

# OCCUPATIONAL SAFETY & HEALTH: LEGAL FRAMEWORK & STATISTICAL TREND ANALYSIS (2010-2015)



International Labour Standards Unit Ministry of Overseas Pakistanis & Human Resource Development

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Occupational Safety & Health: Legal Framework & Statistical Trend Analysis/ International Labour Standards Unit / Ministry of Overseas Pakistanis & Human Resource Development 2016 / Pakistan

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OSH / disability / workers / hazards / factories / employers/ workers/ compensation / collective bargaining / tripartite consultations / silicosis / healthcare / anthrax / labour inspection / labour force survey / Pakistan / newspaper statistics / precarious employment / joint action plan / industrial relations / mining / construction / agriculture / manufacturing / international labour standards / fire / asthma / policy formulation / legislation / benefits



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#### **Foreword**

The importance of having a national statistical system cannot be emphasized enough for sustainable development, equitable growth and evidence based planning. Reliable data serves a crucial role in facilitating formulation of sound and judicious policies and timely decision making for achievement of development goals. Labour market information is valuable not only for policies and programmes targeting improvement in employment and working conditions but is also vital for the overall socio-economic development planning of a country. Ensuring due rights of the workforce is intrinsically linked to development goals set by a country. Promotion of fundamental principles and rights at work, safe and humane working conditions, productive employment, social protection and dialogue with the cross cutting theme of gender therefore play a part in a country's socio-economic progress.

One of the increasingly important topics that has taken global attention recently is that of Occupational Safety & Health (OSH). Recognized as a human right and an integral part of people-centered agenda for sustainable development, the scope of OSH is undergoing gradual evolution in response to myriad of social, political, technological and economic changes. OSH, now being an important International Labour Standard, ensures economic stability, good governance, decent work and ultimately provides grounds for a healthy and prosperous society. Government of Pakistan is cognizant of the importance of OSH, especially in the wake of tragic workplace incidents in recent times. Ministry of Overseas Pakistanis & Human Resource Development being the federal institution for coordinating and keeping watch on labour legislation in the country from an international perspective has undertaken this exercise to assess the OSH situation in the country. This report analyzes the present legislative framework and statistical trends on OSH.

Ministry of Overseas Pakistanis & Human Resource Development has initiated this report as a contribution to the orders of the Honourable Supreme Court of Pakistan on development of necessary capacities by provinces and documentation of OSH situation in the country's labour market. The report also fulfills the mandated function of this Ministry to advocate legal and institutional reforms in the post-devolution setup.

The report reviews the legal framework on OSH and presents an analysis of the statistical data on occupational accidents and injuries taken from the last four Labour Force Surveys (2010-11, 2012-13, 2013-14 and 2014-15). It also covers OSH incidents (injuries and fatalities) reported in newspapers during the period 2010 to March 2016. It is hoped that by setting a baseline on the subject, the report will contribute towards improving the OSH situation in the country and feed into policy making, legislative endeavours and allocation of resources at provincial level.

I would like to express my appreciation for the International Labour Standards (ILS) Unit for producing the first comprehensive study on the state of OSH in the country.

Khizar Hayat Khan Secretary Ministry of Overseas Pakistanis & Human Resource Development

April, 2016

## Acknowledgments

International Labour Standards (ILS) Unit, established with the support of the International Labour Organization (ILO), is housed in the Ministry of Overseas Pakistanis & Human Resource Development to ensure timely reporting on ratified and unratified Conventions, address observations of the supervisory committees of the ILO including Committee of Experts on Application of Conventions and Recommendations (CEACR), and publish research studies / evidence based reports on important labour issues to facilitate policy dialogue and technical assistance to improve compliance and reporting in the country.

One of the increasingly important topics that has taken global attention is that of Occupational Safety & Health (OSH). OSH has been recognized as a human right and an integral part of people centered agenda for sustainable development. The scope of occupational safety and health is evolving gradually and continuously in response to myriad of social, political, technological and economic changes. This report reviews not only the legal framework on Occupational Safety and Health issues but also analyses the statistical data on occupational accidents and injuries, taken from the last four labour force surveys (2010-11, 2012-13, 2013-14 & 2014-15). The report further highlights the OSH incidents reported in the newspapers during the period 2010 to March 2016.

The report has been prepared by the ILS Unit, under supervision and guidance of the Ministry of Overseas Pakistanis & Human Resource Development. ILS Unit is overseen by Mr. Iftikhar Ahmad (Labour Specialist and lead author) and the team members (contributing authors) include Syed Hassan Sagheer (ILS Officer) and Mr. Sajjad Akbar (Coordinator/Statistician). Muhammad Asad Noor has assisted in data analysis. Muhammad Imran compiled data on occupational injuries and fatalities from newspapers for this report.

This report would not have been possible without kind oversight of Ms. Atifa Raffat, Joint Secretary HRD. Special thanks are due to Mr. Saad Gilani (Senior Programme Officer ILO Country Office) and Dr. Iftikhar Amjad (Deputy Secretary HRD-II), for their consistent support throughout this work. ILS Unit is grateful to the technical reviewers from ILO Regional Office Bangkok as well as ILO Islamabad colleagues who reviewed this report (Ms. Rabia Razzaque and Mr. Faisal Iqbal) and suggested important improvements. The Unit is also indebted to Dr. Lubna Shahnaz, whose first report on OSH Trends in Punjab (2014) acted as an inspiration for this report. This report is also the result of discussions, spanning over years, with former Central Labour Advisor - Raja Faizul Hassan Faiz on the state of OSH affairs in the country and labour law reform.

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# **Abbreviations**

CEACR	Committee of Experts on Application of Conventions and Recommendations
DoL	Directorate of Labour
EFP	Employers Federation of Pakistan
EOBI	Employees Old-Age Benefits Institution
EU	European Union
FTA	Free Trade Agreement
GDP	Gross Domestic Product
GSP	Generalized Scheme of Preferences
ILO	International Labour Organization
ILS	International Labour Standards
JAP	Joint Action Plan
LFS	Labour Force Survey
LJCP	Law & Justice Commission of Pakistan
M/o OP&HRD	Ministry of Overseas Pakistanis and Human Resource Development
NILAT	National Institute of Labour Administration & Training
OSH	Occupational Safety and Health
PESSI	Provincial Employees Social Security Institution
PESSO	Provincial Employees Social Security Ordinance
PWD	Pakistan Public Works Department
PWF	Pakistan Workers Federation
RoP	Return on Prevention
SAA-CIWCE	Saeed Ahmad Awan Centre for Improvement of Working Conditions &
	Environment
UN	United Nations
WWF	Workers Welfare Fund

#### **Executive Summary**

Decent work is essentially safe work. Occupational accidents in recent years led to the development of a Joint Action Plan which called for introduction of legal and institutional reforms. While hearing a suo motu case on occupational diseases (Silicosis), the Honourable Supreme Court of Pakistan directed the provinces to develop necessary capacities in compiling key labour and OSH statistics, analyze them and translate them into policy-making recommendations. Ministry of Overseas Pakistanis & Human Resource Development (OP&HRD), in the post devolution scenario, is mandated with "coordination of labour legislation" and "keeping a watch on labour legislation from international perspective". This mandate requires the Ministry to take on analytical work and come up with recommendations for legislative and institutional reforms. For research and analytical work, the Ministry has established an International Labour Standards (ILS) Unit which not only ensures that the Government meets its international reporting obligations but also takes on analytical work like this report and advocate reforms in labour matters.

This is the first comprehensive study of legal regime on OSH and related statistical data collected under Labour Force Surveys. This report analyses data on occupational accidents and injuries taken from the last four Labour Force Surveys (2010-11, 2012-13, 2013-14 and 2014-15) as well as occupational incidents reported in newspapers. Reported newspaper data has been useful in determining workplace fatalities since these are not covered under LFS.

Pakistan is the sixth most populous country in the world with a population of about 189 million (LFS 2014-15). The estimated labour force is 61 million comprising of all persons of age ten years and above. Those employed are 57.42 million while 3.62 million (5.94%) are unemployed. Agriculture sector employs the highest percentage of labour (42%) and bears the major brunt of occupational accidents/injuries (48%) in terms of numbers. The industrial sector engages 22% of the labour force, however its share in total occupational accidents and injuries is nearly one third. Services sector employs 35% of the

labour force and has lowest accidents ratio (19%). The formal sector constitutes 27.4% of the non-agricultural labour force while the informal sector employs 72.6% of the non-agricultural labour force. The ratio of occupational accidents/injuries is the highest in the informal sector (86%) when compared with the formal sector. Data from newspapers on occupational injuries and fatalities confirms these trends.

Although the incidence of occupational diseases/injuries is 4% for overall economy, the ratio is higher for male workers as well as for rural workers. When data is analyzed on provincial basis, Sindh has the highest incidence of occupational accidents while Balochistan has the lowest. Although agriculture has the largest share of total occupational diseases and injuries, the most hazardous sectors in in terms of occupational incidence are construction, followed by mining, and quite unexpectedly transport, storage & information and communication sector with major occupational injuries/diseases occurring in transport and storage sector..

This report provides the most comprehensive overview of the country's legal framework regarding OSH with details on healthcare and workers' compensation system. It further delves into details on bipartite consultation and cooperation on OSH matters (OSH councils or works councils) as well as mutual rights and responsibilities of both parties to maintain safe and healthy workplaces. Labour and OSH laws further require employers to take preventive and protective measures and stipulate recording and notification of workplace accidents. A separate chapter on enforcement discusses in detail the labour inspection system under various labour laws, gaps and challenges faced by the system and the suggestions for revitalization and restructuring of labour inspection in the country as enunciated in the framework document prepared by this Ministry.

#### The main findings of the report are:

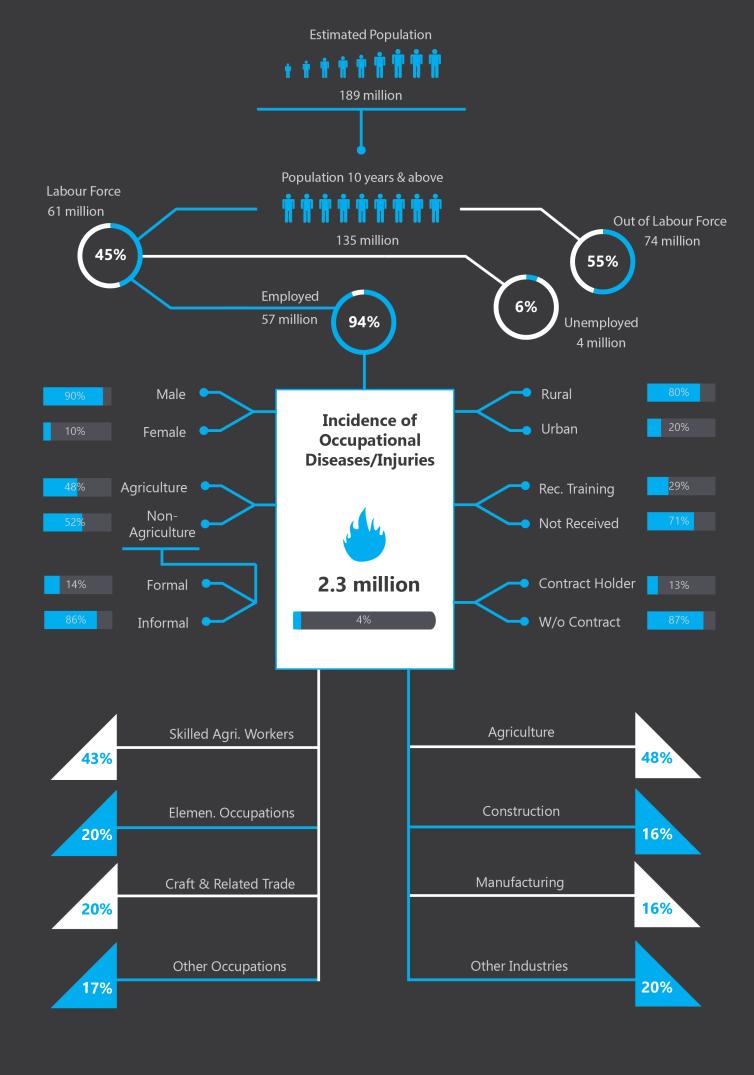
 Occupational analysis: highest incidence of occupational accidents/injuries for plant and machine operators, followed

- by craft and related trade workers and elementary occupations
- 2. Sectoral analysis: highest incidence of occupational injuries and diseases is in construction, followed by mining, and transport & storage sector
- 3. Lack of a coherent and comprehensive law with general applicability on all sectors of economy
- 4. More than two-thirds of employed labour force does not enjoy any protection provided under labour and OSH laws (agriculture, construction, informal sector workers including self-employed, home-based and domestic workers)
- Non-availability of reliable data on occupational accidents, injuries and fatalities
- Lack of awareness on importance of OSH and little concern with returns on prevention

The current report recommends the following reforms for addressing the gaps and challenges in the area of OSH:

- Enactment of a standalone modern law on OSH with universal and uniform coverage of occupational sectors and employment situations
- Protection of employment of those workers who file a complaint or act as a whistleblower
- 3. Bringing the most affected sectors (rural economy, agriculture and construction sectors) under the ambit of labour and OSH laws
- 4. Standalone Labour Inspection legislation which creates a dedicated labour inspection career service (separate from labour department) through creation of independent labour inspection authority at the provincial level with sufficient human and financial resources
- 5. Encouragement and promotion of collective bargaining to bring

- about genuine progress and tangible improvements in working conditions
- 6. Promoting the establishment of work councils/OSH committees for discussing OSH issues at workplace
- 7. Preparation of a national OSH profile and review of the list of occupational diseases
- 8. Amending the LFS questionnaire for greater and better coverage of occupational diseases/injuries and fatalities
- 9. Improving collaboration between Employees Social Security Institutions, Health Departments, Environmental Protection and Local Government Departments for timely and effective health care
- 10. Improvement of healthcare infrastructure in rural areas including Basic Health Units (BHU)
- 11. Awareness and advocacy on the importance of OSH to inculcate a safety culture not restricted to workplaces rather the wider society
- 12. Prioritizing OSH in terms of allocation of finances at governmental and enterprise level





# INTRODUCTION & BACKGROUD



## **Background**

A human rights case (No. 16143-P of 2014) was filed in the Supreme Court under Article 184(3) of the Constitution of Pakistan. The Supreme Court of Pakistan took a suo motu notice on the death of 18 workers due to silicosis (a respiratory disease where fine particles during stone crushing process enter lungs and cause respiratory and breathing problems), this, during the last couple of years in the stone crushing industry of Gujranwala, Punjab. During the course of trial, findings revealed that more than 50 deaths in Punjab were attributed to silicosis. During the proceedings, it also became evident that provincial labour departments do not have any authoritative and reliable data on the numbers and profile of the labour force in their respective provinces and districts. With scarce data, there was dearth of evidence-based policymaking as well as results based action plans. Labour & Human Resource Department, Government of Punjab had prepared its Punjab Employment Trends (Occupational Safety & Health) 2014 Report, which was highly appreciated by the superior court. The Honourable Court also exhorted other provinces to follow suit, and develop necessary capacities to compile key statistics, analyse them, and translate them into policy-making recommendations that could later inform the monitoring and evaluation framework and system.

The importance of OSH and promotion of decent working conditions and safer work environments for improved trade opportunities, better market access is also evident from the various trade preferential schemes. European Union has applied a system of unilateral trade concessions called the Generalized Scheme of Preferences (GSP) to help, developing countries and least developed countries, generate export revenue by reducing or eliminating tariffs on a range of products entering the EU market. The aim of the scheme is also to facilitate integration of the developing countries into the international markets. Pakistan was granted the GSP-Plus status from 01st January 2014 after meeting the economic/trade vulnerability, and (27 UN/ILO) convention ratification criteria. European Union's 2015 Policy 'Trade for All' emphasises that "the Commission will prioritise work to implement effectively the core labour standards (abolition of child labour and forced labour, non-discrimination at the workplace, freedom of association and collective bargaining), as well as health and safety at work in the implementation of Free Trade Agreements (FTAs) and GSP'.

In order to have a better understanding of OSH standards and resources at national and provincial level, the 2013 Joint Action Plan (chalked out in the wake of Baldia Factory Fire in September 2012) proposed to carry out an OSH Profile in Pakistan in order to ascertain the current legal situation, systems in place, and inspection and monitoring mechanisms within the country. The proposed study under JAP was aimed to be used as a benchmark for future development work in OSH.

The subject of labour was devolved to the provinces in 2010 in the light of the 18th Constitutional Amendment. The responsibility of coordination of labour legislation and reporting on compliance with International Labour Standards, however, lies with the Federal Government. The mandated function of "coordination" and "keeping a watch on labour legislation from international perspective" requires the Federal Government to take on analytical work advocating legal and institutional reforms that are necessary to comply with international labour standards.

The International Labour Standards Unit, housed in the Ministry of Overseas Pakistanis & Human Resource Development, proactively initiated this report to i) supplement the orders of the Supreme Court, on development of necessary capacities by Provinces and documentation of Occupational Safety and Health situation in the country's labour market; ii) showcase the state of labour market especially the situation of Occupational Safety and Health in the country and initiate necessary reforms in the area in line with EU Trade Policy and in order to maintain GSP + status, iii) prepare a partial Occupational Safety & Health Profile for the country and lay the foundation for upcoming detailed OSH profile, and iv) fulfill the mandated function of this Ministry to advocate legal and institutional reforms.

