. in Cr)	Growth (Percentage)	Share of CSEZ Exports in All-India SEZ Exports (Percentage)
2000-01	8,552	-	204	-	2.4
2001-02	9,190	7.5	209	2.7	2.3
2002-03	10,057	9.4	240	15.0	2.4
2003-04	13,854	37.8	398	65.5	2.9
2004-05	18,314	32.2	492	23.7	2.7
2005-06	22,840	24.7	711	44.6	3.1
2006-07	34,615	51.6	1,065	49.6	3.1
2007-08	66,638	92.5	4,088	283.9	6.1
2008-09	99,689	49.6	11,811	188.9	11.8
2009-10	2,20,712	121.4	17,674	49.6	8.0
2010-11	3,15,868	43.1	19,006	7.5	6.0
2011-12	3,64,478	15.4	28,725	51.1	7.9

Source: Compiled and computed from APR of CSEZ (2012) and database of Ministry of Commerce available on www.commerce.nic.in referred on May, 2013

During the 12 years from 2000-01 to 2011-12, the total exports for all-India SEZs has grown from Rs.8,552 crores to Rs. 3,64,478 crores. The year-on-year growth rate varies from 7.5 per cent in 2001-02 to 121.4 per cent in 2009-10. The highest growth is during the period 2006-07 to 2010-11, the period after the implementation of SEZ Act 2005. CSEZ also showed impressive growth, from 204 crores in 2000-01 to Rs. 28,725 crores in 2011-12. The introduction of SEZ policy 2000 and SEZ Act 2005 might have made positive impact on its performance. CSEZ has derived greater benefit from the SEZ Act 2005 which got implemented in the year 2006. The growth in exports for CSEZ is more than that for all-India SEZs during 2007-2009. Increase in investment in SEZs has also contributed to its performance. The new SEZ policy has boosted the investor confidence resulting in an increase in the exporting units in the Zone. The world-wide recession of 2008 followed by European Union crisis might have affected the performance of all-India SEZ and CSEZ with the growth rate of both decreasing in the years 2008-09 and 2010-11. CSEZ has seen a slow recovery afterwards. The growth of exports experienced by the CSEZ and all-India SEZ is illustrated in figure 6.1.

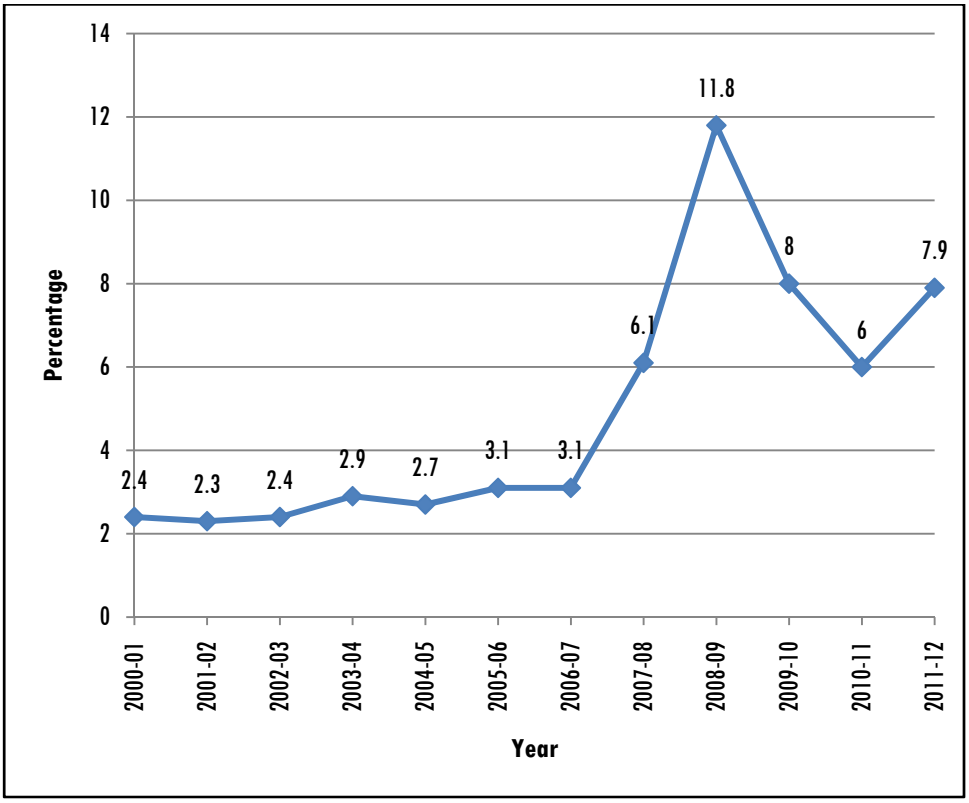
Figure 6.1 Growth of Exports



Source: Compiled and computed from APR of CSEZ (2012) and database of Ministry of Commerce available on www.commerce.nic.in referred on May, 2013

CSEZ has grown in stature among all the SEZs in India, as is evident from the share of CSEZ exports in total all-India-SEZ exports (see table 6.1). The share has been growing at a slow rate from the beginning of the decade (see figure 6.2). The positive impact of SEZ policy 2005 is reflected in the data for the years 2007-08 and 2008-09.

Figure 6.2 Share of CSEZ Exports in all-India SEZ Exports

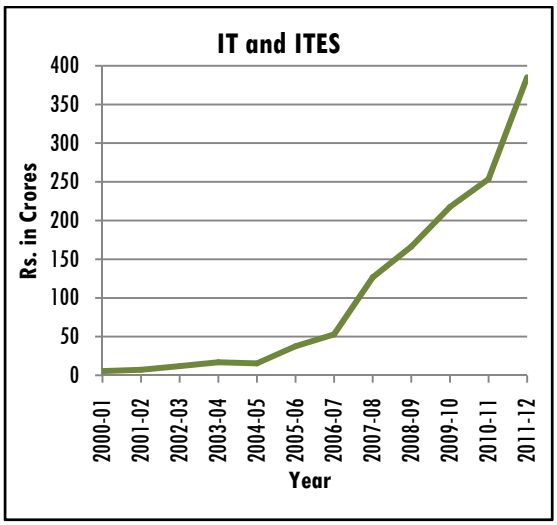


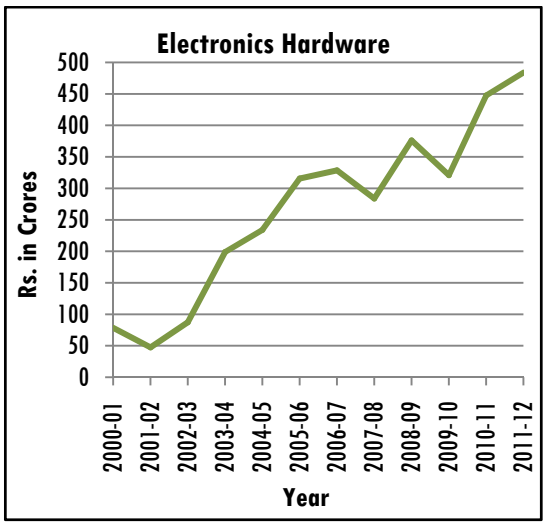
Source: Compiled and computed from APR of CSEZ (2012) and database of Ministry of Commerce available on www.commerce.nic.in referred on May, 2013

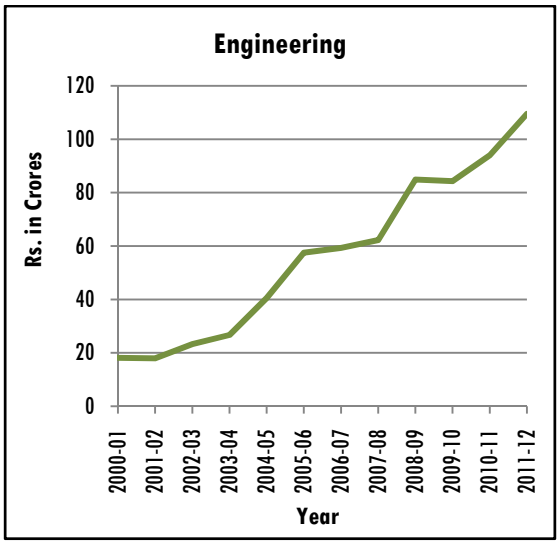
6.2 Sector-wise Exports and Growth of Exports in CSEZ

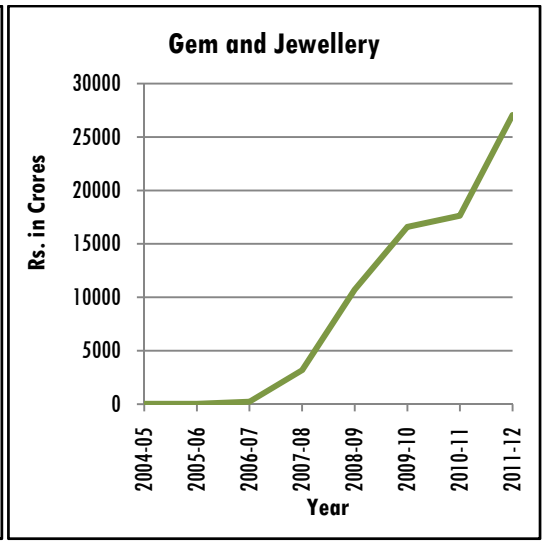
A time-series analysis of the total exports and growth of exports of each sector in the Zone is shown in figures 6.3 and 6.4 respectively. The data for certain years for Gem and Jewellery and Service sectors are not shown. While the Service sector started functioning in the Zone in the year 2007-08, the reporting process for Gem and Jewellery became more up-to-date only from 2004-05. The sectors are also ranked in table 6.2 and table 6.3 respectively, on the basis of their total exports and growth of exports in each year.

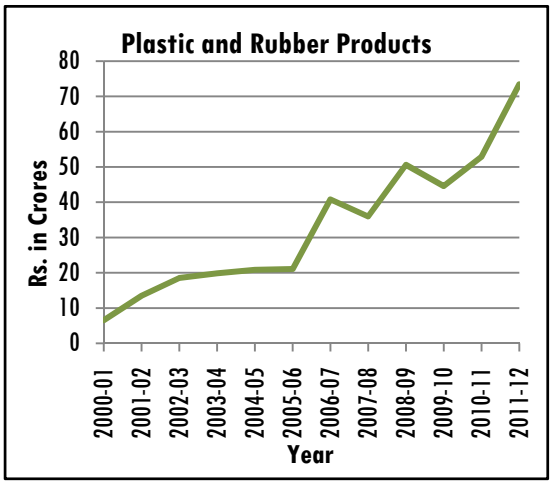
Figure 6.3 Total Exports in Each Sector

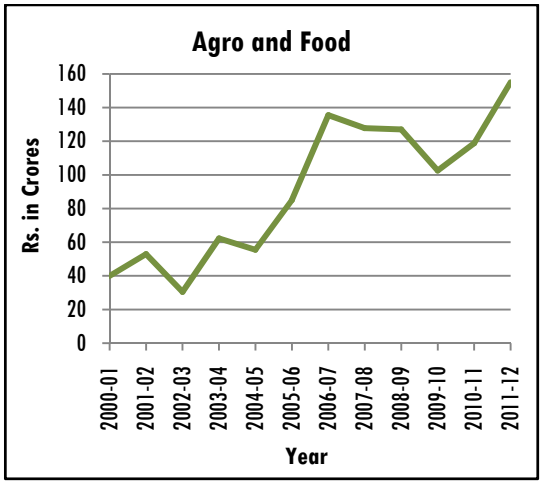


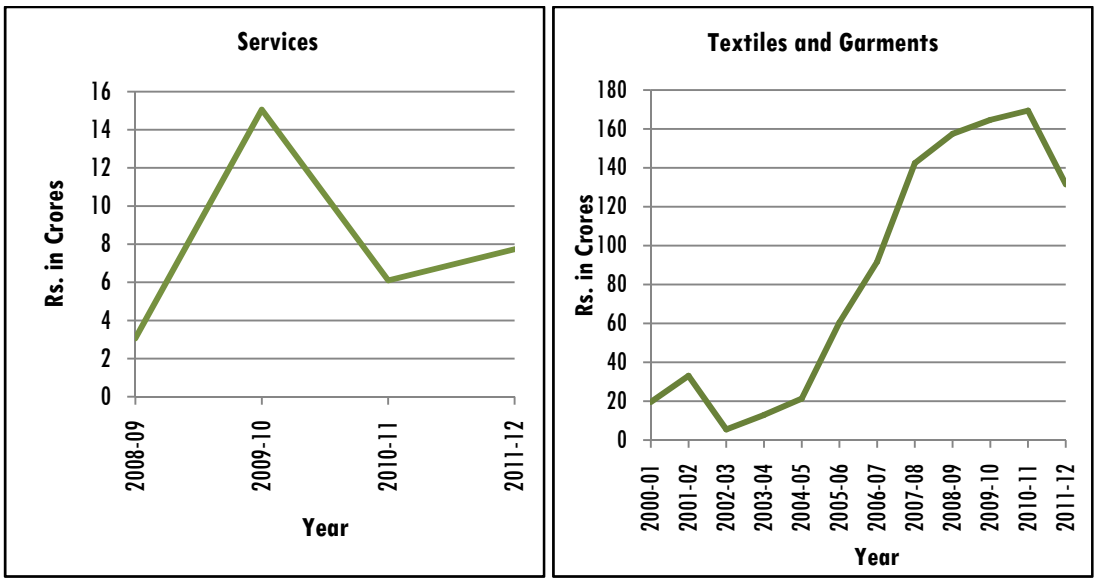












Source: Compiled and Computed from APR of CSEZ (2012)

Table 6.2 Ranking of Sectors Based on Total Exports

Sector	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
IT and ITES	6	6	5	5	7	5	6	5	3	3	3	3
Electronics Hardware	1	2	1	1	1	1	1	2	2	2	2	2
Engineering	4	4	3	3	3	4	5	6	6	6	6	6
Gem and Jewellery	-	-	-	-	4	6	2	1	1	1	1	1
Plastic and Rubber Products	5	5	4	4	6	7	7	7	7	7	7	7
Agro and Food	2	1	2	2	2	2	3	4	5	5	5	4
Services	-	-	-	-	-	-	-	-	8	8	8	8
Textiles and Garments	3	3	6	6	5	3	4	3	4	4	4	5

Source: Compiled and Computed from APR of CSEZ (2012)

For the past 11 years every sector in the Zone has registered an improved performance in its exports in absolute terms. The increasing demand for the IT services and IT skilled professionals for the world is reflected in the total export data for IT and ITES sector. This has made the sector improve its rank in the Zone in terms of total exports from six in the beginning of the decade to three from 2008-09 till date. The advantage of this sector is that, it can be set up anywhere without considering raw-material availability, as is evident from the fact that 60 per cent formal government

approvals take place in this sector. Though the sector has had an overall increase in total exports, it is not devoid of fluctuations in the growth rate. This is seen in figure 6.4. While the rate of growth has slowed down in some years, more than 100 per cent increase in total exports (the average growth rate of this sector is 53.02 per cent) has been recorded in 2005-06 and 2007-08. It was from the year 2005-06 that India has been recognised globally as a major IT hub for outsourcing. The increasing optimism associated with higher number of approvals in the IT sector might have made its effect on the CSEZ exports too. The growth of exports in 2006-07, from this sector in the Zone could not keep up with the IT exports of India. Global recession and EU crisis may have affected this sector, but it has slowly recouped in 2011-12.

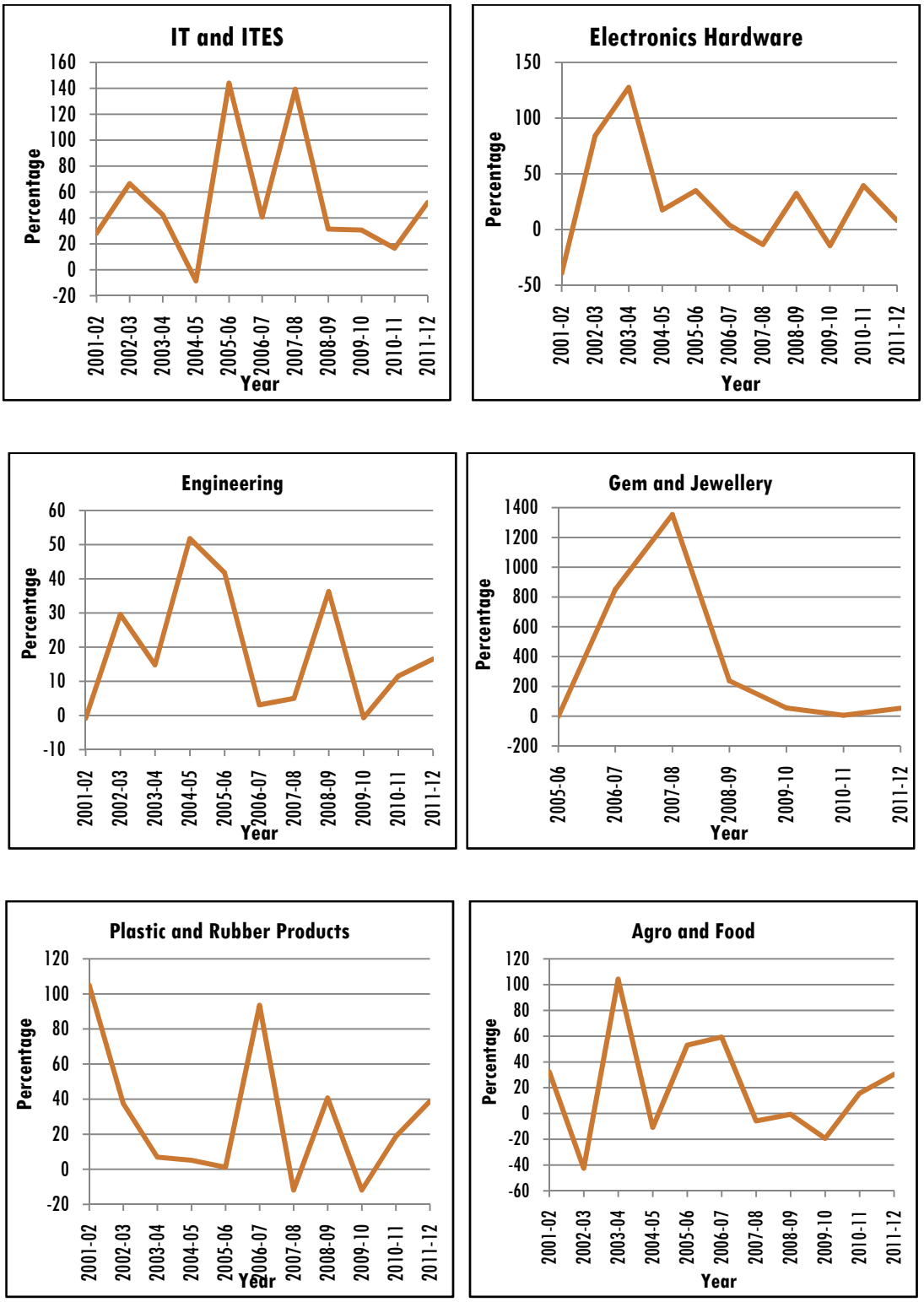
A similar noteworthy performance has been reported in the case of Electronics Hardware sector too. Among all the other sectors in the Zone, this sector is maintaining its competitive position at the first or the second position in the Zone (in terms of total exports) for the past 10 years i.e., just after the Gem and Jewellery sector. Increase in the demand for consumer electronics, instruments, telecom equipments and cables abroad have all contributed to its exports. Though in terms of total exports the Electronics Hardware sector is having a competitive position, it is not so in terms of growth of exports. The sector maintains an average growth rate of 25.50 per cent. A fall in the annual growth rate (-13.6% and -14.6% respectively) is noticed in the years 2007-08 and 2009-10. During this period Electronics Hardware industry in India has recorded a positive growth of around 10 per cent, though its global share is only less than two per cent. According to SEZ authorities, the fluctuations in the percentage annual growth rate of this sector is because of the variations in the business volume of the less competitive electronic units in the Zone over the years. The uncompetitive position of the CSEZ electronic units is seen in the falling growth rate after 2010-11 also. It ranks seventh in terms of annual growth rate of exports during this period.

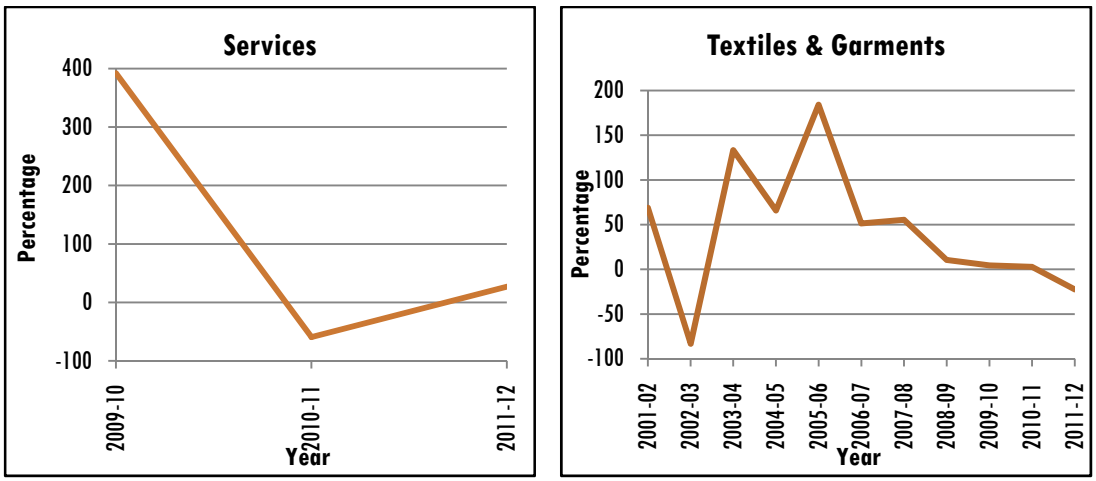
The Engineering sector of India is highly competitive in terms of total exports. Engineering exports have recorded a growth rate of 84 per cent in 2011-12 over 2010-11 exports and 48 per cent above 2008-09 exports (CCI, 2012). In the CSEZ, the sector has had an increase in total exports, but its ranking in terms of total exports has

declined over the 10 year period giving way to other sectors (from 4th rank in 2001-02 to 6th from 2007-08 till date). The sector is also not competitive in terms of annual growth rate of exports. Average growth rate is just 18.98 per cent. This happens when Indian engineering industry exports is the largest contributor to India's exports (www.commerce.nic.in referred on May, 2012). Though a recovery is recorded after 2009-10, its position is only sixth among other sectors in the Zone. So it is to be concluded that the Engineering sector of the Zone is not competitive in terms of total exports and growth of exports, contrary to the Indian experience in Engineering exports.

Another sector which is highly competitive in terms of share in Indian exports is the Gem and Jewellery sector. This highly labour intensive sector is a major source of foreign exchange earnings of the country. Increase in the demand for Indian jewellery abroad and important policy decisions of the government including de-licensing of jewellery imports, as part of economic reforms, has helped in the growth of this sector. The sector has registered a good performance in growth of exports of 23 per cent and 44 per cent in 2007-08 and 2008-09 respectively. Signs of recession are observed only in 2009-10 (Exim bank India, 2010). The same trend is observed in the case of CSEZ too. In CSEZ also this sector is the most competitive in terms of total exports (1st rank) which has been steadily increasing. At this juncture it needs to be emphasised that the higher share of CSEZ can be attributed to the higher contribution from Gem and Jewellery sector, which has gained significantly in export turnover since 2007-08. Its average growth rate is 232.17 per cent. But, the growth of this sector has been affected due to global recession. From the year 2008-09, growth rate has been falling till 2010-11 for this sector in the Zone. Decrease in demand from US owing to financial crisis and depreciation of Rupee have caused the sharp fall in the growth rate in the following years for this sector in the Zone, as in the national level (Eximbank India, 2010). However, a revival in growth is observed in 2011-12; the sector recovered its rank one in terms of growth in the same year.

Figure 6.4 Percentage Annual Growth Rate of Exports





Source: Compiled and Computed from APR of CSEZ (2012)

Table 6.3 Ranking of Sectors Based on Percentage Annual Growth Rate of Exports

Sector	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
IT and ITES	4	2	4	6	2	5	2	5	3	3	2
Electronics Hardware	6	1	2	3	5	6	7	4	7	1	7
Engineering	5	4	5	2	4	7	4	3	5	5	6
Gem and Jewellery	-	-	-	-	7	1	1	1	2	6	1
Plastic and Rubber Products	1	3	6	4	6	2	6	2	6	2	3
Agro and Food	3	5	3	5	3	3	5	7	8	4	4
Services	-	-	-	-	-	-	-	-	1	8	5
Textiles and Garments	2	6	1	1	1	4	3	6	4	7	8

Source: Compiled and computed from APR of CSEZ (2012)

The Plastic and Rubber sector in the Zone is experiencing an increase in total exports. India's negligible share in world exports of plastic (1.6%) and rubber exports (less than 1%) has been reflected in the Zone exports too. Total exports from this sector in the Zone have never been over Rs.100 crores. Its ranking based on total exports from 2005-06 has been remaining at seven. In terms of annual growth of exports, the sector is ranked first at the start of the decade. Aided by the 2005 SEZ Act, highest growth is observed in 2006-07 and the rank in terms of growth is two for

this sector at this time. Some new products in plastic and rubber have got into the export basket and led to increase in exports. Its performance has deteriorated in 2007-08. Unprofitable operations have caused some units to close down its business operations during this period. With an increase in the export demand for gloves, rubber components, rubber auto parts and processed plastic, a recovery is observed in recent years. The average growth rate of this sector is 29.42 per cent.

On analysis of the total exports of Agro and Food sector, the sector is observed to be maintaining the first three positions before 2007-08. During the initial years, food processing industry is seen performing better compared to other sectors. Government policies in the form of tax holidays have benefited this sector. Apart from that, processed marine food exports also have helped in the performance of this sector. In terms of total exports, the competitive position of this sector has deteriorated to fifth rank after 2007-08. In terms of annual growth too, the sector is observed to be performing better during early periods of the decade. Even while the Indian food processing export sector is seen enjoying growth during the recession, the CSEZ food processing sector has not been performing well. The annual growth rate has been gradually deteriorating during the period 2007-08 to 2009-10. According to SEZ authority, the decrease in the investor confidence owing to recession has caused the decline in the growth rate. The average growth rate of this sector is also comparatively less at 19.70 per cent. However, there has been an improvement in competitiveness of this sector in terms of cost, quality and diversification of products in recent years. This might have helped to increase the rank in terms of growth for this sector to four after 2009-10.

The share of Service sector is rather small in the Zone, with respect to number of firms, employees, exports as well as years of operation. There is only one firm in full-fledged operation. Total exports have always been less than Rs.20 crores. So its ranking in terms of total exports has always been low at eighth position. Even when being small in size, its average growth rate of 32.67 per cent is to be noted. Though

the sector has had a very good performance in the initial year with annual growth rate of 391.9 per cent, the performance is not noteworthy in the following period. An improvement is witnessed only after 2010-11.

The Textiles and Garments industry of the Zone is an uncompetitive labour-intensive industry, but contributing to employment, especially women. Though the total exports have increased, its competitive ranking has fallen from three in 2007-08 to five in 2011-12. This is because of the fact that, in the initial years zones are learnt to be concentrating on investments in Textiles and Food processing. In 2005, the phasing out of quotas under Multi-Fibre Agreement has benefitted the Textiles and Garments sector exports. Strong appreciation of Indian rupee against dollar may have affected the rate of increase in the period that followed, though the total exports have registered a miniscule increase in absolute terms. Recessionary trends may have also affected the exports from this sector. Adding to it, the sector has never been able to recover from the European crisis which began in 2009, that the textile exports from CSEZ has recorded negative growth in 2011-12. But the remarkable average growth rate of this sector is recorded at 42.84 per cent, aided by the better competitiveness ranking in the initial periods of the decade

6.3 Share in Total CSEZ Exports

Information on the share of each sector in total CSEZ exports will help to analyse the relative importance of each sector in the Zone. Table 6.4 provides summary information on this. (Data on Trading and Miscellaneous sector is also shown in the table). The interesting fact is that every sector in the Zone, except Gem and Jewellery, has been experiencing a decrease in their respective shares in total CSEZ exports during the 11 year period. This is particularly after the accounts of the Gem and Jewellery sector have got filed. During the same period Gem and Jewellry sector recorded a several fold increase in exports and in the year 2011-12, 94 per cent of the total exports in the Zone is from the Gem and Jewellery sector[8]. Though the

[8] Large share of gems and jewellery may be due to high value of gold and jewellery items

growth in Gem and Jewellery exports is seen lagging in initial years, after 2007 it has become more pronounced. From figure 6.3 it is understood that this sector has experienced several fold increase in total exports over the years. A year-by- year analysis also proves this.

Table 6.4 Percentage Share of sectors in Total CSEZ Exports

Sectors	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
IT and ITES	2.72	3.40	4.92	4.23	3.13	5.28	4.97	3.10	1.41	1.23	1.33	1.34
Electronics Hardware	38.58	22.72	36.38	50.04	47.52	44.35	30.87	6.94	3.18	1.82	2.36	1.68
Engineering	8.91	8.60	9.69	6.72	8.25	8.09	5.57	1.52	0.72	0.48	0.49	0.38
Gem and Jewellery	-	-	-	-	4.80	3.23	20.51	77.65	90.69	93.82	92.77	94.2
Plastic and Rubber Products	3.23	6.46	7.72	4.99	4.24	2.96	3.83	0.88	0.43	0.25	0.28	0.26
Agro and Food	19.65	25.33	12.66	15.64	11.28	11.94	12.72	3.13	1.08	0.58	0.63	0.54
Services	-	-	-	-	-	-	-	-	0.03	0.09	0.03	0.03
Textiles and Garments	9.62	15.82	2.29	3.23	4.33	8.51	8.61	3.48	1.33	0.93	0.89	0.46
Miscellaneous	15.44	14.90	22.09	10.93	12.92	9.99	7.07	1.33	0.42	0.22	0.50	0.39
Trading	1.85	2.77	4.25	4.21	3.54	5.64	5.86	1.96	0.72	0.58	0.72	0.72
TOTAL	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Source: Compiled and Computed from APR of CSEZ (2012)

During the period from 2001-02 to 2003-04, Electronics Hardware and Agro and Food sectors together accounted for major share (of around 50%) in the total Zone exports. In the year 2003-04, the share of Electronics Hardware alone is 50 per cent. Thereafter it has started declining. One reason for declining share of Agro and Food from 2002-03 is due to the increase in activities in other sectors. Moreover, higher number of approvals takes place in modern sectors like IT and ITES (60% at the national level) and very less in traditional labour intensive sectors of food processing and textiles. The share of Textiles and Garments is 16 per cent in 2001-02.

The sector witnessed an ever declining share in the following years and presently has a share of just 0.46 per cent. Apart from the Service sector with very less quantity of operations, Plastic and Rubber Products sector (0.26%) has the least share followed by Engineering (0.38%). It only reflects the growing share of Gem and Jewellery sector.

6.4 Output-Employment Ratio

Assessing labour productivity is one of the conventional methods of measuring the efficiency of a production unit. Productivity indicates economic growth, competitiveness, efficiency and living standards within an economy. Though there are various measures of calculating labour productivity, the measure used here is output per unit of employment i.e., ratio of output to the number of labourers (OECD, 2008).

Output-Employment Ratio = Volume of output / Total Employment

Major share of the SEZ output is for export. But some enterprises do domestic sales too, known as DTA (Domestic Tariff Area) sales. Thus an addition of both variables, exports and DTA sales, will give the total output produced by each sector in SEZ. As there are different firms in the Zone with different type of products which are not comparable inter-se; value of output, instead of quantity, is considered to represent output produced in the Zone. Total employment is based on the data made available by the SEZ authority.

Table 6.5 Output-Employment Ratio

Sectors	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
IT and ITES	2.66	3.15	2.68	3.63	2.73	5.45	2.05	4.12	4.05	4.81	5.22	7.48
Electronics Hardware	13.74	6.65	9.57	15.7	21.07	16.62	17.86	14.23	17.44	16.57	21.41	23.06
Engineering	7.56	5.24	6.37	7.19	7.02	7.92	9.07	9.04	11.85	11.12	12.12	14.10
Gem and Jewellery	-	-	-	-	236.06	135.09	180.48	2,690.19	8,851.87	14,545.49	15,199.78	20,043.09
Plastic and Rubber Products	2.36	2.54	3.69	3.02	3.91	5.54	8.63	9.54	14.39	12.21	14.79	19.77
Agro and Food	14.65	18.04	8.96	16.97	13.73	17.77	25.68	22.04	23.83	19.18	21.84	28.82
Services	-	-	-	-	-	-	-	-	3.17	18.59	8.36	8.51
Textiles and Garments	1.81	3.32	0.92	2.02	3.39	6.80	7.42	7.17	10.37	10.72	9.61	12.06

Source: Compiled and Computed from APR of CSEZ (2012)

The data shows that all the sectors have had an increase in their productivity levels. Gem and Jewellery sector has experienced the highest increase in efficiency level. This is the sector which has had the maximum quantity of exports. This sector, which is highly labour-intensive, employs unskilled labourers. Ninety per cent of its workers are women and their experience and diligence in their work makes them churnout the maximum output. Together with this, an increase in the world demand for Indian jewellery makes this sector highly competitive in terms of exports. Agro and Food is another sector which has expanded its productivity from 14.65 in 2000-01 to 28.82 in 2011-12. This sector is also characterised by unskilled nature of work and employs women workers as labourers. Moreover, the industry in the Zone in recent years has diversified its activities into frozen foods, including vegetables and sea foods, its storage and processing helping it to export more.