What differentiates this report from many others is that this is the first report that reviews not only the legal framework on OSH at such great length but also analyses the statistical data on occupational accidents

and injuries, derived from the last four (2010-11, 2012-13, 2013-14 & 2014-15) labour force surveys (LFS). It also provides a snapshot of the labour inspection framework, however, it does not explore the area in detail since it is the subject of another study being overseen by the ILO Country Office. An effective labour inspection system is pivotal in reducing the incidence of occupational accidents and injuries besides improving working and employment conditions, provision of social security benefits, elimination of child as well as bonded labour, and freedom of association & collective bargaining. However, the current report touches the subject of labour inspection framework on surface, as this is the subject of another thorough study, while the focus of this study is on OSH.

Other than LFS data, the current report also uses data collected through media/newspaper reports on occupational injuries/accidents and fatalities. The newspaper data is relevant especially to determine workplace fatalities since LFS data does not cover fatal accidents. To maintain the impartiality and uniqueness of this study, the administrative data (data from labour departments and social security institutions) has deliberately not been used. The current report summarizes the existing OSH situation, while including national data on occupational accidents and diseases, high-risk industries and occupations, and the description of national systems for occupational safety and health and other national means of acting in this area.

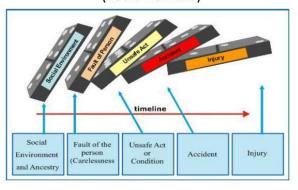
#### Introduction

Occupational safety and health is defined as the "science of the anticipation, recognition, evaluation and control of hazards arising in or from the workplace that could impair the health and well-being of workers", while taking into account the possible impact on the surrounding communities and the general environment. Globalization has both positive and negative impact on the world of work, especially in the realm occupational safety and health. Trade liberalization, rapid technological progress, significant improvement in transport and

communication, changing patterns of employment, adjustments in work organization practices, and numerous other factors can all generate new types and patterns of hazards, exposures, and risks.

The first well-known study into safety management was undertaken by Heinrich in 1931 and is usually referred to as "Heinrich's domino theory". Heinrich identified a chain of events and circumstances that ultimately lead to injury:

#### Heinrich Domino Theory (1930) (Teori Domino)



Heinrich analyzed a large number of industrial accidents and determined that 88% were due to unsafe acts and only 10% due to unsafe conditions. These finding, encapsulated in his 10 axioms on industrial safety, have formed the basis of much subsequent OSH management theory. In the light of Heinrich's law, it can be argued that fatalities, though fateful, are not fated; accidents do not just happen and may not always be injurious (the case of near misses and 1-30-300 proportioning); illnesses/diseases are not random rather all of these are caused and thus preventable through education/training of the workforce, improved engineering practices (safeguarding of machinery initially, as proposed by Heinrich), and better enforcement.

The protection of workers against sickness, disease, and injury related to the working environment is embodied in the preamble of the ILO's Constitution. The commitment to worker

health and safety was renewed in the Deceleration of Philadelphia 1944 which recognized the solemn obligation of the International Labour Organization in achieving the adequate protection for the life and health of workers in all occupations. Majority of the 189 Conventions and 204 Recommendations adopted by the International Labour Conference between 1919 and 2016 address, directly or indirectly, the issues of Occupational Safety and Health. Occupational Safety and Health is a key element in achieving sustained decent working conditions (thus becoming an integral element of ILO Decent Work Agenda), and strong preventive safety cultures. Main ILO instruments on OSH are listed in Box-1.

There are human, social and economic costs associated with occupational accidents, injuries, and diseases. ILO's research has indicated that 2.3 million fatalities occur across the world every year.

Another study indicates that the rate of occupational accidents, both fatal and non-fatal, is estimated at 317 million. The economic burden alone is estimated at 4% of the global gross domestic product (GDP) each year.

#### Box - 1 Instruments Concerning Occupational Safety and Health

#### General Provisions

- Protection of Workers' Health Recommendation, 1953 (No. 97)
- Occupational Safety and Health Convention (No. 155), and Recommendation (No. 164), 1981
- Occupational Health Services Convention (No. 161), and Recommendation (No. 171), 1985
- Prevention of Major Industrial Accidents Convention (No. 174), and Recommendation (No. 181), 1993
- List of Occupational Diseases Recommendation, 2002 (No. 194)
- Protocol of 2002 to the Occupational Safety and Health Convention, 1981 (No. 155)
- Promotional Framework for Occupational Safety and Health Convention (No. 187), 2006, and Recommendation (No. 197), 2006

#### Specific Risks and Substances

- Radiation Protection Convention (No. 115), and Recommendation (No. 114), 1960
- Occupational Cancer Convention (No. 139), and Recommendation (No. 147), 1974
- Working Environment (Air Pollution, Noise and Vibration) Convention (No. 148), and Recommendation (No. 156), 1977
- Asbestos Convention (No. 162), and Recommendation (No. 172), 1986
- Chemicals Convention (No. 170), and Recommendation (No. 177), 1990

#### Specific Branches of Economic Activity

- Hygiene (Commerce and Offices) Convention (No. 120), and Recommendation (No. 120), 1964
- Occupational Safety and Health (Dock Work) Convention (No. 152), and Recommendation (No. 160), 1979
- Safety and Health in Construction Convention (No. 167), and Recommendation (No. 175), 1988
- Safety and Health in Mines Convention (No. 176), and Recommendation (No. 183), 1995
- Safety and Health in Agriculture Convention (No. 184) and Recommendation (No. 192), 2001

#### **Pakistan & OSH Conventions**

The ILO Conventions and International Labour Standards provide the backbone for creating socially desirable decent work conditions. These standards cover the whole spectrum of social and economic interactions between workers, employers and governments and address diverse issues, including occupational health and safety, social security, and labour inspections. In order to keep national objectives in conformity with the principles of the International Labour Standards, Government of Pakistan has enacted labour and workplace protection laws. Pakistan has ratified 36 ILO Conventions, of which 33 are in force. These ratified Conventions include the eight core Conventions enshrined in the ILO Declaration on Fundamental Principles and Rights at Work (1998), generally referred to as Charter of Workers' Rights. These core standards relate to fundamental human rights to be observed at the workplace. Pakistan has not ratified any of the ILO Conventions indicated in Box-1, however, most of the OSH standards are addressed in the various Acts and regulations. Although, Pakistan has not ratified any OSH convention, a closer look indicates that there are many conventions which are ratified by Pakistan, which have direct and indirect linkage with OSH. Box-2 showcases those conventions.

Box-2 Pakistan and Ratified ILS: Relevance to OSH					
Subject	Convention	Ratification			
Abolition of Child Labour	Worst Forms of Child Labour Convention, 1999 (C182)	2001			
Labour Inspection & Admintration	Labour Inspection Convention, 1947 (C81)	1953			
Occupational Safety & Health	Underground Work (Women) Convention, 1935 (C045)	1938			
Employment Policy & Formulation	Vocational Rehabilitation and Employment (Disabled Persons) Convention, 1983 (C159)	1994			
	Workmen's Compensation (Occupational Diseases) Convention, 1925 (C18)	1927			
Social Security	Equality of Treatment (Accident Compensation) Convention, 1925 (C19)	1927			
	Equality of Treatment (Social Security) Convention, 1962 (C118)	1969			
5 1 70 1	Marking of Weight (Packages Transported by Vessels) Convention, 1929 (C027)	1931			
Dock Workers	Protection Against Accidents (Dockers) Convention (Revised), 1932 (C032)	1947			
Seafarers	Medical Examination of Young Persons (Sea) Convention, 1921 (C016)	1922			

The International Labour Standards are being governed through the implementation of labour laws, labour policies and institutional set-ups which aim to promote good labour and industrial relations, occupational safety and health, social security, employment, skills, vocational training and workers' education.

#### **Post Devolution Scenario**

The 18th Constitutional Amendment 2010 has devolved the subject of labour, with the deletion of concurrent legislative list, to the Provinces. The only federal legislation, still applicable to workers in provinces is Industrial Relations Act 2012, which deals with the formation of trade unions and improvement of relations between workers and employers in trans-provincial establishments and industry. The responsibility of coordination of labour related issues, however, lies with the Federal Government. It is also the responsibility of Federal Government to ensure that Provincial labour laws are drafted in accordance with International Conventions ratified by Pakistan. Apart from the function of, "keeping a watch from International perspective and coordination of labour legislation", the subject of reporting on International Labour Standards also vests with the Federal Government.

While amending the Constitution, the Parliament ensured continuity of laws that existed at that time Article 270-AA till provincial governments enact their own laws. This Article therefore provides that the laws would continue to remain in force until altered, amended or repealed by provincial governments. Consequent to the 18th Amendment, provinces have started legislative work in the field of labour and are, at present, at the different stages of law making.

Post devolution, the Federal Government has taken steps to initiate dialogue with all stakeholders leading to the necessary legislations and enforcement arrangements. The Government is benefitting from the spirit of tripartism to reach consensus with regard to updating existing laws and regulations in line with International Labour Standards, including Occupational Safety and Health.

In order to ensure the implementation of OSH provisions, provincial governments are striving to bring about reforms in the labour inspection regime. A number of steps are in process, including development of a national action plan and ensuring participation of concerned stakeholders in the inspection process at the grassroots level. The ongoing labour inspection reforms also envisage a number of initiatives like registration of workplaces and their risk assessment, integrated inspections, and advocacy and awareness on the subject. Additionally, the Government aims to inculcate a spirit of selfinspection and self-reporting. All these endeavors are aimed at developing an efficient and effective inspection regime while keeping in view the capacity and resource constraints faced by the country.





# STATE OF THE LABOUR MARKET & OSH 2010 - 2015



#### Overview of the Labour Market

The current chapter provides an overview of the market, analyses OSH data from Labour Force Surveys and newspaper data from 2010 onward. Pakistan is the sixth most populous country in the world with a population of about 189 million, as estimated and used by Labour Force Survey 2014-15. The estimated labour force is 61 million comprising of all persons of age ten years and above. The number of people employed increased from 56

million in 2013-14 to 57.42 million in 2014-15. Agriculture sector employs 42.27% of the labour, followed by the services sector, which engages 35% of the employed labour force. The industrial sector accommodates 22.61% of the labour force. The formal sector constitutes 27.4% of the non-agricultural labour force, while the informal sector employs 72.6% of the non-agricultural labour force (Table 1).

Table 1: Size & Distribution of the Labour Force (2014-15)					
	Millions	%			
Labour Force	61.04	100			
Unemployed	3.62	5.94			
Employed	57.42	94.06			
Agriculture	24.27	42.27			
Non-Agriculture	33.15	57.73			
Formal	9.092	27.43			
Informal	24.06	72.57			
Services	20.17	35.12			
Industry	12.98	22.61			

Table 2 shows the employment shares for different sectors and as well as their respective shares in the GDP. Agriculture employs 42.27% of the total labour force and contributes 21% to the GDP. Mining, having a relatively smaller share in employment, contributes 3% to the GDP. Construction engages 7.31% of the total employed population with 2.44% share in GDP. This table also displays sectoral share in employment, sectoral share in GDP, and sectoral share in injuries and diseases. Agriculture not only employs the highest percentage of workforce (42.28%), its share in occupational injuries/diseases is also the highest (47.95%). Quite interesting is the case of construction which employs 7.31% of workforce, contributes 2.44% to GDP, and its sectoral share in injuries/diseases is 16.27%. Quite opposite is the case of wholesale and trade,

which employs 14.64%, contributes 18.26% to GDP, and its sectoral share in injuries/diseases is 7.07%. The incidence of occupational injuries and diseases by sectors, however, tells a very compelling account. Construction is the most hazardous sector (8.90%), followed by mining (6.84%), and quite unexpectedly Transport, Storage & Information & Communication sector (5.60%). Agriculture, though has nearly half of the share of total occupational injuries, has incidence of 4.54% followed by 4.15% in manufacturing. A further insight into data indicates that the incidence of occupational injuries and diseases is 6% in transport and storage sector. On the other hand, no occupational injuries occurred in the information and communication sectors during 2014-15.

Table 2: Sector-Wise Distribution of Employment, GDP Share and Injuries/Diseases

Sector	Sectoral Share in Employment (%)	Sectoral Share in GDP (%)	Sectoral Share in Total Injuries/ Diseases (%)	Incidence of Occupational Injuries/ Diseases by Sector (%)
Agriculture/Forestry & Fishing	42.28	20.88	47.95	4.54
Mining & Quarrying	0.16	2.92	0.27	6.84
Manufacturing	15.34	13.27	15.90	4.15
Electricity & Gas	0.40	1.67	0.32	3.14
Construction	7.31	2.44	16.27	8.90
Wholesale & Trade	14.64	18.26	7.07	1.93
Transport, Storage & Information & Communication	5.40	13.36	7.57	5.60
Financial & Insurance	0.59	3.14	0.09	0.64
Others	13.89	24.06	4.55	1.31

## State of Occupational Safety & Health

The current chapter uses the data from last four Labour Force Surveys (2010-11, 2012-13, 2013-14, and 2014-15) and showcases the labour market and OSH situation in the country. Provincial comparisons are also part of this chapter.

### Population, Labour Force, and Unemployment Rate

Pakistan has a total population of 189 million of which 65% are based in rural areas while the remaining 35% live in urban areas. Population distribution for the country shows an upward increasing trend in the last five years with sharper spikes residing in rural areas (as compared to Urban) and Punjab (as compared to other provinces). The working age population (10 years and above) is 135 million, of which 63% lives in the rural areas while 37% is based in urban areas (**Table 3**).

Table 3: Population Distribution (Millions)					
Sector	2010-11	2012-13	2013-14	2014-15	
Pakistan	174.39	181.72	186.19	189.19	
Male	89.23	93.32	95.03	96.48	
Female	85.16	88.40	91.16	92.71	
Urban	58.49	61.29	64.63	65.83	
Rural	115.90	120.43	121.56	123.36	
Punjab	97.58	101.19	103.22	104.41	
Sindh	43.04	45.27	45.92	46.81	
Khyber Pakhtunkhwa	24.92	26.18	25.79	26.37	
Balochistan	8.85	9.08	11.27	11.60	

<sup>1</sup> Labour Force Survey 2010-11, 2012-13, 2013-14 and 2014-15

Pakistan's working age population increased from 132.2 million in 2013-14 to 135 million approximately in 2014-15. All the provinces, except Khyber Pakhtunkhwa, saw smooth increments in their working age population during the last five years. Khyber Pakhtunkhwa experienced a decrease in working age population from 2012-13 to 2013-14, while an increase between 2013-14 and 2014-15 (from 17.7 million to 18.2 million). Even though the national labour force shows an upward trend in working age during the last five years, **table 4** shows how the increments are relatively smaller

than those experienced by the national working age population. Gender disaggregation shows both males and females experienced minute growth from 2013-14 to 2014-15; Males from 45.7 million to 46.4 million, and Females from 14.4 million to 14.7 million. Provincial disaggregation indicates that only Balochistan's labor force grew more significantly than its 10+ population; a change of 0.36 million in labor force compared to 0.14 million in population, between 2013-14 and 2014-15. (§26 of Industrial

Table 4: Population &	Labour force (10	years and above) Di	stribution (Millions)	
Sector	2010-11	2012-13	2013-14	2014-15
		Population		
Pakistan	125.30	130.73	132.24	134.99
Male	63.99	66.74	67.06	68.43
Female	61.32	63.99	65.17	66.56
Urban	44.36	46.63	48.62	49.39
Rural	80.94	84.10	83.62	85.60
Punjab	71.20	73.88	75.01	76.20
Sindh	31.25	32.53	32.36	33.32
Khyber Pakhtunkhwa	17.25	18.24	17.70	18.17
Balochistan	5.61	6.09	7.17	7.31
		Labour Force		
Pakistan	57.24	59.74	60.10	61.04
Male	43.96	45.98	45.65	46.39
Female	13.29	13.76	14.45	14.66
Urban	17.54	18.52	18.97	19.09
Rural	39.70	41.22	41.13	41.95
Punjab	34.36	35.71	36.81	36.92
Sindh	14.07	14.73	13.99	14.31
Khyber Pakhtunkhwa	6.58	6.72	6.46	6.60
Balochistan	2.23	2.58	2.85	3.21

The labour force participation rate (LFPR), defined as the ratio of the economically active population to the working age population, indicates the potential supply of labour in any economy. The labour force participation rates in table 5 show the national LFPR at 45.22 percent in 2014-15, a decrease form 45.45 in 2013-14. The LFPR is 22% for females, while it is more than three times (68%) for males. Similarly, the participation rate is higher in the rural areas (49%) than in the urban areas (39%). Gender wise LFPR shows a decrease in Male

LFPR at 67.78% in 2014-15 vs 68.07% in 2013-14, and Female LFBR at 22.02% in 2014-15 vs 22.17% in 2013-14. Table 5 compliments the tardy growth in Labor force compared to growth in working age population shown in **table 4**. As such, **table 5** shows mild decreases in LFPR in all provinces except Balochistan, where LFPR grew by 4.15% between 2013-14 and 2014-15. However, the highest LFPR remains with Punjab at 48.46% in 2014-15, while the lowest with Khyber Pakhtunkhwa (36%).

Table 5: Labour Force Participation Rate (%)					
Sector	2010-11	2012-13	2013-14	2014-15	
Pakistan	45.69	45.70	45.45	45.22	
Male	68.70	68.89	68.07	67.78	
Female	21.67	21.50	22.17	22.02	
Urban	39.54	39.71	39.01	38.66	
Rural	49.05	49.02	49.19	49.01	
Punjab	48.26	48.33	49.07	48.46	
Sindh	45.03	45.30	43.22	42.96	
Khyber Pakhtunkhwa	38.14	36.85	36.47	36.34	
Balochistan	39.83	42.34	39.74	43.89	

The unemployment rate indicates the proportion of the labour force that is out of work and is available for work and seeking employment opportunities. The unemployment rate is approx. 6% for the overall economy, 5% for male workers and 9% for female workers. There is disparity again in the urban and rural areas in terms of unemployment rate where the rate is 8% for urban areas but 5% for rural areas (a case of underemployment).

**Table 6** shows that Pakistan experienced a gradual decrease in unemployment rate (0.02 percentage points) from 2013-14 to 2014-15. A similar trend is evident for males with a 0.1 percentage point decrease from 2013-14 to 2014-15. Female unemployment rate, however, increased by 0.23 percentage points in the same year. Provincial analysis suggests Balochistan having the lowest unemployment rate (3.92%) in 2014-15, a 0.04% drop from the previous year. Khyber Pakhtunkhwa has the highest provincial unemployment rate (7.71%) in 2014-15, albeit showing the sharpest decrease (0.65 percentage points) from the previous year. It is interesting to note that Sindh was the

only province where unemployment rate grew (from 4.17% to 4.66%) during the last two years.

Employment-to-population ratio provides information on the ability of an economy to create jobs for its people and is used to assess the extent to which growth has contributed to increased employment opportunities. EPR is more insightful indicator than unemployment rate in Pakistan (and all developing countries), where no one can afford to remain unemployed for long. The EPR represents the share of unutilized labour in an economy. The unemployment rate and EPR both offer insights into the underutilization of labour. The unemployment rate captures only a small share of unutilized population. The total share of unutilized labour potential is captured by subtracting EPR from 100. A country with high unutilized labour potential must take measures to decrease unemployment and increase employment opportunities. The current employment to population ratio (for 10+ population) is 42.54% (labour underutilization rate is 47.46%), 20% for females and 64% for males.

Table 6: Unemployment Rate (%)					
Sector	2010-11	2012-13	2013-14	2014-15	
Pakistan	5.95	6.24	5.96	5.94	
Male	5.07	5.41	5.08	4.98	
Female	8.88	9.03	8.74	8.97	
Urban	8.84	8.83	8.02	7.98	
Rural	4.68	5.08	5.01	5.01	
Punjab	6.10	6.38	6.37	6.29	
Sindh	5.08	5.24	4.17	4.66	
Khyber Pakhtunkhwa	8.05	8.57	8.36	7.71	
Balochistan	3.00	3.93	3.96	3.92	

#### Incidence of Occupational Injury/Diseases

The incidence of occupational disease/injury is 4% for overall economy, higher for the male workers (4.70%) than for the female workers (1.69%). The incidence is similarly higher in the rural areas (4.62%) than in the urban areas (2.59%). Table 7 shows how the percentage of employed persons suffering from Occupational Diseases/Injuries for the country has decreased by 0.29 percentage points in between 2013-14 and 2014-15. This decrease overshadows the 0.27 percentage point increase from 2012-13, however, still failing to reach the previous

low of 3.49% in 2010-11. Provincial disaggregation shows an increase in occupational diseases/injuries for Balochistan by 0.68 percentage points between 2013-14 and 2014-15. Balochistan still shows the provincial lowest for 2014-15 at 1.34%, while Sindh shows the provincial highest at 4.93%. The incidence of occupational injury/disease has been increasing consistently for Khyber Pakhtunkhwa and Balochistan over the reference period (2010-2015). Punjab and Sindh show a mixed trend over the period.

Table 7: Distribution of Employed Persons Suffered Occupational Diseases/Injuries (%)					
Sector	2010-11	2012-13	2013-14	2014-15	
Pakistan	3.49	4.02	4.29	4.00	
Male	4.06	4.52	4.93	4.70	
Female	1.52	2.30	2.16	1.69	
Urban	2.28	2.55	2.89	2.59	
Rural	4.00	4.65	4.91	4.62	
Punjab	3.42	4.11	4.16	3.94	
Sindh	4.64	4.87	6.12	4.93	
Khyber Pakhtunkhwa	2.33	2.86	2.53	3.60	
Balochistan	0.66	0.90	0.66	1.34	

#### **Sectoral and Occupational Distribution**

Occupation wise, the percentage share of occupational accidents/injuries is the highest for skilled agriculture, forestry and fishery workers (43%) followed by elementary occupations as well as craft and related trade workers (20% each). Listing these percentage diseases/injuries by their respective occupations, table 8 shows that the highest proportion of injured were skilled agricultural workers, marking 42.8% of all occupational injuries in 2014-15. The Clerical Support Work appeared as the least deleterious occupation, grabbing only 0.05% of all occupational injuries in 2014-15. Managers, Professionals, Elementary occupations, and Craft and Related Trade workers posted an increase in relative proportions of occupational injuries moving from

2013-14 to 2014-15; vice-versa all other occupations have shrunken proportions. In Sindh the agriculture workers with 60.78% have the highest share of occupational injuries, while in Khyber Pakhtunkhwa craft and related trade work with 41% surfaced as the deadliest occupation. Province wise, the share of plant and machinery operators is the highest in Khyber Pakhtunkhwa (25.71%).

The incidence of occupational accidents/injuries is the highest for plant & machine operators (5.92%), craft and related trade workers (5.84%) and elementary occupations (5.06%). The incidence of occupational diseases/injuries is 4.61% for skilled agriculture workers.

Table 8: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Occupation (%)							
Occupation	2010-11	2012-13	2013-14	2014-15			
Managers	4.14	1.08	0.42	0.43			
Professionals	0.25	0.84	0.76	0.93			
Technicians & Associate Professionals	1.20	0.87	1.11	0.91			
Clerical Support Workers	0.21	0.20	0.23	0.05			
Service & Sales Workers	1.94	7.22	6.76	5.86			
Skilled Agri, Forestry & Fishery Workers	44.62	43.51	44.97	42.80			
Craft and Related Trades Workers	20.47	18.78	19.05	19.76			
Plant & Machine Operators and Assemblers	4.85	6.58	7.51	9.24			
Elementary Occupations	22.31	20.92	19.21	20.02			

The percentage distribution of all employed persons suffering from occupational injuries/ disease by industry division, presented in Table 9, indicates that the highest share of employed persons injured during 2014-15, were working in the agriculture sector. However, this share dropped by 3.11 percentage points from the previous year. The least deleterious industrial sector in 2014-15 is Financial Services, Insurance & Real Estate, having a mere 0.09 percent share in occupational injuries. While agriculture has remained the most injurious sector during the last five years, the least injurious sector has had different incumbents every year; Electricity, Gas & Water in 2010-11; Mining &

Quarrying in 2012-13; Financial Services, Insurance & Real Estate for 2013-14, 2014-15. Agriculture is the least hazardous sector in Khyber Pakhtunkhwa (9.25%) and most perilous sector in Sindh (62.96%). Construction and transport, storage and communication sectors are the most hazardous in Khyber Pakhtunkhwa. Interestingly, Sindh had least injuries in manufacturing sector while the highest ratio was observed in Balochistan.

As explained under Table 2, the highest incidence of occupational injuries and diseases is in construction, followed by mining, and quite unexpectedly transport, storage & information and communication sector.

Table 9: Distribution of Employed Persons Suffered by Occupational Diseases/Injuries by Industry (%)				
Industry	2010-11	2012-13	2013-14	2014-15
Agriculture, Forestry and Fishery	49.8	49.15	51.16	47.95
Mining & Quarring	0.23	0.21	0.26	0.27
Manufacturing	15.78	13.32	14.21	15.9
Electricity, Gas & Water	0.2	0.49	0.24	0.32
Construction	13.1	15.24	14.14	16.27
Wholesale Trade, Restaurants & Hotels	10.26	9.98	7.57	7.07
Transportation, Storage and Communication	7.06	7.24	7.45	7.57
Financial Services, Insurance & Real Estate	0.32	0.24	0.04	0.09
Community, Social & Personal Services	3.25	4.13	4.93	4.55

OSH performance varies between sectors. Data indicates that highest rates of occupational injuries is found in Agriculture, Forestry and Fishery (48%) followed by Construction (16.27%) and Manufacturing (15.9%). Wholesale, retail & trade as well as transport, storage and communication have the incidence of 7% each. Of the total injuries

reported, 48% are found in the agriculture sector. The non-agriculture sector faces 52% of total injuries however the percentage is higher for the informal sector (86%) than for the formal sector (14%). In the non-agriculture sector, industrial sector has much greater incidence of occupational injuries than the services sector (**Table 10**).

Table 10: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Sector & Industry (%)					
Sector & Industry	2010-11	2012-13	2013-14	2014-15	
Agriculture	49.77	49.15	51.16	47.95	
Non-Agriculture	50.23	50.85	48.84	52.05	
Formal	16.60	14.77	13.91	14.42	
Informal	83.40	85.23	86.09	85.58	
Industry	14.51	29.15	28.84	31.58	
Services	35.73	21.70	20.00	20.48	

#### Employment Status, Contract Type, Working Hours and Children

Disaggregation of occupational injuries/ disease by employment status, table 11 shows that the largest share of injured workers in 2014-15 were employees accounting for 40.64% of the share, closely followed by Own Account Workers with 40.59%. Their collective share is 81.23% which has been constantly increasing since the last five years. The table also shows that Employers suffer the

least injuries with just 0.52% of the share in 2014-15. Employees face the most injuries/diseases in Khyber Pakhtunkhwa (42.55%) while own account workers face the most injuries in Sindh (45.98%). Contributing family workers face the least injuries in Khyber Pakhtunkhwa while the ratio is highest for Balochistan (30.36%).

Table 11: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Employment Status (%)

Employment Status	2010-11	2012-13	2013-14	2014-15
Employers	0.99	0.66	0.50	0.52
Own Account Workers	40.87	38.80	41.97	40.59
Contributing Family Workers	21.99	22.42	19.61	18.25
Employees	36.15	38.12	37.92	40.64

If seen through employment status, the share of own account workers (self-employed) and employees is 41% each while 18% for contributing family workers. Of the total occupational injuries, 16% are shared by the contributing family workers from agriculture. Since women are mostly working as contributing family workers in agriculture, this situation needs special attention. Government must, not only bolster the public health system in

the rural areas, but also raise awareness on health and safety for those working in rural economy. The own account workers from non-agriculture sector have the share of 14%, which is also relevant for women since a huge portion of women in urban areas is engaged as home based workers. The share of casual paid employees and piece rate workers facing occupational injuries is 29%. This shows the perils associated with precarious work (**Table 11 & 12**).

Table 12: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Employment Status (detailed) (%)

<b>Employment Status</b>	2010-11	2012-13	2013-14	2014-15
Regular paid employee	10.56	10.39	10.92	11.66
Casual paid employee	17.72	18.88	17.23	19.52
Paid worker by piece rate	7.41	8.63	9.52	9.08
Paid non-family apprentice	0.46	0.22	0.24	0.38
Employer	0.99	0.66	0.50	0.52
Own account worker (agriculture)	17.10	16.46	3.82	3.45
Own account worker (non-agriculture)	17.12	16.46	13.71	14.18
Owner cultivator	13.51	10.49	11.62	11.93
Share cropper	8.35	8.18	9.93	8.89
Contract cultivator	1.62	3.57	2.84	2.13
Contributing family worker (agriculture)			17.01	16.08
Contributing family worker (non-agriculture)	21.99	22.42	2.60	2.17
Member of producer's cooperative	0.03	0.00	0.00	0.00
Other	0.23	0.10	0.05	0.00

Precarious work has following contractual arrangements and employment/working conditions. It has limited duration of contract (fixed-term, short-term, temporary, seasonal, day-labour and casual labour), the nature of employment relationship is triangular and disguised including bogus self-employment, subcontracting and agency contracts. The precarious conditions include low wage, poor or no protection from employment termination, lack of access to social security benefits, and lack of or limited access of workers to exercise their rights at work (no right to form and join unions).

The overall incidence of occupational injuries for precarious workers is 6% while compared to the rate of 4% for overall economy. Males show a higher portion of their occupationally injured involved in precarious work than females (7.09% compared to 1.7%). Provincially, Khyber Pakhtunkhwa shows the highest portion of its occupationally injured involved in precarious work (8.28%). (**Table 13**)

Table 13: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Precarious Work (%)

Sector	2010-11	2012-13	2013-14	2014-15
Pakistan	5.36	5.74	5.95	6.06
Rural	5.58	6.32	6.24	7.02
Urban	4.83	4.47	5.36	4.25
Male	6.20	6.61	7.00	7.09
Female	0.86	1.61	1.81	1.70
Punjab	5.01	5.77	5.97	6.21
Sindh	7.30	5.66	6.81	5.22
Khyber Pakhtunkhwa	5.20	6.86	5.51	8.28
Balochistan	1.52	1.70	1.50	1.88

An analysis of linkage between status of employment contract and occupational injuries indicates that the share of workers suffering occupational injuries without contract is 87% and the ratio decreases with longer contract period (**Table 14**). The excess hours of work also has its impact on the incidence of occupational injuries and the data showed that 44% of occupational

injuries occurred for workers working beyond 48 hours per week. 32% of occupational injuries occur for workers working between 40-48 hours per week (**Table 15**). A further sectoral analysis can indicate specific sectors/occupations where accidents are happening in the hour range (40-48 hours) and a case can be made for reduction of working hours for certain hazardous sectors.

Table 14: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Status of Contract (%)

Status of Contract	2010-11	2012-13	2013-14	2014-15
Permanent/Pensionable	11.82	9.73	6.65	7.81
Less than 1 year	0.79	1.45	1.66	1.12
Up to 3 years	2.46	1.89	1.17	2.39
Up to 5 years	1.20	0.98	0.72	0.95
Up to 10 years	0.65	0.60	0.09	0.34
10 years and more	0.31	0.23	0.07	0.53
With out contract	82.76	85.12	89.64	86.86

Table 15: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Hours of Work (%)

Hours per week	2010-11	2012-13	2013-14	2014-15
Less than 20	3.69	3.93	3.20	3.32
20 - 29	4.63	7.71	5.55	3.73
30 - 39	17.13	15.99	15.92	17.45
40 - 48	33.67	33.49	33.02	31.66
49 - 56	15.66	15.53	20.14	20.13
57 - 60	8.82	7.95	7.13	7.68
61 & above	16.41	15.41	15.05	16.03

It is interesting to note that of the 2.14 million children (10-14 years) employed in the labour market, 75% are engaged in agriculture, forestry and fishery followed by manufacturing (11%) and wholesale, retail trade, and restaurants and hotels (7.27%). The share of occupational injuries/diseases faced by children is the highest for agriculture, forestry and

fishery sector (65%), followed by manufacturing (14%), community, social and personal services (9%), and construction (8%). It is alarming to note that children's share of employment in construction is only 2% however the share of occupational injuries is 8% (Table 16). Further insight into data also indicates that construction sector has the highest incidence of occupational injuries/diseases for workers aged 10-14 years. Similar ratio is observed for adults in construction sector under **Table 2.** 

Table 16: Distribution of Employed Persons (10-14 years of age) Suffered Occupational Diseases/ Injuries by Industry

Industry	<b>Employed Persons</b>		Workers suffering diseases/injuries	
	Number	(%)	Number	(%)
Agriculture, Forestry and Fishery	1,601,094	74.72	38,695	65.08
Mining & Quarring	0	0.00	0	0
Manufacturing	226,269	10.56	8,518	14.33
Electricity, Gas & Water	0	0.00	0	0.00
Construction	43,493	2.03	4,852	8.16
Wholesale Trade, Restaurants & Hotels	155,680	7.27	2,074	3.49
Transportation, Storage and Communication	15,681	0.73	0	0
Financial Services, Insurance & Real Estate	696	0.03	0	0
Community, Social & Personal Services	99,743	4.66	5,314	8.94

#### **Literacy & Training**

Literacy has its impact on the incidence of occupational injuries and diseases. The share of illiterate is 49% among those who faced occupational injuries during 2014-15. The share of injuries and diseases dwindles with the increase in education level (36% for below matric to 1.19% for those with Degree education) (**Table 17**). The occupational injury/disease rate of those who did not receive training is 71% compared to mere 29%

for those who received training. Those who received on the job training did not experience many injuries when compared with those who received off the job training. It also evident that the duration of training has negative relation with occupational injuries, stipulating a shorter and more relevant training adding to increased health and safety in the enterprise (**Table 18**).

Table 17: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Literacy & Education Level (%)

Level of Education	2010-11	2012-13	2013-14	2014-15
Illiterate	50.37	50.25	50.29	49.35
Literate	49.63	49.75	49.71	50.65
Below Matric	35.01	36.25	36.12	36.09
Matric	9.90	10.03	9.00	10.14
Intermediate	3.20	1.96	2.68	2.91
Degree	1.05	1.22	1.56	1.19
Post Graduate	0.47	0.29	0.35	0.32

Table 18: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Techincal/Vocational Training (%)

Level of Training	2010-11	2012-13	2013-14	2014-15
Not received training	82.70	83.02	73.33	70.95
Received training	17.30	16.98	26.67	29.05
Received on job	8.00	8.17	10.88	12.13
Received off job	9.30	8.82	15.80	16.91
1-4 weeks training	0.31	0.78	0.57	0.37
5-12 weeks	1.52	2.05	1.32	1.11
13-26 weeks	3.06	2.20	4.35	4.43
27-52 weeks	5.31	5.24	8.44	10.86
53 weeks & above	7.10	6.71	11.99	12.28

#### **Unsafe Acts/Conditions Leading to Injuries**

An analysis of occupational injuries indicates the following unsafe acts (by workers) contributing to injuries/diseases: taking unsafe position (24%), excess speed (21%), using unsafe equipment (19%), and failure of safety devices (12%). Failure to use personal protective equipment contributed only 1.65% to occupational injuries (**Table 19**).