Electronics Hardware sector in the Zone has made advantage of the skilled workers qualified from ITI and Engineering Institutes. Low cost advantage, technical advancements and phasing out of trade barriers have helped the growth of this sector. The major players operating in this sector is Nest and its subsidiary units. Their managerial efficiency has also helped to generate a very high turnover for this sector. Similar is the case with IT and ITES sector in the Zone. High number of BPO jobs, high quality skilled labour with English proficiency and lower cost of production compared to other countries, have made many exporters choose the Zone as its area of operation. Another capital and skill-intensive sector is the Engineering sector whose productivity might have expanded owing to the lower cost of production and technical advancements. It can also be rated at the average level compared to other sectors' labour-productivity.

Plastic and Rubber sector in the Zone has industries mainly concentrating on the manufacture of rubber items like gloves processed plastic etc. The wages paid in this sector is comparatively low and it also employs labourers on daily basis. This way it enjoys a cost advantage. Adding to this, the easy availability of raw material and the increase in the export demand for this sector's products have contributed to its productivity. Textiles and Garments sector is equally productive, mainly due to the

cost advantage it enjoys in the Zone. The industries in the sector employ unskilled and semi skilled workers who become well-proficient in their work while on job.

The Service sector, though composed of two firms, has only one firm engaged in productive activity. Though a late-comer, this multi-national firm operates according to the procedures employed by the parent company. This company makes use of technically qualified labourers and are usually paid well. Their increased efficiency has contributed to the increase in productivity of this sector, though lower compared to other sectors.

6.5 The Industrial Competitiveness Index (ICI)

Another index for measuring competitiveness is the Industrial Competitiveness Index (ICI). It is a composite measure of relative and multidimensional economic performance as measured by profitability, productivity as well as output growth. (Fischer and Schornberg, 2006).

Accordingly, competitiveness has been defined as a function of, profitability, productivity and output growth.

$$COMP_S = f(PRO_S, PROD_S, GRO_S).$$

In the present study, this model is used to analyse and compare the competitiveness level of each sector in the Zone. The Index has been calculated for each sector for a period of 12 years. However, unlike in the original study, only two indicators of productivity and output growth have been used.

Output-employment ratio is used as the productivity measure as it is influenced by every efficiency aspect of the firm - technical, organisational and efficiency change, economies of scale, varying degrees of capacity utilisation and measurement errors. For the assessment of output growth, the annual change in production value is calculated. Profitability is considered to be an apt measure to assess whether the primary goal of generating income is achieved or not. But, as per SEZ rules, the CSEZ authority is not expected to compile the profitability details of the firms or sector. The firms also do not reveal details related to their profits. Hence the sector level competitiveness has to be assessed based on the other two measures. The original study mentions the possibility of measuring industry competitiveness

using two measures – efficiency measured in terms of productivity and growth of output (Lall, 2001).

$$COMP_S = f(EFF_S, GRO_S).$$

ICI is constructed based on the methodology used for the calculation of the United Nations' Human Development Index. Individual indices have been constructed for productivity and output growth. Maximum and minimum values for each sector over the years are selected from the data on labour productivity and output growth. Thereafter, the formula given below is used.

The general formula for calculating individual indices is,

$$\text{Indices, } I = \frac{\text{ActualValue} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimum Value}}$$

ICI is then calculated as the simple average of the individual indices.

The results calculated to analyse competitiveness levels over of a period of ten years for each sector in the Zone is presented in table 6.6. The sectors have been ranked each year on the basis of their respective ICI.

Table 6.6 Sector-wise ICI and their Rankings

Sectors	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
IT and ITES	0.11 (4)	0.16 (4)	0.28 (3)	0.30 (4)	0.06 (6)	0.81 (1)	0.16 (7)	0.67 (1)	0.31 (6)	0.38 (4)	0.37 (7)	0.70 (2)
Electronics Hardware	0.43 (1)	0	0.46 (1)	0.78 (1)	0.61 (1)	0.53 (5)	0.48 (4)	0.31 (5)	0.56 (3)	0.40 (3)	0.68 (1)	0.66 (4)
Engineering	0.26 (3)	0	0.43 (2)	0.29 (5)	0.60 (2)	0.58 (3)	0.26 (6)	0.25 (6)	0.76 (1)	0.35 (5)	0.51 (4)	0.66 (4)
Gem and Jewellery	-	-	-	-	-	0	0.32 (5)	0.56 (2)	0.31 (6)	0.38 (4)	0.38 (6)	0.52 (6)
Plastic and Rubber Products	0	0.43 (2)	0.23 (4)	0.06 (6)	0.12 (5)	0.09 (6)	0.68 (2)	0.23 (7)	0.53 (4)	0.30 (7)	0.43 (5)	0.69 (3)
Agro and Food	0.29 (2)	0.48 (1)	0	0.70 (2)	0.23 (4)	0.55 (4)	0.77 (1)	0.45 (4)	0.52 (5)	0.34 (6)	0.52 (3)	0.75 (1)
Services	-	-	-	-	-	-	-	-	0	1.00 (1)	0.17 (8)	0.27 (7)
Textiles and Garments	0.08 (5)	0.39 (3)	0	0.45 (3)	0.39 (3)	0.76 (2)	0.55 (3)	0.54 (3)	0.59 (2)	0.61 (2)	0.55 (2)	0.63 (5)

Source: Compiled and Computed from APR of CSEZ (2012)

Figures in brackets show ranks

All the measures of competitiveness confirm competitiveness of the Gem and Jewellery sector. But, the sector's ICI ranking has deteriorated from two in 2007-08 to six in 2011-12. The reason for lower ranking is purely mathematical[9].

Another sector that has recorded a noteworthy change is the Agro and Food sector, which shows a high ICI and whose ranking is in the first position. This traditional sector, whose position is observed to be first at the start of the decade, is worst affected by decrease in investor confidence due to recession. But the product diversification measures have made the sector highly competitive by 2011-12, according to SEZ authority. Having introduced more dynamic activities, this sector can maintain its competitiveness for many years. The other traditional sector Textiles and Garments, while performing steadily till 2010-11, has of late marked a decline in its competitiveness with a fall in the ranking to five in 2011-12. ICI score, however, has improved over the 12 year period to 0.63.The elimination of quota system under MFA has improved the performance of this sector along with India's textiles import. Volatility in the European Union markets during 2012 has caused a slowdown in Indian textile exports (www.texmin.nic.in referred on May, 2013) consequently reflecting in the textile exports of Zone too.

Like the Agro and Food sector, Plastic and Rubber sector has improved its performance in recent years. Its ICI index is ranked at three in 2011-12, assisted by higher labour productivity and growth of exports. The sector shows high unsteadiness in terms of ICI over the ten year period caused by unprofitable business operations in certain years. The sector that has registered deterioration in ICI is Service sector. Immediately after its entry into the Zone, the sector is the first in ranking, which later slowed down. The Service sector has experienced a fall in total exports as well as growth of exports during these years. The recovery in exports made during 2011-12 is reflected in ICI too.

Electronics Hardware sector's index, which recorded high position before 2005-06, has fallen afterwards. The negative growth rate of exports in these years (see figure 6.4) can be traced as a reason for this. In 2010-11 growth of exports improved. ICI

[9] Low ICI rank for Gem and Jewellery sector is due to the higher output it experienced in 2007-08. Higher output affects the Index of Output growth calculated for different years (i.e between actual values, maximum values and minimum values). Lower value of index of output growth results in lower ICI. Otherwise, the sector's ICI value, excluding the year 2007-08 has registered an increase.

records the first rank for this sector during this year. In 2011-12 growth of exports has further slowed down and so does ICI. Even then, its ICI in 2011-12 is four, revealing its competitive position. Engineering sector is also competitive in terms of ICI with fourth rank for the past 2 years, contrary to the scores recorded by the total exports and growth of exports. The factor that could have helped the ICI ranking to reach four might be the productivity. The sector that has always been remaining competitive (except in a few years) in terms of ICI is IT and ITES sector. Ever growing exports from this sector have always helped it to remain competitive.

6.6 Revealed Comparative Advantage Index (RCAI)

While the sector level competitiveness has been compared and analysed using Industrial Competitiveness Index, Revealed Comparative Advantage Index (RCAI) is used in the present analysis to compare the export competitiveness of sector in CSEZ with respect to the total exports of the country.

Revealed comparative advantage (RCAI), an Index devised by Balassa (1965) is commonly used to measure export competitiveness to identify the sectors in which an economy has a comparative advantage, by comparing the country of interests' trade profile with the world average (Nag, 2009).

The RCA index of country i for product j is often measured by the product's share in the country's exports in relation to its share in world trade. The formula for the estimation of RCAI is explained in section 4.3.5. If the Index exceeds unity (RCAI > 1), the country is said to have a revealed comparative advantage in the product and vice versa.

In the present study, the measure has been modified to compare CSEZ exports with the India's exports. The measure is adapted in to the form,

$$RCAI = \frac{\text{CSEZ Export of Product X}}{\text{CSEZ's Total Export}} \Big/ \frac{\text{India Export of the Product X}}{\text{India's Total Export}}$$

The data regarding India's exports is obtained from the Ministry of Commerce and Ministry of Communications and Information Technology, Government of India. The result obtained for each sector is summarised in table 6.7.[10]

[10] RCAI of services sector for the year 2011-12 is not estimated due to the unavailability of data on non software service sector exports for the particular year.

Table 6.7 RCAI of Sectors in CSEZ

Sectors	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
IT and ITES	0.27	0.28	0.44	0.30	0.21	0.34	0.29	0.17	0.07	0.06	0.07	0.07
Electronics Hardware	22.34	11.69	26.51	26.88	32.36	30.59	21.94	4.68	1.14	0.67	0.87	0.69
Engineering	0.95	0.94	1.06	0.58	0.65	0.63	0.38	0.10	0.04	0.04	0.03	0.02
Gem and Jewellery	-	-	-	-	0.42	0.31	2.32	8.71	7.89	7.83	7.53	7.60
Plastic and Rubber Products	1.55	2.97	3.82	1.91	1.38	1.19	1.61	0.42	0.24	0.13	0.14	0.11
Agro and Food	2.26	2.99	1.74	2.09	1.77	2.03	2.20	0.45	0.17	0.10	0.10	0.07
Services								-	0.01	0.02	0.01	-
Textiles and Garments	0.55	1.02	0.17	0.24	0.41	0.82	0.95	0.42	0.17	0.12	0.13	0.06

Source: Computed from the data collected from Ministry of Commerce available on www.commerce.nic.in, www. deity.gov.in referred on May, 2013.

The RCA Index calculated for the sectors confirms that sector with the maximum competitive advantage is Gem and Jewellery. RCA, for this highly labour intensive sector in 2011-12 is 7.60. Gem and Jewellery is a major export item for India. Fifteen per cent of India's merchandise exports is composed of Gem and Jewellery (Economic Survey 2011-12). The prominence of this sector in exports is visible in the Zone too. RCA Index is above unity and is increasing over the years, showing its competitiveness in the export market. The sectors which are having RCAI above unity in the initial years of the decade are Electronics Hardware, Plastic and Rubber and Agro and Food. Competitive advantage of Plastic and Rubber is visible for many years but it is not able to maintain it. In terms of RCAI, the competitiveness position of these sectors deteriorated and that of Gem and Jewellery improved.

The traditional sectors of Agro and Food, Textiles and Garments, and Plastic and Rubber have turned uncompetitive in terms of RCAI after modern sectors gained prominence in SEZs. However, Plastic and Rubber and Electronics Hardware sector have a comparatively better RCAI. Electronics Hardware sector in India is an upcoming industry and has a number of technically skilled employees. Growing demand for electronic equipments make a positive impact on the exports from India. But the Electronics Hardware sector of CSEZ has not been able to keep up with the trends in exports of the country. This sector of the Zone has had a fall in the competiveness as the index decreased from 22.34 in 2000-2001 to 0.69 in 2011-12. But it is high compared to other sectors in the Zone, after the Gem and Jewellery sector. The IT and ITES sector too has a better RCAI before 2005, even though it has never been above unity. Other than the deterioration of the index during recession, the sector's RCAI is remaining stable at 0.07. Though competitiveness for the sector in terms of other sectors in the Zone has improved, it is not upto the level of India's IT exports. The performance of Engineering in terms of the RCAI is seen greater than one in 2002-03. Afterwards RCAI has been falling and very low for many years.

Other than the Gem and Jewellery sector, the comparative advantage of the Zone has deteriorated as the RCA index for the sectors in recent years has never increased to one. Thus compared to the exports at the all-India level, the sectors' performance is not at all competitive.

A clear lopsidedness is found in the competitive position of sectors in CSEZ. The Zone's competitiveness is not equally captured by all players. There is high concentration of competitiveness experienced by the Zone in a few sectors particularly the Gem and Jewellery sector.

6.7 Summary

The findings related to competitiveness of sectors considered show that over the decade the competitiveness position of sectors has improved. But the sector which has made a commendable performance in the export competitiveness is the Gem and Jewellery sector, thanks to the low cost of the labour as well as the de-licensing policies. Similar noteworthy performance was recorded by IT and ITES sector aided by increase in the number of approvals, low cost skilled labour, etc. The factors that have made the Electronics Hardware sector competitive are increase in the demand for consumer electronics, telecom equipments, etc. abroad. Professionally skilled work force is also a factor which has favoured the export competitiveness of the sector. Engineering industry enjoys only a comparatively lower competitiveness level in the Zone. But sector maintains higher labour productivity with the help of technically qualified workers and lower cost of production. The traditional sectors of Agro and Food and Textiles and Garments are trying to regain the competitiveness which they enjoyed earlier. Agro and Food has become successful due to government support, export diversification, etc. Lower exports to volatile European markets have affected the competitiveness of Textiles and Garments sector in recent years. Being a new entrant with only one firm in productive activity, the competitiveness of the Service sector has maintained a lower competitiveness level. Plastic and Rubber has been remaining competitive. But, unprofitable business operations have made the sector's competitive position fluctuating.

The analysis of competitiveness of different sectors in the Zone shows a mixed result. While some measures prove the competitiveness to be high for some sectors, other measures do the opposite. Why some are more competitive than others? And some are not at all competitive. One popular argument is that labour standards determine the competitiveness of a sector. How far it is connected to the labour conditions existing in the Zone is a matter of interest in academic circle. The

argument that labour standards are affected by competitiveness and vice versa, is very relevant. A detailed analysis of the working conditions existing in different sectors in the Zone is analysed in the chapter 7.

Chapter 7

LABOUR STANDARDS AT COCHIN SPECIAL ECONOMIC ZONE

Contents

Labour standards are certain minimum working conditions that are to be ensured to the workers in enterprises. When a competitive cost advantage is to be maintained the labour standards become the first and the easiest to get compromised. This case is very much true in the case of SEZs. At the same time, poor working conditions and wages signify the violation of the rights of the workers. In this backdrop, it is essential to see the exact status of working conditions in CSEZ. In order to understand this, a survey of labourers in CSEZ is undertaken with the methodology as explained in chapter 1(section 1.7). Such an analysis will be useful in finding out the extent to which labour standards have been compromised in the pretext of strategy of maintaining export competitiveness.

7.1 Background Profile

To begin with, the background profile of workers is looked into in terms of gender, age, marital status and educational qualification.

In the survey, care has been taken to include female workers as it is understood that Zone has a preference to employ female workers. The survey covers 46.4 per cent of males and 53.6 per cent of females. The preference for females can be attributed to the easiness to extract work from female workers. They are generally very hard working, very diligent and meticulous in their work. Above all, they have low inclination towards joining trade unions or striking work. They also seem to be content with the existing system of salary and other working conditions, unlike their male counterparts.

Among the 276 employees surveyed, majority (79 %) of the workers belong to the age category 20-35. The average age worked out for the Zone is 30 years (see table 7.1). The lowest average age is reported in IT and ITES and Electronics Hardware, the two sunrise industries in the Zone. As against this, the highest average age is reported at 34 in Textiles and Garments.

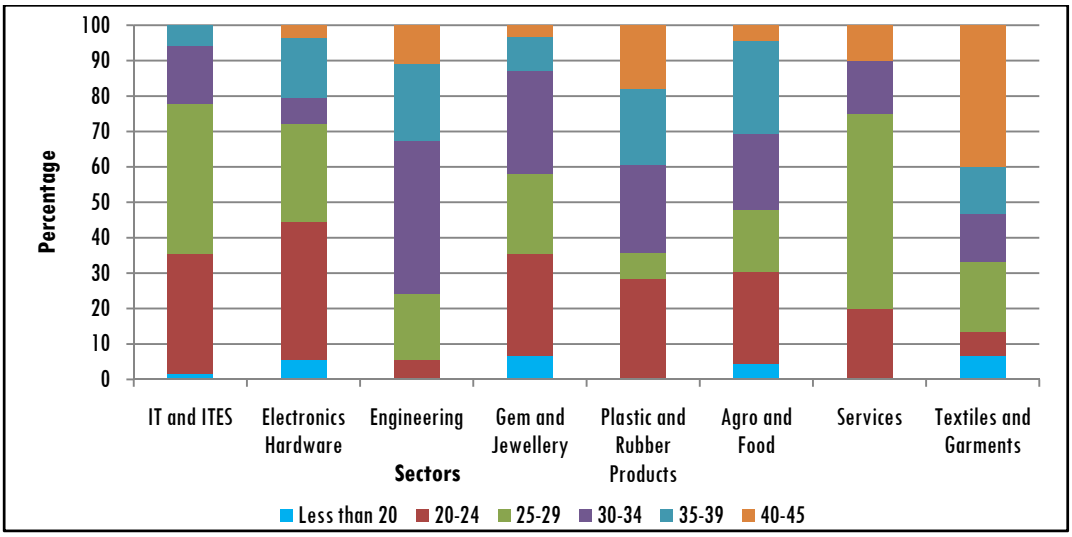
Table 7.1 Average Age Across Sectors

Sectors	Average Age
IT and ITES	27
Electronics Hardware	27
Engineering	33
Gem and Jewellery	28
Plastic and Rubber Products	32
Agro and Food	30
Services	28
Textiles and Garments	34
Total	30

Source: Computed from primary data

Fifty eight per cent of the workers in the Zone are of age less than 29; and 79 per cent below the age 35. The workers find the job in the Zone as a means of gaining experience in the field as soon as they finish studies. They leave the Zone when they find alternative jobs with better profile. This trend is more visible in the IT and ITES sector, a sector employing largely trainees and contract workers. All the other sectors except Textiles and Garments sector also show this pattern. This is because the workers in Textiles and Garments sector stick on to their jobs as they find it very difficult to get better jobs. This is illustrated in figure 7.1.

Figure 7.1 Percentage Distribution of Workers by Age



Source: Primary Survey

The Zone also has the presence of higher proportion of unmarried employees (52.2 %). Employers prefer to recruit young unmarried workers who can work hard throughout for the firm. Marital status is also found to vary across sectors. The sectors with young workers will naturally have unmarried workers. All the sectors having more than 50 per cent of workers with less than 29 years of age follow this pattern. Engineering sector and Plastic and Rubber sector have a few workers below age 29 (24% and 38% respectively); hence they have less number of unmarried workers. But this argument does not hold true in case of Textiles and Garments. This sector has only 33 per cent workers below the age 29, but has more unmarried workers.

Table 7.2 Percentage Distribution of Workers by Marital Status

Sectors	Unmarried	Married
IT and ITES	60.3	39.7
Electronics Hardware	59.3	40.7
Engineering	21.6	78.4
Gem and Jewellery	54.8	45.2
Plastic and Rubber Products	42.9	57.1
Agro and Food	56.5	43.5
Services	60	40
Textiles and Garments	60	40

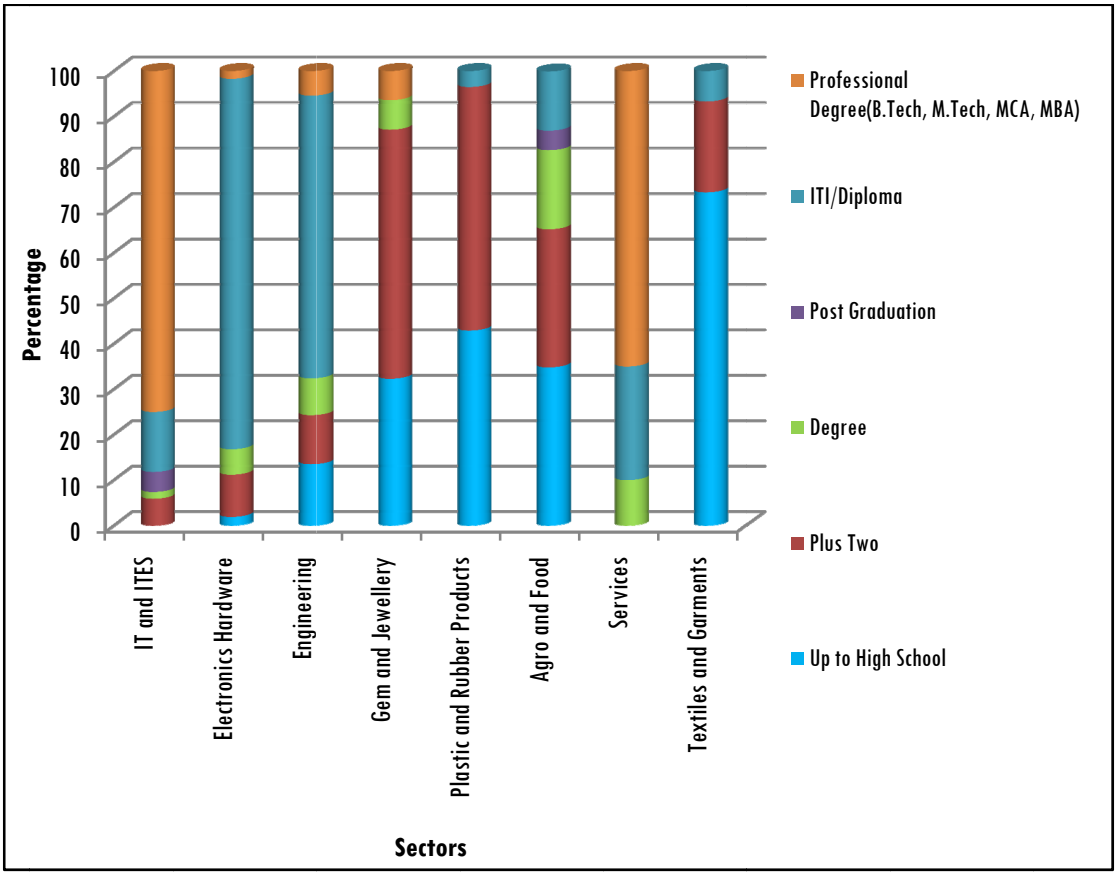
Source: Primary Survey Pearson Chi Square – 18.820 P Value – 0.009

Chi-square test is performed to see whether there is any discrepancy between the proportion of married and unmarried workers across the sectors in the Zone. The p value being (0.009) < .05, it can be concluded that there is difference in marital status across sectors.

All the sectors employ workers according to their nature of activity and skill required. Figure 7.2 shows the educational qualification of the workers in CSEZ. Textiles and Garments sector has the maximum number of workers with high school qualification (73.3%). This sector functions with simple processes like stitching, weaving, etc., which demand workers with less qualification. Gem and Jewellery, Plastic and Rubber Products and Agro and Food have similar characteristics. However, they form just 17 per cent of the total CSEZ workers. All the other sectors

require the services of workers with Professional degree or a Diploma (i.e. 56% of the total workers in the Zone.)

Figure 7.2 Percentage Distribution of Workers by Educational Qualification



Source: Primary Survey

IT and ITES sector and Services sector require the skill of professionally qualified employees. Hence three-fourth of their workers have professional qualification. Engineering sector and Electronics Hardware sector involve manual jobs of manufacturing and assembling of machines and thus require the service of workers with ITI qualification. These sectors perform technical works requiring the services of technicians, operators, etc. Hence almost all their employees have either ITI qualification or a Diploma. In the case of Gem and Jewellery, Plastic and Rubber Products, Agro and Food and Textiles and Garments sectors, substantial percentage of workers with just plus-two qualification are employed. This is because these industries can function even with workers who are less skilled or they can be imparted skills while on job, to perform functions like packing, stitching, etc., which

are less technical in nature. It is also possible to find employees with school education merely up to seventh standard in the Agro and Food sector.

7.2 Working Conditions

Enterprises operating in the Zone usually set targets and make the workers do strenuous work. Eighty nine per cent of the firms work six days in a week. Only very few enterprises in the IT and ITES, Engineering and Services sectors offer Saturdays and Sundays as holidays. The workers work for 8-9 hours a day. The average hours of work across the sectors is illustrated in table 7.3.

Table 7.3 Average Hours of Work Across Sectors

Sectors	Average Hours of Work
IT and ITES	8.7
Electronics Hardware	8.6
Engineering	8.6
Gem and Jewellery	8.9
Plastic and Rubber Products	9
Agro and Food	8.6
Services	8.25
Textiles and Garments	9
Total	8.7

Source: Computed from primary data

Employees, usually contract employees, have to opt for over-time work and shifts. Hence a systematic and detailed analysis of the working conditions of the firms operating in the Zone is given in the ensuing sections.

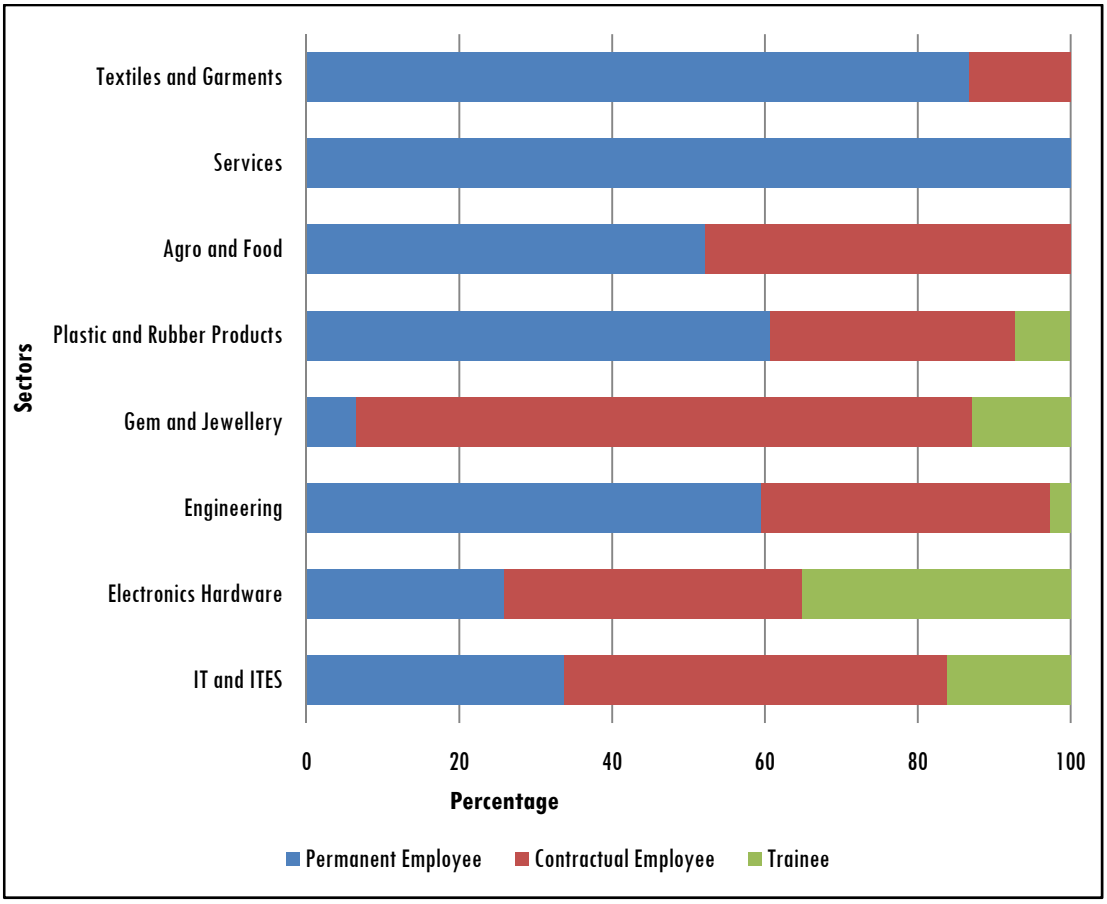
7.2.1 Nature of Work

According to the workers, the companies now employ workers only on contract basis or trainee basis. When workers are appointed on a temporary basis, the firms can prevent them from claiming more employment benefits, promotion, etc. There is always an uncertainty associated with their job tenure. In the survey, workers who are appointed for a fixed term are appointed as contract workers. Those workers who are appointed for training and apprenticeship are considered as trainees.

Permanent workers are those who are not appointed for any fixed term, but who is likely to continue in employment.

Nature of employment shows that the permanent employees form only 44.6 per cent of the total workers interviewed. Contractual employees and trainees in the Zone form 42 per cent and 13.4 per cent respectively. This situation is very much true in the case of IT and ITES sector and the Electronics Hardware sector with only less than 30 per cent workers employed permanently. The major player in the Electronics Hardware sector, even though with a very high turnover, lately, appoints workers as trainees only. It is also to be noticed that trainees in the Electronics Hardware sector form 35.2 per cent of the workers. In the case of Gem and Jewellery sector, with higher number of female-unorganised workers, only 7 per cent is appointed as permanent.

Figure 7.3 Percentage Distribution of Workers by Nature of Employment



Source: Primary Survey

The interesting fact is that, those workers who claim themselves to be permanent in the survey are infact appointed on contract basis. As for instance, the service sector has reported all workers as permanent workers, but infact all workers are appointed on contract basis. Their contract is signed for a period of three months, six months, or one year. The contract gets renewed after its tenure and only the deserving employees continue in their job. Either they assume themselves to be permanent or they work under the hope that one day they will be made permanent.

The productivity of the workers depends on their skill level. Workers are hired depending on their skill level required in the work. Sometimes workers hired are trained by the employees to suit their job requirement. The data on the skill level of the workers in the Zone, and the method of the acquisition of their skill is presented in tables 7.4 and 7.5.

Table 7.4 Percentage Distribution of Workers by Skill

Sectors	Skilled	Semi-skilled	Unskilled
IT and ITES	89.7	8.8	1.5
Electronics Hardware	83.3	14.8	1.9
Engineering	89.2	10.8	-
Gem and Jewellery	77.4	22.6	-
Plastic and Rubber Products	25.0	60.7	14.3
Agro and Food	39.1	34.8	26.1
Services	90.0	10.0	-
Textiles and Garments	53.3	46.7	-

Source: Primary Survey

It is evident from the table that all the sectors except Plastic and Rubber Products and Agro and Food sectors have majority of skilled workers (74.3%). Unskilled workers in the Zone are just 4.3 per cent of the total workers. Textiles and Garments and Gem and Jewellery sectors appoint workers with less qualification. But they train their employees while on job to perform functions which require less skill in these sectors (see table 7.5). A notable example is that of Textiles and Garments sector which has higher number of workers with qualification up to high school. But they undergo training in stitching before they join. All the other sectors have workers with qualification of other ITI or other Professional degrees. The skill acquisition in

IT and ITES, Engineering and Electronics Hardware sector is mainly through vocational courses and apprenticeships. Service sector is also the sector having workers who are professionally educated. Workers in sectors which are less technical-oriented have learnt skill while on job.

Table 7.5 Percentage Distribution of Workers by Method of Acquisition of Skill

Sectors	Vocational Course	Apprenticeship Elsewhere	Learnt on the Job
IT and ITES	80.9	2.9	16.2
Electronics Hardware	64.8	24.1	11.1
Engineering	67.6	5.4	27.0
Gem and Jewellery	16.1	22.6	61.3
Plastic and Rubber Products	7.1	7.1	85.7
Agro and Food	30.4	-	69.6
Services	85.0	-	15.0
Textiles and Garments	6.7	20.0	73.3

Source: Primary Survey

CSEZ has been functioning since 1986. While some of the firms have quit operation, a number of firms in the Zone have more than 10-15 years of existence. But the data shows that the number of workers with 10-15 years of experience is very less. Out of the total employees in the Zone, those with more than 10 years of experience in the Zone form just 18 per cent. Majority of workers (59%) are with less than 5 years of service in the Zone. The situation in the Textile and Garments sector is different with 47 per cent workers with more than 15 years of service. As mentioned earlier, the workers remain in this sector in the absence of alternatives elsewhere. The sectors having workers with more years of service (see table 7.6) like Textiles and Engineering have their average age reported at 34 and 33 respectively. Service sector, which is a recent entrant, can naturally never have employees with more years of service. In all other sectors, due to low salary, workers leave the job once they gain experience. Workers are working in the Zone in order to gather experience or to improve their job profile.

Table 7.6 Percentage Distribution of Workers by Years of Service

Sectors	0-5	5-10	10-15	15-20	20-25
IT and ITES	66.2	29.4	4.4	-	-
Electronics Hardware	68.5	9.3	5.6	13.0	3.7
Engineering	29.7	35.1	18.9	10.8	5.4
Gem and Jewellery	64.5	32.3	-	-	3.2
Plastic and Rubber Products	39.3	42.9	17.9	-	-
Agro and Food	60.9	13	21.7	-	4.3
Services	100	-	-	-	-
Textiles and Garments	33.3	6.7	13.3	20	26.7

Source: Primary Survey

7.2.2 System of Wage Payment and Wage

A visible feature of the poor working condition prevailing in the case of a few workers in the Zone is the daily payment of wages. These workers fall under the contract workers category. The strategy of daily payment is employed by firms to avoid making wage payment for holidays and leaves. But this group of workers form a minority (11%) in the Zone and that too not visible in modern sectors like IT and ITES, Electronics Hardware, Engineering, Services and also the traditional sector of Textiles and Garments. Only in three sectors, given in table 7.7, daily wage system is prevalent.

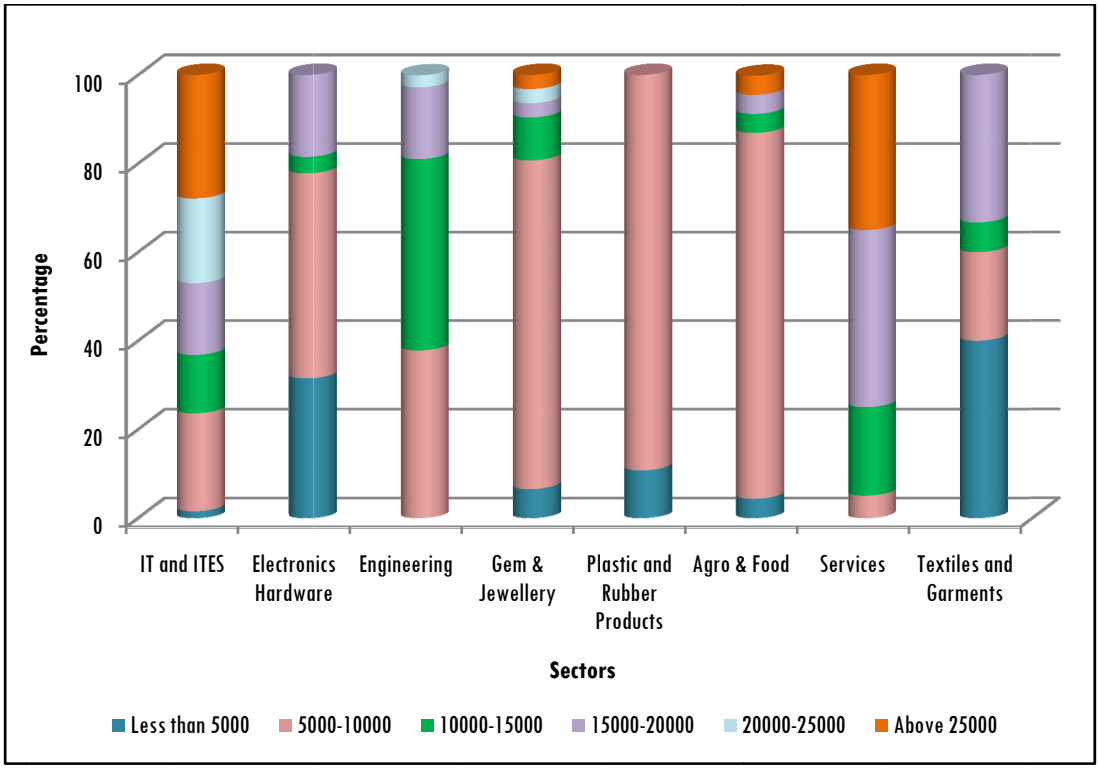
Table 7.7 Percentage Distribution of Workers by System of Wage Payment

Sectors	Daily	Monthly
Gem and Jewellery	41.9	58.1
Plastic and Rubber Products	28.6	71.4
Agro and Food	34.8	65.2

Source: Primary Survey

While the out-dated mode of daily payment of wages is not found in all sectors, the sectors are in unison in the matter of amount paid as wages. Excluding Engineering and Service sector all the other sectors have workers who earn less than Rs.5,000. Salary ranging Rs.5000-Rs.10,000 is the standard wage rate at the Zone (45.3%). But service sector is an exception. The variation in salary across the sector is given in figure 7.4.

Figure 7.4 Percentage Distribution of Workers by Monthly Wage Earned



Source: Primary Survey

It is noted that 56 per cent of the workers receive wages less than Rs.10,000. The survey reveals that there are employees in the Zone with salary starting at Rs.3,500. This is visible not only in the traditional sectors but also in modern IT oriented and Electronics Hardware sectors. In sectors requiring less qualified workers (Gem and Jewellery, Plastic and Rubber, Agro and Food, Textiles and Garments), for majority of the workers, salary never rises above Rs.10,000. But this situation is true in case of Electronics Hardware sector too, a sector with very high turn-over and having qualified workers. Seventy eight per cent of workers earn below Rs.10,000. It is of interest to note that 31.5 per cent of the workers in the highly profitable Electronics Hardware sector earn salary less than Rs.5,000. And this is also the sector where, 35.2 per cent of employees are appointed as trainees. This sector has the presence of qualified Engineers who receive less than Rs.4,000 as their remuneration. Also, the salary in this sector does not rise above Rs.20,000. In the Textiles and Garments sector too, 40 per cent of the workers earn less than Rs.5,000. In the Engineering sector where salary does not fall below Rs.5,000, the salary for

ITI/Diploma holders, who form the majority in this sector, does not rise above Rs.25,000.

The average wage in the Zone is worked out at Rs 11,975. The wage across sectors is seen in table 7.8. The average wage is the lowest in the Plastic and Rubber Products sector and the highest in Service and IT and ITES sectors. It is also noted that the average wage of traditional sectors of Gem and Jewellery, Plastic and Rubber, Agro and Food, Textiles and Garments never rises above Rs.10,000. These are also the sectors with workers of lower educational qualification.

Table 7.8 Average Wage Across Sectors

Sectors	Average Wage (Rs.)
IT and ITES	18,161.8
Electronics Hardware	7,962.98
Engineering	11,689.2
Gem and Jewellery	9,112.9
Plastic and Rubber Products	6,964.3
Agro and Food	8,804.3
Services	19,500.0
Textiles and Garments	9,166.7
Total	11,974.6

Source: Computed from primary data

Wages vary across skilled and unskilled workers and between permanent and temporary workers. In all the sectors salary above Rs.20,000 is meant for a skilled worker. Apart from the Engineering sector and the Service sector salary rises above Rs.10,000 only for the skilled workforce. Workers belonging to the semi-skilled category in these sectors earn salary up to Rs.20,000. The salary of the unskilled category never rises above Rs.10,000. Five per cent of the total workers in the Zone in the skilled category are paid less than Rs.5,000.

Table 7.9 Percentage Distribution of Skilled and Unskilled workers by Wages Paid per Month

Sectors	Category	Less than 5000	5000-10000	10000-15000	15000-20000	20000-25000	Above 25000	Chi Square	P Value
IT and ITES	Skilled	1.6	13.1	14.8	18	21.3	31.1	27.57	.002
	Semi-skilled		100	-	-	-	-		
	Unskilled		100	-	-	-	-		
Electronics Hardware	Skilled	22.2	51.1	4.4	22.2			14.73	.022
	Semi-skilled	87.5	12.5	-	-	-	-		
	Unskilled	-	100	-	-	-	-		
Engineering	Skilled	-	36.4	45.5	15.2	3	-	.855	.836
	Semi-skilled	-	50	25	25	-	-		
Gem and Jewellery	Skilled	-	75	12.5	4.2	4.2	4.2	8.61	.125
	Semi-skilled	28.6	71.4	-	-	-	-		
Plastic and Rubber Products	Skilled	-	100	-	-	-	-	20.16	.000
	Semi-skilled	-	100	-	-	-	-		
	Unskilled	75	25	-	-	-	-		
Agro and Food	Skilled	11.1	66.7	-	11.1		11.1	7.06	.530
	Semi-skilled	-	87.5	12.5	-	-	-		
	Unskilled	-	100	-	-	-	-		
Services	Skilled	-	5.6	22.2	33.3		38.9	3.33	.343
	Semi-skilled	-	-	-	100	-	-		
Textiles and Garments	Skilled	-	25	12.5	62.5	-	-	12.32	.006
	Semi-skilled	85.7	14.3	-	-	-	-		

Source: Primary Survey

Chi-square test is done to analyse whether there is variation in the wages paid between skilled and unskilled workers. In sectors of IT and ITES, Electronics Hardware, Plastic and Rubber and Textiles, $p < .05$. So, there is significant difference in the payment of wages between skilled and unskilled labourers in these sectors. Wage increment is found only for the skilled category and unskilled and semi-skilled have to remain content with the existing wage. With many MNCs operating in the IT and ITES sector, professionally qualified workers draw wage above Rs.25,000. Service sector too presents a similar trend. But the wage variation between skilled and unskilled category in Service sector is less as more than 90 per cent of the workers are professionally skilled. There is no significant difference in other sectors like Engineering, Gem and Jewellery, Agro and Food, Services ($p > .05$). This is because in these sectors, there are very few employees in unskilled category earning more than what the skilled category earns. In the Engineering sector the absence of such a variation is very sharp with only three per cent of the skilled workers earning above Rs.20000.

Wages vary between permanent and temporary employees also. Permanent workers get comparatively larger share of wages. Chi square test proves that there is significant difference in the wages paid between permanent and temporary employees in IT and ITES, Electronics Hardware, Engineering, Plastic and Rubber and Textiles and Garments. In these sectors p value is < .05. In the IT and ITES sector, the highly qualified skilled worker, even if he belongs to contract category, is paid wage above Rs.20,000 like the permanent worker. But all trainees are paid below Rs.15,000. In the Electronic sector and in the Textiles sector contract workers and trainees are never paid above Rs.10,000. In the Engineering sector and the Plastic and Rubber sector, it is the contract labour category (93% and 33% respectively) which is paid less than what trainees earn. This may be because the trainees in these sectors are with higher qualification and years of experience who naturally draw more salary. In Gem and Jewellery and Agro and Food sectors there is no variation in the scale of pay between permanent and temporary employees (p >.05).

Table 7.10 Percentage Distribution of Permanent and Temporary Employees by Wages

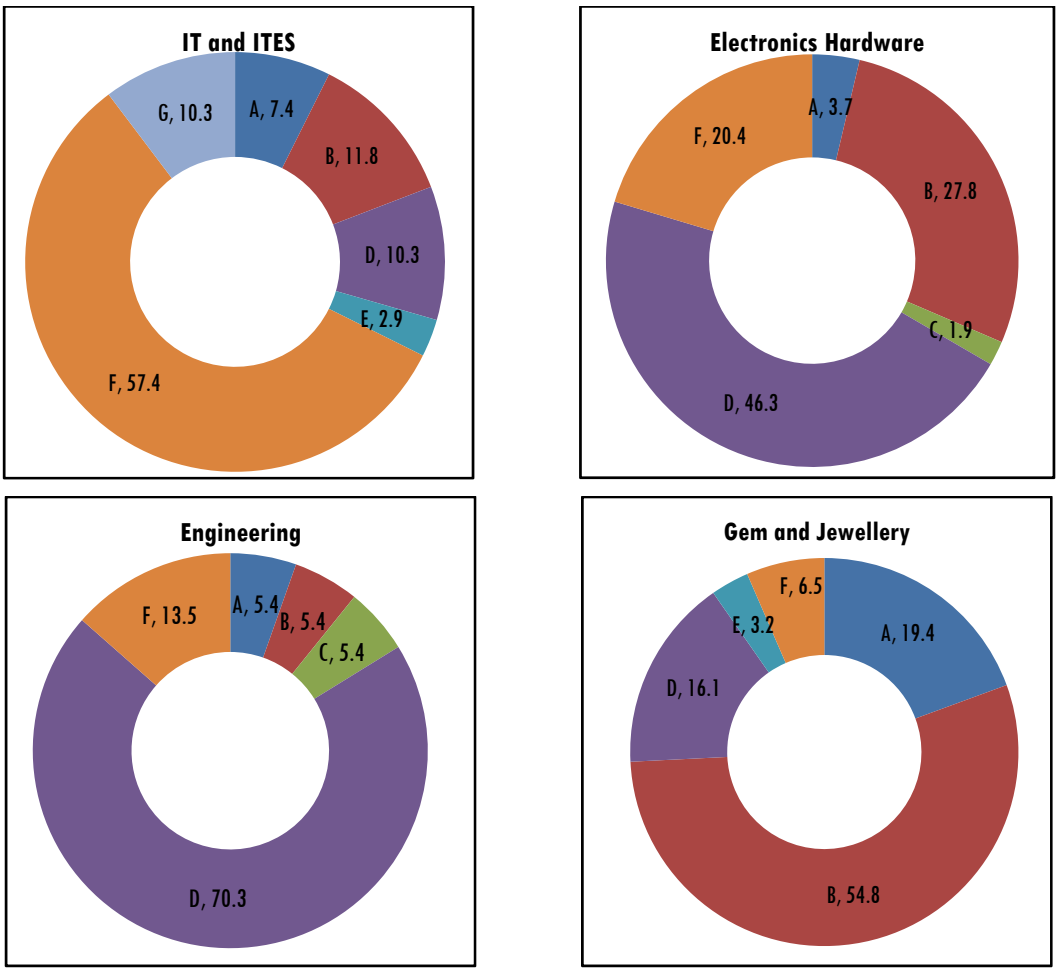
Sectors	Category	Less than 5000	5000-10000	10000-15000	15000-20000	20000-25000	Above 25000	Chi Square	P Value
IT and ITES	Permanent		52.2	4.3	4.3	8.7	30.4	48.80	.000
	Contractual	2.9	8.8	8.8	11.8	32.4	35.3		
	Trainee			45.5	54.5				
Electronics Hardware	Permanent		14.3	14.3	71.4			63.20	.000
	Contractual	14.3	85.7						
	Trainee	73.7	26.3						
Engineering	Permanent		4.5	72.7	18.2	4.5		34.71	.000
	Contractual		92.9		7.1				
	Trainee				100				
Gem and Jewellery	Permanent		100					2.59	.990
	Contractual	8.0	68	12	4	4	4		
	Trainee		100						
Plastic and Rubber Products	Permanent		100					7.1	.029
	Contractual	33.3	66.7						
	Trainee		100						
Agro and Food	Permanent		75	8.3	8.3		8.3	4.02	.404
	Contractual	9.1	90.9						
Services	Permanent		5.0	20	40		35	-	-
Textiles and Garments	Permanent	46.2	7.7	7.7	38.			9.23	.026
	Contractual		100						

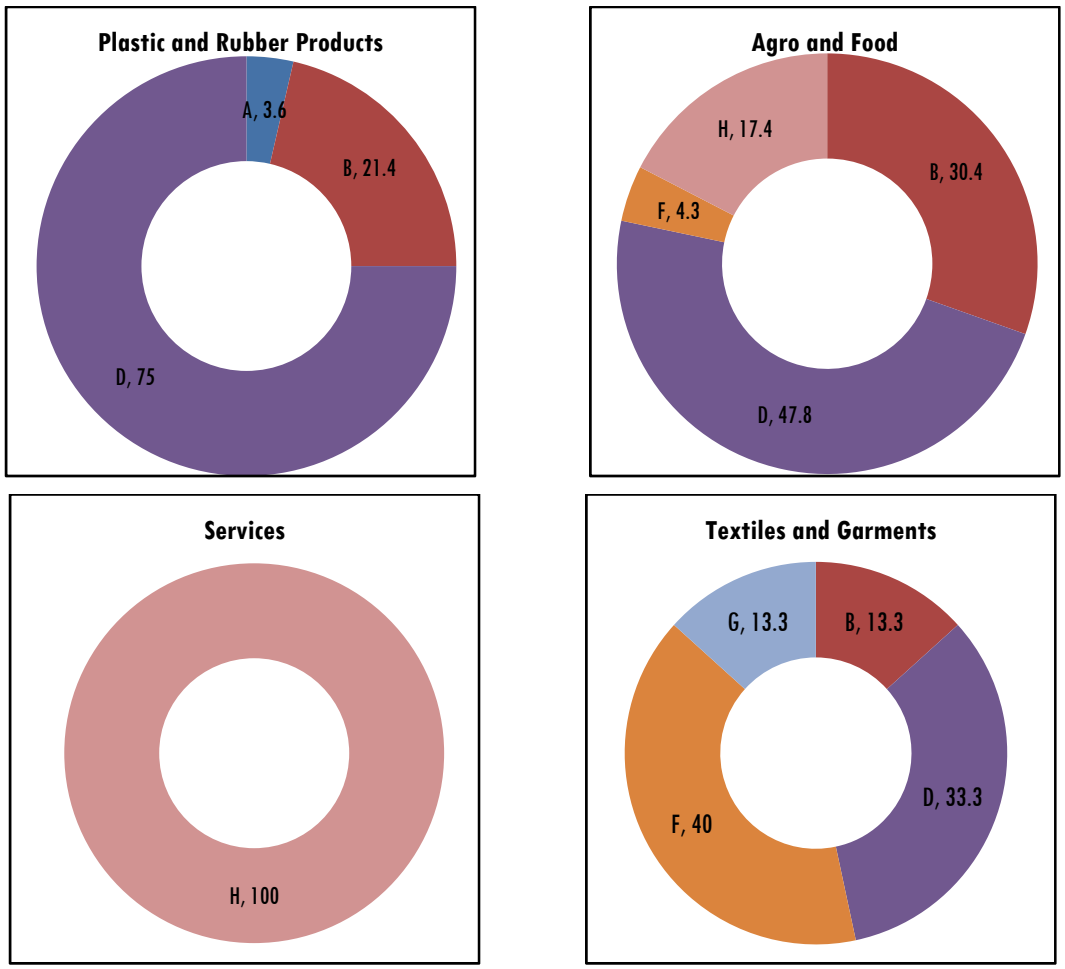
Source: Primary Survey

7.2.3 Social Security Measures

Generally the firms which offer good working conditions to its employees offer Social Security Measures to meet distress in life in the form of sickness, old age, etc. But not all firms in CSEZ offer such measures to all its employees. Only a few companies provide benefits and other allowances like PF, gratuity, etc. to the contract workers. IT and ITES, though employing workers on contract basis, provide PF, bonus, gratuity, incentives, life-insurance to 57.4 per cent of its workers. Textiles sector too provide the same to 40 per cent of its workers. In Electronics Hardware, Engineering, Plastic and Rubber and Agro and Food sectors, PF, Bonus and ESI is the received by more than 40 per cent of the workers. The sector where 54 per cent of the workers receive the least, i.e., only PF and ESI is Gem and Jewellery.

Figure 7.5 Percentage Distribution of Workers by Social Security Measures Received (Notations explained at the end of the table)





Source: Primary Survey

A – PF	E - Incentives, Medical Insurance
B - PF, ESI	F - PF, Bonus, Gratuity, Incentives, Life-Insurance
C - PF, Bonus	G - PF, Gratuity, Bonus, ESI
D - PF, Bonus, ESI	H - Nil

Service sector employees do not receive any other benefits other than the regular salary they draw. Their company is foreign based and they do not follow Indian policies. Apart from deduction of tax, nothing else is similar to the Indian system of Social Security Measures . But employees of this sector never complain and they are comfortable with the comparatively better salary they draw.

In the case of Social Security Measures too the permanent employees have an advantage over contract employees. The advantage of appointing employees on contract basis is that the companies can prevent them from claiming benefits and allowances. The job insecurity associated with contract workers prevents them from

pressing for allowances. In all other sectors there is considerable variation in the salary and other emoluments between permanent workers and contract workers.

In all the sectors, p value < .05, shows difference in the entitlement over Social Security Measures according to the nature of employment (see table 7.11). This means that there is considerable variation in the salary and other emoluments between permanent workers and contract workers.

Table 7.11 Percentage Distribution of Permanent and Temporary Workers by Social Security Measures

Sectors	Category of Employee	PF	PF, ESI	PF, Bonus	PF, Bonus, ESI	Incentives, Medical Insurance	PF, Bonus, Gratuity, Incentives, Life-Insurance	PF, Gratuity, Bonus, ESI	Nil	Chi Square	P Value
IT and ITES	Permanent	-	17.4	-	4.3	4.3	43.5	30.4	-	45.53	.000
	Contractual	-	11.8	-	14.7	2.9	70.6	-	-		
	Trainee	45.5	-	-	9.1	-	45.5	-	-		
Electronics Hardware	Permanent	-	-	-	21.4	-	78.6	-	-	48.58	.000
	Contractual	-	28.6	-	71.4	-	-	-	-		
	Trainee	10.5	47.4	5.3	36.8	-	-	-	-		
Engineering	Permanent	-		-	81.8	-	18.2	-	-	26.77	.001
	Contractual	7.1	14.3	14.3	57.1	-	7.1	-	-		
	Trainee	100	-	-		-	-	-	-		
Gem and Jewellery	Permanent	-		-	100	-	-	-	-	29.93	.000
	Contractual	8	68	-	12	4	8	-	-		
	Trainee	10	-	-		-	-	-	-		
Plastic and Rubber Products	Permanent	-	-	-	100	-	-	-	-	26.33	.000
	Contractual	-	55.6	-	44.4	-	-	-	-		
	Trainee	50	50	-		-	-	-	-		
Agro and Food	Permanent	-		-	91.7	-	8.3	-	-	23.0	.000
	Contractual	-	63.6	-		-	-	-	36.4		
Services	Permanent	-	-	-		-	-	-	100	-	-
Textiles and Garments	Permanent	-	-	-	38.5	-	46.2	15.4	-	15.0	.002
	Contractual	-	100	-		-	-	-	-	-	-

Source: Primary Survey

The permanent workers receive comparatively better Social Security Measures in the Zone. An exception is IT and ITES sector which pays PF, bonus, gratuity, incentives, life-insurance to 70 per cent and 46 per cent of contractual employees and trainees respectively. In Engineering sector all the trainees, who form just three per cent of the workers, receive only PF. The sectors where more than 50 per cent of the contract workers receive PF, Bonus and ESI are Electronics Hardware and

Engineering. In sectors Agro and Food, Plastic and Rubber, Gem and Jewellery and Textiles and Garments sectors, more than 50 per cent of the contract employees receive only PF and ESI. There are trainees who receive just PF. They belong to the sector of IT and ITES (46%), Engineering (100%) and Plastic and Rubber (50%). Apart from Service sector, 36 per cent of contract workers in Agro and Food are never paid any social security measure, who form 17.4 per cent of the total workers in the sector (see figure 7.5).

7.2.4 Over-time Work and Shift System

As production targets are to be met, most enterprises (72.8%) in the Zone have the system of overtime work. For 52 per cent of them, OT happens every day in their firm. For 48 per cent, OT work is seasonal which varies according to fluctuations in demand for the product they manufacture.

Most firms make a payment for the OT work done by its workers. OT work is also optional for all the employees in the Zone. Hence permanent employees with better salary abstain from it and contract workers with low salary opt for it often. Whenever there is work load, sometimes, instead of taking night shifts, the workers convert it to OT work and claim a payment for it. In some enterprises the workers have the option to finish jobs by working on Sundays and thus avail the OT facility.

Table 7.12 Percentage Distribution of Workers by Hours Spent on Over-time Work

Sectors	Workers with OT	Hours of Over-time Work per Week				
		2-4	4-6	6-8	10-12	12-20
IT and ITES	32.4	9.1	22.7	22.7	18.2	27.3
Electronics Hardware	100	-	37	40.7	18.5	3.7
Engineering	83.8	-	51.6	9.7	32.3	6.5
Gem and Jewellery	93.5	75.9	13.8	3.4	3.4	3.4
Plastic and Rubber Products	75	38.1	38.1	23.8	-	-
Agro and Food	95.7	9.1	36.4	36.4	13.6	4.5
Services	35	100	-	-	-	-
Textiles and Garments	100	-	20	46.7	33.3	-

Source: Primary Survey

In IT and ITES sector and Services sector, the enterprises set targets and expect the employees to complete the work on time. More than 60 per cent of the workers in these sectors never opt for OT work. While the IT and ITES sector makes a payment for those who do OT work, Service sector does not. In the Service sector, time spent on OT work is never beyond 2-4 hours per week. But in the IT and ITES sector, time spent on

OT work is more (see table 7.12). The average hours of OT work calculated also shows that workers of IT and ITES sector spend more on OT work (see table 7.13).

It reveals the tedious and strenuous working culture in the IT and ITES sector. In all the other sectors, more than 70 per cent of the employees are those with OT work. Firms in Gem and Jewellery also never put pressure on their female employees to spend extra time in the company. Apart from this sector, workers in others spend normally about 4-8 hours per week in OT work.

Table 7.13 Average Hours of OT Work

Sectors	Average Hours
IT and ITES	8.5
Electronics Hardware	7
Engineering	7.6
Gem and Jewellery	4
Plastic and Rubber Products	4.7
Agro and Food	6.7
Services	3
Textiles and Garments	8
Total	6.5

Source: Computed from primary data

The workers note that the allowance for overtime (OT) work has got implemented after the inception of trade union in CSEZ. Over-time work has also become discretional after the inception of the union. Presently, OT work is seasonal in nature and is usually done by junior male contract staff.

Table 7.14 Percentage Distribution of Workers by OT Allowance Earned per Hour

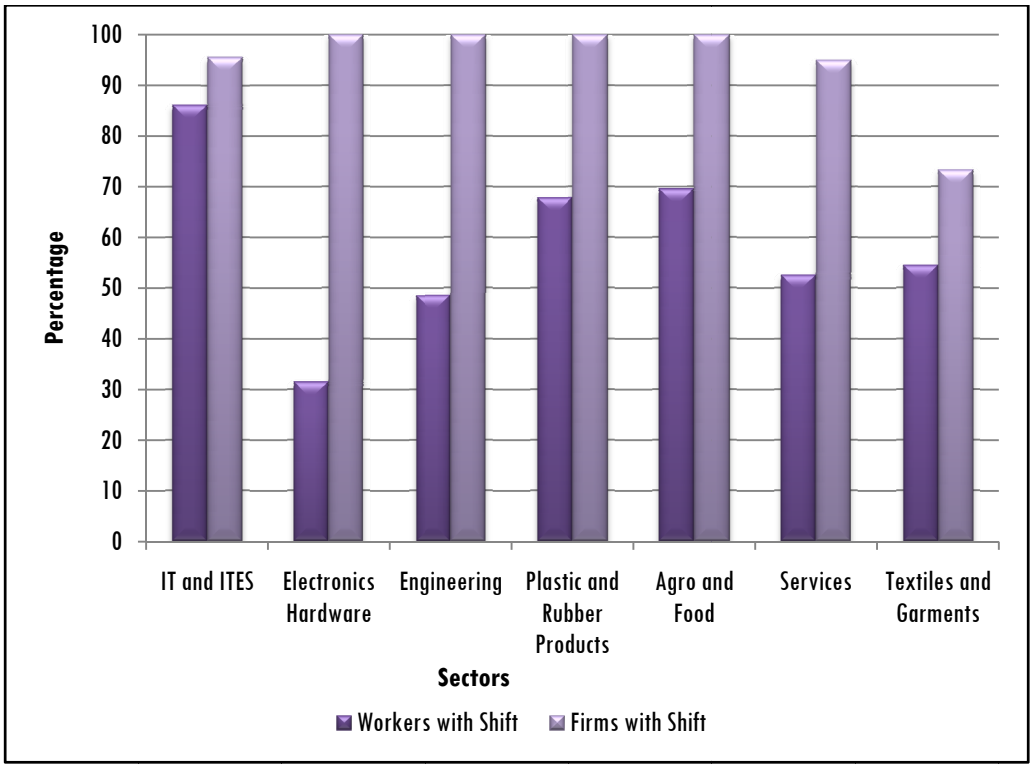
Sectors	Nil	< 30	30-60	60-90	90-120	120-150	150-240*	Other
IT and ITES	-	-	4.5	40.9	4.5	18.2	13.6	18.2
Electronics Hardware	-	25.9	50	-	9.3	5.6	7.4	1.9
Engineering	-	6.5	32.3	6.5	12.9	35.5	6.4	-
Gem and Jewellery	-	-	27.6	51.7	13.8	6.9	-	-
Plastic and Rubber Products	-	14.3	33.3	52.4	-	-	-	-
Agro and Food	-	31.8	45.5	13.6	4.5	-	4.5	-
Services	100	-	-	-	-	-	-	-
Textiles and Garments	-	6.7	53.3	-	6.7	6.7	26.7	-

Source: Primary Survey
*(Classes 150-200, 210-240 have been combined)

Workers generally do not have knowledge on the method of calculating overtime allowance. They accept whatever they are given. Majority of the workers receive OT allowance between Rs.30 and Rs.90 per hour. Other than monetary allowances for OT work, the workers in some firms receive one day compensatory off if he/she works for stipulated number of hours.

Generally the companies have 3 shifts. Time duration per shift is eight hours for all the firms with shift system. However ladies are bound to take only general shift, the timing of which is from 8.30 am to 5.30 pm. The managerial staff has a different shift from 9.00 am to 5.30 pm. Usually, ladies and permanent staff are exempted from taking shifts. Men and contract workers opt for shifts. Moreover, night shifts happen only when the companies have excess work-load. Sometimes, there is also the practice of workers converting shifts into OT work so that they can demand payment for it.

Figure 7.6 Percentage Distribution of Workers and Firms with Shift System



Source: Primary Survey

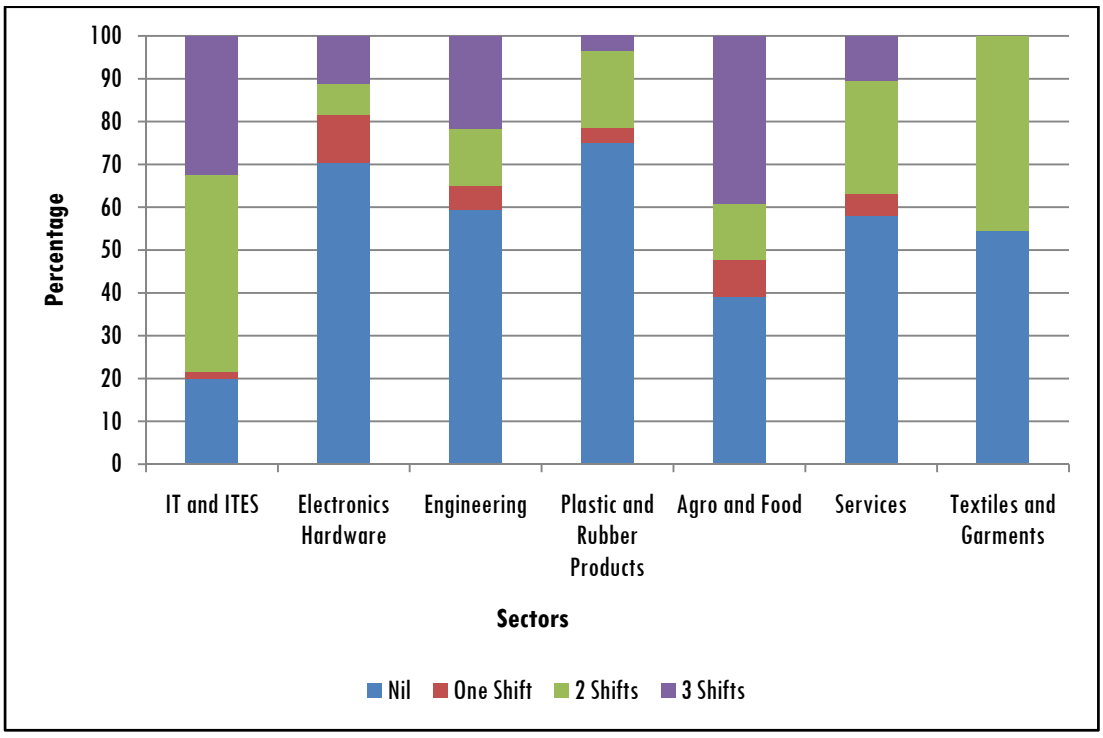
Gem and Jewellery sector has no shift system, hence it is not represented in the figure 7.6. According to the company authorities, more than 90 per cent of the

workers are females in this sector. As the companies cannot take care of their security and travel issues, this sector has just one general shift for all the employees. In the case of other sectors too, shift system applies during peak-demands.