The unsafe conditions contributing to injuries and diseases include defective tool, equipment or material (28%), slippery surfaces (22%), unguarded or inadequately guarded machinery (9%), and non-provision of necessary protection equipment (7%) (Table 20).

Table 19: Distribution of Em		

Unsafe Act	2010-11	2012-13	2013-14	2014-15
Operating without authority	1.71	1.86	1.36	2.47
Excess speed	18.89	19.22	19.47	20.70
Horse play	6.04	6.92	4.66	4.43
Failure of safety devices	10.43	8.04	9.23	12.07
Using unsafe equipment	21.06	22.38	23.59	19.31
Taking unsafe position	23.20	23.59	24.61	24.05
Disobeying instruction	0.72	0.94	0.70	1.27
Failure to use provided PPE	2.93	3.29	3.03	1.65
Unsafe loading or stacking	8.08	6.82	4.76	6.11
Wrong order of supervisor	0.10	0.04	0.13	0.05
Unsafe act by fellow employee	0.46	0.95	0.42	0.77
Unsafe act of outsiders	0.95	0.98	0.63	0.82
Other	5.42	4.98	7.43	6.30

Table 20: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Unsafe Conditions (%)

Unsafe Conditions	2010-11	2012-13	2013-14	2014-15
Unguarded or inadequately guarded	6.97	8.69	7.37	8.98
Defective tool, equipment or material	26.06	24.88	24.39	27.79
Unsafe design or construction	6.69	6.83	6.36	8.03
Poor illumination	3.63	3.43	3.83	4.30
Inadequate ventilation	0.82	0.49	0.33	0.60
Improper clothing and footwear	10.16	8.91	11.14	6.47
Non-provision of necessary protection equipment	9.65	8.59	8.06	6.93
Poor house keeping	4.93	6.48	4.60	8.73
Slippery surfaces	24.36	25.18	25.31	21.72
Others	6.72	6.52	8.60	6.45

#### Type of Treatment and Working Days Lost

Analyzing the occupational injuries by treatment received, 21% of those who faced injuries had to take time-off from work, 8% were hospitalized (in effect, the share of those absent from work due to injuries rising to 29%) while 59% of workers had to consult a doctor or medical professional after occupational injury. Majority of workers (61%) were able to resume work within the same day or during 1-7 days. 15% of workers were able to resume

work within 8-30 days. Data indicates that 4% of the workers would never be able to resume work because of permanent disability (**Table 21 & 22**). While the highest ratio of the workers were able to return to work the same day (20.95%) in Sindh, in comparison to other provinces, 12.98% of workers in Sindh (who faced injuries) were never able to return to work.

Table 21: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Treatment Received for First Injury (%)

Treatment type	2010-11	2012-13	2013-14	2014-15
Hospitalized	8.84	10.90	7.78	7.76
Consulted a doctor, nurse or other medical professional	52.60	46.40	52.29	58.64
Took time off work	23.33	22.44	23.38	20.53
None	15.23	20.26	16.55	13.06

Table 22: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Resuming Work (%)

Resumed work after first injury	2010-11	2012-13	2013-14	2014-15
Same day	10.85	10.68	15.60	13.91
1-7 days	50.67	50.19	56.19	57.40
8-30 days	19.92	21.61	15.13	14.70
2-4 months	5.30	4.84	4.43	4.36
5-7 months	0.71	0.76	0.70	0.79
8-12 months	0.13	0.41	0.28	0.43
More than one year	0.00	0.16	0.00	0.00
Don't know	0.20	0.44	0.22	0.20
Still not resumed	6.51	5.86	3.71	4.11
Will never be	5.72	5.06	3.75	4.11

# **LEGISLATIVE FRAMEWORK**



The Constitution of Pakistan guarantees safe and humane working conditions at the workplace. Article 37(e) of the Constitution, in its first part, promises for the provisioning of securing just and humane conditions of work and, in its second part, requires that children and women are not employed in vocations which are unsuitable to their age or sex. Further relevant provisions are found in Article 38 of the Constitution.

#### Box-3 Legislative Provisions on OSH

Law

#### **Legislative Provisions**

Constitution of the Islamic Republic of Pakistan, 1973 **Article 3 Elimination of exploitation:** The State shall ensure the elimination of all forms of exploitation and the gradual fulfillment of the fundamental principle, from each according to his ability to each according to his work.

Article 37(e) Promotion of social justice and eradication of social evils. The State shall: make provision for securing just and humane conditions of work, ensuring that children and women are not employed in vocations unsuited to their age or sex, and for maternity benefits for women in employment

Article 38 (a-d) Promotion of social and economic well-being of the people. The State shall: (a) secure the well-being of the people, irrespective of sex, caste, creed or race, by raising their standard of living, by preventing the concentration of wealth and means of production and distribution in the hands of a few to the detriment of general interest and by ensuring equitable adjustment of rights between employers and employees, and landlords and tenants;

(b) provide for all citizens, within the available resources of the country, facilities for work and adequate livelihood with reasonable rest and leisure;

(c) provide for all persons employed in the service of Pakistan or otherwise, social security by compulsory social insurance or other means;

(d) provide basic necessities of life, such as food, clothing. housing, education and medical relief, for all such citizens, irrespective of sex, caste, creed or race, as are permanently or temporarily unable to earn their livelihood on account of infirmity, sickness or unemployment;

Mines Act, 1923

Sections 17-22 (Chapter 5)

Factories Act, 1934

Sections 13-33Q (Chapter 3)

Shops & Establishment Ordinance, 1969

No provision (some provisions found in Rules)

The Employment Of Children Act, 1991

Section 13

Dock Labourers' Act, 1934

Section 5 allows rule making with regard to safe working conditions

The Dock Workers (Regulation Of Employment) Act, 1974

Section 3 allows making schemes with regard to health and safety measures in places where dock workers are employed in so far as satisfactory provision there for does not exist apart from the scheme

Road Transport Workers Ordinance, 1961

No provision

Newspaper Employees (Conditions of Service) Act, 1973

No provision

Road Transport Workers Ordinance, 1961

Section 6-15

Occupational safety and health issues have been a major component of labour policies in Pakistan, even the first Labour Policy (1955) recommended establishment of an adequate inspectorate to examine safety and hygiene condition in factories. Labour Policy 2002 suggested to consolidate and rationalize labour laws under five categories and suggested a standalone law on occupational safety and health (OSH). The Policy also aimed at establishment of National Occupational Safety and Health Council to set OSH standards and review them periodically to meet the changing needs of the industry. The Labour Policy 2010 had similar recommendations and called for establishment of Tripartite Council on Health and Safety to identify occupational hazards for workers of all economic sectors and to make recommendations on safety measures.

Occupational safety and health was also a focus of Labour Protection Policy 2005 which recommended the promotion of health and safety culture for enterprises, based on a wider culture of safety and health in society at large. Further recommendations included written safety and health policy for enterprises over a certain size, establishment of occupational safety and health council and of OSH institutes.

After devolution, occupational safety and health issues have been focus of labour policies in Punjab, Balochistan, and in the draft OSH Policy of Sindh. Labour Policy Punjab "stresses that risks for occupational accidents and diseases at work place have to be managed jointly by the employers and workers and requires establishment of OSH management systems". It calls for the provincial government to create necessary enabling environment, provide a legislative framework, and strengthen enforcement mechanisms. The Policy also recommends formulation of a law that deals exclusively with OSH; capacity building of enforcement mechanisms through provision of necessary training, equipment and recruitment of qualified personnel, and having an OSH tool kit to facilitate proper inspections.

Provinces are taking measures to establish, maintain, progressively develop and periodically review their respective systems for OSH. The SAA Centre for Improvement of Working Conditions & Environment (SAA-CIWCE) is currently formulating an OSH Policy in Punjab. However, mining and agriculture sectors are out of the scope of this policy. Sindh already has a draft OSH Policy.

#### **Mining**

Although mining sector is regulated through its own legislation, yet it has been a focus of labour policies of the country. Labour Policy 2002 recommended for extension of Employees Old Age Benefits Institution (EOBI), social security schemes, and Workers Welfare Fund (WWF) schemes to the mining sector in order to provide social protection to mining sector workers. The Labour Policy 2010 aimed to provide contractual protection to mine workers as is available to other workers and also recommended that they should benefit from minimum wage payments, access to social security, and improved safety and health at their workplaces.

National Mineral Policy 2013 recommends establishment of Inspectorates of Mines, charged with the responsibility of ensuring practice of acceptable safety and health standards in Pakistan's mining sector.

Specifically, the Inspectorates of Mines has the responsibility to carry out the following:

- 1. Enhancing health and safety measures in mining operations and effective implementation of a Mine Safety & Health Management Plan;
- Providing training in the area of health and safety laws, use of explosives, electricity; and
- 3. Research and development for

improvements in the safety and health of the mining workforce, such as in finding substitutes to the use of timber in mining operations.

#### Agriculture

Since more than 40% of the employed labour force is engaged in the agriculture sector, the Labour Policy 2002 recommended constitution of an inter-ministerial committee to formulate a package of labour welfare measures for the employees in the agriculture sector. It was proposed that the Committee would also make recommendations for provision of certain benefits to the workers in corporate agriculture farming. While realizing that labour laws are not applicable to the agriculture sector, and the resultant deprivation of these workers from benefits (which are available to the workers in industrial establishments), the Labour Policy 2010 proposed to extend the coverage of Workmen's Compensation Act, 1923 to provide compensation in case of injury as well as death to workers of mechanized farms in the rural sector.

Although there is no agricultural policy in place, the Agriculture Pesticide Rules, 1973 prescribes certain precautionary standards for the health and safety of agriculture workers. Similarly, occupational safety and health certificate is a prerequisite for registration of pesticide manufacturing and formulation.

#### Construction

Construction industry serves as the backbone of all development activities and is estimated to employ more than four million workers<sup>2</sup>. Since this sector is witnessing rapid expansion, health, safety and occupational hazards are likely to pose new challenges. In order to guard against occupational hazards and to provide safe working conditions for those employed in this sector of the economy, the Labour Policy 2010 recommended enactment of suitable legislation to ensure health and safety of construction workers and provision of benefits available to other formal sector workers such as workmen's compensation, social security, old-age pension etc.

Health and safety provisions for workers in the construction sector are found in West Pakistan Labour Camp Rules, 1960 and Pakistan Public Works Department (PWD) Contractor's Labour Regulations. Provisions in other laws on OSH (Shops & Establishments Rules, Standing Orders, notification of hazardous work under Employment of Children Act & its provincial variants) are applicable to the construction sector.

OSH has been a prime concern of the Federal Government and the federating units. A specific law on Occupational Safety & Health has been drafted by the Ministry of Overseas Pakistanis & Human Resource Development subsequent to directions of the Supreme Court of Pakistan. At present, Law & Justice Commission of Pakistan (LJCP) is coordinating with all provincial government for consensus building. Factories Act, 1934 which has OSH provisions, is in force in three Provinces i.e. Punjab, Sindh and Balochistan. Whereas, the Government of Khyber Pakhtunkhwa has enacted its own law, Khyber Pakhtunkhwa Factories Act, 2013. Box-4 indicates all applicable legislation relevant to OSH in Pakistan.

#### Box-4 OSH Relevant Legislation and its applicability (sector-wise)

#### **Applicability**

#### Law/Rule

Factories Act, 1934 Sindh Factories Rules, 1975 **Balochistan Factories Rules, 1978** Factories Act, 1934 (adapted in 2012)

Punjab Factories Rules, 1978

Khyber Pakhtunkhwa Factories Act, 2013 **NWFP Factories Rules, 1975** 

Hazardous Occupations Rules, 1963 (Lead; Aerated Waters; Rubber; Chromium; Cellulose Solution Spraying; Sand Blasting; Sodium and Potassium-Bichromates; Petrol Gas Generating Plant; Miscellaneous)

#### General

#### Hazardous Occupation Rules (Silicon) 2015

West Pakistan Shops and Establishments Ordinance, 1969 Khyber Pakhtunkhwa Shops and Establishments Act, 2015 West Pakistan Shops and Establishments Rules, 1969

**Boilers and Pressure Vessels Ordinance, 2002** 

Employment of Children Act, 1991 Employment of Children Rules, 1995 Sindh Employment of Children Rules, 1995

Employment of Children Act, 1991 (adapted in 2011) Punjab Employment of Children Rules, 1994

Khyber Pakhtunkhwa Prohibition of Employment of Children Act, 2015 NWFP Employment of Children Rules, 1996

Pakistan Environmental Protection Act, 1997

Hazardous Substance Rules, 2003

Mines Act, 1923

Coal Mines Regulations, 1926

Metalliferous Mines Regulations, 1926

Consolidated Mines Rules, 1952

Balochistan/Punjab/Sindh Mining Concession Rules 2002

NWFP (KPK) Mining Concession Rules, 2005

Punjab Coal Mines Rescue Rules, 1988

Sindh Coal & Metalliferous Mines (Supplementary) Regulations, 1986

The Agricultural Pesticides Ordinance, 1971

The Agricultural Pesticide Rules, 1973

West Pakistan Labour Camps Rules, 1960

Pakistan Public Works Department Contractor's Labour Regulations

Fatal Accidents Act, 1855

Employer's Liability Act, 1938

Workmen's Compensation Act, 1923/Sindh Workers' Compensation Act 2015

Khyber Pakhtunkhwa Workers' Compensation Act, 2013

West Pakistan Workmen's Compensation Rules, 1961

Provincial Employees Social Security Ordinance, 1965/Sindh Employees Social Security Act, 2016

PESS (Occupational Diseases) Regulations, 1967

West Pakistan Industrial and Commercial Employment (Standing Orders) Ordinance, 1968/SindhTerms of Employment (Standing Orders) Act, 2016

#### Mining & Quarrying

#### Agriculture

#### Construction

#### Applicable to All Sectors

Laws providing for compensation or benefits in the event of accident or diseases or disability

Applicable to All Sectors

Other Laws relevant to OSH in different sectors/occupations Khyber Pakhtunkhwa Industrial and Commercial Employment (Standing Orders) Act, 2013

Employees' Old-Age Benefits Act, 1976 Sindh Employees' Old-Age Benefits Act, 2014

Workers Welfare Fund Ordinance, 1971 The Sindh Workers Welfare Act, 2014

Protection Against Harassment of Women at the Workplace Act, 2010

Electricity Act, 1910 and Electricity Rules 1937 Explosives Act 1884 and The Explosives Rules 1940 The Petroleum Rules 1937, Oil & Gas (Safety in Drilling & Production) Regulations, 1974, LPG (Production & Distribution) Rules 2001 Pak Nuclear Safety and Radiation Protection Regulation 1990 The Pakistan Plant Quarantine Act, 1976

The Factories Act 1934 consolidates the laws relating to the regulation of labour in factories in the country and is applicable to industrial establishments with 10 or more workers. The Provincial Governments may extend the provisions of the Act through a notification in the official Gazette to those industrial units employing even five workers. This Act governs the working conditions of the industrial workers, such as hours of work, mandatory rest intervals, weekly holidays, overtime work, and annual holidays with pay, etc.

Factories Act has special regulations on employment of adolescents and children, special provisions for women workers provisions for the safety, health and hygiene, and welfare of workers in factories. It deals with all the OSH matters in industrial units. Provincial governments are allowed to make rules under this Act and, successively, all the provinces have introduced their "Factories Rules". Chapter-II of the Act makes provision for inspection system and certifying surgeons. Chapter III of the Act provides a comprehensive strategy for combating likely industrial hazards. From "ventilation & temperature" to "precautions against dangerous fumes", and from "fencing and casing of machinery" to "declaring some extremely dangerous manufacturing processes detrimental to health and safety and prohibiting these by order", the law has addressed all the probable hazards keeping in mind the interests of both workers and employers.

Hazardous Occupations Rules are issued under the authority of the Factories Act 1934 and prescribe medical certification and examination by certifying surgeons, preventive activities (from exhaust emissions, provision of washing facilities,

protective clothing), prohibition of employment (women and young persons), and the issuing of certificates of fitness in the case of dangerous jobs involving exposure to certain substances (lead, rubber, chromium, sodium and potassium dichromate, silicon), and certain other dangerous operations (manufacturing of aerated water spraying of cellulose solutions, sand blasting, generation of petroleum gas). The West Pakistan Hazardous Occupations (Miscellaneous) Rules 1963 specifies a large number of processes (manufacturing, and/or utilization of a large number of harmful or explosive substances) as hazardous under the meaning of the rules. The Rules also permit the Chief Inspector to declare other processes assessed as hazardous.

The terms and conditions of employment of mines workers are regulated by Mines Act, 1923 which mainly covers the safety, health and welfare of persons employed in mines, including gas and oil fields. Like Factories Act, the Mines Act regulates working and employment conditions of mine workers and has a separate chapter on occupational safety and health. The Mines Act also provides provisions for a vibrant inspection system under the Chief Inspectorate of Mines.

## Healthcare and Workmen's Compensation System

The subject of health, like labour, was also devolved to the provinces in the wake of 18th Constitutional Amendment. In accordance with article 38(d) of the Constitution, it is the responsibility of the State to provide basic necessities of life, such as

food, clothing. housing, education and medical relief, for all such citizens, irrespective of sex, caste, creed or race, as are permanently or temporarily unable to earn their livelihood on account of infirmity, sickness or unemployment. The healthcare system in Pakistan consists of public and private sectors. The private health care sector has developed considerably and has spread across the country and provides a varying level of care. The share of health expenditure in total public sector expenditure is the most significant variable effecting health status in a country however the current health expenditure is 0.42% of GDP (114 billion rupees), which is depressingly low.