Shift system is applicable for 86 per cent of the workers in the Zone. But only 60 per cent of the workers in the Zone opt for it. From the figure 7.6, it is obvious that not all workers are mandated to opt for shift system. In Electronics Hardware, Engineering, Plastic and Rubber and Textiles, shift is applicable only for men.

But there are exceptions, especially in the IT and ITES. Ladies in some of the enterprises in this sector are also bound to take all shifts, including night shifts. However, the companies arrange travel facility and food during night shifts. Some firms in Agro and Food also have shift system applicable for ladies. The enterprise in the Service sector manages even without shift system, except during peak-seasons. As per rule, shift system is applicable for ladies also. But even during peak-times, Service sector relieves ladies from working after 5pm. The number of night shifts the workers take in a month is illustrated in figure 7.7.

Figure 7.7 Percentage Distribution of Workers by No. of Night-shifts Opted per Month



Source: Primary Survey

The 24- hour day gets divided into different shifts and the employees rotate shifts. When the number of night shifts that a person takes is more than two in a month there are risk factors involved like health issues, family issues etc. Night-shifts are least applicable for workers in sectors of Electronics Hardware (30%) and Plastic and Rubber (25%), followed by Engineering (40%) and Service sectors (42%). Night-shifts up to three in a month applies for 32 per cent and 39 per cent of the workers in IT and ITES and Agro and Food sector respectively.

Company-borne conveyance facility is a necessity especially during night shifts. Among all the workers interviewed, 48 per cent of the workers agreed to have conveyance facility provided by firms to their place of stay during night-shifts. But full expense is not borne by the firms. The expense of travel is cut from their salary. In some enterprises in the Electronics Hardware sector, only 50 per cent of the travel expense is cut from the salary.

Table 7.15 Percentage Distribution of Workers without Company-borne Night-conveyance Facility, Their Means of Travel and the Problems Faced by Workers without the Facility

Sectors	Without Facility	Means of Travel			Workers Who Faced Problem	Not Applicable
		Auto	Walk	Other		
IT and ITES	23.5	6.3	37.5	31.3		25
Electronics Hardware	38.9		23.8	9.5	4.8	66.7
Engineering	59.5	13.6	9.1	31.8	13.6	45.5
Gem and Jewellery	-	-	-	-	-	100
Plastic and Rubber Products	75			23.8		76.2
Agro and Food	34.8	25	12.5	25	37.5	37.5
Services	75	13.3	13.3	26.7	-	46.7
Textiles and Garments	73.3			45.5		54.5

Source: Primary Survey

Table 7.15 shows that night-conveyance facility is not available to a number of workers who opt for night shifts. The situation is grave in Textiles and Garments sector and Plastic and Rubber sector. But as these two are the sectors where night-shifts are not applicable to females, the problem of travel is that of men. In Service sector, 75 per cent employees are without night-conveyance facility. In this sector shifts are applicable for women also. But as mentioned earlier, women are generally exempted from night shifts. So is the case with other sectors.

But, even when night shifts are applicable for men only, absence of night-travel facility is a grave issue. Sometimes they walk to their place of stay, rely on an auto, bikes, etc. Very few of them have also faced problems like burglary, police checking, etc. in the absence of proper night conveyance facility.

CSEZ has a number of very young employees, both men and women, coming from very far off places. Sixty two per cent of the employees are on rental accommodation. But none of the enterprises in the Zone provide accommodation facility or bear accommodation expenses of employees. The accommodation status of the employees is shown in table 7.16.

Table 7.16 Percentage Distribution of Workers by Type of Residence

Sectors	Own House	Rent
IT and ITES	47.1	52.9
Electronics Hardware	16.7	83.3
Engineering	64.9	35.1
Gem and Jewellery	16.1	83.9
Plastic and Rubber Products	35.7	64.3
Agro and Food	34.8	65.2
Services	55	45
Textiles and Garments	40	60

Source: Primary Survey

There are a number of hostels and paying-guest facilities adjacent to the Zone. The workers with better salary can afford better accommodation facilities. But the young males and females earning low salary live under pathetic conditions. Some of their dwellings, specially built for the Zone workers are simple unpaved concrete blocks with aluminum roofs and with minimal facilities. All the workers of all the units register their discontentment about unavailability of accommodation facilities.

7.2.5 Leisure-time and Leave-system

The amount of time workers spent on work is very high over the years. The workers have to either constantly sit or remain in a standing posture throughout the production process. The work has to be done meticulously with immense amount of concentration. So the workers get exhausted and tired often and may impair their health. Here is the significance of leisure time and leave system. Appropriate leisure

time can help to maintain physical health and mental health thus enabling workers to remain productive.

Seventy per cent of the workers commented that firms provide 45 minutes to one hour of rest time in a day. They get 10 minutes break in the morning and evening and half an hour lunch time too. Five per cent of workers in the IT and ITES sector have a flexible time system. They can take rest whenever they want, provided they meet the production targets on time. Those who are on night shifts, however, get only 10 minutes break during the entire shift.

Table 7.17 Percentage Distribution of Workers According to No. of Leaves Entitled to in a Year

Sectors	5-10 Days	10-15 Days	More than 15 Days
IT and ITES	10.3	89.7	-
Electronics Hardware	1.9	98.1	-
Engineering	-	91.9	8.1
Gem and Jewellery	6.5	90.3	3.2
Plastic and Rubber Products	-	100	-
Agro and Food	4.3	95.7	-
Services	-	-	100
Textiles and Garments	-	100	-
Total	4	87.3	8.7

Source: Primary Survey

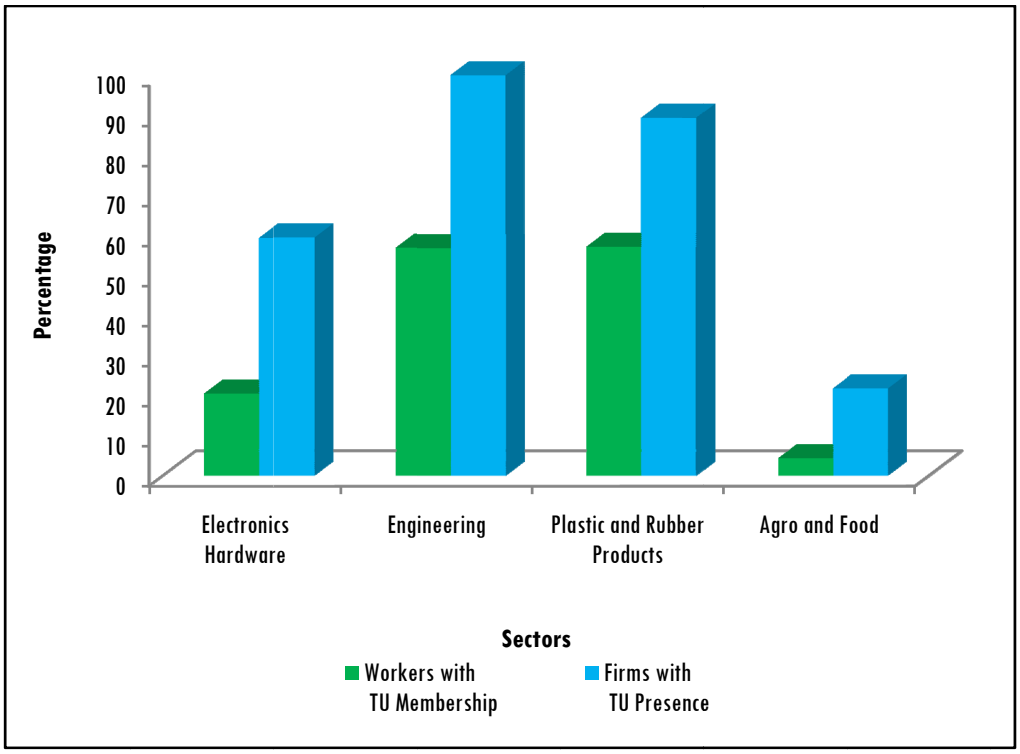
As far as the leave system is concerned, contract employees and trainees are at a disadvantage. Salary is cut for every leave taken, irrespective of national holidays and festivals. This is especially true for workers who draw salary on daily basis. However, majority of the workers receive more than 10 days as holidays in a year. The leaves get sanctioned for the contract employees after approval from the doctor employed in the Zone.

7.3 Trade Union Membership

With a 'public utility status' conferred up on SEZ, the freedom to form trade unions and declare strikes remain curtailed. However, CSEZ has the presence of CITU, which is the prominent trade union present in the Zone. INTUC and BJP's wing have diminutive presence in the Zone, and their activities are very weak inside the Zone.

Eighty two per cent of the workers in the Zone have no membership in trade union. Only 64 per cent of the firms have trade union presence. Among these, only four sectors have the presence of trade union as shown in figure 7.8.

Figure 7.8 Percentage Distribution of Workers and Firms with TU



Source: Primary Survey

The presence of trade union in a sector does not guarantee full membership of its workers. All the workers in the Engineering sector have agreed to the presence of trade union in the Zone, only 57 per cent are members in it. Similar is the case with other three sectors.

It cannot always be argued that sectors with least membership in trade unions are those with higher number of temporary workers and less salary. Workers in IT and ITES (66 % contract workers) sector and Service sector (75 % with wages more than Rs.15,000 and 35% with more than Rs.25,000) have no membership in trade unions, but many of its firms offer good salary and working conditions to its employees.

CITU is the prominent trade union in the Zone. There is 100 per cent CITU membership in the three sectors with trade union presence, except in the Engineering

sector. In the Engineering sector, 14.3 per cent of the workers have CWU (CSEZ Worker's Union) membership and others with CITU membership. CWU is the union with BJP's backing, although they claim to be nonpolitical in nature. INTUC's presence is also understood from the discussions with workers.

Trade union membership is found among permanent members, where as membership among contract workers is marginal. Trade union membership and the bargaining process associated with it have helped the permanent workers in the Zone to earn more and also to establish their rights. So workers are asked to rate the performance of trade unions.

Table 7.18 Percentage Distribution of TU Members by Agreement on Bargaining Capacity

Sectors	TU Bargains with Management		TU Secures High Wages		
	Strongly Agree	Agree	Strongly Agree	Agree	Disagree
Electronics Hardware	90.9	9.1	63.6	36.4	-
Engineering	95.2	4.8	57.1	38.1	4.8
Plastic and Rubber Products	87.5	12.5	68.8	31.3	-
Agro and Food	100	-	100	-	-

Source: Primary Survey

More than 80 per cent of the workers agree that trade unions bargain with management for wages and better working conditions. Majority (more than 50%) agree with trade unions' strength in securing high wages. Workers attribute the hike in the salary and all other monetary benefits and improved working conditions they receive to unionisation. Incentive for over-time work is also initiated after repeated pressures from the trade union. To them, every interaction with management is also made through the union which guarantees their rights. Attempt has already been started to increase the penetration of trade unions among the workers in all the enterprises.

The workers also agree that they have voluntarily joined trade unions and not out of persuasion from anyone. Only 4.8 per cent of the workers in the Engineering sector oppose this. This is understood from table 7.19.

Table 7.19 Percentage Distribution of TU Members Who are Forced to Joined TU

Sectors	Agree	Disagree	Strongly Disagree	Not At All
Electronics Hardware	-	18.2	18.2	63.6
Engineering	4.8	28.6	4.8	61.9
Plastic and Rubber Products	-	6.3	6.3	87.5
Agro and Food	-	100	-	-

Source: Primary Survey

When non-members of trade unions are asked on reasons for not joining trade unions, absence of trade union in the sectors is the major reason cited by them (IT, Gem and Jewellery, Agro and Food, Services and Textiles). In Electronics Hardware, Engineering and Plastic and Rubber sectors, more than 80 per cent have commented that the management prevents workers from joining trade union.

Table 7.20 Percentage Distribution of Non Members on the Reason for Not Joining TU

Sectors	Prevented by Management	Own Decision	Union Not Present in the Company
IT and ITES	1.5	2.9	95.6
Electronics Hardware	95.3	-	4.7
Engineering	87.5	12.5	-
Gem and Jewellery	6.5	-	93.5
Plastic and Rubber Products	83.3	-	16.7
Agro and Food	45.5	4.5	50
Services	-	-	100
Textiles and Garments	40	-	60
Total	3	2.2	60.8

Source: Primary Survey

Although IT and ITES sector has complete absence of trade unions, 9 per cent of the workers of this sector who are interviewed are members of Open Forums which act like dispute settlement mechanism within the company. Around 10 per cent of workers in Electronics Hardware and Engineering sectors have membership in Welfare Societies.

7.4 Health Issues of the Workers

The workers of all the industries confirm health problems due to excessive strain at work place. They have to work hard without availing breaks or holidays to

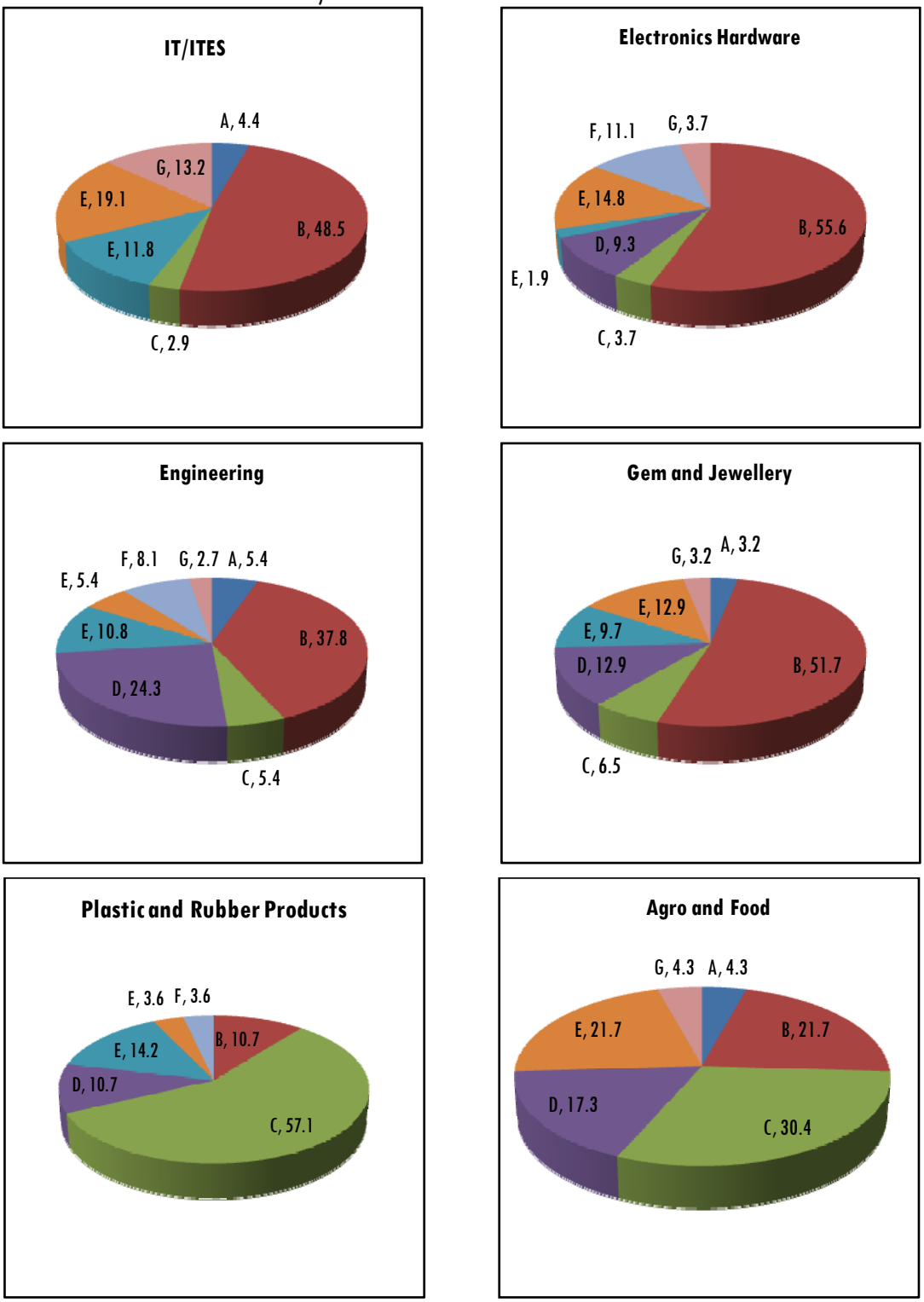
attain the target set for each day. Else termination of service is to be expected. Thus to retain the job, they work hard to maintain their performance. Workers in the IT and ITES sector sit in front of the computers for hours. The common problems faced by the IT and ITES, Electronics Hardware, and Gem and Jewellery sectors are back pain, headache, eye strain, fatigue, stress and leg pain (67.6%, 70.4% and 64.5% respectively). The employees of the Service sector also face similar problems (80%).

In addition to the problems like headache, back pain, stress and fatigue, the workers in Electronics Hardware sector have to face respiratory related ailments too. To get rid of hazardous chemicals and fumes, air purification system has got installed in Electronics Hardware after repeated complaints from employees. Electronic sector is completely dustproof and temperature control systems are there, as they manufacture delicate items. Still workers complain of lung problems, eye strain, breathing problems, etc. The temperature has to be maintained very cool, so they work with sweaters on.

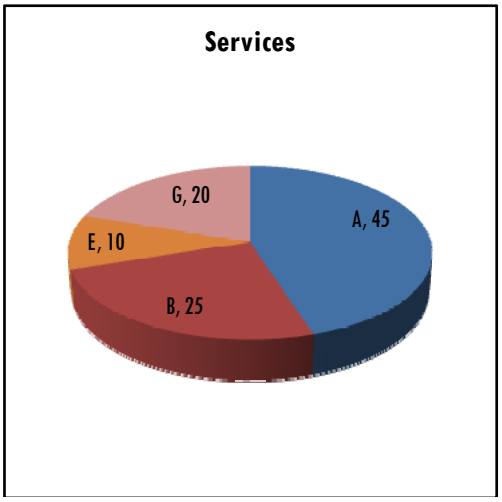
In the Engineering industry too similar kind of pollution related problems are encountered by the workers. The nature of their work forces them to remain in the standing posture for the whole day. Forty per cent of the people suffer from back pain owing to constant standing. Other ailments the workers of this sector face are back pain, head ache, eye strain and fatigue and muscle pain (62%).

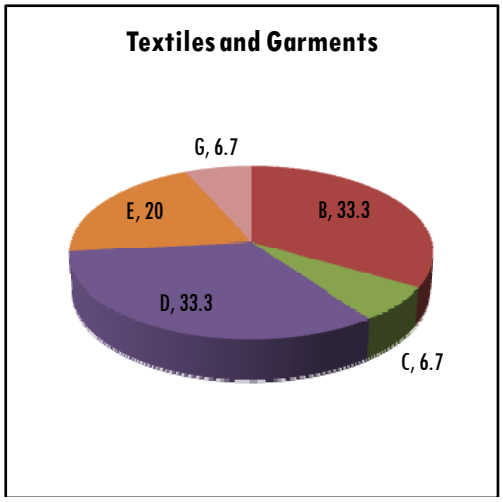
In Agro and Food industry workers have to strain and they complain of back pain, body pain, headache, etc. But Agro and Food industry is reported to be free of pollution as they require the use of fewer chemicals in production. They face the problems related to dust, like asthma and other lung related diseases. They suffer from back pain, head ache, eye strain, fatigue, leg pain, stress and asthma (73.8%). In Textiles, dangerous chemicals used in dyeing, noise of machines etc. do harm to the health of employees, that 67 per cent of the workers of this sector have back pain, head ache, eye strain, fatigue and muscle pain, The problems faced by the workers of the Plastic and Rubber sector are back pain, asthma, eye strain and fatigue (57%).

Figure 7.9 Percentage Distribution of Workers with Work-related Medical Ailments (Notations explained at the end of the table)



Source: Primary Survey





A- Stress, Fatigue	E -Spondylitis, Leg Pain, Fatigue, Stress, Allergy, Skin Problems
B - Back Pain, Head Ache, Eye Strain, Fatigue	F - Back Pain, Leg Pain, Fatigue, Stress
C - Back Pain, Asthma, Eye Strain, Fatigue	G - All
D - Muscle Pain, Back Pain	H - No Ailments

Only the Electronics Hardware sector and the Engineering sector are prone to accidents. Any work related accidents which occur in the firm are satisfactorily taken care by the management. The ESI facility and the medical insurance facilities are made use of by the workers during any medical requirement. Table 7.21 shows that in case of all the sectors, except Service sector and Engineering sector, in more than 70 per cent of the cases, any work related accident is to be taken care through medical insurance. In exceptional cases the expenses of such accidents are fully met by the company. The Service sector, however, does not provide any of such schemes to its workers. Workers (90%) comment that their medical needs are to be met by self.

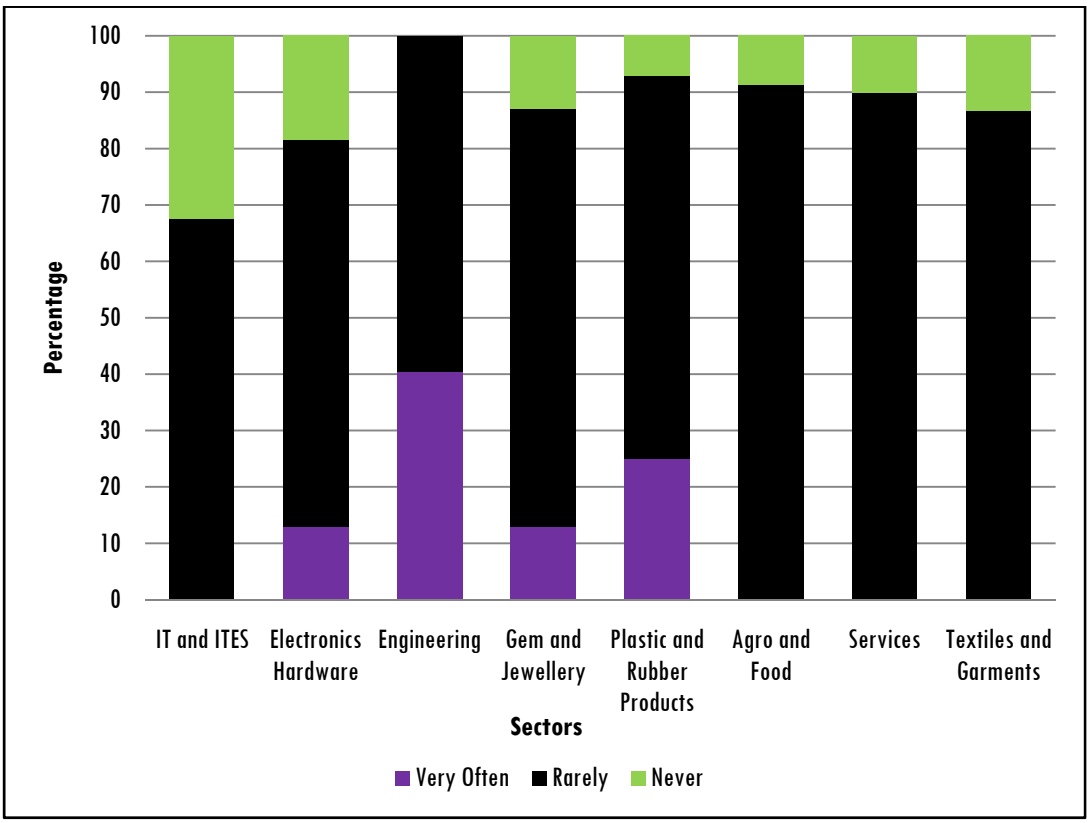
Table 7.21 Percentage Distribution Workers Opinion on the Agency Which Bears the Expense of Work-related Accidents

Sectors	Self	Fully by the Company	Partly by the Company	Medical Insurance
IT and ITES	5.9	2.9	-	91.2
Electronics Hardware	22.2	1.9	1.9	74.1
Engineering	29.7	10.8	13.5	45.9
Gem and Jewellery	6.5	3.2	-	90.3
Plastic and Rubber Products	3.6	3.6	3.6	89.3
Agro and Food	-	4.3	13	82.6
Services	90	-	-	10.0
Textiles and Garments	-	6.7	-	93.3

Source: Primary Survey

A means of registering workers' grievances is with the Labour Commissioner. Labour Commission is bound to make regular inspections to check the working conditions at the Zone and thus register grievances of the labourers. But the powers of Labour Commissioner have been transferred to the Development Commissioner. So Labour Department has limited powers in the Zone.

Figure 7.10 Percentage Distribution of Labour Commission Inspection



Source: Primary Survey

Figure 7.10 shows that, workers in the Zone are of the opinion that the Labour Commission Inspection to the Zone happens rarely. Every time the Labour Commission visit is to be made to the Zone, it is supposed to get prior approval from the Development Commissioner at the Zone. Sometimes this approval is not given as a means to protect the interest of the enterprises in the Zone.

7.5 Workers' Preference for Alternative Job

Survey includes an enquiry into the workers choice of alternative jobs. As the working conditions and wages available to the labourers ought to be better in the Zone, whether workers wish to change their present job is to be analysed.

Owing to better job opportunities available both inside and outside the Zone, the workers in the IT and ITES sector (47%), Electronics Hardware sector (76%), Engineering sector (43%) and Service sector (45%) prefer to have better jobs. The workers of these sectors with professional qualification seek alternative jobs. They

find the job in the Zone as a means of gaining experience and they quit after a few years. It is to be noted that 65 per cent of workers in Agro and Food also seek alternative jobs. The workers in the Gem and Jewellery (29%) are comparatively satisfied with the existing working conditions. So they prefer to remain in their jobs in the Zone. So is the case with workers in Plastic and Rubber and Textiles and Garments sectors. Moreover, they do not seek alternative jobs as they do not have necessary skills required for alternative jobs

Table 7.22 Percentage Distribution of Workers Preferring Alternative Jobs and the Reasons for their Preference

(Notations explained at the end of the table)

Sectors	Workers Preferring to Quit	Reasons for Quitting Job				
		A	B	C	D	E
IT and ITES	47.1	40.9	9.4	12.5	12.2	25
Electronics Hardware	75.9	48.7	2.4	7.3	9.8	31.7
Engineering	43.2	25.1	6.3	12.5	25	31.3
Gem and Jewellery	29	11.1	-	55.6	-	33.3
Plastic and Rubber Products	39.3	-	9.1	18.2	18.2	54.5
Agro and Food	65.2	13.4	20	46.7	20	-
Services	45.0	11.1	33.3	-	-	55.5
Textiles and Garments	33.3	20	-	60	-	20

Source: Primary Survey

A - Poor Pay and No Promotion	D - Poor Pay, Poor Working Condition, No Promotion Prospects
B - Poor Pay and No Job Satisfaction	E - Poor Pay, Too Much Work , Temporary Work, No Promotion
C - Poor Pay, Temporary Work	

Table 7.22 analyses the reasons put forward by workers for quitting their present jobs and seeking alternative ones. Workers of all the sectors who want to change job cite poor pay as the reason. The qualified workers of IT and ITES sector (66%), Electronics Hardware sector (80%) and Engineering sector (81%) find the job in the Zone without proper pay, promotion prospects, satisfaction, job security, etc. Temporary work, poor pay, quantity of work and absence of promotion make the workers in Gem and Jewellery (90%) wish for a change of job. All the workers who wish to change the jobs in Plastic and Rubber sector have expressed their unhappiness about poor pay. A secondary reason is the temporary nature of their work, absence of promotion prospects, etc. We can see the same reasons, poor pay and temporary work

(47%) in the Agro and Food sector too. Workers in the service sector, with a comparatively better salary, feel they are not paid according to their qualification level and according to the quantity of work they do. Absence of promotion also seems to bother them. Poor pay and temporary work (60%) are the major reasons cited by the workers of Textiles sector seek alternative jobs.

Even though the workers in the Zone face a number of problems like poor pay, absence of proper working conditions, etc., they still prefer to continue in the Zone. The survey results show that a number of workers still find better job opportunities within the Zone. Less than 30 per cent of the workers who wish to change jobs in IT and ITES, Electronics Hardware, Engineering, Gem and Jewellery, Plastic and Rubber and Agro and Food prefer to change jobs outside the Zone. Only 6 per cent of the workers of Engineering sector seek job outside the Zone. Seventy seven per cent of the workers of Service sector wish for growth in job outside the Zone. Among the workers (who seek better jobs) of the Textiles sector too, even when they are with lower educational qualification, 60 per cent prefer to have jobs outside the Zone. The fact that is to be noted under the situation is that, this sector has workers with more years of experience in the Zone.

7.6 Summary

The unmarried young workers (the average age being 30 years) with moderate education and less than 10 years of service constitute the largest category in the CSEZ. This general trend is not reflected in all the sectors of the Zone. While Textiles and Garments have dominance of unmarried workers and with more years of experience (47% with > 15 years of service), IT and ITES, Electronics Hardware, Engineering and Service sectors absorb professionally qualified workforce with a professional degree or a diploma because of its technical nature of work. Gem and Jewellery, Plastic and Rubber, Agro and Food, Textiles and Garments function with more number of workers with High School or Plus-two qualification. Firms' preference for employing workers on contract basis or trainee basis is found in the Zone, except in case of Textiles and Garments. The average wage in the Zone is Rs.11,974 per month. When sectors with workers of lesser qualification of plus-two or tenth earn below Rs.10,000, there are ITI diploma holders in the Electronics

Hardware sector who earn the same wage. Wages vary according to the skill level and nature of employment of the workers.

Overtime work is optional, usually opted by junior male contract staff while women are generally exempted from shifts. Trade Union membership is found only in sectors of Electronics Hardware, Engineering, Plastic and Rubber and Agro and Food sectors. Labour Commission inspection also takes place rarely in the Zone. The strenuous work in the Zone makes the workers of all sectors suffer from occupation related disease. Even with many issues with the working conditions in the Zone, there are a good number of workers (more than 70%) in sectors other than Services and Textiles, who prefer to continue their work in the Zone.

This chapter concludes on mixed labour standards in the Zone. While some sectors and some categories of workers are lucky to be entitled to most of the labour standards, others do not enjoy it. At this juncture a crucial question that arises is whether competitive strategies and labour standards are interrelated. That is whether labour standards are protected in the enterprises with high export competitiveness or vice versa. How far the working condition in CSEZ is compromised in the context of the export competitive strategy is analysed in detail in Chapter 8.

Chapter 8

COMPETITIVENESS AND LABOUR STANDARDS

Contents

Firms try to be competitive in the export market by manufacturing goods which appeal to the foreign buyers in terms of price, quality, technological-content etc. To sustain their competitiveness in the export market and to simultaneously maintain a lower cost of production, firms follow the strategy of provision of poor labour standards to its workers. However, some firms with modern employment practices may provide better standards to enhance the labour productivity. Under the backdrop of such a relationship, it is necessary to analyse how far labour standards are related to competitiveness. In order to analyse this, an overview of the competitiveness in various sectors can be done first.

8.1 Competitiveness

Sector-wise consolidated data on export competitiveness in the Zone for the year 2011-12 is reproduced from chapter 6 in table 8.1. Data for the year 2011-12 is used to compare the competitiveness with the current labour conditions.

Table 8.1 Sector-wise Competitiveness (2011-12)

Indicators	IT and ITES	Electronics Hardware	Engineering	Gem and Jewellery	Plastic and Rubber	Agro and Food	Services	Textiles
Percentage Annual Growth Rate of Exports	51.9 (2)	8.1 (7)	16.5 (6)	53.5 (1)	38.8 (3)	30.4 (4)	26.9 (5)	-22.4 (8)
Percentage Share in Total CSEZ Exports	1.34	1.68	0.38	94.2	0.26	0.54	0.03	0.46
Output-Employment Ratio	7.48	23.06	14.10	20,043.09*	19.77	28.82	8.51	12.06
Industrial Competitiveness Index	0.70 (2)	0.66 (4)	0.66 (4)	0.52 (6)	0.69 (3)	0.75 (1)	0.27 (7)	0.63 (5)
Revealed Comparative Advantage Index	0.07	0.69	0.02	7.60	0.11	0.07	-	0.06

Source: Computed from secondary data
Figures in bracket show ranks
*Comparatively higher value of Gem and Jewellery's Output-Employment Ratio indicates high value of gold

In terms of RCAI, only Gem and Jewellery sector is competitive as its index is greater than unity. But a comparatively better index is recorded for Electronics Hardware and Plastic and Rubber sectors. In terms of ICI, another index of industrial competitiveness, Agro and Food performs well. It is followed by IT and ITES, Plastic and Rubber, Engineering, Electronics Hardware, respectively. The competitiveness trend noticed in terms of ICI and RCA has not been fully supported by other indicators considered. In terms of percentage annual growth rate, labour productivity and percentage share, competitiveness is the highest for Gem and Jewellery sector. Plastic and Rubber sector, though RCAI is lower, also enjoys a competitive position in terms of annual growth, productivity and ICI. The firm in the Service sector being a new entrant experiences low competitiveness in terms of all the competitiveness measures, except annual growth rate. Among Engineering sector and Electronics Hardware sector, the latter records higher competitiveness. However, annual growth rate for Engineering is double of that of Electronics sector; still Electronics sector is much superior in all other competitiveness measures. The sector that shows a lower competitiveness level in terms of competitiveness measures is the Textiles and Garments sector. Its growth has recorded a negative figure in 2011-12. Other than labour productivity, this sector's competitiveness cannot be considered noteworthy.

8.2 Labour Standards

Labour standards in CSEZ have been analysed in detail in chapter 7. It is not easy to compare the same analysis with competitiveness in a rigorous manner in order to evaluate the relation between competitiveness and labour standards. For this, an attempt has been made to quantify the labour standards using scaling technique. This is done through the analysis of the responses of the employees on various aspects of labour standards. Hence, the responses of workers towards these aspects can be explored first.

8.2.1 Scaling of Labour Standards

Worker's responses towards various labour aspects are nothing but the satisfaction level of workers. The satisfaction level of workers is very important as it has a bearing up on staff turn-over, individual performance, productivity levels and

overall well-being of the workers. Satisfaction levels are influenced by the wages, working conditions, quality of work, fairness, relationship in the organisation, etc.

8.2.1.1 Wage and Other Working Conditions

The satisfaction level of the workers with regard to the working conditions can have a positive bearing up on the export competitiveness of the sectors in the Zone. An attempt is made to analyse working conditions in terms of wages, working hours, volume of work and job security.

Wages are among the most important working conditions and employment at the enterprise level. It represents a cost to the employer, but is a main source of income for the worker (www.ilo.org referred on June 2013). Wages are a determinant factor in workers' well-being. Considering its important role, workers are asked to indicate their satisfaction levels with regard to the monthly wages they draw. The results are reported in table 8.2.

Table 8.2 Percentage Distribution of Workers by Agreement on Satisfactory Wages Drawn

Sectors	Strongly Agree	Agree	Disagree	Strongly Disagree	Not At All
IT and ITES	19.1	57.4	13.2	8.8	1.5
Electronics Hardware	16.7	42.6	24.1	13	3.7
Engineering	10.8	48.6	13.5	21.6	5.4
Gem and Jewellery	22.6	64.5	12.9	-	-
Plastic and Rubber Products	3.6	32.1	28.6	28.6	7.1
Agro and Food	4.3	52.2	21.7	17.4	4.3
Services	15	50	10	20	5
Textiles and Garments	6.7	66.7	-	26.7	-

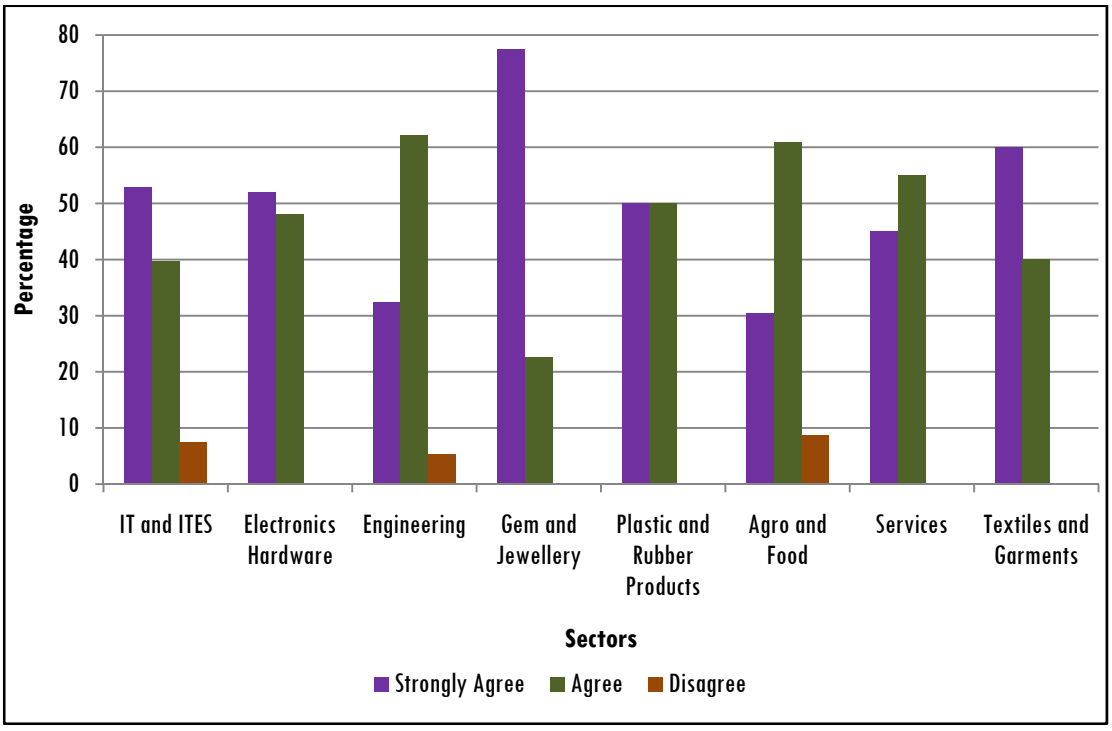
Source: Primary Survey

Generally, the workers in all the sectors are satisfied with the wages offered to them, except Plastic and Rubber Sector. The dissatisfaction of the workers in Plastic and Rubber Products sector is 64 per cent. It is also the sector where the wages have never crossed Rs.10,000. So naturally workers' dissatisfaction is to be expected. Gem and Jewellery sector is the sector with lowest dissatisfaction level (12.9%). To the irony, more than 80 per cent of the workers earn less than Rs 10,000. Considering their (poor) education and skill (acquired) level they accept the existing wage.

Textiles and Garments sector is the sector with 33 per cent of the workers having more than 10 years of service. Only 27 per cent of the workers of this sector are dissatisfied with the wage structure. Hence satisfaction with the wage system makes them continue in the service. In sector like IT and ITES and Service sectors, wage structure is comparatively better and fair, i.e., determined according to their skill level, education and years of service. So there is a general agreement of workers with the salary system in these sectors, at least among the permanent employees.

It is already reported in Chapter 7 (section 7.2) that the average regular working hour in the Zone is 8.7 hours. But companies function in OT and Shifts and the working time gets extended to 12-20 hours. Workers are asked to rate their satisfaction about the working hours.

Figure 8.1 Percentage Distribution of Workers by Agreement that Working Hours are as per Law



Source: Primary Survey

Generally, the workers are satisfied about their working hours. Only less than 10 per cent of the employees of IT and ITES, Engineering and Agro and Food sectors are dissatisfied with their working hours. Low level of dissatisfaction is due to the option for the workers to convert extra working hour into OT work and shifts, thus claiming a payment for it.

Along with wage and working hours, the 'volume of work' also has to be taken into account to analyse working conditions. Workers do have good opinion about the quality of work they do. As the production is for exports and the products have to meet international standards, it is with great precision and exactness that the work is done in all the sectors. But they are not satisfied with the volume of work they do. As they are bound to meet the targets they have to do work over and above their capacity. They get tired by the end of the day. When their pay structure does not match the effort they take, they become dissatisfied. This is very much obvious in the Agro and Food sector with 52 per cent of workers dissatisfied with volume of work. Workers in the Service (45%), Textiles and Garments (40%) and IT and ITES (35%) sectors also are discontented with the volume of work they do.

Table 8.3 Percentage Distribution of Workers by Agreement on Appropriate Volume of Work

Sectors	Strongly Agree	Agree	Disagree	Strongly Disagree
IT and ITES	13.2	51.5	27.9	7.4
Electronics Hardware	25.9	70.4	3.7	-
Engineering	18.9	70.3	10.8	-
Gem and Jewellery	45.2	54.8	-	-
Plastic and Rubber Products	17.9	71.4	-	10.7
Agro and Food	26.1	21.7	47.8	4.3
Services	15	40	40	5
Textiles and Garments	33.3	26.7	40	-

Source: Primary Survey

Job security is the next factor considered under working conditions. Workers belonging to all firms have apprehensions with respect to the tenure of job. Being private firms, the job security is limited even for permanent employees, least to mention about workers who have got appointed in temporary category. This is very well reflected in table 8.4. Job tenure is dependent on the performance of the employee. More than 50 per cent of the workers in all the sectors, except Engineering, Plastic and Textiles are in disagreement with regard to their job tenure.

Table 8.4 Percentage Distribution of Workers by Agreement on Availability of Job Security

Sectors	Strongly Agree	Agree	Disagree	Strongly Disagree	Not At All
IT and ITES	13.2	41.2	25	7.4	13.2
Electronics Hardware	29.6	33.3	7.4	3.7	25.9
Engineering	21.6	40.5	8.1	8.1	21.6
Gem and Jewellery	19.4	22.6	22.6	9.7	25.8
Plastic and Rubber Products	7.1	57.1	10.7	-	25
Agro and Food	17.4	43.5	13	4.3	21.7
Services	20	15	-	-	65
Textiles and Garments	13.3	66.7	20	-	-

Source: Primary Survey

Satisfaction level with respect to working conditions is rated. For this, wage is singled-out as evaluation criteria. The wages in the Zone have been rated on a five-point scale by collecting responses to whether they receive 'very high wage', 'high wage', 'moderate wage', 'low wage' , and 'very low wage'. Coincidently, it has been noticed that most of the workers with a wage more than Rs.20,000, 15,000-20,000, 10,000-15,000, 5,000-10,000, and less than 5,000 are in the above respective categories. They are given scores in descending order starting from five to one. Number of respondents under each category is taken as the weight and is multiplied with the respective scale. Sector-wise score obtained for wages is presented in table 8.5.

Table 8.5 Sector-wise Labour Standards (Wage) Score

Sectors	Scale					Total Score	Average Score
	1	2	3	4	5		
IT and ITES	1	15	9	11	32	262	3.9
Electronics Hardware	17	25	2	10	0	113	2.09
Engineering	1	14	16	6	1	105	2.83
Gem and Jewellery	2	23	3	1	2	71	2.29
Plastic and Rubber Products	3	25	0	0	0	53	1.89
Agro and Food	1	19	1	1	1	51	2.2
Services	0	1	4	8	7	81	4.05
Textiles and Garments	6	3	1	5	0	35	2.3

Source: Computed from primary data
Total Score: Sum of (no. of respondents * scale)
Average Score: Total Score / No. of responses

The labour standard in terms of wages is the highest in the service sector with an average score of 4.05. It is followed by the IT and ITES sector. The average score of wages is at a modest level for other sectors. The lowest score is for Plastic and Rubber sector where the wages do not rise above Rs.10,000 for any category of workers.

8.2.1.2 Absence of Discrimination

Gender discrimination in wage is another factor considered. Wage discrimination is the situation of different wage packet for same type of jobs. Table 8.6 makes it clear that there is agreement among most of the workers in the Zone about the parity in wages paid to men and women. Discrimination is reported in all sectors except IT and ITES and Services. But, only very few workers have commented about the unequal wages paid in each sector. Workers in Gem and Jewellery and Agro and Food are largely female workers. So the discrimination is reported only by less than 5 per cent.

Table 8.6 Percentage Distribution of Workers by Agreement on Absence of Gender-discrimination in Wages Paid

Sectors	Strongly Agree	Agree	Disagree	Strongly Disagree	Not At All
IT and ITES	39.7	60.3	-	-	-
Electronics Hardware	18.5	68.5	7.4	3.7	1.9
Engineering	18.9	48.6	16.2	10.8	5.4
Gem and Jewellery	32.3	64.5	3.2	-	-
Plastic and Rubber Products	10.7	75	-	14.3	-
Agro and Food	17.4	78.3	4.3	-	-
Services	80	20	-	-	-
Textiles and Garments	33.3	46.7	-	6.7	13.3

Source: Primary Survey

Workers of Engineering and Plastic and Rubber have reported the greatest discrimination (32% and 20% respectively). In the Engineering sector and Electronics Hardware sector, female workers are paid Rs.400 to Rs.2,000 lesser salary in a month, compared to their male counterparts. Workers in the Plastic and Rubber and Textiles and Garments sectors also pay Rs.2,000 less for their women. Agro and Food sector pays Rs.400 less for their women workers.

The agreement of the workers with respect to the absence of discrimination in wages paid between males and females is rated. Absence of discrimination is directly represented on the five-point scale. The respondents' agreement of absence of discrimination is categorised as 'Strongly Agree', 'Agree', 'Disagree', 'Strongly Disagree', and 'Not at All', which are respectively given 5, 4, 3, 2, and 1 scale. The average score obtained for each sector is shown in table 8.7.

Table 8.7 Sector-wise Labour Standards (Absence of Discrimination) Score

Sectors	Scale					Total Score	Average Score
	1	2	3	4	5		
IT and ITES	0	0	0	41	27	299	4.4
Electronics Hardware	1	2	4	37	10	215	3.98
Engineering	2	4	6	18	7	135	3.64
Gem and Jewellery	0	0	1	20	10	133	4.29
Plastic and Rubber Products	0	4	0	21	3	107	3.82
Agro and Food	0	0	1	18	4	95	4.13
Services	0	0	0	4	16	96	4.8
Textiles and Garments	2	1	0	7	5	57	3.8

Source: Computed from primary data
Total Score: Sum of (no. of respondents * scale)
Average Score: Total Score / No. of responses

It is understood that as only a few workers have registered their dissatisfaction with respect to absence of gender equality in wage payment, the average score for all the sectors is nearly four or greater than four in all the sectors.

8.2.1.3 Working Environment

Promotion, training, ventilation and cleanliness, medical facility, canteen facility, crèche facility, and attitude of the management towards workers are the factors considered here.

The satisfaction level of workers relating to promotion plays an important role and hence it is included in the analysis. Promotion provides positive incentives for workers to perform better in their work. But promotion prospects are very sparsely available for workers in the Zone. This is known from table 8.8. Workers of firms in the IT and ITES sector (80%) and Service sector (70%) are satisfied with promotion prospects available in their companies. Promotion chances for workers in other

sectors are very less. About 50 per cent of the workers in all the sectors other than IT and ITES and Service sectors lack chances of promotion. Firms are also reluctant in giving promotions as they have to provide workers with better salary and other perks for every promoted individual. The consequence of such a strategy is that individuals, in the absence of promotions, never stay for long in the firm.

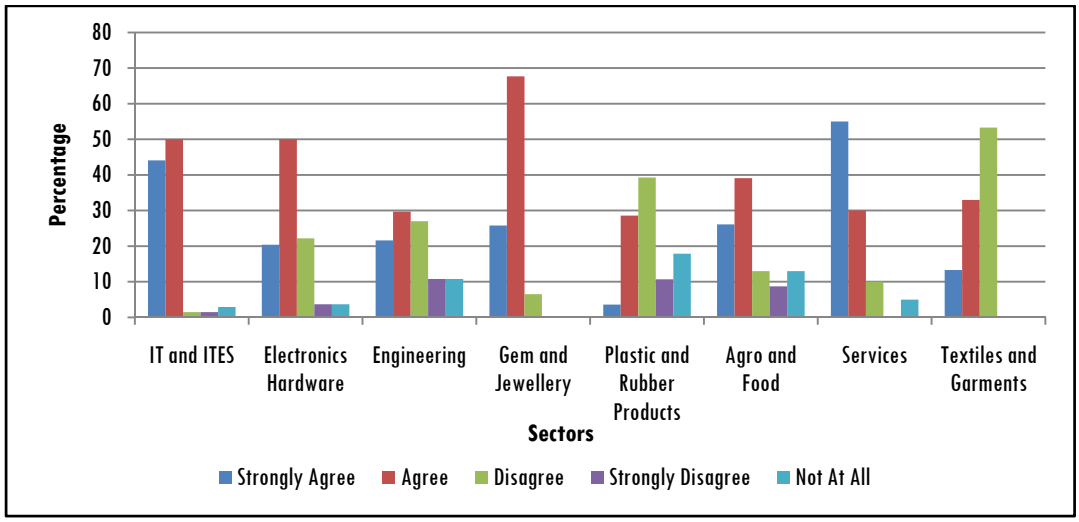
Table 8.8 Percentage Distribution of Workers by Agreement on Availability of Promotion Prospects

Sectors	Strongly Agree	Agree	Disagree	Strongly Disagree	Not At All
IT and ITES	27.9	52.9	10.3	4.4	4.4
Electronics Hardware	1.9	42.6	11.1	16.7	27.8
Engineering	10.8	32.4	10.8	13.5	32.4
Gem and Jewellery	19.4	29	41.9	6.5	3.2
Plastic and Rubber Products	3.6	28.6	25.0	10.7	32.1
Agro and Food	13	39.1	17.4	8.7	21.7
Services	40	30	30	-	-
Textiles and Garments	13.3	26.7	40	6.7	13.3

Source: Primary Survey

The promotion is followed by analysis of satisfaction regarding training. When a worker joins the firm, training on the work to be done is immediately provided. When something new gets introduced in the company, then also training is given. Dissatisfaction of workers is with the absence of regular training. Skill development programmes are never initiated by the management in most of the firms.

Figure 8.2 Percentage Distribution of Workers by Agreement on Availability of Regular Training



Source: Primary Survey

The firms in Plastic and Rubber, and Textiles and Garments have comparatively lesser training workshops. Sixty eight per cent of the workers in Plastic and Rubber, 53 per cent of the workers in Textiles and 49 per cent in Engineering are not satisfied with the training facilities given by their firms. When the management too is aware that the workers never stay for long number of years in the company, they abstain from regular training workshops to the employees. It is understood from the satisfaction of employees of IT and ITES sector and Gem and Jewellery sector in figure 8.2 that these sectors provide adequate training to their employees.

Equally important factor is the ventilation and cleanliness of the workplace. Nature of the production necessitates computerisation, mechanisation, air-conditioning, ventilation facilities, room dimensions and space, lighting, etc. in the units; and the workers are pleased with them. Cleaning and removal of wastes are regularly done. Sanitary conveniences, washing facilities are also adequately provided. However, in the Electronics Hardware and Plastic and Rubber sectors, the workers do complain about the presence of chemicals in the atmosphere which often create lung problems for them. In Plastic and Rubber sector, 54 per cent have registered their dissatisfaction about the absence of proper cleaning mechanism. Agro and Food firms use 'masalas' and curry powders and the smell lingers in the atmosphere causing discomfort for the workers.

Table 8.9 Percentage Distribution of Workers by Agreement on Adequate Ventilation and Cleanliness of the Workplace

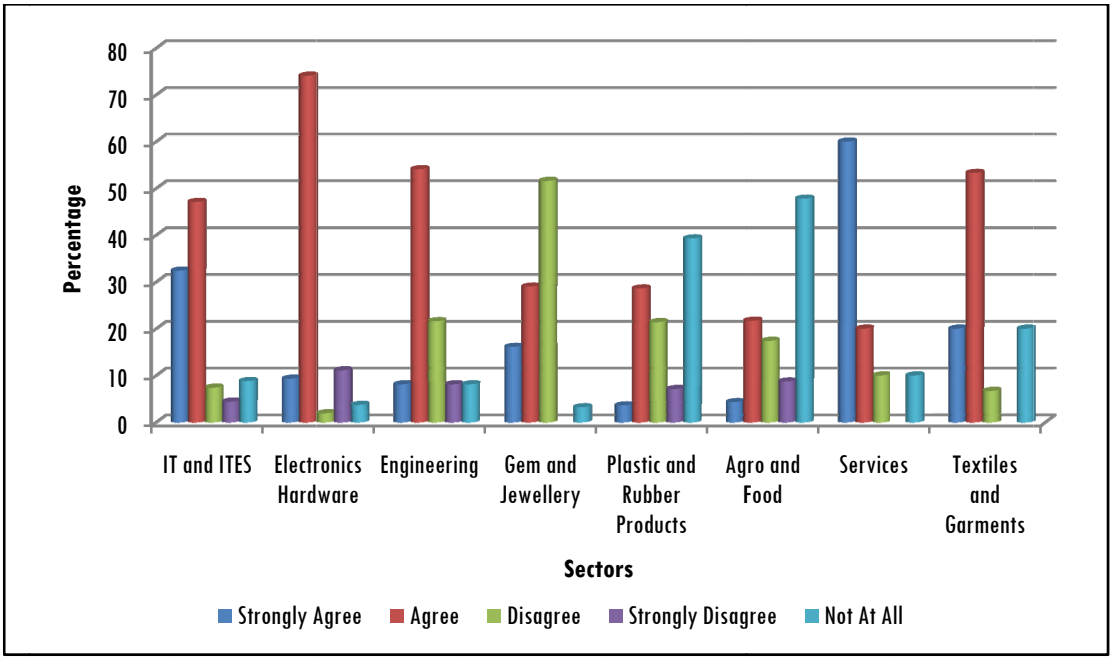
Sectors	Strongly Agree	Agree	Disagree	Not At All
IT and ITES	75	25	-	-
Electronics Hardware	42.6	53.7	3.7	-
Engineering	40.5	59.5	-	-
Gem and Jewellery	83.9	16.1	-	-
Plastic and Rubber Products	3.6	42.9	25	28.6
Agro and Food	39.1	52.2	8.7	-
Services	100	-	-	-
Textiles and Garments	73.3	26.7	-	-

Source: Primary Survey

Medical facility is another factor considered. Workers of sectors like Electronics Hardware, Engineering, where chances of accidents are more, have rated

the safety standards to meet accidents to be good. Workers are immediately attended in the event of an accident. Medical expenses are met either partly by the company or through ESI facility. Firms in the IT and ITES sector and Service sector do not have an accident-prone work structure. So their workers have less dissatisfaction about the medical aid available. Eighty per cent of the workers in these sectors are satisfied with the medical facility available. But more than 60 per cent of the workers of Gem and Jewellery, Plastic and Rubber and Agro and Food have registered their dissatisfaction with the medical aid available to them. The Zone even lacks an ambulance facility in order to attend to an emergency.

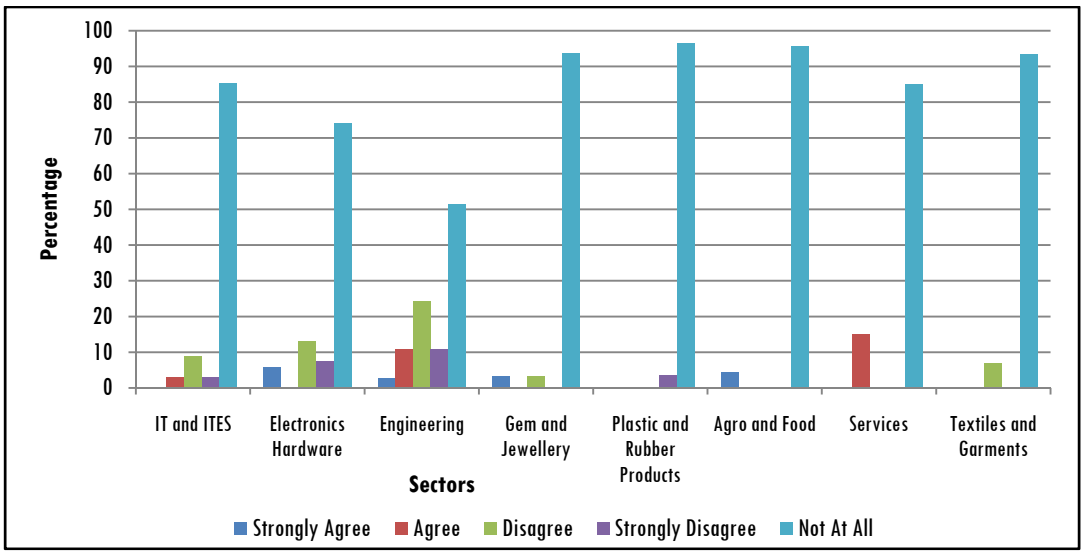
Figure 8.3 Percentage Distribution of Workers by Agreement on Adequate Medical Facility



Source: Primary Survey

The absence of crèche facility inside the Zone is also a serious worry considering the number of young women folks who work in the Zone. After repeated demands from part of all the female employees, a crèche has started functioning recently. But it needs to be expanded to accommodate the needs of all the women employees in the Zone. The dissatisfaction registered with the non-availability of proper crèche is very obvious in figure 8.4

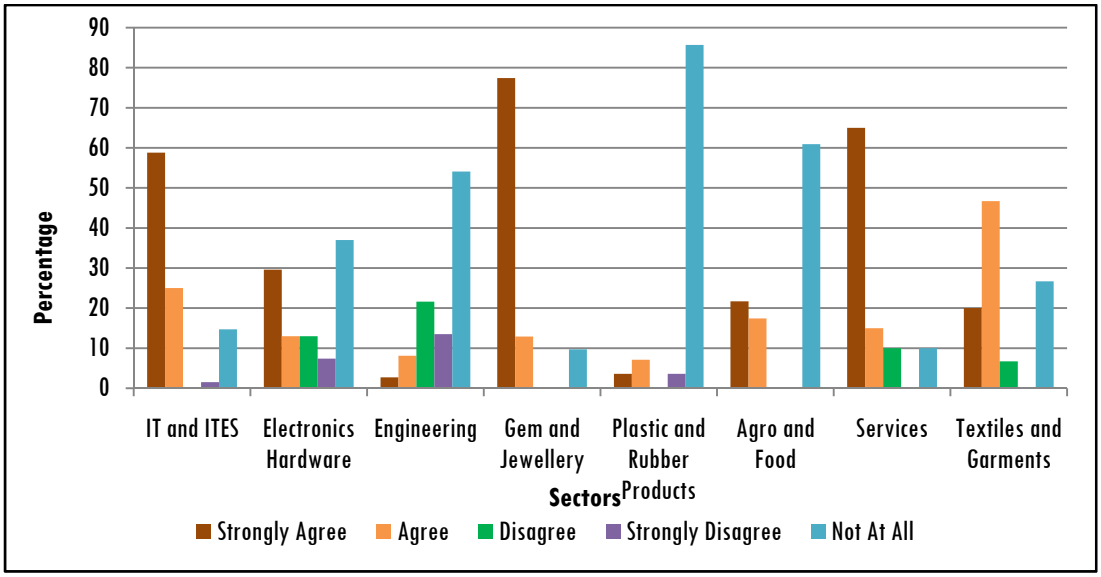
Figure 8.4 Percentage Distribution of Workers by Agreement on Availability of Creche Faciltiy



Source: Primary Survey

Inadequate canteen facility is another area of concern. The Zone as a whole does not have a common canteen. However, some firms in some sector do provide snacks and other refreshments for their employees, but at a price. But those taking night shifts are provided with food free of cost. More than 80 per cent of the workers in Plastic and Rubber sector have no canteen, 89 per cent in Engineering sector do not have adequate canteen facility. However, in Gem and Jewellery sector, only 10 per cent are dissatisfied with the available canteen facility.

Figure 8.5 Percentage Distribution of Workers by Agreement on Availability of Adequate Canteen Facility

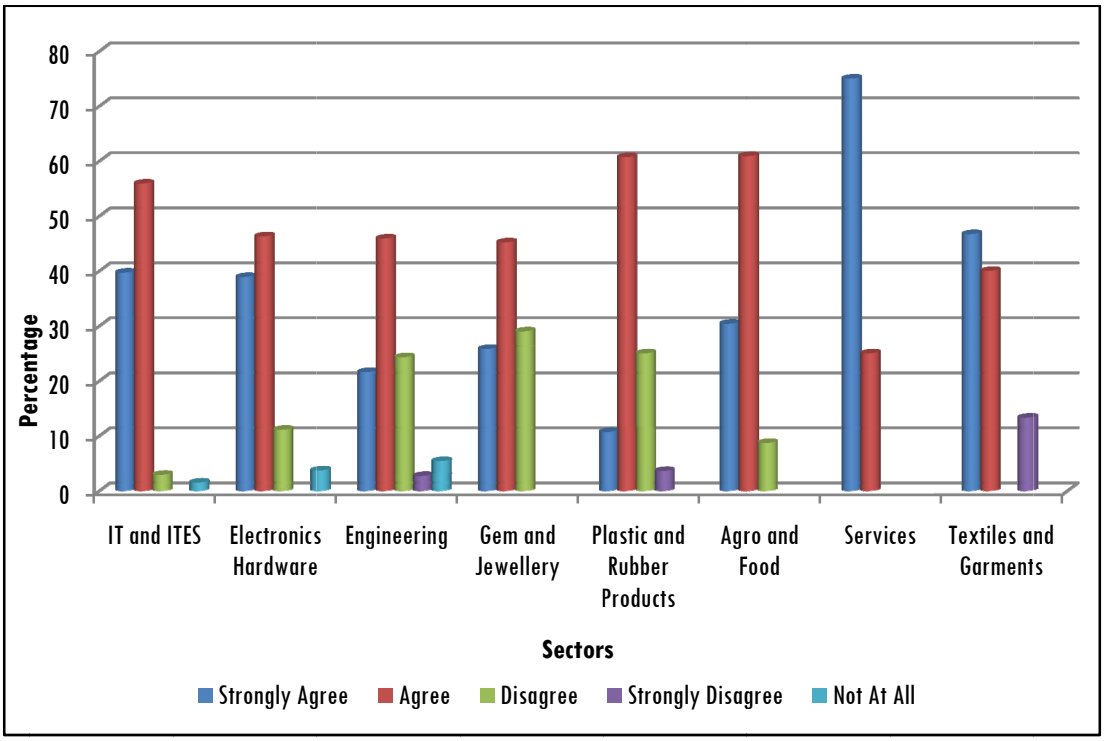


Source: Primary Survey

Figure 8.5 shows that except the IT and ITES, Service and Gem and Jewellery sectors, all other sectors have dissatisfaction with the absence of adequate canteen facility in their firms.

The attitude of management towards workers is an important factor to be considered for analysing the satisfaction level of workers relating to labour standards. Figure 8.6 presents data relating to this. The workers regard the attitude of the management as very cooperative. They have a good interaction with the management, but usually through the reporting manager or the trade union. They also find the reporting manager's attitude to be very approachable and comfortable. In all the sectors, less than 15 per cent have registered their dissatisfaction with management of the firm.

Figure 8.6 Percentage Distribution of Workers by Agreement on Management's Cooperative Attitude



Source: Primary Survey

The working environment is rated on the five-point scale and Total Score and Average Score of each variable of labour standard is derived. Consolidated score for the working environment is presented in table 8.10

Table 8.10 Consolidated Scores of Working Environment

	TS/AS	IT and ITES	Electronics Hardware	Engineering	Gem and Jewellery	Plastic and Rubber Products	Agro and Food	Services	Textiles and Garments
A	TS	269	148	102	110	73	72	82	48
	AS	3.96	2.74	2.76	3.55	2.61	3.13	4.10	3.20
B	TS	293	205	126	130	81	82	86	54
	AS	4.31	3.80	3.41	4.19	2.89	3.57	4.30	3.60
C	TS	323	237	163	150	82	99	100	71
	AS	4.8	4.4	4.4	4.8	2.9	4.3	5.0	4.7
D	TS	265	202	128	110	70	52	84	53
	AS	3.9	3.7	3.5	3.5	2.5	2.3	4.2	3.5
E	TS	88	84	75	37	29	27	29	17
	AS	1.3	1.6	2.0	1.2	1.0	1.2	1.5	1.1
F	TS	280	157	71	139	39	55	85	50
	AS	4.1	2.9	1.9	4.5	1.4	2.4	4.3	3.3
G	TS	294	225	139	123	106	97	95	63
	AS	4.3	4.2	3.8	4.0	3.8	4.2	4.8	4.2

Source: Computed from primary data
Average Score: Total Score / No. of responses

A - Availability of Promotion Prospects B - Availability of Regular Training
C - Ventilation and Cleanliness D – Availability of Medical Facility
E- Availability of Crèche F- Availability of Canteen
G - Managements' Attitude TS – Total Score, AS – Average Score

Regarding promotion prospects and availability of regular training, workers of the IT and ITES and Service sectors have registered the highest average scores of labour standards. Promotion chances and training are sparsely available for the employees of Plastic and Rubber sector, with the lowest average score of 2.61 and 2.89 respectively. The employees of Engineering and Electronics Hardware sector too are not better off with regard to chances of promotion. Plastic and Rubber sector has the least score of 2.9 for availability of ventilation and cleanliness. Even the sectors prone to pollution, Electronics Hardware and Engineering sectors too have the average score of 4.4, showing the company's efficiency in managing pollutants. Only the Engineering sector and Electronics Hardware sector are prone to work-related accidents. The average score for these sectors are 3.7 and 3.5, conveying that the firms have mechanisms to deal with work-related accidents. Workers' dissatisfaction with respect to absence of crèche facility is visible in the scores for all the sectors.