The healthcare benefits to workers are provided under West Pakistan Workmen's Compensation Rules, 1961, Workmen's Compensation Act, 1923, and West Pakistan Industrial and Commercial Employment (Standing Orders) Ordinance, 1968. Moreover, the Workmen's Compensation Act, 1923 identifies occupational diseases arising during the course of employment and has fixed compensation for workers affected due to these occupational diseases. Another list of occupational diseases is found in the Provincial Employees' Social Security (Occupational Diseases) Regulations, 1967 where provinces have also notified extra occupational diseases found in different sectors of economy. The Protection Against Harassment of Women at the Workplace Act 2010 requires that "in case the complainant is in trauma, the organization has to arrange for psycho-social counseling or medical treatment and for additional medical leave. The organization may also offer compensation to the complainant in case of loss of salary or other damages". The depression (or loss of job) consequent to sexual harassment, must be considered as an occupational injury and treated as such.

Pakistan has established a comprehensive national system for occupational safety and health. This national system includes law and regulations (indicated in Box 4), authorities responsible for occupational safety and health and inspection (carried out by labour departments, mines and minerals departments, inspectorates of labour and mine, agriculture departments, Pakistan Public Works Department and the Environment Departments), provision of occupational safety and health training (by Directorates of Workers' Education, Saeed Ahmad Awan Centre for Improvement of Working Conditions & Environment (SAA-CIWCE) in Punjab and National Institute of

Labour Administration & Training (NILAT) and OSH-Centre under Labour Department of Sindh, KPK has just started a project to establish OSH Centre in the province), occupational health services and social security schemes covering occupational injuries, diseases and accidents. Fatal Accidents Act, 1855 covers the compensation for injuries and death. Employer Liability Act, 1938 allows a suit for damages against the employer in respect of an injury sustained by a workman. Workmen Compensation Act, 1923 provides for death grant and different kinds of disability benefits. The Provincial Employees Social Security Institutions provide cash benefits and medical care to the registered workers of industrial and commercial establishments. Other than medical care for workers and their dependents, the cash benefits include maternity benefit, iddat benefit (for women workers who have lost their partner), partial/ total disablement pension, survivors' pension, and death grant. The benefits under the Employees Old Age Benefits Act include old age pension, survivors' pension, disablement (non-work related) pension and old age grant. The Standing Orders Ordinance 1968 requires all industrial and commercial establishments with 50 or more employees to have all its permanent workers insured against natural death and disability, and death and injury arising out of the contingencies not covered by the Workers Compensation Act, 1923 or the Provincial Employees Social Security Ordinance, 1965. Every permanent worker must be insured against at least the amount specified in the Workmen Compensation Act, 1923 (varies between PKR 200,000 to PKR 400,000 among provinces). The benefits are further explained in **Box-5**.

#### Box-5 OSH Occupational Diseases/Injuries & Benefits

#### **Provincial Employees Social Security Ordinance, 1965\***

#### Sickness Benefit

75% of the insured worker's monthly earnings are paid for up to 121 days in a one-year period. The benefit rises to 100% for tuberculosis and cancer for 365 days in a one-year period.

The rate of sickness benefit is 50% in Khyber Pakhtunkhwa and Balochistan.

#### Injury Benefit/Temporary Disability Pension

60% of the insured worker's monthly earnings are paid for up to 180 days (after a 3-day waiting period). The benefit rises to 100% in Punjab and Sindh.

#### Disablement Gratuity

Benefit is paid as a lump sum amount if the Medical Board assesses the disablement at 5-20% (This percentage is 1-20% in Balochistan). The amount of benefit depends on the wages and percentage of degree of disablement.

#### Permanent Partial Disability Pension

Benefit varies depending on the percentage of disability and former wages of a worker for disability assessed at 21-66%.

#### Permanent Total Disability Pension

75% of the insured worker's monthly earnings are paid for total disability with loss of earning capacity of 67% or more with free lifelong medical care.

The pension is 100% of the insured worker's earnings in Punjab.

#### Survivor's Pension

Survivor's pension is granted to spouse, dependent children and dependent parents. Total survivors' pension must not exceed 100% of the total disability pension the deceased received or was entitled to receive.

#### Death Grant

100% of the last drawn wages or 30 days of sickness benefit. Should not be less than PKR 15,000 (Sindh).

#### Medical Care

Lifelong medical care to workers and their dependents. Benefits include general medical care, specialist care, medicine, hospitalization, maternity care, and transportation.

#### The Workmen's Compensation Act, 1923\*

#### Temporary Disablement Benefit

50% of the insured worker's monthly earnings are paid for up to one year. The benefit is 33% of the monthly earning, paid for up to one year, in the case of lung disease.

#### Fatal Accident/Death

A lump sum of 200,000 rupees is paid (ICT, Balochistan). The amount of compensation is raised to 300,000 rupees in Khyber Pakhtunkhwa and to 400,000 rupees in Punjab. The amount is the highest in Sindh, i.e., 500,000 rupees.

#### Permanent Total Disablement

A lump sum of 200,000 rupees is paid (ICT and Balochistan). The amount of compensation is raised to 300,000 rupees in Khyber Pakhtunkhwa and to 400,000 rupees in Punjab. The amount is the highest in Sindh, i.e., 500,000 rupees.

#### Permanent Partial Disablement

Percentage of loss of earning capacity is multiplied by the benefit provided for total disablement.

#### The Industrial and Commercial Employment (Standing Orders) Ordinance, 1968\*

Group insurance where workers are insured against natural death and disability, and death and injury arising out of the contingencies not covered by the Workers Compensation Act, 1923 or the Provincial Employees Social Security Ordinance, 1965. The amount of benefit is same as under Workmen's Compensation Act, 1923.

\* Similar provisions are found in the provincial Acts.

# INSTITUTIONAL MECHANISMS: CONSULTATION, PREVENTION AND PROTECTION



#### **Consultation and Cooperation**

Consultations have been held on the draft Occupational Safety and Health Law in Federal and Provincial Tripartite Consultative Committees. Punjab has notified its Occupational Safety and Health Council to advise government on a wide range of policy and legislative matters concerning workers safety and health.

There is a tripartite Mining Board, with representation from workers and employers, which discusses issues including OSH in the mining sector. Law requires referral of every draft regulation under the Mines Act to the Mining Board for its review (§10 & 31 of the Mines Act, 1923). Such arrangement is not found in the agriculture and construction sectors.

As regards the cooperation and consultation on OSH issues between the management and workers at the level of an undertaking/enterprise, there is provision of establishment of Works Council in the industrial relations legislation. These Works Councils are established at the level of enterprise, where fifty or more workers are employed, to promote measures for securing and preserving good relation between an employer and his workers and, in particular;

- 1. Endeavour to maintain continuous sympathy and understanding between the employer and the workmen;
- 2. To promote settlement of differences and disputes through bilateral negotiations;
- 3. To promote security of employment for the workmen and conditions of safety, health and job satisfaction in their work;
- 4. To take measures of facilitating good and harmonious working condition in the factory/establishment; to provide vocational training and educational facilities for children of workmen in secretarial and accounting procedures and to promote their absorption in these departments of the factory/establishment; and
- To discuss any other matter of mutual interest with a view to promoting better labour-management relations.

(\$26 of Industrial Relations Act, 2012; \$40 of the Balochistan Industrial Relations Act, 2010; \$36 of Khyber Pakhtunkhwa Industrial Relations Act, 2010; \$29 of Punjab Industrial Relations Act, 2010; \$29 of Sindh Industrial Relations Act, 2013 (referred to as Workers Management Council in Punjab and Sindh). Occupational Safety and Health issues can further be dealt by Joint Management Boards and through institution of "workers participation in management".

Occupational safety and health issues can also be dealt under collective bargaining agreements, referred to as memorandum of settlement in industrial relations legislation. The collective bargaining agent is entitled to:

(a) undertake collective bargaining with the employer or employers on matters connected with employment, non-employment, the terms of employment or the conditions of work other than matters which relate to the enforcement of any right guaranteed or secured to it or any workmen by or under any law, other than the Act, or any award or settlement;

During collective bargaining, both parties are at liberty to raise their demands and in some cases demands regarding OSH have been included in the collective bargaining agreements. However due to lack of awareness on OSH, these issues are mostly ignored. A study of 70 Collective Agreements in Pakistan (still in development stage and being done by ILS Unit) has indicated that occupational safety and health was not even touched in any of the agreements rather the focus was more on monetary provisions.

#### Responsibilities, Duties & Rights of Workers & Employers

Chapter-III of the Factories Act, 1934 (and its provincial variants) stipulates the responsibilities of the occupiers /employers towards implementation of provisions regarding OSH in factories. Under this chapter, it is the primary responsibility of the employer to maintain cleanliness, effective management of disposal of wastes and effluents, securing adequate ventilation, prevention of dust and fumes, artificial humidification, prevention of overcrowding at workplace; provision of suitable and sufficient lighting; maintain sufficient supply of wholesome drinking water, and clean toilets. The law further enjoins provision of a "Hygiene Card" to every worker and compulsory vaccination and inoculation of all workers. The Act stipulates fencing and casing of machinery and prescribes various safety measures for cranes and other lifting machinery, hoists and lifts, revolving machinery, pressure plant and requires protection in the case of fire. Factories Act also has provisions on lifting of excessive weight and protection of eyes (thus requiring free of cost protective equipment, i.e., screens or goggles). Employer is required to maintain safety of building, machinery, and manufacturing process.

Under the Mines Act, it is mandatory for every mine owner, agent and manager of the mine to cooperate with workers on safety and health issues. Every mine owner is responsible to ensure compliance with provisions relating to safety and health, as laid down in the Act. Chapter V of the Mines Act has provisions on health and safety and requires availability of medical appliances, first-aid rooms and shelters for workers. If a mine is being supervised by a contractor, the contractor will be responsible for safety and health regulations. The Mines Act does not explicitly incorporate the right of workers to leave the mine in case of danger, however, it does not restrict them either. The mine owner is responsible to evacuate workers from a mine in case of a hazardous incident. Both the Factories Act (Section 33-I, Section 45 of KPK law) and Mines Act (Section 16 & 19) holds it the responsibility of the employer (and inspector) to remove workers from a situation where there is imminent danger to their health and safety. The inspector can further require ceasing of operations in a mine or factory, or part thereof, until the danger is removed. Section 28(8) of the KPK Factories Act makes employers liable to have an emergency/disaster management plan to cater to any emergency situation. The Sindh Factories Bill also has similar provision on preparation of emergency response plan.

The employers are obligated to ensure compliance to safety standards at workplaces strictly in accordance with the provisions of the Chapter – III of Factories Act, 1934. In order to facilitate the employers in this regard and to carry out periodic assessments, the Punjab Labour Department has devised a checklist on OSH to be used during labour inspections. Inspectors are required to adhere strictly to the notices and instructions issued by the Inspectorate of Factories. However, this activity is limited to the industrial establishments covered under the Factories Act, 1934. Other provinces must also use this checklist as a model.

Since the adoption of OSH practices is a mutual effort; employers must provide a safe and healthy environment to the workers. Similarly, workers can demand for their rights and should protect themselves against hazards by keeping the working environment safer. However, the ultimate responsibility of compliance of health and safety at workplace lies with employers. Chapter -III of Pakhtunkhwa Factories Act, 2013 provides all necessary clarifications in this regard. On the other hand, work councils and joint management boards established under industrial relations legislation are bodies/forums available to the workers where they can raise their voice whenever they find themselves in danger or believe to be at risk at the workplace. Furthermore, they can also lodge a complaint to the Directorates of Labour. Such complaints are forwarded to the area officers to be resolved. There is, however, no clear provision on workers' rights and responsibilities under any of OSH relevant Acts and even not in the new standalone draft OSH Act. The right to remove oneself from danger or position of risk immediately needs to be enunciated and explained.

Agriculture Pesticide Act (1971) and Rules (1973) prescribe health and safety standards/measures for the health of workers and makes it obligatory for the employer to observe the same including age limits (18-60 years), respiratory dust filters and their replacement, ventilated accommodation, record keeping of every worker and provision of soap, water and towels.

#### **Prevention & Protective Measures**

The Directorates of Workers Education (at the provincial level) arrange trainings on all labour issues including OSH. The CIWCE in Punjab and NILAT/OSH Centre in Sindh also conduct regular training programs for employers, workers and trade unions. Tripartite consultations are held by the Labour Department Punjab, SAA-CIWCE and Punjab Occupational Safety & Health Council to adopt measures to ensure that workers are informed of safety and health hazards associated with their work. The health and safety guidelines are also stated in the Factories Act, 1934, Shops & Establishments Ordinance, 1969 and the Industrial and Commercial Employment (Standing Orders) Ordinance, 1968. Moreover, dedicated committees are being notified to regularly check the OSH situation in the mega construction projects in Punjab.

Factories Act 1934 (and its provincial variants) provides necessary provisions regarding the preventive measures for safety and health at workplaces. Under the Act, to ensure the safety and health at workplace, establishments are demanded a stability certificate, site plan and list of machinery to be used, at the time of registration. Other provisions in the Factories Act explain the safety and health requirements related to the design, maintenance and use of machinery and equipment.

Inspection staff of the Provincial Directorates of Labour periodically inspects industrial establishments to minimize risks to workers especially those arising from exposure to physical, chemical and biological hazards. However, due to limited resources, the Departments restrict their activities to major construction projects for inspection.

Factories Act also provides for handling and disposal of hazardous substances and waste. If a worker is suffering from a contagious and infectious disease, he/she shall be discharged from duty and provided medical care. He/she will not be appointed back unless declared free of such illness/disease. Similarly, Section 28 of Factories Act explicitly states the precautions and measures to be taken in case of a fire emergency at the establishment. Section 21 of the KP Factories Act states that wholesome drinking water should be adequately supplied at convenient points to the workers at the establishment, including facilities for taking meals, sanitary facilities etc.

The Hazardous Occupation Rules 1963 have provisions on protective clothing (sufficient and suitable overalls, gloves and head coverings, helmet, shoes, clean respirator, etc.) to be provided by the employer. A worker is required to wear protective clothing specified for the work. A person cannot be engaged in hazardous work/occupation unless the certifying surgeon has provided the certificate of medical fitness for such work.

#### **Mining**

The Inspectorates of Mines in all provinces regularly conduct short training programmes for the mine workers. Workshops are arranged on various mines related issues such as blasting techniques, safety, health, first aid, mine rescue and recovery etc. During training, as well as inspection visits, mine supervisors and managers are instructed and made aware of safety and health hazards.

Mines are frequently inspected by the mines inspector to verify the compliance of health and safety regulations by the mine owners and managers. Mines Act 1923, Coal Mines Regulation 1926, Metalliferous Mines Regulation 1926 and Consolidated Mine Rules 1952 contain standards and specifications regarding the design and construction of underground and surface mines. Mining Concession Rules require the holder of an exploration license to take all reasonable steps necessary to secure the safety, welfare and health of persons employed for purpose of those operations in the exploration area and to protect the environment. The Mining Concession Rules (Rule 227) also have provision on safe working and the licensing authority may require a lessee (employer) to remove defects within a specified period. In the event of failure, the authority has the power to stop the work of extraction of minerals in whole or in any part of the area till such time that the defects are removed. If the lessee still does not remove the defect, the authority within two months from the date of stoppage of work, may cancel the lease and forfeit the money already paid.

The Coal Mine Regulations 1926 require that worker should use protective devices provided by the employer (Section 136-A). Section 45

of the Metalliferous Mines Regulations, 1926 requires that if a working place or travelling road is found to be unsafe, all persons shall be withdrawn immediately from the dangerous area and all access to such working place or travelling road, except for the purpose of removing the danger or saving life, shall be prevented by securely fencing the full width of all entrances to the place. Sindh Coal & Metalliferous Mines Regulation-1986 (Chapter VIII) also has provision on use of personal protective equipment. Consolidated Mines Rules 1952 and Punjab Coal Mines Rescue Rules 1988 have detailed provisions on rescue operations and use of protective equipment. Sindh Coal & Metalliferous Mines Regulation-1986 (Part-IV) have provisions on design, maintenance and use of machinery and equipment. The Government of KPK is planning to carry out a detailed OSH survey in selected mining areas of the province for the first time.

#### **Agriculture**

Agriculture Departments impart trainings on health and safety to pesticide and fertilizer dealers, farmers, companies and farming community through workshops, field days, seminars, mass media, bulletins, publications and general awareness programs.

Employers, under the Agriculture Pesticides Rules 1973 are:

- required to ensure that workers are thoroughly trained in the precautions to be observed and are being adequately supervised by qualified supervisors;
- not to permit a worker on job unless he/ she is using standard protective clothing or devices or those otherwise prescribed for the specific product being handled by him/her;
- 3. required to provide workers with the prescribed protective clothing and respirators or dust filters with adequate number of replacement filters (Part-IX of the Rules)

Occupational health certificate is also a prerequisite for registration of pesticide manufacturing, formulation and refilling/re-packing plant (Form 18 & 19 under the Agriculture Pesticide Rules). Occupational health and safety measures are also implemented under Part-IV of the Rules requiring provision of protective clothing and regular medical check-ups.

Since agriculture sector is yet to be recognized under the ambit of formal economy (although union formation has been allowed in the provinces of Sindh and Balochistan), the current legislation does not require implementation of OSH provisions in this sector. The temporary and seasonal agricultural workers do not enjoy the same safety & health protection which is accorded to the permanent workers in other sectors.

#### Construction

Laws require obligatory insurance against accidents for construction labourers, provision of basic medical training to specified work staff, and basic medical service and supplies to workers and a layout plan for camp site, indicating safety measures taken by a contractor such as firefighting equipment, safe storage of hazardous material, first aid, security, fencing and contingency measures in case of accidents.