Inadequate canteen facility is an issue for the sectors of Engineering, Plastic and Rubber and Agro and Food sectors. Workers of all the sectors are satisfied with the attitude of management that all the sectors register good rating for it.

Analysis of workers' satisfaction level with respect to working environment reveals that, generally, IT and ITES and Services sectors, along with Gem and Jewellery have comparatively better average scores of labour standards(promotion, training , medical aid and cleanliness). The sector with low average score for the labour aspects used to assess working environment is Plastic and Rubber sector. As the factors considered in working environment are not covered intensively in ILO labour standards, they are not accommodated in the analysis.

8.2.1.4 Social Security Measures

Social security measures are the facilities like provident fund, gratuity, bonus, and insurance like ESI. When all these four facilities are offered to the workers, they are given five points. Those with three schemes, two schemes, one scheme and no scheme are respectively given 4, 3, 2 and 1 point. The number of respondents in each sector receiving the corresponding package of social security measures is given respective scales.

Table 8.11 Sector-wise Labour Standards (Social Security Measures) Score

Sectors	Scale					Total Score	Average Score
	1	2	3	4	5		
IT and ITES	0	13	7	7	41	280	4.1
Electronics Hardware	0	17	26	0	11	167	3.09
Engineering	0	4	28	0	5	117	3.16
Gem and Jewellery	0	23	5	0	3	76	2.45
Plastic and Rubber Products	0	7	21	0	0	77	2.75
Agro and Food	4	7	11	0	1	56	2.4
Services	20	0	0	0	0	20	1
Textiles and Garments	0	2	5	2	6	57	3.8

Source: Computed from primary data
Total Score: Sum of (no. of respondents * scale)
Average Score: Total Score / No. of responses

The IT and ITES sector, which offers social security measures irrespective of the workers' nature of employment receives the highest score of 4.1 (see section

7.2.3). The firm in the service sector, as mentioned earlier, is managed by its foreign parent company. As per the norms followed by the parent company, the workers in this sector receive only wages and no social security measures. So it has the average score of one.

8.2.1.5 Trade Union Membership

The percentage of workers with trade union membership (see section 7.3) is also rated on five-point scale. The respective choice variables are, no trade union, limited trade union involvement (i.e. less than 25 per cent workers are union members), moderate trade union involvement (i.e. 25-50 per cent of workers are union members), high trade union involvement (i.e. 50-75 per cent of workers are union members), and very high trade union involvement (i.e. more than 75 per cent of workers are union members). They were given 1, 2, 3, 4, and 5 scores respectively.

Table 8.12 Sector-wise Labour Standards (Trade Union Membership) Score

Sectors	Scale					Average Score
	1	2	3	4	5	
IT and ITES	Nil	-	-	-	-	1
Electronics Hardware	-	20.4		-	-	2
Engineering	-	-	-	56.8	-	4
Gem and Jewellery	Nil	-	-	-	-	1
Plastic and Rubber Products	-	-	-	57.1	-	4
Agro and Food	-	4.3	-	-	-	2
Services	Nil	-	-	-	-	1
Textiles and Garments	Nil	-	-	-	-	1

Source: Computed from primary data

As there are only two possible responses, that is, positive or negative affirmation, the five-point scale is directly applied based on the percentage of positive affirmation in each sector.

The sectors without membership for its workers receive the lowest average score of one. Plastic and Rubber sector receives the highest average score of four with more than half of its workers having trade union participation. The least scale is for Agro and Food sector with only 4.3 per cent of its workers being members.

8.2.2 Consolidated Scores for Labour Standards

In section 8.2.1, average score of labour standards have been derived from the satisfaction level registered by workers for each labour aspect- wages and working conditions, absence of discrimination, working environment, social security measures and trade union membership. From these, four important labour standards which have immediate influence on the welfare of the workers are selected. They are: wage, absence of discrimination, social security measures and trade union membership. For each of these selected labour standards, Combined Average Score is estimated. This will provide a quantitative approximation of the labour standards provided in each sector, which is necessary for its comparison with competitiveness indicators.

The Combined Average Score (CAS) for each sector is given in table 8.13. It is the simple average of the four averages score of labour standards calculated for each sector. The sector with CAS of 0-1.4 is rated as 'Very Low' sector , with CAS of 1.5 to 2.4 as 'Low', with CAS of 2.5 to 3.4 as 'Moderate', with CAS of 3.5 to 4.4 as 'High', and with CAS score of above 4.5 gets the rating 'Very High'.

Table 8.13 Sector-wise Scores of Labour Standards

Labour Standards	IT and ITES	Electronics Hardware	Engineering	Gem and Jewellery	Plastic and Rubber	Agro and Food	Services	Textiles
Wage	3.9	2.09	2.83	2.29	1.89	2.2	4.05	2.3
Absence of Discrimination	4.4	3.98	3.64	4.29	3.82	4.13	4.8	3.8
Social Security Measures	4.1	3.09	3.16	2.45	2.75	2.4	1	3.8
Trade Union Participation	1	2	4	1	4	2	1	1
Combined Average Score (CAS)	3.35	2.79	3.4	2.50	3.1	2.68	2.71	2.72
Rating of CAS	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate

Source: Computed from primary data

The Combined Average Score (CAS) of labour standards found out for the sectors reveals that all the sectors have moderately rated working conditions. CAS ranges between 2.50 and 3.4, showing variations in the moderately rated labour standards provided in each sector. In the light of various indicators that reveal the competitiveness position of sectors it is to be analysed further how far the labour standards, in terms of CAS, are sacrificed or upheld for gaining export competitiveness.

8.3 Labour Standards and Competitiveness

Export competitiveness of a firm is influenced by number of factors, one among them being labour standards. It is already understood from chapter 6, that all the sectors in the Zone have improved their competitiveness position over the years, though in varying degrees. The four important labour standards quantified on the basis of CAS is analysed and compared with the competitiveness of the sectors. This will throw some light on the relationship which exists between them in CSEZ.

8.3.1 IT and ITES Sector

At the outset, the two primary indicators of competitiveness, ICI and RCAI for the sector are analysed. When ICI is employed, IT and ITES is second among all sectors in competitive position in the Zone. But RCAI does not provide such a glossy picture. There are other supporting indicators like percentage annual growth rate of exports, share of sectors in total CSEZ exports (2nd position) showing high competitiveness for the sector. Though the labour productivity in terms of output-employment ratio reported for this sector is lowest in the Zone, it also has to be considered when analysing the competitiveness. As a result of labour productivity and growth of exports, the sector has been able to maintain high ICI too. Hence, generally, the sector can be said to be having high competitiveness.

Table 8.14 Competitiveness and Labour Standards (IT and ITES)

(a)

Competitiveness Indicators	Results
Percentage Annual Growth Rate of Exports	51.9 (2)
Percentage Share in Total CSEZ Exports	1.34
Output-Employment Ratio	7.48
Industrial Competitiveness Index	0.70 (2)
Revealed Comparative Advantage Index	0.07

(b)

Labour Standards	Rating
Wage	High
Absence of Discrimination	High
Social Security Measures	High
Trade Union Participation	Very Low (Nil)
Combined Average Score	**Moderate**

Source: Computed from primary data
Figures in bracket show ranks

'Moderate' labour standards (CAS at 'moderate' level) are reported in the IT and ITES sector as against high competitiveness. The labour standards that have

helped the sector to gain competitiveness are absence of discrimination, social security measures and wage rate. Wage level is reported to be 'high', and it is better compared to the Zone standards. This modern sector with many companies with modern employment practices never discriminates between professionally qualified employees on the basis of gender in the payments of wages. So is the case with social security measures. Even the contract workers in the Zone are offered social security measures like PF, gratuity, incentives, life insurance etc. Trade Union participation is miserably poor which has adversely affected the CAS of labour standards, making it 'moderate' for this sector. When labour aspects are singled-out, among many factors affecting competitiveness, it can be argued that labour standards provided in the sector have contributed to its competitiveness.

The conclusion is that a slightly better competitiveness is accompanied by moderate labour standards, much lower than what is expected. It means that competitiveness, whatever the sector has, is maintained at the cost of labour standards at least to some extent.

8.3.2 Electronics Hardware Sector

The competitiveness of this sector is understood from ICI which is in fourth position in the Zone and comparatively better RCAI. RCAI is less than unity showing lower competitiveness compared to Indian Electronics Hardware sector. When compared to other sectors' RCAI in the Zone, the index is noteworthy. Percentage share of this sector's exports in total Zone-exports has recorded a lower figure of 1.68 per cent. But excluding the Gem and Jewellery sector and considering other sectors' share to Zone-exports, the sector can be regarded as competitive. Professionally skilled labour force of this sector is very productive and hard working, that the output-employment ratio is 23.06. High productivity of the skilled workforce and high share in Zone-exports have resulted in a better RCAI. The sector can be regarded as competitive in terms of ICI and RCAI supported by percentage share and output-employment ratio. Only percentage annual growth rate of exports shows a lower ranking among other sectors.

Table 8.15 Competitiveness and Labour Standards (Electronics Hardware)

(a)

Competitiveness Indicators	Results
Percentage Annual Growth Rate of Exports	8.1 (7)
Percentage Share in Total CSEZ Exports	1.68
Output-Employment Rati	23.06
Industrial Competitiveness Index	0.66 (4)
Revealed Comparative Advantage Index	0.69

(b)

Labour Standards	Rating
Wage	Low
Absence of Discrimination	High
Social Security Measures	Moderate
Trade Union Participation	Low
Combined Average Score	**Moderate**

Source: Computed from primary data
Figures in bracket show ranks

The CAS of labour standards is 'moderate' for this sector. But its score is very low at 2.79. Considering the individual labour aspects, only absence of discrimination gets a 'high' rating for this sector with modern employment practices. Observing table 8.13, important labour standard of wage also has a poor rating of 2.09, but after Plastic and Rubber sector. The workers are also prevented from joining trade union. 'Low' wage and 'low' trade union participation and 'moderately' rated social security measures have made the CAS 'moderate'.

When important labour standards like wage show poor rating and considering the high competitiveness maintained by the sector in the Zone, it is to be concluded that the sector is not providing a due share of high competitiveness in the form of labour standards to its workers. In the name of competitiveness, labour standards are sacrificed in the Electronics Hardware sector.

8.3.3 Engineering Sector

In terms of ICI, Engineering sector is maintaining its competitive position at four in the Zone. But the RCAI for the sector is not impressive. When analysed whether high competitiveness of ICI is supported by other indicators, the situation is rather depressing. The sector records a low annual growth rate of exports and share of exports. Only the output-employment ratio shows a better picture, but it is only an average score compared to the productivity of other sectors. So, the competitive position of the sector is indicated only by ICI and an average output-employment ratio. So the sector is comparatively weaker in terms of competitiveness.

Table 8.16 Competitiveness and Labour Standards (Engineering)

(a)

Competitiveness Indicators	Results
Percentage Annual Growth Rate of Exports	16.5 (6)
Percentage Share in Total CSEZ Exports	0.38
Output-Employment Ratio	14.10
Industrial Competitiveness Index	0.66 (4)
Revealed Comparative Advantage Index	0.02

(b)

Labour Standards	Rating
Wage	Moderate
Absence of Discrimination	High
Social Security Measures	Moderate
Trade Union Participation	High
Combined Average Score	**Moderate**

Source: Computed from primary data
Figures in bracket show ranks

The CAS of labour standards for this sector in the Zone is 'moderate'. Individual labour standards are all rated at 'high' and 'moderate' levels. Absence of discrimination in payment of wages is reported to be high in this sector. Trade union participation is also getting a 'high' rating as 56 per cent of the workers are enrolled. All these have rated the Combined Average Score of labour standards the highest in the Zone at 3.4. However, despite having all the labour aspects measured at a better level, the competitiveness of the sector is lower.

It can only be concluded that comparatively better labour standards provided in the sector has not been able to guarantee higher competitiveness. Conversely, 'moderate' scores recorded for important labour standards of wage and social security measures have de-motivated the workers from taking its competitiveness to higher levels.

8.3.4. Gem and Jewellery sector.

Gem and Jewellery sector in the Zone has been registering a noteworthy level of competitiveness. The RCA Index calculated for the sectors shows that the sector with maximum competitive advantage is Gem and Jewellery. It also shows the contribution made by the Gem and Jewellery sector of the Zone to all-India exports. ICI shows only a lower ranking of sixth position in the Zone, which is purely due to mathematical reasons (see section 6.5). The sector is having the highest percentage annual growth of exports. The percentage share of this sector in the Zone is also much above all the other sectors. The sector shows very high labour productivity in terms of

output-employment ratio. Thus all the measures, except ICI confirm very high competitiveness for this sector.

Table 8.17 Competitiveness and Labour Standards (Gem and Jewellery)

(a)

Competitiveness Indicators	Results
Percentage Annual Growth Rate of Exports	53.5 (1)
Percentage Share in Total CSEZ Exports	94.2
Output-Employment Ratio	20,043.09
Industrial Competitiveness Index	0.52 (6)
Revealed Comparative Advantage Index	7.60

(b)

Labour Standards	Rating
Wage	Low
Absence of Discrimination	High
Social Security Measures	Moderate
Trade Union Participation	Very Low (Nil)
Combined Average Score	**Moderate**

Source: Computed from primary data
Figures in bracket show ranks

High competitiveness reported in the sector is to be analysed in the background of the labour standards provided to the workers. As against the 'high' competitiveness, the CAS is the lowest (2.5) in the Zone at 'moderate' level. Wages are 'low' in this sector which is largely composed of women unorganised workers. Social security measures for the workers who do meticulous work is reported to be at 'moderate' level. It is the lowest in the Zone with score of 2.45. Trade union participation in this sector is also reported to be nil. Absence of discrimination on the basis of gender gets 'high' rating, as females form higher proportion of total workforce and male workers are very few in number.

As the competitiveness maintained in the sector is very high and the labour standards get a very low score, it can be understood that the labour standards are compromised in the sector. When the high competitiveness enjoyed by the sector is studied with respect to the poor labour standards enjoyed by the sector, the notion that labour standards are poor in the sector gets proved.

8.3.5 Plastic and Rubber Products

The competitiveness position enjoyed by the sector is indicated by ICI in third position in the Zone. RCAI is lower than unity, but better compared to other sectors' RCAI. These two competitiveness indicators are supported by high percentage annual growth rate of exports and high output-employment ratio. The increase in output-

employment ratio has contributed to high productivity. Less-skilled labourers in the sector work for the firm by enhancing their productivity and ensuring growth of exports. Growth of exports and labour productivity together took ICI to third rank in the Zone. Only the percentage share of exports in the Zone exports is low showing its lower scale of operation. But, high competitiveness is validated by all the other measures.

Table 8.18 Competitiveness and Labour Standards (Plastic and Rubber)

(a)

Competitiveness Indicators	Results
Percentage Annual Growth Rate of Exports	38.8 (3)
Percentage Share in Total CSEZ Exports	0.26
Output-Employment Ratio	19.77
Industrial Competitiveness Index	0.69 (3)
Revealed Comparative Advantage Index	0.11

(b)

Labour Standards	Rating
Wage	Low
Absence of Discrimination	High
Social Security Measures	Moderate
Trade Union Participation	High
Combined Average Score	**Moderate**

Source: Computed from primary data
Figures in bracket show ranks

CAS, though at 'moderate' level is reported to be 3.1. Absence of discrimination and trade union participation rated at 'high' level have contributed to gaining competitiveness. Discrimination in the payment of wages is present in this sector too, but only 14 per cent, which has rated this indicator at 'high' level. Moreover, trade union participation is indicated to be the highest for the sector. But the most important labour standard of wage is 'low' for this sector, the lowest in the Zone with a score of 1.89.

The Plastic and Rubber sector confirms very high level of competitiveness. The 'moderate' labour standards provided in the sector definitely have helped the sector to gain in competitiveness. But considering the lower wages paid in this sector it should be affirmed that competitiveness could have been higher if the wages were provided at a higher level.

8.3.6 Agro and Food Sector

Agro and Food sector is first among all sectors in competitive position in the Zone when ICI is employed. But its RCAI is quite depressing showing lower share for this sector in India's exports. Other indicators showing high rating are percentage

annual growth rate of exports and output-employment ratio. Growth of exports and higher labour productivity have helped the ICI to occupy the first position of competitiveness in the Zone. This has but has not benefitted the sector to increase its share of exports in the Zone.

Table 8.19 Competitiveness and Labour Standards (Agro and Food)

(a)

Competitiveness Indicators	Results
Percentage Annual Growth Rate of Exports	30.4 (4)
Percentage Share in Total CSEZ Exports	0.54
Output-Employment Ratio	28.82
Industrial Competitiveness Index	0.75 (1)
Revealed Comparative Advantage Index	0.07

(b)

Labour Standards	Rating
Wage	Low
Absence of Discrimination	High
Social Security Measures	Low
Trade Union Participation	Low
Combined Average Score	**Moderate**

Source: Computed from primary data
Figures in bracket show ranks

CAS of labour standards is only 'moderate', with all the labour factors, except absence of discrimination, at 'low' level. This traditional sector with less qualified workers does not discriminate in the payment of wages, which has rated absence of discrimination to 'high' level. The 'low' rating for other labour aspects has made the CAS at 2.68, the lowest in the Zone after Gem and Jewellery sector. So there is massive sacrifice of labour standards in this sector, which is also composed largely of females. Thus the combined effect of important labour standards of wage, social security measures and trade union participation have made CAS 'moderate' and have prevented the competitiveness from reaching higher levels.

8.3.7 Services

The share of Service sector is rather small in the Zone, with respect to number of firms, employees, exports as well as number of years of operation. The competitiveness of this new entrant is poor in terms of ICI. Output-employment ratio, though small compared to other sectors, is to be rated better when considering it's the absolute value. As this sector entered the Zone in the year 2007, it cannot be expected to maintain a higher share of exports. All the competitiveness indicators recorded are rather low. Competitiveness for this sector is worth mentioning only in terms growth of exports.

Table 8.20 Competitiveness and Labour Standards (Services)

(a)

Competitiveness Indicators	Results
Percentage Annual Growth Rate of Exports	26.9 (5)
Percentage Share in Total CSEZ Exports	0.03
Output-Employment Ratio	8.51
Industrial Competitiveness Index	0.27 (7)
Revealed Comparative Advantage Index	-

(b)

Labour Standards	Rating
Wage	High
Absence of Discrimination	Very High
Social Security Measures	Very Low (Nil)
Trade Union Participation	Very Low (Nil)
Combined Average Score	**Moderate**

Source: Computed from primary data
Figures in bracket show ranks

CAS of labour standards too is rated at 'moderate' level. Wage is reported to be at 'high' level and absence of discrimination at 'very high' level. This sector with modern management practices pays high wage to its workers. Discrimination in the payment of wages is also lowest in the sector. But these two highly rated labour standards have had no effect in maintaining competitiveness of the sector. The foreign firm works according to their international policies and provides no social security measures to its employees. The management also prevents trade union participation. It is to be concluded that 'moderate' CAS has not helped the sector to improve the confidence of employees to work to gain productivity, exports and ICI.

8.3.8 Textiles and Garments

The competitiveness maintained by the Textiles and Garments sector is rather low. The competitiveness indicators of ICI and RCAI show lower ranking of fifth position and a score of 0.06 respectively. Comparatively better indicator is the output-employment ratio. In fact, percentage annual growth rate of exports exhibits a negative figure for the year 2011-12 and the percentage share is also lower.

Table 8.21 Competitiveness and Labour Standards (Textiles and Garments)

(a)

Competitiveness Indicators	Results
Percentage Annual Growth Rate of Exports	-22.4 (8)
Percentage Share in Total CSEZ Exports	0.46
Output-Employment Ratio	12.06
Industrial Competitiveness Index	0.63 (5)
Revealed Comparative Advantage Index	0.06

(b)

Labour Standards	Rating
Wage	Low
Absence of Discrimination	High
Social Security Measures	High
Trade Union Participation	Very Low (Nil)
Combined Average Score	**Moderate**

Source: Computed from primary data
Figures in bracket show ranks

As against lower competitiveness, CAS is rated 'moderate'. Absence of discrimination and social security measures are rated 'high' making labourers maintain their productivity. This has enabled the sector to maintain its ICI at least in the fifth position in the Zone. It is the wage rate that is rated at the moderate level that is de-motivating the workers from raising productivity. Added to this, the trade union participation is also nil. All these factors have led to poor output level and thus lower share for this sector in the Zone.

It can be concluded that, considering lower competitiveness, labour standards are slightly better for the sector. Unsatisfactory level of competitiveness should be interpreted as the result of 'moderate' level of labour standards, especially the 'low' wage. 'Moderate' CAS has made the competitiveness ever declining for this once competitive traditional sector.

8.4 Summary

From the analysis of competitiveness indicators and labour standards in each sector, it is understood that all sectors have become competitive over the years. The sectors that have recorded better competitiveness are Gem and Jewellery, IT and ITES, Electronics Hardware, Plastic and Rubber and Agro and Food sectors. Though the CAS maintained by these sectors are 'moderate' there are variations in the scores for individual labour standards. IT and ITES sectors provide better labour standards in the Zone in terms of CAS and individual labour aspects. The competitiveness maintained by this sector is slightly higher when compared to the labour standards provided. CAS in the Electronics Hardware sector never matches its competitiveness. Important labour standard like wages records poor rating which means that the labourers do not get due share of the competitiveness of the sector. Plastic and Rubber sector registers a CAS of labour standards of 3.1. But the individual score for wage is the lowest for Plastic and Rubber sector also. Agro and Food is another sector with high competitiveness and poor labour standards. The CAS is the lowest in the Zone, reflecting 'low' wage, 'low' social security measures and 'low' trade union participation. These factors might have restricted the sector from taking its competitiveness to higher levels. The worst labour standards are recorded at Gem and Jewellery, the sector with the best competitiveness position. It can be noticed that, in

the sectors with high competitiveness (except IT and ITES), important labour standards of wage provided is 'low'.

Service sector, a new entrant with low competitiveness, provided 'high' salary and absence of discrimination is also infrequent in the sector. But absence of trade union participation and absence of social security measures have caused the sector to have CAS of 'moderate' level. Textiles and Garments sector is with rather low competitiveness but provides 'moderate' labour standards. Engineering sector also offers better labour standards to its workers, but it has not made contributions to the sector's competitiveness.

There is no denial to the argument that all the sectors are export-competitive. But, competitiveness strength varies across sectors. Likewise, labour standards also differ. The above analysis, however, hints that if provided better labour standards firms can remain more competitive.

Chapter 9

FINDINGS AND CONCLUSIONS

Contents

The setting up of Special Economic Zone (SEZ) as a strategy of boosting economic growth has led to several responses and counter responses. While proponents favour SEZ for high growth coupled with employment generation, critics mainly point out its inability to create employment. The former advocates competitiveness as a tool for growth. The latter worries not only about low employment generation but also about its low quality through violation of labour standards. In other words, to achieve export competitiveness and improvement in productivity, compliance with labour standards is being made certain by firms in the Zones. An alternative view is that observance of high labour standards leads to decline in cost competitiveness. This makes the firms follow the strategy of cutting down labour standards to remain export competitive. This invites a serious investigation about how far the firms in the Zone attain competitiveness and whether it is at the cost of labour standards or not. Are the firms in the Zone making any effort for trade-off between competitiveness and labour standards? The present study is an attempt to analyse these critical issues in the context of Cochin Special Economic Zone (CSEZ).

9.1 Background and Structure of the Study

The competitive strategy of SEZs can have three main implications on labour standards. With the support of the government, firms in the Zones follow competitive strategy through labour exploitative measures. Conversely, some firms in the Zones

uphold their competitiveness by bringing in measures to improve the productivity of the workforce. At other times, the labour standards provided can vary across the sectors in the Zone, especially a multi-product one. Cochin Special Economic Zone (CSEZ) is one such multi-product zone with wide variety of production activities. As a novel research area, it is necessary to study about the competitiveness and labour standards at CSEZ. Also, the relationship between both needs to be analysed.

Under this backdrop, the study is carried out 1) to study the export competitiveness of firms in CSEZ over the years, 2) to analyse the present status of labour standards in CSEZ, 3) to analyse how export competitiveness and labour standards are interrelated to each other. Out of the ten sectors in the Zone (Agro and Food, Electronics Hardware, Engineering, Gem and Jewellery, IT and ITES, Miscellaneous, Plastic and Rubber, Service, Textiles and Garments and Trading), eight sectors (except Miscellaneous and Trading) are selected for the study.

For the analysis of export competitiveness of CSEZ, sector-wise data after the introduction of SEZ policy 2000, on exports, employment etc. is used. Measures used to assess competitiveness of the Zone are Industrial Competitiveness Index (ICI) and Revealed Comparative Advantage Index (RCAI). These two measures are supplemented by total exports, percentage annual growth of exports, and percentage share of exports in Zone exports and output-employment ratio.

Analysis of labour standards is through a primary survey of working conditions at the enterprises in the zone. A two-stage sampling technique is adopted for the selection of samples. In the first stage, selection of enterprises is done from the selected sectors. The total number of enterprises according to Cochin Export Processing Zone Investors Association (CEPZIA) in the selected eight sectors is 79. Proportionate random sampling technique without replacement is used for the selection of enterprises from each sector. From each sector, a representative size of 30 per cent of the enterprises is selected. The sample size of enterprises is 24.

In the second stage, selection of workers is done. Since the exhaustive list of the total number of workers in each enterprise is not accessible, the approximate data on the total number of workers in each enterprise is made available by CEPZIA. A non-proportionate purposive sampling technique is used to select the sample workers.

From the sectors with more than 2000 employees, two per cent is fixed as the sample size (IT and ITES and Electronics). Three per cent samples are taken from sectors with workers ranging between 1001 and 2000 (Gem and Jewellery and Engineering). For the sectors with workers less than 1000 workers and above 200 workers, 5 per cent samples are chosen (Plastic and Rubber Products and Agro and Food). The sectors with less than 200 workers but more than 100 workers, 10 per cent, and those with less than 100 workers, 20 per cent samples are selected (Services and Textiles and Garments respectively). The total sample size constitutes 3 per cent of workers in the selected enterprises. For the survey of working conditions among workers, pre-tested structured interview schedule is used.

The next process involves the analysis of relation between competitiveness and labour standards. Each sector's export performance is compared with the labour standards provided. For this, four important labour standards from those prescribed by ILO are selected. They form: wage, absence of discrimination in wage payment, social security measures and trade union membership. After the labour standards have got quantified using five-point scaling technique, they are compared with the current competitiveness indicators calculated for the year 2011-12.

9.2 Major Findings

Some of the significant findings that have emerged from the present study are discussed under the following sub-headings.

9.2.1 Competitiveness of Sectors in CSEZ

- The study, in general, indicates improvement of competitiveness of CSEZ among other SEZs in India. The share of CSEZ exports in total all-India SEZ exports was 2.4 per cent in 2000-01 and increased to 11.8 per cent in 2008-09. Factors that might have contributed to its higher share are implementation of SEZ Act, 2005, increase in investment in all the sectors, higher contribution from Gem and Jewellery sector of the Zone, etc. Global recession and the European crisis would have affected its exports, causing a fall in share (6% in 2010-11). A revival has been registered in 2011-12 to 7.9 per cent.

- Export competitiveness of IT and ITES sector is obvious from its ICI at second position in the Zone in 2011-12. Sector exhibits better competitiveness in exports compared to other sectors in the Zone. High ICI is supported by increase in total exports (Rs. 5.54 crores in 2000-01 to Rs. 385.07 crores in 2011-12) and percentage annual growth of exports (28.2% in 2000-01 to 51.9% in 2011-12). Its percentage share in the Zone exports is 1.34 per cent, but comparatively higher when not considering the Gem and Jewellery sector's share. Labour is productive with the output-employment ratio increasing from 2.66 in 2000-01 to 7.48 in 2011-12, but is relatively lesser. RCAI is less than unity (0.07 in 2011-12) showing that the sector is not competitive in relation to India's IT exports.

- ICI ranking of the Electronics Hardware sector is four in 2011-12, revealing its competitive position in the Zone. RCAI, though less than unity at 0.69 in 2011-12, is better compared to other sectors' RCAI in the Zone. The sector is competitive in terms of total exports aided by increase in the demand for consumer electronics and equipments abroad (second position with total exports at Rs.483.95 crores in 2011-12). But, annual growth rate falls to seventh position in 2011-12 owing to some uncompetitive units in the Zone. It maintains a good share of 1.68 per cent in Zone exports. Low cost advantage, technical advancements, phasing out of trade barriers and managerial efficiency of the existing firms may have facilitated the sector to maintain a high output-employment ratio (23.06 in 2011-12).

- Engineering sector's competitiveness in the Zone in terms of ICI has fallen down from second position in 2001-02, but has maintained its rank at four in 2011-12. RCAI shows low result of 0.02, contrary to the Indian experience in Electronics exports. Total exports of the Engineering sector have increased from Rs.18.14 crores in 2000-01 to Rs. 109.55 crores in 2011-12. But compared to other sectors, it is not competitive in terms of total exports and annual growth of exports (sixth rank in the Zone). The uncompetitive position is also revealed from its share in total Zone exports (0.38% in 2011-12). Only, in terms of output-employment ratio, the sector's competitiveness shows an

average score of 14.10 which might be due to the lower cost of production and technical advancements.

- The sector that has registered its competitive position in the Zone in terms of all the measures (except ICI) is the Gem and Jewellery sector aided by increase in demand for Indian Jewellery abroad and government policies like de-licensing (total exports at Rs. 27,058.17 crores, annual growth of exports at 53.5%, share at 94.2%, output-employment ratio at 20,043.09, and RCAI at 7.6 in 2011-12). RCAI is above unity, exhibiting its competitive position compared to all-India Gem and Jewellery exports. Supported by the growth of exports, the sector's share is also the highest in the Zone.

- The competitive position of Plastic and Rubber sector compared to other sectors is observed in the ICI, assisted by higher labour productivity and growth of exports (38.8% and 3rd rank in 2011-12). High output-employment ratio (19.77 in 2011-12) might be owing to easy availability of raw material and increase in export demand. The sector's RCAI shows lower performance (0.11 in 2011-12) compared to all-India Plastic and Rubber exports, but is competitive compared to other sectors' RCAI. It has experienced an increase in total exports from Rs.6.58 crores in 2000-01 to Rs.73.42 crores in 2011-12. But total exports have never been more than Rs.100 crores (hence only seventh position in 2011-12). This has resulted in lower share in Zone exports (0.26 in 2011-12).

- In the year 2011-12, Agro and Food has regained its competitive position, with its ICI at first position among other sectors in the Zone. Productivity and growth of exports (30.4%) make the sector the most competitive in terms of ICI in 2011-12. Meticulous working habits of the labourers and the product diversification may have helped the sector to have high output-employment ratio (28.82 in 2011-12). Its total exports were in first position in the Zone exports in 2000-01, declined to fifth position in 2008-09 and has recouped to fourth position in 2011-12. Government policies in the form of tax holidays and increase in processed marine food exports would have helped in the

growth of this sector. But RCAI is lower (0.07 in 2011-12) showing the uncompetitive position of this sector's exports in all-India exports.

- Being a new entrant in 2007-08, with only one firm engaged in productive activity, the competitiveness of the Service sector has always been low in terms of ICI (seventh position in 2011-12), total exports (eighth rank in 2011-12) and share of exports (0.03% in 2011-12). In the year 2009-10, it maintained first rank in growth of exports, but the growth declined (-59.5% in 2010-11) affected by internal factors. It set an improvement in 2011-12 (26.9%). The sector has been able to improve its output-employment ratio, (8.51 in 2011-12) probably aided by its technically qualified staff. It is still uncompetitive compared to other sectors.

- Textiles and Garments is uncompetitive among other sectors in the Zone having an ICI score of 0.63 (5^{th} position) in 2011-12. Total exports have expanded to Rs.131.45 crores, but is uncompetitive at fifth position in the Zone. Lower exports have made the sector uncompetitive in terms of RCAI (0.06 in 2011-12) too. The discontinuation of quota system under MFA in 2005 might have improved the performance of this sector. But volatility in the European markets may have caused this sector land up with negative annual growth of exports in 2011-12. Decline in growth of exports has reduced its share (0.46% in 2011-12) making this sector uncompetitive. But, the lower cost advantage in the Zone may have helped the sector to have output-employment ratio with an average rate of 12.06 in 2011-12.