The work safety rules are to be followed by contractors to ensure there are no health risks to labourers. Contractors are also bound to provide protection devices, adequate sanitation, washing, cooking and dormitory facilities, including satisfactory light, proper maintenance of facilities, protective clothing for labourers handling hazardous materials such as helmets, appropriate footwear for bituminous pavement works, protective goggles, gloves etc.

Under the Contractor's Labour Regulations (part of Public Works Department Code), a contractor is required to provide protective gear to the workers engaged in construction work. In the event of failure to provide such equipment, Government may provide the same to the workers and recover the cost from the contractor.

Section 11 of the Factories Act (and its provincial variants), section 6 of the Mines Act, section 32 of the Agriculture Pesticides Rules, section 17 of the Labour Camp Rules, section 12 of the Hazardous Substance Rules 2003 authorize the

inspector to assess occupational risks and hazards at a workplace.

The Hazardous Substance Rules, 2003 framed under Environmental Protection Act 1997 has provision of safety precautions for workers and a licensee (employer) is required to take the following measures:

- 1. no worker below 18 years or over 60 years to be employed for any work involving physical handling of hazardous substances;
- workers to be trained in safety precautions for handling hazardous substances and necessary supervision by qualified supervisors;
- provision of protective clothing and equipment comprising helmet or cloth caps after spectacles or goggles, respirators or masks, rubber or plastic gloves and work boots to workers who may be exposed to any substance;
- 4. no worker to be permitted on job unless and until he/she is wearing such protective clothing and equipment;
- 5. adequate supply of water for personal washing and washing of protective clothing and equipment by workers;
- prohibiting workers from eating, drinking or smoking until they have removed protective clothing and equipment, washed their hands and face and left the workplace;
- 7. checking and proper maintenance of firefighting, emergency and safety equipment
- 8. availability of fully equipped medical facility, supervised by trained staff;
- 9. medical check-up of workers to be carried out at the time of employment and at least once a year;
- 10. maintenance of employee record containing details about medical check-up history and hazardous substances handled by the employer.

The provisions on first-aid facilities, medical facilities, rescue operations, safe drinking water, sanitary facilities are found in Factories Act, 1934 (Section 19-21 & 33-Q), Mines Act (section 17-17B, 18, 18-A & 30-A), Labour Camp Rules (Rule 9-11 & 13), Agriculture Pesticides Rules (Rule 39 & 41) and Hazardous Substance Rules (Section 12(h)).



# ENFORCEMENT AND IMPLEMENTATION OF LEGISLATION



#### **Recording, Notification & Statistics**

Factories Act 1934 (and its provincial variants) as well as Rules require a notice of accidents (fatal or non-fatal causing absence of a worker from work) to the inspector of factories. Notice of fatal accidents is also required under Workmen's Compensation Act 1923. Mine owners are obligated under Section 20(A) to inform the Chief Inspectorate of Mines through a written notice about the occupational diseases contracted by the mine workers. Section 20(A) of the Mines Act, 1923 requires a mine owner to report an incident where worker(s) suffer from an occupational disease. It prohibits women employment in mines or any work that requires their presence underground. Workers covered under the Shops and Establishments Ordinance, 1969 and its Rules lack detailed provisions on OSH (though section 22 of Act and Rule 5 have provisions on fencing of machinery), which leaves workers of shops, commercial establishments and plazas vulnerable to accidents and health hazards. Clause 19-D of the Contractor's Labour Regulations requires a contractor to present before an inspector (Engineer-in-charge) the details of activities for the previous fortnight including the details on accidents that occurred, circumstances leading to them, and extent of injury or damage caused by the accident.

The said reality, however, is that there is serious under-reporting of accidents, both fatal and nonfatal, to the concerned authorities. It is interesting to mention here that if the employer fails to observe health and safety rules as prescribed under Factories Act, the Social Security (Contribution) Rules 1966 allow the increase in percentage of contribution to such a percentage, not exceeding 20 percent as, in the opinion of concerned authority, is merited by employer's failure.

#### **Enforcement**

The previous chapters have focused on legal provision as contained in national laws and regulations. While there are issues with focusing only on de-jure labour market institutions and provisions (mainly because of the existence of large informal sector, non-compliance coupled with tepid and lackluster implementation of labour laws), well

drafted and inclusive (with least "exclusions") are still a pre-condition for attaining decent work (which is also safe work). It has been argued that even the widest and most expansive legal foundations cannot achieve the desired outcomes if these are not enforced and backed by sufficient resources. Nonetheless, strong legal foundations are a pre-condition for securing higher provisions and resources. There is not a single situation where a country provides generous benefits or can stop abuses against workers without a comprehensive legal basis.

Appropriate legislation and regulations, together with adequate means of enforcement, are necessary for the protection of workers' safety and health. As explained above, legislation is the very foundation of social order and justice. The enforcement of legal provisions concerning occupational safety and health and the working environment must be secured by an adequate and appropriate system of inspection. As shown in the previous pages, Pakistan has taken various measures to protect workers' safety and health by enacting laws and establishing enforcement institutions. Laws not only regulate safety and health but also working condition including working hours and annual leave which have a direct bearing on occupational injuries/ accidents. Law also regulates working of trade unions and employers' organizations, collective bargaining thus providing a stage for negotiation on working conditions between the parties.

According to the ILO Convention 81, the system of labour inspection in industrial workplaces must apply to all workplaces in respect of which legal provisions relating to conditions of work and the protection of workers while engaged in their work are enforceable by labour inspectors. An effective labour administration system provides for a stable business climate and encourages national and foreign direct investment. Legal compliance helps to ensure a level playing field whereby all are required to respect the same rules and standards. Proper labour inspection can help companies benchmark their compliance and, rather than being purely a fine-imposing service (penalty-oriented regime), the labour inspectors can help educate, and assist business in meeting these obligations.

The Provincial Directorates of Labour Welfare

in all provinces are responsible for implementation of laws relating to health and safety in industrial and commercial establishments. Provincial Mines Departments are responsible to ensure enforcement of relevant provisions of health and safety in mines under Mines Act, 1923. The Environment Protection Departments also contribute a lot for ensuring safe working conditions by ensuring compliance with the Environmental Protection Act, 1997 (EPA) and Hazardous Substance Rules, 2003. Agriculture Departments ensure compliance with agriculture related rules, especially health and safety provisions in Agricultural Pesticide Act & Rules. The Pakistan Public Works Department ensures compliance with its Contractor's Labour Regulations and inspectors under the Factories Act inspect compliance with Labour Camp Rules.

The inspection machinery is mainly established in Department of Labour and Department of Mines in each province. Labour inspection under various

labour laws in the industrial and commercial establishments as well as mines was already entrusted with the provinces prior to devolution. Enforcement of laws and regulations in mines and industrial and commercial establishments was the responsibility of the respective provincial governments. Enforcement of laws for dockworkers as well as marine workers (seafarers) is entrusted to Ministry of Ports and Shipping at the Federal level. The Directorate of Dock Workers Safety and Government Shipping Office ensure compliance with Dock Labourers Act, 1934 and Pakistan Merchant Shipping Ordinance 2001 respectively. The enforcement of health and safety provisions in the oil and gas installations (rigs) is with the Federal Government, i.e., the Ministry of Petroleum & Natural Resources. The inspection under various labour laws and OSH provisions under these laws in ICT and Federally Administered Tribal Areas (FATA) also remains the responsibility of the federal Government (Ministry of Interior).

Table 23: Legislative Provisions on Labour I	nspection
Law	Legislative Provisions
Mines Act, 1923	Sections 4-9A
Factories Act, 1934	Sections 9-12, 49-E, and 63
Shops & Establishment Ordinance, 1969	Sections 25 & 26
The Employment Of Children Act, 1991	Sections 09 & 17
Dock Labourers' Act, 1934	Sections 03 & 04
The Dock Workers (Regulation Of Employment) Act, 1974	Section 04
Road Transport Workers Ordinance, 1961	Section 9
Newspaper Employees (Conditions of Service) Act, 1973 Balochistan	Section 20
The Apprenticeship Ordinance, 1962	Section 08
The Boilers and Pressure Vessels Ordinance, 2002	Sections 05-16
The Bonded Labour System (Abolition) Act, 1992	No provisions with regard to the institution of labour inspection however office of District Coordination Officer (at some places District Magistrate) was authorized to ensure that provisions of this Act are implemented. Vigilance Committees, established under the Act, were also required to keep an eye on the working of law (Section 9 & 15).
	The Khyber Pakhtunkhwa Bonded Labour System (Abolition) Act, 2015 however creates the institution of labour inspector under the Act (Sections 11-17).
Emigration Ordinance, 1979	Inspections conducted by the Protector of Emigrants (Section 4)

Law	Legislative Provisions
Employees' Old-Age Benefits Act, 1976	An official of the Employees Old Age Benefits Institution is required to check employer records (section 12
The Provincial Employees' Social Security Ordinance, 1965	An official of the Employees Social Security Institution is required to check employer records (section 22)
The Payment Of Wages Act, 1936	Section 14
The Minimum Wages Ordinance, 1961	Labour Inspection: Power of the Minimum Wage Board to collect information (Section 12)

Informal economy (domestic and home-based workers), agriculture, and construction (except government run projects) sectors are out of the ambit of law. Although, penalties have been imposed for violation under the said laws, yet these are quite meager and have no deterrence effect. However, after devolution, the provinces are in process to amend the laws. The inspection system in Pakistan faces a serious shortage of inspectors in relation to the number of workplaces liable to inspection. A recent study indicated that there is one labour inspector for every 25,000 employed workers (Decent Work Country Profile for Pakistan:2014). Tables 24 & 25 contain

relevant information on the number of inspectors and registered workplaces. The number of inspector does not correspond with the number of industrial and commercial units. Labour Departments are currently at a dual disadvantage. Not only is the number of inspectors lower, the capacity of those inspectors is also limited. And then, there is issue of training and capacity development (though Punjab and Sindh have at least institutions for training purposes, i.e., Saeed Awan Centre for Improvement of Working Condition & Environment and National Institute of Labour Administration and Training as well as an OSH Centre respectively).

Table 24: Number of Registered Factories, Shops and Establishments							
Key Elements	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan			
Number of Registered Factories	14,013	8,572	895	503			
Number of Registered Shops and Establishments	337,308	17,311	74,286	88,920			

Table 25: List of Inspector of Factories in the Provinces						
Province		Labour	Mines	Total		
	Factory	OSH	Technical			
Punjab	114	4	2	10	130	
Sindh	78	8	10	24	120	
KPK	24	-	1	14	39	
Baluchistan	33	2	-	10	45	
Total	249	14	13	58	334	

There is a need for standalone law on labour inspection in order to provide for a reformed labour inspection system with potential participation from the private sector (promoting the collaboration with social partners as prescribed by C81). Inspection services have limited domain as these cover only the so-called formal sector. Labour extension services must be started to bring the huge informal sector under the legal domain. Consolidated annual report (in line with provisions of Convention 81) on inspections conducted during the year must also be published and provincial labour departments should provide timely data for preparation of such report. Provincial labour inspectorates, with dedicated career officials, need to be established with the mandate of enforcing legal provisions relating to conditions of work such as working time, wages, occupational safety & health, social security, child labour, bonded labour, and other issues (benefits guaranteed under laws as well as types of contracts).

Labour Inspection is conducted in isolation of the other inspection conducted by environment specialists, boiler engineers, civil defense officials, electric inspectors and inspection by Tehsil Administration. Social Security Institutions and EOBI also have their inspection mechanism, which has no link with the inspections carried out by Labour Department.

Currently, employers and workers organizations have no role in labour inspection activities. Involvement of social partners, through consultation and information sharing, is very important for feedback on policy and practice. Labour Inspection Convention (81) and accompanying Recommendation (No. 81) require the competent authority to make appropriate arrangements in order to promote "collaboration between officials of the labour inspectorate and employers and workers or their organisations".

Inspecting Officers are not allowed to visit factories without prior notice to the management (in some areas; the Sundar Industrial Estate, Lahore is also an example where the Sundar Industrialists Welfare Association advised the government functionaries to contact the Association office instead of entering the factory area) while Convention 81 stipulates that inspectors must be empowered to "enter freely and without previous notice at any hour of the day or night any workplace liable to inspection". There is a need to change this situation in order to bring it in

line with the provisions of Convention 81.

The Punjab Industrial Policy 2003, while abolishing the system of inspection of industrial units by labour inspectors, introduced a new system of "self declaration". While acting on the behest of industrial lobby, Government of Punjab claimed that the policy curbed "harassment" of employers by inspectors and thus created a conducive and business friendly concept. Only 5% of the registered units, drawn by a computerized random process, were to be physically inspected each year. Sindh followed suit and inspections were also banned there. It is interesting to note that Labour Inspection Policy 2005 also recommended self-declaration process. Instead of revitalizing the inspection system, these policies recommended downsizing of the overall enforcement mechanisms. The successive government kept the ban on labour inspections in place until the industrial accidents of 2012 in Lahore and Karachi, which prompted provincial governments to revive the institution of labour inspection. This also indicates that provinces, even prior to devolution, were quite independent in developing their policies and plans. The above bans on labour inspection are a clear violation of labour rights and labour inspection convention, ratified by Pakistan. There is a need to ensure that "investment friendly" and "competitiveness raising" polices and practices should not lead to scrapping of institutions established to enforce laws.

Federal Ministry of OP&HRD has worked on a framework document for revitalization and restructuring of labour inspection system in the country. It argues that the reforms can be started through the following initiatives:

- 1. Registration and risk assessment (requiring compulsory registration and focusing on "at risk" enterprises through various risk assessment techniques)
- Integrated inspection ('one enterpriseone inspector' with one general inspector undertaking inspection in all work areas)
- Self-inspection and self-reporting (on completion of registration and risk assessment, self-inspection and selfreporting can be piloted in "low-risk" enterprises)
- 4. Systems inspection (instead of focusing

- on minor details, the proposed approach focuses on the systems the enterprise has in place to prevent accidents, protect workers, and improve working conditions)
- 5. Labour extension (providing advisory services to assist informal sector enterprises to improve their working conditions and the working environment -emphasis is on information and advice. Of particular importance is the issue of safety and health for these workers)
- 6. Private Sector involvement (engaging private sector through granting of licenses to duly accredited companies and individuals for performing specific inspection tasks, working under the authority of the Labour Inspectorate.
- 7. Involvement of employer and labour representatives in district level tripartite committees.

#### **Penalties under OSH Laws**

The following box provides in detail the penalties related to non-compliance with the provisions of laws and regulations on OSH.

Table 26: Penalties for OSH violations under different laws		
Law	Section	Penalty for Violation of OSH Provisions
Factories Act, 1934	Section 60	Fine which may extend to twenty thousand rupees
Mines Act, 1923	Section 39	Fine which may extend to two hundred rupees for every day on which the offence is proved to have persisted in the contravention after the date of the first conviction
Agriculture Pesticides Act, 1971	Section 21A	Fine which may extend to one hundred thousand rupees
Pakistan Environmental Protection Act, 1997	Section 17	Fine which may extend to one hundred thousand rupees, and in case of continuing contravention or failure with an additional fine which extend to one thousand rupees for every day during which such contravention continues.
Labour Camps Rules, 1960	Section 20	Any employer of labour in camps shall be liable to pay a fine not exceeding Rs. 50 (fifty) for infringement of any of the provisions of these rules.

Chapter – VIII of the Mines Act, 1923 deals with the penalties and procedures related to non-compliance of provisions of the Act. Section 19 (2) of the Act empowers the inspectors to suspend the operations in mines or any workplace on health and safety grounds.

Section 87 of the Khyber Pakhtunkhwa Factories Act, 2013 provides for punishment in case of violation of sections pertaining to health and safety in factories. The first offence leads to a fine

up to twenty thousand rupees, and the subsequent offence may be fined up to fifty thousand rupees.

According to Balochistan Factories Bill, 2015, if there is any contravention of Sections (13-32) related to safety and health matters, the manager and owner of the establishment is punishable with fine which may extend from twenty to fifty thousand rupees.

# FINDINGS, WAY FORWARD & CONCLUSION

#### **Findings**

The findings of this study can be listed under the following four areas:

#### **Areas of Concern: Sectors and Occupations**

- 1. In terms of occupation, the incidence of occupational accidents/injuries is the highest for plant & machine operators (5.92%), craft and related trade workers (5.84%) and elementary occupations (5.06%). The incidence of occupational diseases/injuries is 4.61% for skilled agriculture workers. Viewed as a percentage of total occupational injuries and diseases, skilled agriculture, forestry and fishery workers have the highest share (43%) followed by elementary occupations as well as craft and related trade workers (20% each).
- 2. OSH conditions vary among sectors. LFS data indicates that highest number of occupational injuries are reported in Agriculture, Forestry and Fishery (48%) followed by Construction (16.27%) and Manufacturing (15.9%). Wholesale, retail & trade as well as transport, storage and communication industry show occupancy of 7% each. Among the total injuries reported, 48% come from the agriculture sector. The non-agriculture sector faces 52% of total injuries however the percentage is higher for the informal sector (86%) than for the formal sector (14%). In the non-agriculture sector, industrial sector has much greater incidence of occupational injuries than the services sector. Even in industry, as indicated above, manufacturing and construction reported higher number of occupational injuries than other industrial sectors. The highest incidence of occupational injuries and diseases is in construction, followed by mining, and transport & storage sector.

#### Legislative and Coverage Issues

- 1. OSH laws are not applicable to agriculture, construction (unless mega projects) and informal sector workers.
- 2. Lack of a single coherent and comprehensive law on OSH and labour inspection.
- 3. OSH laws do not cover micro and small (MSEs). Self employed, home based, and domestic workers are also not covered by OSH and social security related legislation. Casual, piece rated and workers without employment contract are not covered under labour and OSH laws.