9.2.2 Sector-wise Labour Standards at CSEZ

- IT and ITES sector has young workers with an average age of 27. Nature of work requires workers who are professionally qualified and skilled, but only 33.8 per cent are appointed as permanent employees. Due to temporary nature of the job, majority (66.2%) have less than five years of experience in the Zone. The average wage reported in this sector is Rs.18,161. But there are workers whose wage starts at Rs.3500 per month. Only skilled workers receive salary above Rs.10,000. Fifty seven per cent of the workers are

provided social security measure of PF, bonus, gratuity, incentives, and life-Insurance. OT work is optional for the employees. Among those who opt for it, 68 per cent spend 6-20 hours per week in OT work and 18 per cent of them receive non-money allowance in the form of compensatory holidays. Shift system is applicable for both men and women. Conveyance facility during night shifts is available for 76 per cent of the workers, but only at a payment. Eighty nine per cent of the workers can avail up to 15 days of leave in a year in this sector. There is no trade union in this sector to address workers' grievances. Labour Commission inspection also happens rarely. As the workers do strenuous job, back pain, head-ache, eye strain, fatigue and stress are common among the workers. However, only 47 per cent of the workers prefer to have alternative job and they cite poor pay, absence of promotion prospects, temporary work, volume of work, etc. as reasons for searching alternative job.

- Majority (74%) of the workers in the Electronics Hardware sector also have the average age of 27. Manufacturing and assembling of machines require the service of skilled workers with ITI/Diploma qualification, who constitute 82 per cent in the sector. But the sector has only 26 per cent permanent employees. Because of this, those with less than five years of experience form 69 per cent. The average wage in this sector is only Rs.7962. Also, 13 per cent of the workers have reported discrimination in the payment of wages on the basis of gender. Wage above Rs.10,000 is found only for skilled and permanent workers. Seventy nine per cent of permanent workers receive better 'basket' of Social security measures including PF, incentives, life insurance, gratuity and bonus. All the workers have OT work, 96 per cent spend 4-12 hours per week on it. Shift system which happens only during peak-seasons, is applicable only for men. Only 30 per cent get night shifts (1-3 shifts) per month. Sixty one percent of those who opt for night-shifts are provided paid conveyance during night shifts. The number of leaves provided in the sector is up to 15 in a year. Trade union is present in 59 per cent of the firms. But membership is limited to very few workers (20%). Ninety five

percent of nonmembers are prevented by the management from joining it. Labour inspection also takes place rarely in this sector. The common health problems they (56%) face are back pain, headache, eye strain and fatigue. Seventy-five per cent of workers prefer alternative jobs due to poor pay, too much work, temporary work and absence of promotion in the sector.

- The Engineering sector has workers with the average age of 33, 62 per cent with ITI/Diploma. Permanent status is given to 60 per cent of the workers. So the sector has 54 per cent workers with 5-15 years of experience. Average wage in this sector is Rs. 11,689 and they are never below Rs.5000. But, it rises above Rs.20,000 only for 3 per cent of the workers. Permanent workers receive higher share of salary, but wages do not vary much between skilled and semi-skilled workers. Some workers (32%) report that there is gender based wage discrimination in this sector. Only 7 per cent of the contract workers receive gratuity, incentives and life insurance apart from PF, Bonus and ESI. Only 7 per cent has to do more than 12 hours of OT work per week. Eighty-seven per cent receive an allowance between Rs.30 and Rs.150 per hour. Shift system is present in every firm, but only 49 per cent of workers opt for it. Night conveyance facility is provided only for 44 per cent of workers who opt for night-shifts. Leaves for more than 15 days are available only for 8 per cent of the workers. Frequent labour inspection from the government is reported by 41 per cent of the workers. Trade union membership is available for 57 per cent of the workers. Eighty seven per cent of the non-members are prevented by the management from joining trade unions. As the workers in the sector have to do meticulous work remaining in standing posture, 62 per cent face health issues like back pain, headache, eye strain, fatigue and muscle pain. This sector is prone to accidents and they have to rely on medical insurance to meet the expenses. Those who seek alternative jobs (43%) cite poor pay, poor working condition, too much work, temporary work and absence of promotion as the reasons for searching alternative job.

- Gem and Jewellery sector has number of young, unmarried (54.8%), women temporary (93.5%), workers either with a plus two or high school

qualification. No worker has more than 10 years of service in this sector. The average wage in the sector is Rs. 9112. Only the skilled category receives wages above Rs.10,000. Twelve per cent of the temporary workers receive wages above Rs.15000. Nineteen per cent of the workers are provided only PF and 55 per cent of the workers receive PF and ESI. Seventy six per cent of the workers spend only 2-4 hours in OT work. OT allowance ranges between Rs.30-120 per hour for 93 per cent of the workforce. There is no trade union membership for the workers in this sector. Occupational health issues involve back pain, headache, eye strain and fatigue for 52 per cent of the work force. The frequency of labour inspection is also very rare in this sector.

- Plastic and Rubber Products sector has young (average age 32), permanent (60.7%), semi-skilled (60.7%) workers with high school and plus-two qualification. Eighty two per cent has less than 10 years of service. Daily payment of wages is present in this sector for 29 per cent of the workers. Average wage is merely Rs. 6964. Wages never cross Rs.10,000 and 11 per cent are paid less than Rs.5000. Some workers (14%) report to have gender based discrimination in the payment of wages. Seventy five per cent of unskilled labourers and 33 per cent of the contract workers receive wage less than Rs.5000. While permanent workers receive PF, Bonus and ESI, 55 per cent of contract workers receive only PF and ESI. Half of the trainees receive only PF and ESI and the other half of the trainees receive only PF. Workers spend 2-8 hours in OT work and 86 per cent receive OT allowance of Rs.30-90 per hour. Shift system is present in all the firms; 68 per cent of the workers opt for it and is applicable only for men. There is no night-shift for 75 per cent of the workforce. But seventy five per cent of those who opt for shifts are not provided conveyance facility. All the workers have up to 15 days of leave. Fifty seven per cent of the workers have CITU membership. Eighty three per cent of non members have been prevented by the management from joining union. Workers (57%) suffer from health related issues like back pain, asthma, eye strain and fatigue. Labour inspection is also very rare to address their issues. However, only 55 per cent of the workers wish to have another job

owing to poor pay, too much work, temporary work and absence of promotion.

- Agro and Food sector has workers of average age of 30. Sixty five percent of the workers are with plus-two or high school qualification. Half of the workers (52%) are permanent. Daily payment of wages is applicable for 35 per cent of the workers. Wages for 87 per cent of them never cross Rs.10,000. Average wage of this sector is Rs.8804. Higher wage above Rs.15,000 is meant for skilled and permanent workers. Ninety two per cent of the permanent workers receive PF, Bonus and ESI where as 64 per cent of the contract workers receive only PF and ESI. Thirty six per cent of the contract workers are never provided any social security measure. OT work is present for 95 per cent of the workers. Majority (73%) spends 4-8 hours per week in OT work. Ninety one per cent of the workers with OT work receive an allowance up to Rs.90. Only 70 per cent are shift based workers. Shift system is applicable for women too. Sixty one per cent workers get up to 3 shifts per month and paid night conveyance facility is provided to 65 per cent of the workers. While 46 per cent have been prevented by the management from joining the union, for 50 per cent of the workers, absence of union in company made them not join. They face health problems related to dust (like asthma), eye strain, fatigue, back pain, headache etc. Workers have to rely on medical insurance to meet any work related accident. Very rarely does Labour commission inspection take place in the sector.

- Service sector too has young (average age 28) workers and 65 per cent of them are professionally skilled. All the workers claim to be permanent, but they are also appointed on contract basis. As the sector started in 2007, no worker has more than five years of service. Majority of them (75%) are paid salary above Rs.15,000. Among them, 35 per cent receive payment above Rs.25,000. Average wage in this sector is Rs.19,500. There is no gender discrimination reported in the payment of wages. Higher wages are meant only for skilled work force. But no worker is provided any social security measure. Very few workers (35%) have OT work and that too only for 2-4

hours per week. But no payment is available for OT. Shift system is applicable for both males and females. Forty two per cent of the workers get up to 3 shifts per month. But only 25 per cent are provided night conveyance facility. More than 15 days of leave is ensured for the employees. Trade union presence is completely absent in the sector. Common work related health issues that 70 per cent workers face are stress, fatigue, back pain, headache and eye strain. Medical expenses are to be borne by employees themselves. Labour inspection happens rarely in this sector. Forty five per cent of them seek better jobs due to poor pay, volume of work, absence of job satisfaction etc.

- Textiles and Garments sector has 53 per cent of workers above the age of 35 and 73 per cent with high school qualification. Permanent employees form 86 per cent of the total work force. The average age in this sector is 34, still unmarried workers in this sector form 60 per cent. Average wage in the sector is Rs. 9,166. Only nineteen per cent of the workers report gender based wage discrimination. The wage for semi-skilled and contract workers also never crosses Rs.10,000. Contractual employees receive only PF, ESI where as permanent workers receive better social security measures. Majority (80 %) spends 6-12 hours per week in OT work and receives Rs.30-60 per hour as OT allowance. Shift system is applicable only for men and only 2 shifts per month are accepted by 46 per cent of them. But night conveyance is not provided for 73 per cent of the workers who opt for shifts. The workers are provided up to 15 days of leave in a year. Trade union membership is completely absent in this sector. Management has prevented 40 per cent of the non members from joining them. In Textiles too, dangerous chemicals used in dyeing, noise of machines etc. do harm to the health of employees. Health issues which 67 per cent of the workers face are muscle pain, back pain, headache, eye strain and fatigue. Labour inspection takes place rarely. Only 33 per cent prefer alternative jobs, mainly due to poor pay, poor working condition, absence of promotion prospects, etc.

9.2.3 Competitiveness and Labour Standards at CSEZ

- IT and ITES sector of the Zone is highly competitive, but with 'moderate' labour standards. ICI of the sector is competitive at second position in the Zone, supported by indicators like annual growth rate of exports, share of sector in total CSEZ exports. Labour is productive with output-employment ratio of 7.48, though the lowest rate recorded in the Zone in 2011-12. The competitiveness of the sector has been aided by 'high' individual labour standards of wage, absence of discrimination and social security measures. Absence of trade union participation has made the CAS of the sector 'moderate'. Only RCAI exhibits an uncompetitive score, proving that the exports from this sector are not rising according to all-India exports. Thus labour standards provided in the Zone have contributed to its competitiveness, which in turn, can improve further with better provision of labour standards.

- Electronics sector is also a competitive sector of the Zone, but the CAS of labour standards is 'moderate' with a very low rate of 2.79. Sector has high ICI, very high output-employment ratio, high percentage share and comparatively better RCAI. The high competitiveness of the sector is not shared with the labourers as the scores recorded for individual labour standards of wage and trade union participation is 'low'. While absence of discrimination is rated at 'high', social security measures is rated at 'moderate' level. This made the CAS 'moderate' with a low figure, indicating the extent of sacrifice of labour standards in this highly competitive sector.

- Engineering sector portrays the case of 'moderate' labour standards and relatively low competitiveness. The sector has witnessed a general improvement in exports. But compared to other sectors, high competitiveness is recorded only in terms of a high ICI ranked at four and labour productivity is reported at the average level. The sector records a low RCAI, low annual growth rate of exports and low share of exports. CAS, however, is the highest in the Zone at 3.4. All the four labour standards are rated either at a 'high'

level or at a 'moderate' level. The comparatively better labour standards provided in the sector has not been able to guarantee higher competitiveness.

- Gem and Jewellery sector in the Zone has been registering a noteworthy level of competitiveness, but with the lowest CAS. All the measures confirm a very high competitiveness position for the sector, except ICI. The competitiveness maintained in the sector is very high and the labour standards are only at a 'moderate' level with the lowest score of 2.5. Wage is rated 'low' and trade union participation is nil for this sector. Thus it can be understood that there is poor labour standards in the midst of high competitiveness.

- The competitiveness of Plastic and Rubber sector is indicated by high ICI, high growth rate of exports and high output-employment ratio. RCAI is lower than unity, but comparatively better in the Zone. As against this, the CAS of labour standards recorded in the sector is 'moderate' with score of 3.1. Absence of discrimination and trade union participation are at 'high' level and social security measures are at 'moderate' level. Though a CAS of 3.1 is better, the rating of the important labour standard, wage is 'low'. This substantiates that, had the wages been high, competitiveness too would have been higher**.** It is a clear case of high competitiveness and moderate labour standards, but with a low wage.

- The Agro and Food sector is a competitive sector in the Zone. But it records poor individual labour standards, even when the CAS is rated 'moderate'. The sector's competitive position is visible in terms of ICI with high annual growth and output-employment ratio. The only labour standard that is rated 'high' is absence of discrimination. Other labour standards of wage, social security measures and trade union participation are rated at 'low' level. This reveals the compromise of labour standards in this sector with the low CAS of 2.68 in the Zone. The sector is maintaining lower competitiveness in terms of Share and RCAI. To take competitiveness to higher levels, individual labour standards which are rated 'low' should be improved.

- In the Service sector, competitiveness achieved since its entry into the Zone is rather low, the labour standards are also rated 'moderate'. The competitiveness of Service sector is worth mentioning only in terms of growth of exports. Social security measures and trade union participation are completely nil in the sector. Wage and absence of discrimination are rated at 'high' and 'very high' levels respectively. But these two highly rated labour standards have had no effect in maintaining competitiveness of the sector.
- In the case of Textiles and Garments too, lower level of competitiveness is accompanied by poor labour standards. None of the indicators confirm higher competitiveness level for Textiles and Garments sector. Comparatively better indicators are output-employment ratio and ICI, which are also at lower levels. The labour factors contributing to the output-employment ratio (though low compared to other sectors) are absence of discrimination and provision of social security measures, both of which are rated 'high'. But the wage rate is rated at a 'low' level and trade union participation is also nil. Hence the CAS of labour standards in this sector is 'moderate'.

9.3 Contributions of the Study

The present study on the relationship between export competitiveness and labour standards is the first of its kind in Kerala. The study is unique as it is held in Cochin SEZ whose labour aspects are not subject to much research. Though a few studies have been held about CSEZ, the attempt to measure export competitiveness of different sectors of the Zone is a new area of research. The study is also special as it is the first attempt towards a comprehensive assessment of working conditions of labourers in the Zone. The study reinforces the exploitation taking place in these 'closed industrial' enclaves.

The study exhibits the competitiveness maintained by CSEZ through measures like share towards all-India SEZ exports, labour productivity, ICI and RCAI. It explores various determinants of export competitiveness in different sectors in the Zone. It substantiates the notion that competitiveness maintained by SEZs has consequences on the labour standards. It unveils the fact that the labour rights are not

upheld in the Zone and the workers, especially the contract workers, are often weak to raise their voice against it. It also proves the extent of labour exploitation taking place in some sectors like Gem and Jewellery.

The study also conveys to the business firms the importance of providing labour standards for motivating the employees to enable them to contribute more to productivity. It communicates to the government the areas where interventions are necessary to help not only the labourers but also the business firms.

9.4 Policy Implications

The study points out that the present style of operation of SEZ only weakens the objectives with which it has been set up by the government. The study reveals to the policy makers that a system which is supposed to be growth oriented and welfare oriented can degenerate into a burden for the government especially to its finances if not taken adequate measures. In the wake of the results of the present study, there are a number of policy changes that are to be implemented for the successful operation of SEZ.

- To maintain competitiveness of the Zone, the government has to consider greater incentives and relaxations for the investors.
- The new SEZ regime should take into account not only the investors, but should have provisions to adequately address the grievances of the labourers working in SEZs. The present SEZ policy is biased towards instilling the confidence of the investors and developers. The labour class bears the consequences of the present model. This creates an uneven pattern of development wherein the workers' welfare gets compromised. What is required is a policy that protects the interests of both the employers and the employees.
- In the existing liberalised environment of SEZs, laxity in the execution of labour laws becomes inevitable. So, to protect them, the labour laws existing in the country like Minimum Wages Act, Contract Labour (Regulation and Abolition) Act, Trade Unions Act, Industrial Disputes Act and Equal Remuneration Act should be made applicable for SEZs too.

- Along with the government, the Development Commissioner of the respective SEZs too should play a crucial role in ensuring welfare of the labourers. Presently, the role of the Development Commissioner consists of looking into labour matters too, but generating sufficient investments remains his priority. This can have consequences on labour standards. The Commissioner should make the provision of labour standards like adequate remuneration and allowances, freedom of association, job security, health and safety standards etc. mandatory in SEZs.

9.5 Future Research Issues

The present study throws open many avenues for research related to SEZs.

- Due to unavailability of data, the present study is confined to a sector wise analysis. Individual firm-specific studies on topics of competitiveness as well as labour standards are prospective areas of future research. Each firm in SEZ has different characteristics and working pattern. Accordingly, the working conditions will also vary between them.
- The export competitiveness of the sectors proved in this study can be reinforced and strengthened through adequate matrices.
- As SEZs are employing increasing number of female workers, a gender-specific study on labour standards is also feasible.
- Much research needs to be done to explore deeply the relationship between competitiveness and labour standards at SEZs. Presently, research on the relationship between trade and labour standards are available. But none of them advances any quantitative techniques for its assessment. Hence, models and econometric tools to study the inter-relationships between competitiveness and labour standards can be evolved through research.
- Future export growth of the country will be connected to SEZs. Success of SEZs is always associated with the export competitiveness and investment they generate. But, tax breaks, exemption from customs duties, provision of infrastructural facilities, low labour costs, etc. can create a burden on the

government and can have welfare implications. In this context, the benefits they generate in the form of employment, foreign exchange, FDI and economic growth should be assessed through research. So cost-benefit analysis of the SEZs can be carried out to study the overall impact of SEZs on the economy.

- The study can be also be extended to include a comparative study of CSEZ with all the SEZs in India. This will give profound idea on the relative performance of the Zone in comparison to others.

9.6 Suggestions

Based on the present study, measures to improve the competitiveness of the Zone without compromising the labour standards are put forward.

- The study has brought out the fact that CSEZ has been successful in generating more output, exports and employment opportunities. To sustain this, measures to attract further private investment and FDI should be made to make the Zone more competitive. For this, better infrastructural facilities, like cheap power supply, road networks and telecommunication services, investor friendly administration, good governance, especially with respect to labour laws etc. should be provided.

- Another factor necessary to improve the export competitiveness of firms in CSEZ is diversifying the export basket by introducing new export products. CSEZ authority can play a better part by devising market access strategies in foreign markets by conducting market surveys, organising trade fairs, exhibitions etc. to make the goods manufactured in the Zone popular in foreign markets**.**

- Cutting down labour standards is not the only method to make the firms in the Zone cost- competitive. Labour recruitment costs associated with frequent retrenchment of workers, transfers and dismissals can be cut down if permanent staff is employed.

- Shortage of skilled workers can increase the operating cost of the firms. Recruitment of skilled labourers and frequent training and workshops for them can benefit the firm in the long run. The firms can also rely on alternative sources of cheap and reliable sources of physical inputs.

- Measures to enhance the performance of the workers are essential. The firms should acknowledge the rights of the workers and should ensure proper working conditions. A productivity-linked wage structure, training programmes for labourers, avoidance of multiple shifts in a day, recognising the workers' right of association, ensuring non- discrimination, providing occupational health and safety, etc. can help to imbibe in them a sense of belongingness. Facilities like canteen, crèche, night-conveyance facility, etc. form the basic necessities in an industrial structure confined to an enclave.

- Workers in CSEZ are of the opinion that Labour Commission inspection happens rarely. Dividing responsibilities relating to labour laws between the Labour Commissioner and Development commissioner will only lead to neglect of labour issues. To ensure welfare of the labourers, instead of division of office, more powers to guarantee welfare of the labourers should be conferred on the Development Commissioner. Policies which preserve the interests of both labourers and producers should be devised by the Development Commissioner.

9.7 Conclusion

The tradeoff between competitiveness and labour standards invites serious discussions and the need for policy interventions, both at national and global levels. The crucial question is how far the labour standards can be compromised for competitiveness? By doing so what would be the benefit for the society and economy? The consequent ramifications on the labour standards developed by ILO should be equally acceptable to developing and developed countries. The global perspective developed so should be taken care of by the Zones in all countries.

Keeping in view the benefits Zones generate, measures should be taken to promote the export competitiveness of the Zones in the country. But due care should

also be given to the welfare implications of promoting SEZs. The purpose of establishment of SEZs will be defeated if attention is not paid to the well-being of the labourers. A balanced strategy of preserving the interests of both the investors and labourers should be adopted, if the export competitiveness is to be preserved for the long run. As a result, SEZs can play effective role in ensuring competitiveness and simultaneously aid in human capital formation and poverty alleviation.

APPENDIX I

ESTABLISHMENT OF SPECIAL ECONOMIC ZONE

According to SEZ Act 2005, SEZ could be set up either jointly or individually by the Central Government, State Government, or any person, implying a company for,

- manufacturing goods
- for rendering services
- for both manufacturing of goods and for rendering services , or
- as a Free Trade and Warehousing Zone (FTWZ) (www.csez.com referred on June 2013).

Area Requirements for SEZs

Type of Special Economic Zone	Area(hectares)
Multi-Sector SEZ	1000 hectares
Sector Specific SEZ	100 hectares
Free Trade and Warehousing Zone	40 hectares
IT/ITES/handicrafts SEZ Bio-technology/non-conventional energy/gems and jewellery Sector	10 hectares

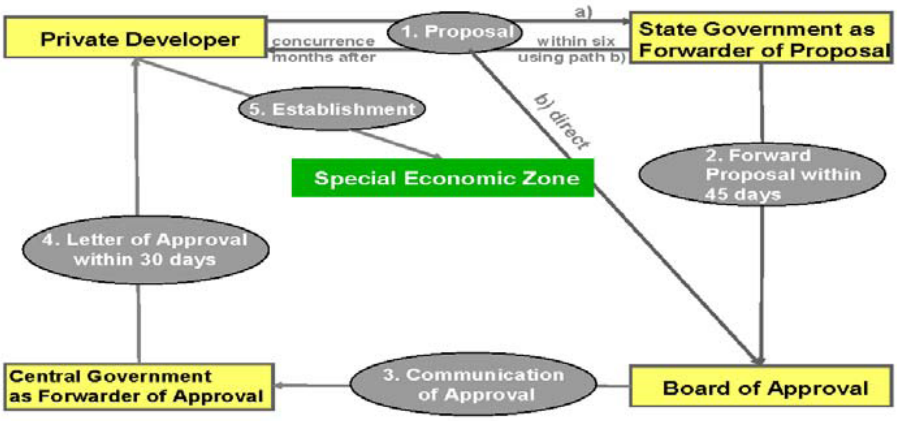
Source: www.sezindia.nic.in referred on June 2013

After identifying the proposed area the private developer can submit the proposal to the Board of Approvals directly or indirectly through the state government. When the private developer submits the proposal to the State government concerned, the State Government forwards the proposal with its recommendation within 45 days from the date of receipt of such proposal to the Board of Approval. Sometimes the private developer has the option to approach the Board of Approvals directly and get the concurrence from the state government. The Board of Approvals may accept or reject or modify the particular proposal of the private developer. If the proposal of the private developer gets approved, Board of Approvals communicates it to the Central government which in turn grants formal approval to the developer through a Letter of

Approval. Upon getting formal approval for a SEZ from the Board of Approval and after the Central Government notifies the area of the SEZ, units are allowed to be set up in the SEZ (Section 3 of SEZ Act, 2005).

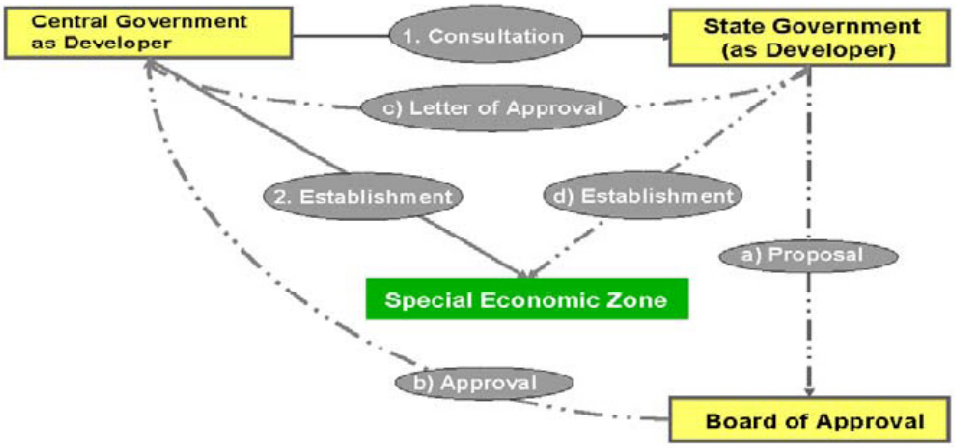
If the Zone is developed by the state government, it can directly approach the Board of Approvals for its approval. If it gets approved, the central government issues the Letter of Approval. Alternatively, when the central government is the developer, the proposal is forwarded to the Board of Approvals after consultations with the state government (www.csez.com referred on June 2013; Dohrmann, 2008).

Approval mechanism for the establishment of SEZ by a private developer



Source: www.csez.com referred on June 2013; Dohrmann, 2008

Approval mechanism for the establishment of an SEZ for the Central and state government as a developer



Source: www.csez.com referred on June 2013; Dohrmann, 2008

Setting up of Unit

The person who intends to set up a Unit in SEZ may submit the proposal to the Development Commissioner who will then forward it to the Approval Committee for its formal approval. If the proposal complies with the provisions of the Act, the Development Commissioner would issue a letter of approval to the person intending to set up a unit in the SEZ (Section 15 of SEZ Act, 2005).

Meanwhile, the developer has to take permission from the Board of Approval for carrying out any operation in the SEZ. After the unit gets approval to set up its unit in the SEZ from the Development Commissioner, the Developer grants land to it on the basis of a lease agreement. To apply for an Offshore Banking Unit, application is directly made to the Reserve Bank of India (Section 17 of SEZ Act, 2005)and to set up units that require either FDI clearance or an industrial license, application is made to the Board of Approvals at the Centre (Section 9 of SEZ Act, 2005).

Administrative Structure of SEZs.

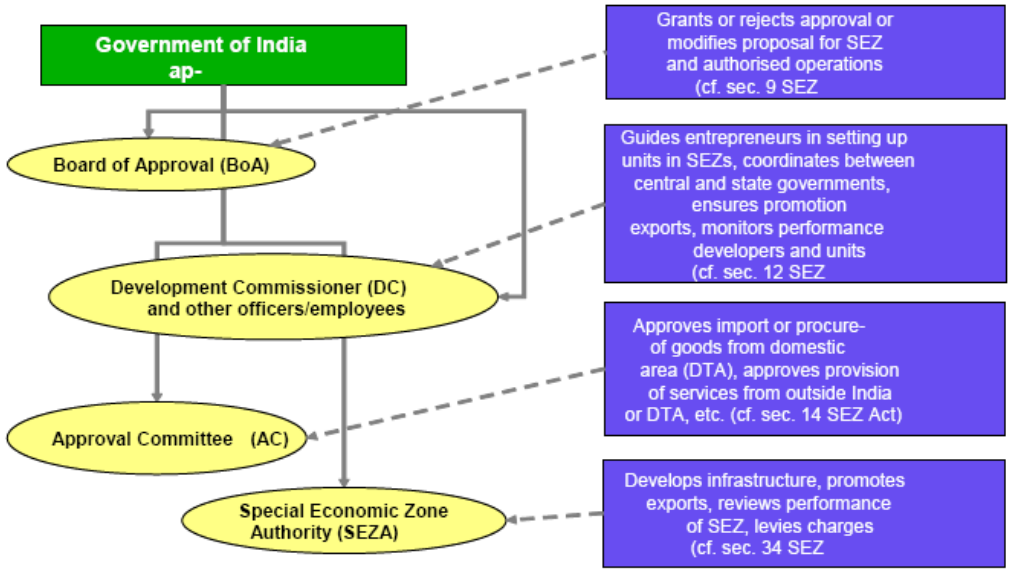
SEZs have a three- tier administrative structure with Board of Approval at the apex level. It is headed by the Secretary, Department of Commerce. The orderly development of the SEZs , granting of approval or rejecting proposal or modifying such proposals for establishment of the Special Economic Zone is also done by Board of Approvals(sec 9 of SEZ Act,2005). The Board of Approval has 19 members comprising of various joint secretaries and other officials from several ministries, such as the Ministries of Commerce, Economy, Science and Technology, Home Affairs, Defense, Environment, Law, Overseas Affairs, Urban Development and Finance as well as that of a nominee of the state government concerned, a professor at the Indian Institute of Management or the Indian Institute of Foreign Trade (section 8 of SEZ Act).

The Central Government appoints Development Commissioner of one or more Special Economic Zones to perform his functions under this Act to ensure speedy development of the Special Economic Zone. He shall be overall in charge of the SEZ and exercises administrative controls and supervision up on the employees in the zone. Development Commissioner provides guidance to the entrepreneurs for

setting up of Units in the Special Economic Zone and takes necessary steps for the promotion of exports. He ensures proper co-ordination of SEZ with the Central Government or State Government Departments concerned, monitor the performance of the Developer and the Units in a Special Economic Zone and performs any other function delegated to him by the BoA. (Sec 12 of SEZ Act).

At the Zone level, below the Development Commissioner, the Centre appoints an 'Approval Committee' consisting of Development Commissioner, Customs Authorities and representatives of State Government(Section 13(2) of the Act). It can approve, modify or reject proposals for setting up Units, the import of goods from Domestic Tariff Area and allows foreign collaborations to establish units in SEZs (www.csez.com referred on June 2013; Dohrmann, 2008).

Approval Mechanism



Source: Source: www.csez.com referred on June 2013; Dohrmann, 2008

SEZ Authority

The SEZ Act 2005 provides for setting up of SEZ Authority for every Special Economic Zone by the Central Government for management of the Special Economic Zones (SEZs). Development Commissioner of the Special Economic Zone concerned shall be the chief executive of the Authority. The functions of the authority are as follows

a) the development of infrastructure in the Special Economic Zone;
b) promoting exports from the Special Economic Zone;
c) reviewing the functioning and performance of the Special Economic Zone;
d) levy user or service charges or fees or rent for the use of properties belonging to the Authority;
e) performing such other functions as may be prescribed. ((www.csez.com referred on June 2013)

APPENDIX II

INCENTIVES AND FACILITIES OFFERED TO THE SEZS

To attract the private investors, Government of India has been offering concession packages for setting up of SEZs such as duty-free import/domestic procurement of goods for development, operation, and maintenance of SEZs; extension of income tax benefits / income tax exemptions; external commercial borrowing by SEZ units without any maturity restrictions through recognised banking channels; treating supplies from the DTA to SEZ at par with physical exports; exemption from Central Sales Tax on sales made from the DTA to SEZs; exemption from Service Tax for SEZ units and developers and exemption from State taxes and levies, as notified by various State (Lakshmanan , 2009).

Incentives for Units in SEZs

- Duty free imports /procurements of intermediate goods from abroad /DTA is allowed without import license requirements.
- Income tax exemption on export income from SEZ units
- Facility to repatriate profits from the zone within 12 months
- Manufacturing, trading or service activities are allowed n the zone.
- Units have the freedom to subcontract productive activities and are allowed abroad too
- Free of routine custom examination of export and import cargo
- Facilities to retain 100 per cent foreign-exchange receipts in Export Earners' Foreign Currency Accounts
- Provision to re-export defective imported goods.
- Hundred percent FDI allowed in manufacturing sector barring few sectors. Even in areas where foreign technical –know how and capital are barred for units in DTA

- Exemption from Central and States Sales Tax and Service Tax. , Central excise duty payment of the securities transaction tax,
- Facility to set up off-shore banking units with approval from RBI
- 100 per cent FDI is permitted for SEZ franchisees in providing basic telephone services in SEZs.
- Facility for External Commercial borrowing up to US $ 500 million in a year through recognized banking channels.
- Exemption from electricity duty
- Provision of market development subsidy
- Waste materials are disposed of in the DTA after payment of duty
- Hundred percent of production in the domestic market allowed with import license.
- Credit facility is provided at concessional interest rates
- Suppliers from DTA are treated as deemed exports
- Private bond houses allowed to be set up to stock and sell duty free raw materials
- Provision to remit profits and dividends
- Freedom to allocate developed plots to SEZ
- Basic facilities like water, electricity, security are provided to all units in the zone
- No cap on foreign investment for small-scale-sector reserved items which are otherwise restricted.
- Exemption from industrial licensing requirements for items reserved for the small-scale-industries sector
- Upper limit of the area required for multi product SEZs is 5000 hectares, with the State Governments having the option to prescribe a lower limit
- Minimum processing area is 50 per cent for multi- product SEZs as well as sector specific SEZs

- Housing facilities to be provided to the SEZ employees by the developer (www.sezindia.nic.in referred on June 2013; Das, 2009; Dohrmann, 2008).

Incentives provided by the State government

State governments as well as local bodies shall exempt SEZs from all local taxes, duties and so on for purchases from the Domestic Tariff Area As units in the zone are declared public utility services under the industrial Disputes Act .So strikes without prior notice is illegal.

- Delegation the powers of the Labour Commissioner to the Development Commissioner
- Provision of financial assistance by State financial Corporations

Incentives for Developers of SEZ

- Exemption from duties on import/procurement of goods for the development, operation and maintenance of SEZs.
- Freedom to allocate developed plots as well as basic amenities like water, electricity, recreation etc. to units on commercial basis.
- Provision for townships with in the Zone with residential areas, markets, play areas, recreation centres etc with 100 percent FDI.
- Income tax exemption for a block of 10 years in 15 years.
- Exemption from minimum alternate tax, dividend distribution tax, Service tax and Central sales tax on sales made from DTA.
- External commercial borrowing by SEZ units through banking channels.
- provision to carry forward losses
- Supplies from DTA are treated at par with physical exports for Income tax exemption (www.sezindia.nic.in referred on June 2013; Das, 2009; Dohrmann, 2008).

APPENDIX III

INTERVIEW SCHEDULE

COMPETITIVENESS AND LABOUR STANDARDS IN SPECIAL ECONOMIC ZONES: A STUDY OF COCHIN SPECIAL ECONOMIC ZONE

Please be assured that the confidentiality of responses will be respected

Thank you for your participation in this study. Your cooperation is much appreciated.

Please tick the appropriate boxes and add your comments where relevant.

A. General Information

1. Gender of the respondent Male☐ Female ☐

2. Age

15-19☐ 20-24☐ 25-29☐

30-34☐ 35-39☐ 40-45☐

Above 45☐

3. Marital Status

Unmarried☐ Married☐ Divorced☐

Widow/er ☐ Others☐

4. Educational qualification *(Specify whether passed(P) or failed (F) in the relevant box.*

Primary ☐ Upper primary☐

High School☐ Plus Two ☐

Vocational course /Diploma *(specify the degree)* ☐

Other *(specify the degree)* ☐

B. Employment Particulars

5. Name the firm in which employed

6. What is the nature of activity in your firm?

7. Job Designation

8. No. of years of service in the unit

0-5 years ☐ 5-10 years ☐ 10-15 years ☐

15-20 years☐ 20-25 years ☐ 25-30 years☐

9. Nature of Employment

Permanent employee ☐ Part-time employee ☐

Contractual employee☐ Seasonal eamployee☐

Trainee☐

10. In which of the following category are you included in your firm?

Skilled ☐ Semi-skilled ☐ Unskilled☐

11. If skilled how did you acquire your skill?

Vocational course ☐ Apprenticeship elsewhere ☐

Learnt on the job☐ Any other☐

12. Working hours per day: From ……am To…….……pm

13. Number of working days: ……hours per week/per month/per season *(tick whichever is applicable)*

14. System of wage payment

Daily ☐ Weekly ☐ Monthly ☐ Seasonal ☐

15. Wage paid per day/per week/per month/per season

16. Total wage per month

Less than 5000 ☐ 5000-10,000 ☐

10,000-15,000 ☐ 15,000-20,000 ☐

20,000-25,000 ☐ Above 25,000 ☐

17. How do you rate the monthly wage that you receive?

Very Low Wage ☐ Low Wage ☐

Moderate Wage ☐ High Wage ☐

Very High Wage ☐

18. Does your firm provide any Social Security measures mentioned below *(specify the amount)*

PF	
Gratuity	
Bonus	
Medical Insurance	
Life Insurance	
Invalid Insurance	
Other (Specify)	

19. Do you have the system of over-time work in your firm?

Yes ☐ No ☐

20. If yes, is the over-time work seasonal?

Always ☐ Sometimes ☐ Never ☐

21. How many hours of over-time work you normally do?

……hours per week/month/season *(tick whichever is applicable)*

22. If yes, specify the allowance you receive for over-time work for each extra hour *(specify the amount)*

Normal pay	
1.5 times of normal pay	
Double the normal pay	
Less than normal pay	
Any other system(specify)	

23. Do you have shift system in your firm?

Yes☐ No☐

24. Are you shift-based worker?

Yes☐ No ☐

25. State the time duration per shift ……

26. To whom is night shift applicable?

Only men ☐ Only women ☐ Both men and women ☐

27. How many night shifts do you serve per week?

Nil ☐ One☐ Two☐

Three☐ Other☐

28. How many times does your firm offer resting time in between work in a day?

Once☐ Twice☐ Thrice☐

29. State the duration of total resting time in a day

Nil☐ Half an hour ☐ One hour ☐ Other *(specify)*☐

30. Place of residence

Own house☐ Rental Accommodation☐

31. If in a hostel, is the company bearing the expense?

Yes ☐ No ☐ Partially☐

32. Does your company provide conveyance facility?

Yes ☐ No ☐ Only during night shifts ☐

33. If conveyance facility is not provided during night shifts how do you commute to your place of stay?

Bus ☐ Auto ☐ Walk ☐ Other ☐

34.Have you encountered any problem when conveyance is not provided by your firm.

Yes ☐ No ☐

35. If yes, specify the problem……

36. How many days of paid holidays you can avail in a year?

Nil ☐ 1-5 days ☐ 5-10 days☐ 10-15 days ☐ More than 15 days *(specify)*☐

C. Trade Unionism

37. Is the Trade Union active in your company?

Yes ☐ No☐

38. Are you a member of Trade Union?

Yes ☐ No ☐

If you are a member of Trade Union , answer questions from 3 to 6

39. ……., name the Trade Union you are enrolled in

No membership☐ INTUC ☐ CITU☐ Others☐

Indicate your personal response to the statements below by selecting the appropriate number from the table below and writing it in the box given against each statement

Strongly Agree	*Agree*	*Disagree*	*Strongly Disagree*	*Not at all*
1	*2*	*3*	*4*	*5*

40. I have joined the union as it bargains with management to improve working conditions☐

41. I have joined the union as it secures high wages☐

42. I have joined the union as I was forced to join☐

43. If you have not joined the Trade Union give the reasons for not joining the same

Prevented by Management☐ Own decision☐

Union not present in the company☐ Other☐

44. Other than Trade Union, are there any other dispute settlement mechanism in your firm?

Yes☐ No☐

45. If yes, name it ☐

46. Are there any other non-political association among workers?

Yes☐ No☐

47. If yes name it ☐

D. Job Satisfaction

Indicate your personal response to the statements below by selecting the appropriate number from the table below and writing it in the box given against each statement

Strongly Agree	*Agree*	*Disagree*	*Strongly Disagree*	*Not at all*
1	*2*	*3*	*4*	*5*

48. Number of hours of work is as per law☐

49. Wages are as per general industry standards☐

50. Men and women workers of the same category get the same wages ☐

51. If you disagree how much do you think the difference is per month? ……☐

52. Management is cooperative (communicates company's goals, results of operations) ☐

53. Working place is well ventilated, neat and clean (free from pollution) and meets safety-standards☐

54. Quality of work is high☐

55. Volume of work is appropriate☐

56. Regular on-the-job training is provided by the management☐

57. Promotion prospects are available☐

58. Medical aid (during accidents, illness) is adequate☐

59. Creche facility is available☐

60. Canteen facilities/refreshments are sufficient☐

61. Do you suffer from any of the following physical ailments due to work?

Muscle pain		Leg pain	
Back pain		Eye strain	
Head Ache		Fatigue	
Asthma		Stress	
Spondylitis		Any other	

62. Who bears the expenditure of work related accidents?

Self ☐ Fully by the company☐

Partly by the company ☐ Medical insurance☐

63. Is there labour inspection by the government in your company?

Very often☐ Rarely☐ Never☐

64. Do you think the firm could pay you more?

If Yes, why? .....

If No, why?.....

65. Would you like to get another job in another firm?

Yes☐ No☐

66. If yes, would you like to change to ……..

Different section in the same company☐

Different company in the same industry☐

Different company in CSEZ☐

Different company in a different industry☐

67. If yes, what will be the reasons for leaving the present job?

Poor pay		Irksome discipline	
Poor working conditions		No promotion prospects	
Too much work		No job satisfaction	
Job is temporary		No retirement benefits	
Health issues		Any other	

68. Mention something good about the company……

69. Mention something which you want to change in the company……

REFERENCES

Ackers, Peter (2006): Leaving Labour?, Some British Impressions of Indian Academic Employment Relations, **Economic and Political Weekly**, Vol.41, No.39, pp.4187-4194.

Aggarwal, Aradhna (2004): Export Processing Zones in India: Analysis of the Export Performance, **Working Paper No.148**, Indian Council for Research on International Economic Relations, New Delhi.

Aggarwal, Aradhna (2006): Special Economic Zones: Revisiting the Policy Debate, **Economic and Political Weekly**, Vol. 41, Nos. 43 and 44, pp. 4533-4536.

Aggarwal, Aradhna (2007): Impact of Special Economic Zones on Employment, Poverty and Human Development, **Working Paper No. 194**, Indian Council for Research on International Economic Relations, New Delhi.

Aggarwal, Mita (1995): International Trade, Labor Standards, and Labor Market Conditions: An Evaluation of the Linkages, **Working Paper No.95-06-C**, U.S. International Trade Commission, Office of Economics, Washington D.C.

Alston, Philip (1994): Post-post-modernism and International Labour Standards: The quest for a New Complexity, in Sengenberger, Werner and Duncan Campbell (eds.), **International Labour Standards and Economic Interdependence**, International Institute for Labour Studies, Geneva.

APR,CSEZ (2012): **Cochin Special Economic Zone**, Kochi.

Babu, M. Suresh (1999): Trade Liberalisation and Export Competitiveness of Indian Manufacturing, **Productivity**, Vol.40, N0.1, pp.67-77.

Banerjee, Debdas (2005): Globalisation, Industrial Restructuring and Labour Standards: Where India Meets the Global, Chapter 6, **Globalisation and Labour Standards: The 'Agenda' Beyond WTO**, Sage Publications, New Delhi.

Bangasser, Paul (1983): Productivity and Industrial Relations: The Role Of International Labour Standards, **Productivity**, Vol.24, No. 3, pp.387-393.

Batra, Amita and Zeba Khan (2005): Revealed Comparative Advantage: An Analysis for India and China, **Working Paper no. 168**, Indian Council for Research on International Economic Relations, New Delhi.

Beers, Cees Van (1998): Labour Standards and Trade Flows of OECD Countries, **The World Economy**, Vol.21, No.1, pp. 57-73.

Besley, Timothy and Robin Burgess (2004): Can Labour Regulation Hinder Economic Performance? Evidence from India, **Quarterly Journal of Economics**, Vol. 119, No. 1, February, pp. 91–134.

Bhatt, P.R. (1992): India's Export Competitiveness and Exchange Rate Policy, **Anvesak**, Vol.22, No. 1 and 2, pp. 67-74.

Bin, Peng (2009): Enhancing Export Competitiveness Through Trade Facilitation in Asia, **Impact of Trade Facilitation on Export Competitiveness: A Regional Perspective**, UNESCAP, Vol. 66, pp.1-17.

Bonnal, Michaël (2010): Export Performance, Labor Standards and Institutions: Evidence from a Dynamic Panel Data Model, **Journal of Labor Research**, Vol.31, No.1, pp.53-66.

Busse, Matthias (2001): Do Labor Standards Affect Comparative Advantage? Evidence for Labor-Intensive Goods, **CIES Discussion Paper No.0142**, Adelaide University, Australia.

Cavusgil, S. Tamer, Gary Knight, and John Riesenberger (2009): **International Business: Strategy, Management and the New Realities**, Pearson Prentice Hall.

CCI (2012): A Brief Report on Engineering Sector in India, **Corporate Catalyst India**, New Delhi CEPZIA (2012): **Cochin Special Economic Zone**, Kochi

Chakravarty, Deepita (2010): Trade Unions and Business Firms: Unorganised Manufacturing in West Bengal, **Economic and Political Weekly**, Vol.45, No.6, pp.45-52.

Chandra, Navin (2009): Labour Rights and the Working Poor, **Indian Journal of Labour Economics**, Vol.52, No.3, pp. 471–488.

Chandran, B.P. Sarath (2010): Trade Complementarity and Similarity Between India and Asean Countries in the Context of the RTA, **The Indian Economic Journal** , Vol. Special Issue, pp. 111-117.

Chaudhary, Simmy (1999): International Labour Standards: The Journey So Far and the Road Ahead, **Labour and Development**, Vol. 5, No.1, pp.79-96.

Clark, J., and K. Guy (1998): Innovation and Competitiveness: A Review, Technology Analysis and Strategic Management, reprinted in Kumar, Rajiv and Doren Chadee (2002): **International Competitiveness of Asian Firms: An Analytical Framework**, ERD Working Paper Series No. 4.

Cling, Jean-Pierre, Gaelle Letilly (2001): Export Processing Zones: A Threatened Instrument for Global Economy Insertion?, **Working Paper DT/2001/17**.

CSEZ Authority (2012): **Cochin Special Economic Zone**, Kochi.

Das, Geeta (2009): **Special Economic Zones (SEZs) in India: Lessons From China**, New Century Publications, New Delhi, India.

Das, Sandwip Kumar and Arindam Bandyopadhyay (2003): Quality signals and Export Performance: A Micro Level Study, 1989-97, **Economic and Political Weekly**, special issue on Review of Industry and Management, September 27-October 3, 2003, Vol. 38, No. 39., pp.4135-43.

Devnathan (2009): Globalisation of Labour, **Economic and Political Weekly**, Vol.42, No.39, pp.3995-4001.

D.N. (2001): Basis of China's competitiveness, **Economic and Political Weekly**, Vol.36, No.07, pp.524-525.

Dohrmann, Jona Aravind (2008): Special Economic Zones in India: An Introduction, **ASIEN 106**, pp. 60-80.

Dollar, David and Edward N. Wolff (1993): **Competitiveness, Convergence, and International Specialization**, MIT Press, Cambridge.

Dutta, Madhumita (2009): Nokia SEZ: Public Price of Success, **Economic and Political Weekly**, Vol. 44, No. 40, October 3, pp. 23-25.

Economic Survey (2011-12): **Ministry of Finance**, Government of India.

Economic Survey (2012-13): **Ministry of Finance**, Government of India.

Elliott, Kimberly Ann and Richard B. Freeman (2003): **Can Labor Standards Improve Under Globalization?**, Institute for International Economics, Washington, DC.

Engerman, Stanley L. (2003): The History and Political Economy of International Labor Standards, in Basu, Kaushik, Henrik Horn, Lisa Roman and Judith Shapiro (eds.), **International Labor Standards: History, Theory, and Policy Options**, Blackwell Publishing Ltd, Oxford, pp. 9-83.

EximbankIndia (2010) **Indian Gems and Jewellery: A Sector Study**, Quest Publications

Fagerberg, Jan (1998): reprinted in Babu, M suresh, (1999): Trade Liberalisation and Export Competitiveness of Indian Manufacturing, **Productivity**, Vol.40, N0.1, pp.72.

Feis, Herbert (1994): International Labour Legislation in the Light of Economic Theory, in Sengenberger, Werner and Duncan Campbell (eds.), **International Labour Standards and Economic Interdependence**, International Institute for Labour Studies, Geneva.

Fischer, Christian and Sebastian Schornberg (2006): The competitiveness Situation of the EU Meat Processing and Beverage Manufacturing Sectors, **Department of Agricultural and Food Market Research,** Institute for Food and Resource Economics, Bonn.

Flanagan, R.J. (2003): Labor Standards and International Competitive Advantage, in Flanagan RJ, W B Gould IV (eds), **International Labor Standards: Globalization, Trade, and Public Policy**, Stanford Law and Politics, Stanford.

Francis, Arthur (1989): The Concept of Competitiveness, in Arthur Francis and P. Tharakan (eds), **The Competitiveness of European Industry**, Routledge, London.

Freeman, Richard B. (1994): A Hard-Headed Look at Labour Standards, in Sengenberger, Werner and Duncan Campbell (eds.), **International Labour Standards and Economic Interdependence**, International Institute for Labour Studies, Geneva.

Friedman & Friedman (1979): in Alston, Philip (1994): Post-post-modernism and International Labour Standards: The Quest for a New Complexity, in Sengenberger, Werner and Duncan Campbell (eds.), **International Labour Standards and Economic Interdependence**, International Institute for Labour Studies, Geneva.

Ghorude, K. N. (2004): Labour in Export Processing Zones: The Case of SEEPZ, Mumbai, **Indian Journal of Labour Economics**, Vol.47, No.4, pp.1093-1100.

Global Competitiveness Report (2012-13), **World Economic Forum**, Geneva.

Gopalakrishnan, Shankar (2007): Negative Aspects of Special Economic Zones in China, **Economic and Political Weekly**, Vol.42, No. 17, April 28, pp.1492-1494.

Gopalakrishnan, Shankar (2007 b): **In the Name of Growth: The Politics and Economics of Special Economic Zones,** Council for Social Development, New Delhi.

Goswami, Arti Grover, Aaditya Mattoo and Sebastian Saez (2012): **Exporting Services- A Developing Country Perspective**, World Bank, Washington D.C.

Gupta, K. R. (2008): Special Economic Zones, in Gupta, K.R (ed.), **Special Economic Zones: Issues, Laws and Procedures**, Atlantic Publishers & Distributors, New Delhi.

Hanson, Gordon H. (2001): Should Countries Promote Foreign Direct Investment?, **G-24 Discussion Paper Series**, United Nations.

Hepple, Bob (1994): Equality: A Global Labour Standard, in Sengenberger, Werner and Duncan Campbell (eds.), **International Labour Standards and Economic Interdependence**, International Institute for Labour Studies, Geneva.

Hertanti, Rachmi and Laura Ceresna Chaturvedi (2012): **Working and Living Conditions in Special Economic Zones: A Comparative Study between India and Indonesia**, Cividep India and Indonesia for Global Justice.

ILO (1998): **Labour and Social Issues Relating to Export Processing Zones, Report for Discussion at the Tripartite Meeting of Export Processing Zones-Operating Countries**, International Labour Office, Geneva.

Jacob, Anupa and Martin Patrick (2012): Enforcement and Practice of Labour Standards in Special Economic Zones: A Preliminary Inquiry at Cochin Special Economic Zone, **Asian Journal of Research in Business Economics and Management**, Asian Research Consortium, Vol.2, No.5, pp.63-77.

Johansson, H. (1994): The Economics of Export Processing Zones Revisited, **Development Policy Review**, Vol. 12, No. 4, pp.387-402.

Joshi, V. and I.M.D. Little (1994): **India: Macro-Economics and Political Economy (1964-91)**, The World Bank, Washington D.C.

Kathuria, Vinish (1999): Competition Sans Competitiveness: Need for a Policy, **Economic and Political Weekly**, Vol. 34, No.45, pp.3175-77.

Ketels, C.(2010) **Export Competitiveness: Reversing the Logic**, World Bank, Washington D.C.

Kucera, David and Ritash Sarna (2004): How Do Trade Union Rights Affect Trade Competitiveness?, **Working Paper No. 39**, Policy Integration Department, ILO, Geneva.

Kumar, Surender (2006): Globalisation and Performance of Export Oriented Units, **Southern Economist**, Vol.45, No.15 and 16, pp.47-50.

Kundra, Ashok (2000): **The Performance of India's Export Zones: A Comparison with the Chinese Approach**, Sage Publications, New Delhi.

Lakshmanan, L. (2009): **Evolution of Special Economic Zones and Some Issues: The Indian Experience**, Department of Economic Analysis and Policy, RBI Staff Studies.

Lall, Sanjaya, (1999): Promoting Industrial Competitiveness in Developing Countries: Lessons from Asia, **Economic Paper No. 39**, Commonwealth Secretariat, London.

Lall, Sanjaya (2001): **Competitiveness, Technology and Skills, Edward Elgar**, Cheltenham, UK.

Lang, Andrew (2010): Trade agreements, Business and Human Rights: The Case of Export Processing Zones, **Corporate Social Responsibility Initiative working paper No. 57**, John F. Kennedy School of Government, Harvard University, Cambridge, USA.

Madani, D. (1999): A Review of the Role and Impact of Export Processing Zones, **World Bank Policy Research Paper No.2238**, World Bank, Washington DC.

Manoharan, V. M. (1996): An Evaluation of the Working of the Export Processing Zones in India- A Case Study with Reference to the Cochin Export Processing Zone, **PhD Thesis**, Cochin University of Science and Technology.

Marshall, Ray (1994): The Importance of International Labour Standards in a More Competitive Global Economy, in Sengenberger, Werner and Duncan Campbell (eds.), **International Labour Standards and Economic Interdependence**, International Institute for Labour Studies, Geneva.

Maskus, K.E. (1997): Should Core Labour Standards be Imposed Through International Trade policy?, **World Bank Policy Research Working Paper No.1817**, World Bank, Washington DC

Maskus, Keith E. (2004): Trade and Competitiveness Aspects of Environmental and Labor Standards in East Asia, in Krumm, Kathie

and Homi Kharas (eds), **East Asia Integrates: A Trade and Policy Agenda for Shared Growth**, World Bank and OUP.

Milberg, William and Matthew Amengual (2008): Economic Development and Working Conditions in Export Processing Zones: A Survey of Trends, **Working Paper, No.3**, International Labour Office (ILO), Geneva, Switzerland.

Mukherjee, Shameek and Shahana Mukherjee (2012): Overview of India' Export Performance: Trends and Drivers, **Working Paper no: 363**, IIM, Bangalore.

Murayana, Mayumi and Nobuko Yokata (2009): Revisiting Labour and Gender issues in Export Processing Zones: Cases of South Korea, Bangladesh and India, **Economic and. Political Weekly**, Vol.44, No.22, pp.73-83.

Mytelka, Lynn Krieger (1999): **Competition, Innovation and Competitiveness in Developing Countries**, OECD.

Nag, Biswajith (2009): **Modelling Competitiveness**, Indian Institute of Foreign Trade, New Delhi.

Nair, G.K. (2000): Labour Woes May Force Units to Move Out of Kochi SEZ, **Business Line**, October 30.

Nallathiga, Ramakrishna (2007): Potential of Special Economic Zones in Promoting Industrial and Regional Economic Development: An Analysis, **The ICFAI Journal of Industrial Economies**, Vol.4, No.1, pp.62-76.

Nath, G.B. (2008): Globalization and Growth of Precarious Jobs in the Indian Labour Market: Implication for Economic Policy, **Indian Journal of Labour Economics**, Vol.52, N0.4, pp.533-544.

Neetha, N. (2004): Education and Skill Development of Workforce in Noida Export Processing Zone, **The Indian Journal of Labour Economics**, Vol.47, No.2, pp.269-279.

OECD (1996): **Trade, Employment and Labour Standards: A Study of Core Workers' Rights and International Trade**, OECD, Paris.

OECD (2000): **International Trade and Core Labour Standards**, OECD, Paris.

OECD, (2008): **Labour Productivity Indicators-Comparison of Two OECD Databases Productivity Differentials and the Balassa-Samuelson Effect**, OECD, Paris

Palit, Amitendu and Subhomoy Bhattacharjee (2008): **Special Economic Zones in India: Myths and Realities**, Anthem Press, New Delhi.

Palo, Sasmita et. al. (2000): Labour Standards in the Aftermath of Structural Adjustment Programme: The Case of India, **Indian Journal of Industrial Relations**, Vol.35, No.3, pp.381-396.

Porter, Michael E. (1985): **Competitive Advantage: Creating and Sustaining Superior Performance**, The Free Press, New York.

Porter, Michael E. (1990): **The Competitive Advantage of Nations, The Macmillan Press Limited**, London.

Porter, Michael E. (2008): The Five Competitive Forces that Shape Strategy, **Harvard Business Review**, Vol.86, No.1, pp.78-93.

Raghavan, B. S. (2008): Lifting India's Competitive Spirit, **Business Line**, July 22.

Rajeev, Meenakshi (2006): Contract Labour in Karnataka: Emerging Issues, **Economic and Political Weekly**, Vol.41, No.21, pp.2086-2088.

Raynauld, Andre and Jen Pierre Vidal (1998): **Labour Standards and International Competitiveness**, Edward Elgar, Cheltenham, UK.

RBI (BoP statistics) in Veeramani, C (2012): Anatomy of India's Merchandise Export Growth, 1993-94 to 2010-11, **Economic and Political Weekly**, Vol.47, No.1, pp.94-104.

Sampat, Preeti (2008): Special Economic Zones in India, **Economic and Political Weekly**, Vol.43 No.28, pp.25-29.

Scherrer, Christoph (2007): International Workers' Rights and Competitiveness, **Labour, Capital and Society**, Vol. 40, No.132, pp.134-59.

Sengenberger, Werner (1994): International Labour Standards in a Globalized Economy: The issues, in Sengenberger, Werner and Duncan Campbell

(eds.), **International Labour Standards and Economic Interdependence**, International Institute for Labour Studies, Geneva.

Sengenberger, Werner (2001): Decent Work: The International Labour Organization Agenda, **A Report Prepared for the Friedrich Ebert Stiftung**, Department for Development Policy, Dialogue on Globalization, Berlin.

Sengenberger, Werner (2005): Globalization and Social Progress: The Role and Impact of International Labour Standards, **A Report Prepared for the Friedrich Ebert Stiftung**, Bonn.

Sen, Sunanda and Byasdeb Dasgupta (2008): Labour Under Stress: Findings from a Survey, **Economic and Political Weekly**, Vol.43, No.3, pp. 65-72.

Sharma, Alakh N. (2006): Flexibility, Employment and Labour Market Reforms in India, **Economic and Political Weekly**, Vol. 41, No. 21, pp. 2078-2085.

Sharma, O. P. (1992): Export Competitiveness: Some Conceptual Issues, **Foreign Trade Review**, Vol 27, No.2, pp.159-176.

Sharma, S.S, N.K. Nair and A.K. Barman (1999): India's Performance in the World Competitiveness Scene, **Productivity**, Vol.40, N0.1, pp.1-23.

Singa Boyenge, Jean-Pierre (2007): ILO Database on Export Processing Zones (Revised), **Working Paper 251**, Sectoral Activities Programme, ILO, Geneva.

Singh, Nirvikar (2003): The Impact of International Labour Standards: A Survey of Economic Theory, in Basu, Kaushik, Henrik Horn, Lisa Roman and Judith Shapiro (eds.), **International Labour Standards: History, Theory and Policy Options**, Blackwell Publishing, USA.

Srinivasan, T.N. (1996): Trade and Human Rights, **Center Discussion Paper No. 765**, Economic Growth Center, Yale University.

Standing, Guy (2008): The ILO: An Agency for Globalisation?, **Development and Change**, Vol.39, No.3, pp. 355-384.

Sunmonu, Hassan A (1994): Contemporary Challenges for Labour Standards resulting from Globalization', in Sengenberger, Werner and Duncan

Campbell (eds.), **International Labour Standards and Economic Interdependence**, International Institute for Labour Studies, Geneva.

Tantri, Malini L. (2010): Effectiveness of SEZs over EPZs Structure: The Performance at Aggregate Level, **Working Paper No.248**, The Institute for Social and Economic Change, Bangalore.

Tantri, Malini L. (2010 b): Performance of Indian SEZs: A Disaggregated Level Analysis, **Working Paper No.251**, The Institute for Social and Economic Change, Bangalore.

Tantri, Malini L. (2011): Special Economic Zones in India: Are these Enclaves Efficient?, **Working Paper No.274**, The Institute for Social and Economic Change, Bangalore.

UK Cabinet Office (1996): Competitiveness: Creating the Enterprise Centre of Europe, HMSO, London, reprinted in Lall, Sanjaya (2001): **Competitiveness, Technology and Skills**, Edward Elgar, Cheltenham, pp.1.

UNESCAP (2009): **Impact of Trade Facilitation on Export Competitiveness: A Regional Perspective,** Studies in Trade and Investment, Economic and Social Commission for Asia and the Pacific, United Nations.

Valticos, Nicolas (1969): Fifty Years of Standard Setting Activities by the International Labour Organization, **International Labour Review**, Vol.100, No.3, pp.201-237.

Veeramani, C. (2007): Sources of India's Export Growth in Pre and Post-Reform Periods, **Economic and Political Weekly**, Vol.42, No.25, pp. 2419-2427.

Veeramani, C. (2012): Anatomy of India's Merchandise Export Growth, 1993-94 to 2010-11, **Economic and Political Weekly**, Vol.47, No.1, pp.94-104.

Venkata Ratnam, C. S. (2000): India and International Labour Standards, **Indian Journal of Industrial Relations**, Vol.35, No.4, pp. 461-85.

Wolff, Franziska, Katharina Schmitt, Christian Hochfeld (2007): **Competitiveness, Innovation and Sustainability-Clarifying the Concepts and their Interrelations**, Institute for Applied Ecology, Berlin.

World Bank (1992): **Export Processing Zone, Policy and Research Series, Industry and Development Division**, Industry and Energy Department and Trade Policy Division, Country Economics Department, The World Bank, Washington, D.C.

Websites

- APEDA <http://www.apeda.gov.in/apedawebsite/six_head_product/PFV_OPF.htm>
- Business Standard <http://www.business-standard.com/article/markets/rubber-exports-rise-280-in-april-august-111091400009_1.html>
- CII <http://www.cii.in>
- CSEZ <www.csez.com>
- CSEZ <http://www.csez.com/documents/sezact.pdf>
- Economic times <http://articles.economictimes.indiatimes.com/2010-05-27/news/27570403_1_plastic-exports-overseas-shipments-western-markets>
- EEPCIndia <http://www.eepcindia.org>
- ILO <http://www.ilocarib.org.tt/projects/cariblex/conventions_23.shtml>
- ILO <http://www.ilo.org/global/standards/introduction-to-international-labour standards/conventions-and-recommendations/lang--en/index.htm>
- ILO <http://www.ilo.org/global/standards/introduction-to-international-labour-standards/lang--en/index.htm>
- ILO <http://www.ilo.org/global/topics/working-conditions/wages/lang--en/index.htm>
- ILO <http://www.ilo.org/ilolex/english/newratframeE.htm>
- ILO <http://www.ilo.org/public/english/bureau/leg/declarations.htm>
- ILO http://www.ilo.org/public/english/dialogue/sector/themes/epz/typology.htm
- ILO <http://www.ilo.org/public/english/standards/relm/country.htm>

- Mathew, N.M., Indian Rubber Institute <http://www.irrdb.com/irrdb/Fulltexts/01-Fulltext Rubber%20Products%20Manufacturing%20Industry%20in%20India.pdf>
- Ministry of Commerce and Industry,GoI <http://commerce.nic.in/publications/anualreport_chapter7-2012-13.asp>
- Ministry of Commerce and Industry, GoI <http://commerce.nic.in/publications/anualreport_chapter2-2011-12.asp>
- Ministry of Commerce and Industry, GoI <http://commerce.nic.in/publications/annualreport201011.asp?id=22>
- Ministry of Commerce and Industry, GoI <http://commerce.nic.in/publications/annualreport200910.asp?id=20>
- Ministry of Commerce and Industry, GoI <http://commerce.nic.in/publications/annualreport200809.asp?id=20>
- Ministry of Commerce and Industry, GoI <http://commerce.nic.in/publications/annualreport200708.asp?id=20>
- Ministry of Commerce and Industry , GoI <http://commerce.nic.in/publications/annualreport200607.asp?id=20>
- Ministry of Commerce and Industry , GoI <http://commerce.nic.in/pressrelease/pressrelease_detail.asp?id=1773>
- Ministry of Commerce and Industry, GoI <http://commerce.nic.in/trade/Electronics_Hardware_Export_Study.pdf>
- Ministry of Communications and Information Technology, GoI <http://deity.gov.in/sites/upload_files/dit/files/downloads/annualreports/AnnualReport_2011-12/AnnualReportE_2011-12_8412.pdf>
- Ministry of Textiles, GoI <http://texmin.nic.in/sector/note_on_indian_ textile_and_clothing_exports_intl_trade_section.pdf>
- NMCC <http://nmcc.nic.in/pdf/deloitte_report_foodandagroprocessing.pdf>
- Plexcouncil <http://www.plexconcil.com>

- SEZ India <www.sezindia.nic.in>
- SEZ India <http://sezindia.nic.in/develop-sez-happly.asp>
- SEZ India < http://csez.com/documents/sezact.pdf>
- SEZ India <http://sezindia.nic.in/writereaddata/pdf/ListofoperationalSEZs.pdf>
- SEZ India <http://www.sezindia.nic.in/writereaddata/pdf/StatewiseDistribution-SEZ.pdf>
- IBEF <http://www.ibef.org/download/SEZs-Role-in-Indian-Manufacturing-Growth.pdf>