#### **Enforcement Mechanism and Capacity Issues**

- 1. Inadequate enforcement mechanisms and inefficient enforcement machinery.
- 2. Non-availability of reliable data on occupational safety and health by various industrial sectors. Lack of documentation of various sectors of economy (delay in holding of census has played its part in lack of more reliable data).
- 3. Non-availability of reliable data on incidence of occupational diseases and fatalities from provincial employees social security institutions.
- 4. Non-availability of data on incidence of occupational diseases and occupational deaths from labour force survey data.

#### Lack of Awareness

Lack of awareness on importance of safety and health issues (awareness need to be raised on positive Return on Prevention (ROP). Research indicates that expenditure on occupational safety and health is an investment that "pays off". The ROP is assessed at 2.2, i.e. if an enterprise spends 100 rupees on prevention, the return it receives on this investment is 220 rupees)<sup>4</sup>.

<sup>4</sup> Calculating the International Return on Prevention for Companies, Prof. Dr. Dietmar Bräunig Dr. Thomas Kohstall, ISSA, May 2013

#### Way Forward/Recommendations

#### **Legislative Reforms**

- 1. Enactment of a standalone modern law on occupational safety and health with universal and uniform coverage of occupational sectors and employment situations (emphasis on homogenous law across the provinces to provide necessary guidance to improve safety and health condition in Pakistan).
- 2. Implementation of Sindh Joint Action Plan as a model plan by Sindh and other provinces (as well as ICT).
- The new OSH law must have provisions on workers' rights and duties in maintaining safe and healthy workplaces. Industrial Relations Act 2012 has provisions on workers' and employers' duties and rights in maintain cordial industrial relations. Similar sections must be added to OSH related laws.
- 4. Protection of employment of those workers who filed a complaint or acted as a whistleblower (requires legal reform; similar protection is provided to the complainant in workplace harassment law).
- 5. The definition of occupational accidents and diseases, responsibilities of notification by employers, data gathering and analysis duty of ministries and government agencies should be clearly defined in OSH law; provision for health and safety officers in OSH law.
- Standalone Labour Inspection legislation which creates a dedicated labour inspection career service (separate from labour department) through creation of independent labour inspection authority at the provincial level.
- 7. A separate simplified labour and OSH code needs to be drafted for implementation in micro enterprises/industrial establishments (employing less than 10 workers).

### Promotion of Trade Unions & Collective Bargaining

- 1. Encouragement and promotion of collective bargaining to bring about genuine progress and tangible improvements in working conditions (promotion of trade unionism is a first; the trade union density must rise from current abysmal rate of 3.13% for employed labour force; the unionization rate is 8% for wage employees. Interestingly, if the trade union density is calculated as a percentage of formal sector workers, the rate rises to 19.8%. Current trade union membership (non-official) is estimated as 1.8 million).
- 2. Requirement that Works Councils/ Workers Management Councils with detailed OSH functions (or OSH Committees) are established in enterprises (employing 50 or more workers) and these Councils must discuss issues of OSH and also stipulate flexible procedures to resolve OSH related conflicts. However, since a great number of accidents occur in micro and small enterprises (and to some extent in medium enterprises), both government and social partners have to make effort to raise awareness on these issues.

### Capacity Building, Data Collection & Awareness Raising

- 1. Capacity building of the Provincial Occupational Safety and Health Councils for providing guidance to provincial governments on OSH issues.
- 2. Preparation of a national Occupational Safety and Health Profile, in line with the with Recommendation concerning the Promotional Framework for Occupational Safety And Health, 2006 (No. 197).
- 3. Review of the list of occupational diseases in line with "List of Occupational Diseases Recommendation, 2002 (No. 194)"\*
- 4. Closer engagement of Ministry of OP&HRD and provincial labour

departments with Pakistan Bureau of Statistics to revise its LFS Questionnaire and adding questions on notified occupational diseases and fatalities (similar to the questionnaire used in 2006-07)

- 5. Capacity building of labour administration (increased financial and human resource; need to hire more labour inspectors especially for OSH)
- 6. Improving general public awareness on health and safety issues (to promote a safety culture) through media campaigns and special sponsored events
- 7. Increased number of trainings/workshops held in enterprises on occupational safety and health issues (as a collaborative effort of government, employer and worker organizations). It is needed to reactivate and rejuvenate the federal and provincial Directorates of Workers' Education
- 8. Encourage accident reporting by enterprises and developing a database (at the labour department level) of notified occupational accidents, diseases, injuries and deaths as well as near misses (can help in identifying patterns and taking preventive action)
- 9. In the parallel, reporting system should be made easier to use for employers by making simple forms. Workers can be allowed to submit details/reports of occupational accidents and diseases which can be later checked by inspectors especially when employers are reluctant to report accidents. ILO country office provided assistance to Federal Ombudsman Secretariat for Protection against Harassment of Women at Workplace in developing an online a complaint mechanism<sup>4</sup>. A similar online accident registration can be developed for submission of reports by both workers and employers. An option can also be explored under

Gender Sensitive Inspection System (also developed with ILO assistance) for submission of online data by workers and employers<sup>5</sup>.

#### Improvements in Healthcare System

- Improving the collaboration of Employees Social Security Institutions, Health Departments, Environmental Protection and Local Government Departments for timely and effective healthcare provision.
- Since most occupational accidents occur in agriculture sector, there is a need for specific legislation, improvement of healthcare infrastructure in rural areas such as Basic Health Units (BHU) as well as awareness raising in this regard.
- 3. ILO Country Office must focus on these issues under "Promoting Decent Work in the Rural Economy" priority area of the upcoming DWCP-III (2016-20) in collaboration with provincial labour and health departments. Provinces have to streamline their basic healthcare system. Revival of primary and BHU must be a priority especially with the new local government system in place.
- 4. Rural area and other informal sector workers can also be covered through extension of Employees Social Security Institutions (ESSI) coverage (by copayments through the state)
- 5. Linking of informal sector and poor workers with Prime Minister's National Health Program (PMNHP). The Program covers families making less than \$2 a day. The coverage includes 50,000 rupees for general treatment (including maternity and injuries), and 300,000 rupees for serious illnesses (cancer, heart diseases, diabetes and other chronic infections). The PMNHP is the country's largest public health initiative with an allocation of 9.1 billion rupees. During the first phase, 3 million families will get health

- 4 http://www.fos-pah.gov.pk/cmis.php
- 5 http://gsis.org.pk/default.asp

- insurance in 23 districts of the country. The Program aims to cover 22 million households across the country
- 6. Spending on health is only 0.42% of GDP, which needs to be raised. Similarly, employers should raise the finances for OSH at the enterprise level.

#### **Conclusion**

The current report, through analysis of legal framework and statistical data, has shown that labour/ OSH laws in the country are fragmented and do not cover a huge percentage of labour force even from the formal sector (shops & establishments). Certain economic sectors (agriculture and construction) are experiencing more occupational accidents due to many reasons (mainly because of the lack of legal cover which prevents inspectors from inspecting these workplaces and require compliance with law and precludes workers from registering with employees social security institutions; non-availability of state sponsored primary and basic healthcare which raises the actual impact of a small workplace accident). Though increased occupational accidents can always be attributed to lack of safety and health culture, there have not been enough awareness raising campaigns on this issue. This has led to the lack of awareness about importance of health and safety and its linkage with productivity where employers view expenditure on OSH as sunk costs. Ministry of OP&HRD, in line with its mandated functions of "coordination on labour legislation" and "keeping a watch on labour legislation from international perspective" may proactively work for progress on legislation on OSH, labour inspection reforms and better OSH awareness among employers and workers through enhanced human and technical capacity of Federal ILS Unit.

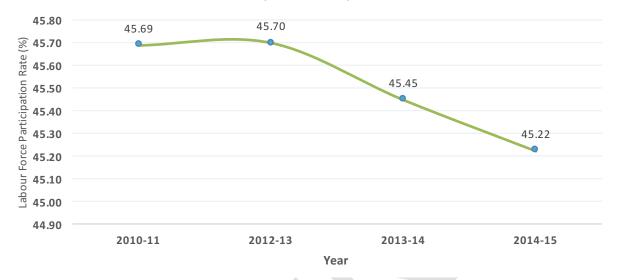


# TABLES & CHARTS NATIONAL LFS DATA ON OSH 2010-2015

Table 27: Labour Force Participation Rate				
	2010-11	2012-13	2013-14	2014-15
Pakistan	45.69	45.70	45.45	45.22

Table 28: Labour Force Participation Rate vs. Employment to Population Ratio				
	2010-11	2012-13	2013-14	2014-15
LFPR	45.69	45.70	45.45	45.22
ETPR	42.97	42.84	42.74	42.54

# LABOUR FORCE PARTICIPATION RATE (PAKISTAN)



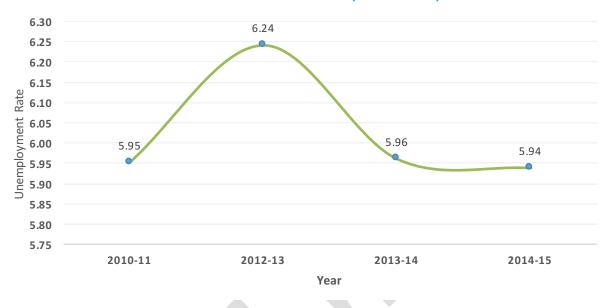
# LABOUR FORCE PARTICIPATIONS VS. EMPLOYMENT TO POPULATION RATIO



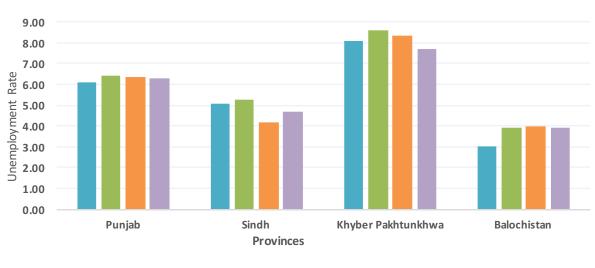
Table 29: Unemployment Rate					
	2010-11	2012-13	2013-14	2014-15	
Pakistan	5.95	6.24	5.96	5.94	

Table 30: Unemployment Rate - Provinces				
	2010-11	2012-13	2013-14	2014-15
Punjab	6.10	6.38	6.37	6.29
Sindh	5.08	5.24	4.17	4.66
Khyber Pakhtunkhwa	8.05	8.57	8.36	7.71
Balochistan	3.00	3.93	3.96	3.92

### **UNEMPLOYMENT RATE (PAKISTAN)**



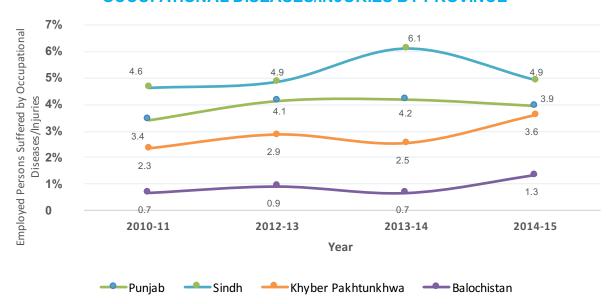
#### **PROVINCE-WISE UNEMPLOYMENT RATES**



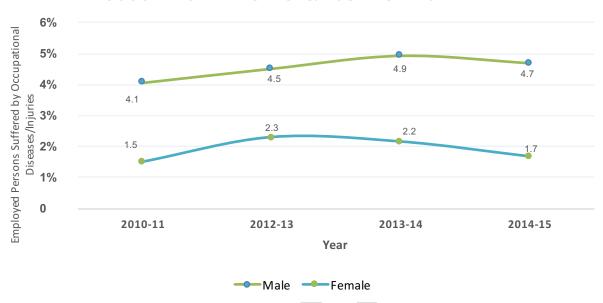
**2010-11 2012-13 2013-14 2014-15** 

Table 31: Incidence of occupational Diseases/Injuries (%)				
	2010-11	2012-13	2013-14	2014-15
Male	4.06	4.52	4.93	4.70
Female	1.52	2.30	2.16	1.69
Urban	2.28	2.55	2.89	2.59
Rural	4.00	4.65	4.91	4.62
Punjab	3.42	4.11	4.16	3.94
Sindh	4.64	4.87	6.12	4.93
Khyber Pakhtunkhwa	2.33	2.86	2.53	3.60
Balochistan	0.66	0.90	0.66	1.34

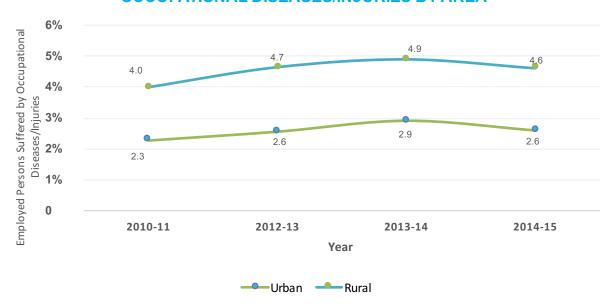
#### **OCCUPATIONAL DISEASES/INJURIES BY PROVINCE**



#### **OCCUPATIONAL DISEASES/INJURIES BY GENDER**



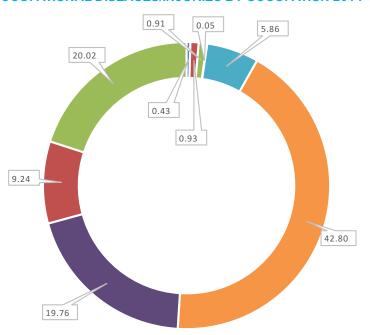
#### **OCCUPATIONAL DISEASES/INJURIES BY AREA**



## Table 32: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Occupations (%)

Occupation	2014-15
Managers	0.43
Professionals	0.93
Technicians & Associate Professionals	0.91
Clerical Support Workers	0.05
Service & Sales Workers	5.86
Skilled Agri, Forestry & Fishery Workers	42.80
Craft and Related Trades Workers	19.76
Plant & Machine Operators and Assemblers	9.24
Elementary Occupations	20.02

#### **OCCUPATIONAL DISEASES/INJURIES BY OCCUPATION 2014-15**



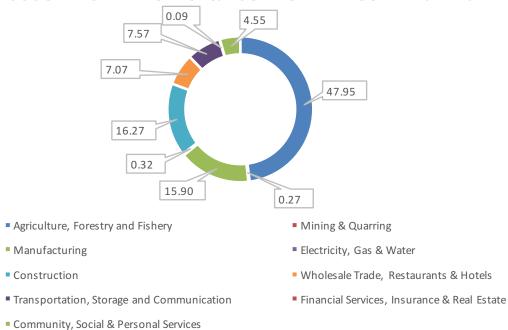
- Managers
- Clerical Support Workers
- Craft and Related Trades Workers
- Professionals
- Service & Sales Workers
- Technicians & Associate Professionals
- Skilled Agri, Forestry & Fishery Workers
- Plant & Machine Operators and Assemblers Elementary Occupations

Table 33: Distribution of Employed Persons Suffered by Occupational Diseases/Injuries by Industry (%)		
Industry	2014-15	
Agriculture, Forestry and Fishery	47.95	
Mining & Quarring	0.27	
Manufacturing	15.9	
Electricity, Gas & Water	0.32	
Construction	16.27	
Wholesale Trade, Restaurants & Hotels	7.07	
Transportation, Storage and Communication	7.57	
Financial Services, Insurance & Real Estate	0.09	
Community, Social & Personal Services	4.55	

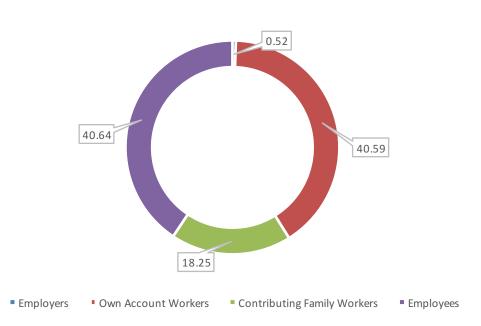
# Table 34: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Employment Status (%)

Employment Status	2014-15
Employers	0.52
Own Account Workers	40.59
Contributing Family Workers	18.25
Employees	40.64

#### **OCCUPATIONAL DISEASES/INJURIES BY INDUSTRY 2014-15**



#### OCCUPATIONAL DISEASES/INJURIES BY EMPLOYMENT STATUS 2014-15



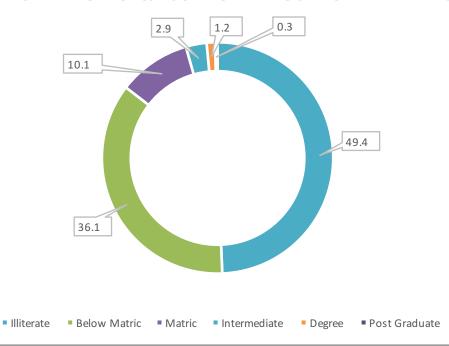
# Table 35: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Literacy & Education Level (%)

Level of Education	2014-15
Illiterate	49.35
Literate	50.65
Below Matric	36.09
Matric	10.14
Intermediate	2.91
Degree	1.19
Post Graduate	0.32

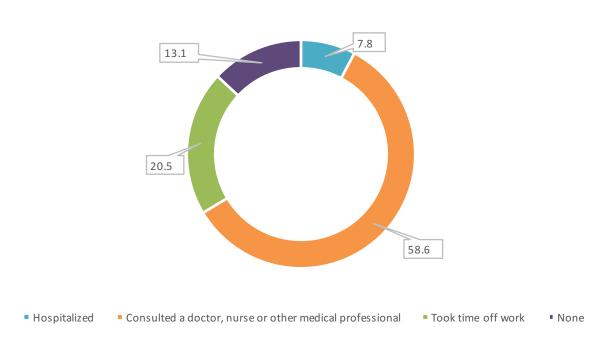
# Table 36: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Treatment Received for First Injury (%)

Treatment type	2014-15
Hospitalized	7.76
Consulted a doctor, nurse or other medical professional	58.64
Took time off work	20.53
None	13.06

#### **OCCUPATIONAL DISEASES/INJURIES BY EDUCATIONAL LEVEL 2014-15**



#### **OCCUPATIONAL DISEASES/INJURIES BY TREATMENT LEVEL 2014-15**



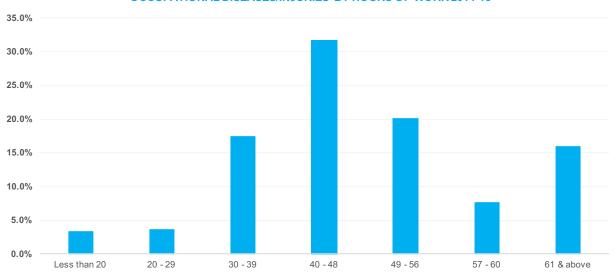
# Table 37: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Hours of Work (%)

Hours per week	2014-15
Less than 20	3.32
20 - 29	3.73
30 - 39	17.45
40 - 48	31.66
49 - 56	20.13
57 - 60	7.68
61 & above	16.03

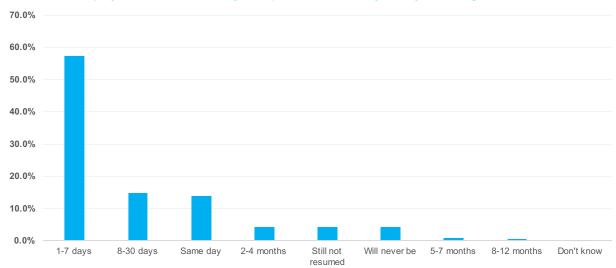
# Table 38: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Resuming Work (%)

Resumed work after first injury	2014-15
Same day	13.91
1-7 days	57.40
8-30 days	14.70
2-4 months	4.36
5-7 months	0.79
8-12 months	0.43
More than one year	0.00
Don't know	0.20
Still not resumed	4.11
Will never be	4.11

#### OCCUPATIONAL DISEASES/INJURIES BY HOURS OF WORK 2014-15



#### Employed Persons Suffered by Occupational Diseases/Injuries by Resuming Work 2014-15



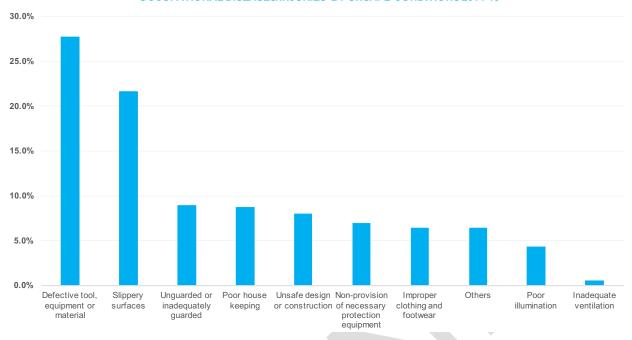
# Table 39: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Unsafe Conditions (%)

Unsafe Conditions	2014-15
Unguarded or inadequately guarded	8.98
Defective tool, equipment or material	27.79
Unsafe design or construction	8.03
Poor illumination	4.30
Inadequate ventilation	0.60
Improper clothing and footwear	6.47
Non-provision of necessary protection equipment	6.93
Poor house keeping	8.73
Slippery surfaces	21.72
Others	6.45

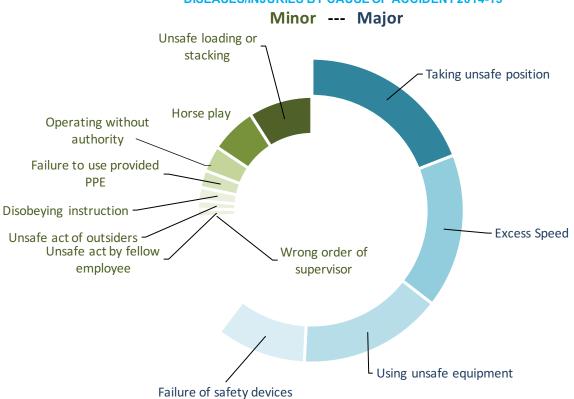
## Table 40: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Unsafe Acts (%)

Unsafe Act	2014-15
Operating without authority	2.47
Excess speed	20.70
Horse play	4.43
Failure of safety devices	12.07
Using unsafe equipment	19.31
Taking unsafe position	24.05
Disobeying instruction	1.27
Failure to use provided PPE	1.65
Unsafe loading or stacking	6.11
Wrong order of supervisor	0.05
Unsafe act by fellow employee	0.77
Unsafe act of outsiders	0.82
Other	6.30

#### OCCUPATIONAL DISEASES/INJURIES BY UNSAFE CONDITIONS 2014-15



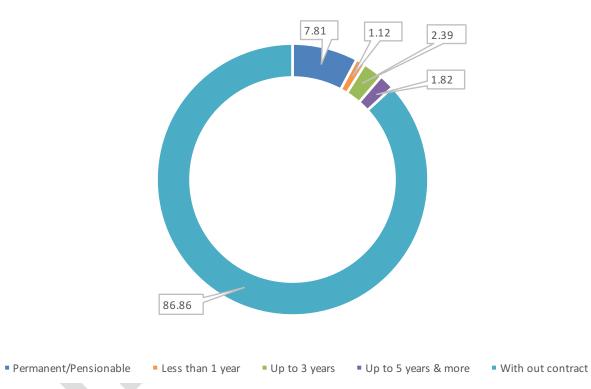
## DISTRIBUTION OF EMPLOYED PERSONS SUFFERED BY OCCUPATIONAL DISEASES/INJURIES BY CAUSE OF ACCIDENT 2014-15



# Table 41: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Status of Contract (%)

Status of Contract	2014-15
Permanent/Pensionable	7.81
Less than 1 year	1.12
Up to 3 years	2.39
Up to 5 years	0.95
Up to 10 years	0.34
10 years and more	0.53
With out contract	86.86

## **OCCUPATIONAL DISEASES/INJURIES BY STATUS OF CONTRACT 2014-15**





# TABLES: PROVINCIAL DATA 2014 - 2015

Table 42: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Occupation (%)

Occupation	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Service & Sales Workers	7.17	3.80	3.86	6.79
Skilled Agri, Forestry & Fishery Workers	39.81	60.78	7.41	36.69
Craft and Related Trades Workers	19.92	11.32	41.00	39.54
Plant & Machine Operators and Assemblers	9.00	4.21	25.71	11.49
Elementary Occupations	20.91	18.85	20.99	4.80
Others	3.19	1.04	1.03	0.69

Table 43: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Industry (%)

Industry	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Agriculture, Forestry and Fishery	47.10	62.96	9.25	36.69
Manufacturing	17.38	9.60	23.96	27.11
Construction	13.98	16.65	30.09	11.94
Wholesale Trade, Restaurants & Hotels	9.16	2.65	8.44	3.09
Transportation, Storage and Communication	6.00	4.70	25.13	12.96
Others	6.38	3.45	3.13	8.20

Table 44: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Employment Status (%)

Employment Status	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Employers	0.70	0.00	1.14	0.00
Own Account Workers	39.42	45.98	31.65	39.00
Contributing Family Workers	17.01	24.44	4.66	30.36
Employees	42.88	29.58	62.55	30.64

Table 45: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Education Level (%)

Education Level	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Illiterate	47.49	56.77	37.28	54.35
Below Matric	39.36	27.25	43.42	33.01
Matric	9.24	10.66	14.96	5.89
Intermediate	2.31	4.06	3.32	1.58
Degree	1.21	1.04	0.79	5.16
Post Graduate	0.39	0.22	0.22	0.00

Table 46: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Cause of Accident (%)

Cause of Accident	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Operating without authority	2.15	2.79	1.35	13.75
Excess speed	17.72	25.55	22.61	29.56
Horse play	2.85	7.70	4.90	0.69
Failure of safety devices	14.27	7.13	15.40	1.95
Using unsafe equipment	22.74	13.67	14.95	21.46
Taking unsafe position	19.10	32.50	28.68	24.90
Disobeying instruction	1.73	0.09	2.29	0.00
Failure to use provided PPE	1.79	1.80	0.13	2.45
Unsafe loading or stacking	5.93	7.78	2.32	5.23
Wrong order of supervisor	0.07	0.00	0.10	0.00
Unsafe act by fellow employee	0.42	0.22	4.78	0.00
Unsafe act of outsiders	1.12	0.49	0.09	0.00
Other	10.10	0.28	2.40	0.00

Table 47: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Treatment Received (%)

Treatment Received for First Injury	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Hospitalized	9.24	3.40	8.80	24.55
Consulted a doctor, nurse or other medical professional	65.80	40.63	76.44	21.61
Took time off work	16.18	31.40	13.39	24.93
None	8.78	24.57	1.36	28.91

Table 48: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Hours of Work (%)

No. of Hours per week	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Less than 20	4.38	0.43	3.05	16.73
20 - 29	4.07	3.63	0.72	10.13
30 - 39	13.98	27.40	7.45	23.21
40 - 48	30.24	29.18	49.59	23.72
49 - 56	20.02	19.82	23.76	9.29
57 - 60	8.13	7.37	6.84	2.39
61 & above	19.18	12.17	8.58	14.53

Table 49: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Resuming Work (%)

Resumed Work after First Injury	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Same day	11.85	20.95	4.24	18.55
1-7 days	55.75	53.90	74.70	76.54
8-30 days	20.79	2.20	17.06	4.91
2-4 months	6.94	0.29	1.67	0.00
5-7 months	1.24	0.00	0.54	0.00
8-12 months	0.67	0.00	0.31	0.00
Don't know	0.26	0.04	0.40	0.00
Still not resumed	2.00	9.63	1.07	0.00
Will never be	0.52	12.98	0.00	0.00

Table 50: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Technical/Vocational Training (%)

	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Not received training	66.16	87.73	45.07	93.12
Received training	33.84	12.27	54.93	6.88
Received on job	14.14	6.43	18.38	5.74
Received off job	19.70	5.84	36.55	1.14
1-4 weeks training	0.47	0.30	0.00	0.00
5-12 weeks	1.18	1.14	0.66	0.69
13-26 weeks	5.55	1.26	7.41	3.10
27-52 weeks	11.68	5.32	24.47	1.95
53 weeks & above	14.96	4.24	22.39	1.14

Table 51: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Unsafe Conditions (%)

For First Injury	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Unguarded or inadequately guarded	10.84	1.52	21.12	4.86
Defective tool, equipment or material	26.95	31.27	25.35	11.59
Unsafe design or construction	5.40	13.04	9.09	7.58
Poor illumination	5.63	2.62	1.07	4.81
Inadequate ventilation	0.49	0.47	1.85	0.00
Improper clothing and footwear	3.39	14.81	1.26	0.00
Non-provision of necessary protection equipment	7.14	2.30	12.83	44.16
Poor house keeping	11.70	5.84	0.67	0.49
Slippery surfaces	18.67	27.86	21.33	24.26
Others	9.79	0.28	5.42	2.25

Table 52: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Employment Status (detailed) (%)

Employment Status	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Regular paid employee	12.88	8.39	13.57	14.62
Casual paid employee	16.55	18.62	42.59	9.49
Paid worker by piece rate	13.15	2.32	4.98	6.52
Paid non-family apprentice	0.29	0.24	1.41	0.00
Employer	0.70	0.00	1.14	0.00
Own account worker (agriculture)	4.32	2.68	0.34	3.86
Own account worker (non-agriculture)	14.50	8.68	26.90	25.62
Owner cultivator	14.03	10.76	3.97	3.77
Share cropper	2.96	23.85	0.44	5.76
Contract cultivator	3.60	0.00	0.00	0.00
Contributing family worker (agriculture)	14.56	23.06	2.77	23.31
Contributing family worker (non-agriculture)	2.45	1.38	1.89	7.05

Table 53: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Status of Contract (%)

Status of Contract	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Permanent/Pensionable	9.02	7.86	2.31	11.01
Less than 1 year	1.26	0.73	0.97	2.51
Up to 3 years	3.40	1.09	0.00	2.26
Up to 5 years	0.83	1.52	0.00	7.66
Up to 10 years	0.48	0.00	0.23	0.00
10 years and more	0.36	0.00	0.00	22.87
With out contract	84.65	88.81	96.49	53.70

Table 54: Distribution of Employed Persons Suffered Occupational Diseases/Injuries by Status of Contract (%)

Sector/Industry	Punjab	Sindh	Khyber Pakhtunkhwa	Balochistan
Agriculture	47.10	62.96	9.25	36.69
Non-Agriculture	52.90	37.04	90.75	63.31
Formal	17.27	12.11	5.58	25.47
Informal	82.73	87.89	94.42	74.53
Industry	30.77	26.33	51.12	39.78
Services	22.13	10.71	39.63	23.53

# STATE OF OSH THROUGH NEWSPAPER DATA 2010 - 2016





رَبِنَ مَوْمَ لَبِرِهِ ؟ الا مود ياك فوق كرجوان اوراها وي كاركن لم المعقول اور فيول والكال دبين

Eight die in Loralai coalmine blast





Six die after inhaling toxic gas in pickle factory

17 labourers buried alive in Mohmand marble mine collapse

Tragedy in Lahore

# Factory collapse kills 18

55 pulled out alive as rescuers search for dozens still trapped under rubble

Disaster in Mohmand

## Explosives trigger mine collapse; 10 dead

Death toll expected to rise as rescuers recover four bodies

A MUREEB MOHMAND LAKARO

At least 10 people were killed on Saturday when a marble mine collapsed in the Safi tehsil of Mohmand Agency, Officials expect the death toll could rise, TRAPPED

A political administration of-

A' RANA TANYEER



## The Need for Newspaper Data

This report also uses a new data set i.e., the work related accidents reported in newspapers. The main purpose is to document work related incidents and also to identify sectors and occupations where most of these accidents are occurring. This report uses the data presented in Occupational Safety and Health 2014 (Punjab Employment Trends Report) for the first three years (2010-2012). For the other years (January 2013-April 2016), we have collected data on the same pattern. Our database of newspaper reported workplace accidents includes description of accidents, economic sector, number of injuries and fatalities, location (city and province), reported date and the newspaper reporting the incident.

This Unit recognizes that there are certain caveats to using the newspaper data. Not all of the workplace accidents are reported in newspapers especially those occurring in small cities or in rural areas as well as accidents happening in agriculture sector. There might also be some workplace accidents, which might have been missed by ILS Unit while collecting data from newspapers. The limited human resource of ILS Unit has also played its part in collecting the data since all workplace accident news were collected through visiting the newspaper websites. This data also does not take into account road accidents where transport services staff (driver and conductor) as well as those commuting to and from work, were injured or lost their lives. Similarly, these figures do not take into account the victims of terrorism commuting to and from work.

Despite all these reservations and inadequacies, this data is indicative of national trend and signifies what is actually happening in the country. According to this data, manufacturing, services, mining and construction are the deadliest sectors. The tables and graphs below show trends in occupational injures and deaths year wise, sector wise and province wise.

# Two brothers among nine labourers electrocuted







## 31 injured in Gujranwala factory boiler blast

#### **Boiler** explosions

FROM THE NEWSPAPER — PUBLISHED OCT 11, 2015 08:39 AM

A boiler explosion in Gujranwala a few weeks ago, resulted in the death of eight workers. Such incidents are becoming a routine matter.

THE EXPRESS TRIBUNE PAKISTAN KP & FATA

Occupational hazards: Teenage labourer yet to be compensated for injury

By Muhammad Sadaqat Published: February 9, 2014

HARIPUR: Over a dozen people have lost their lives

THE EXPRESS TRIBUNE PAKISTAN BALOCHISTAN

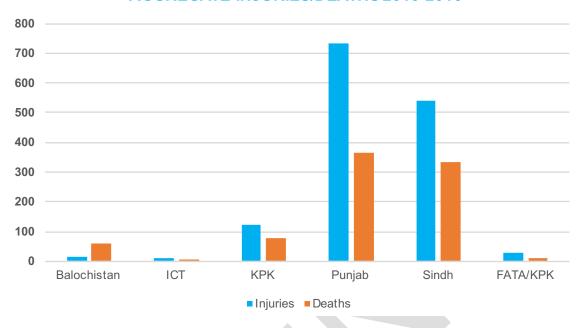
Hazardous work: Eight coal miners killed in Balochistan mine explosion

Five die in Gujranwala flour mill boiler explosion

Table 55: Province-wise Distribution of Total Number of Injuries & Deaths (2010-2016)								
	Balochistan	ICT	КРК	Punjab	Sindh	FATA/KPK		
Injuries	14	12	121	733	539	27		
Deaths	60	3	79	365	335	8		

Table 56: Province-wise Injuries Reported (2010-2016)								
	2010	2011	2012	2013	2014	2015	2016	
Balochistan	7	3	0	0	0	3	1	
ICT	0	0	0	0	3	9	0	
KPK	0	3	0	0	41	25	52	
Punjab	148	95	152	19	39	222	39	
Sindh	50	6	436	0	0	20	27	
FATA/KPK	0	0	0	0	0	0	27	

#### **AGGREGATE INJURIES/DEATHS 2010-2016**



## **PROVINCE-WISE INJURIES REPORTED (2010-2016)**

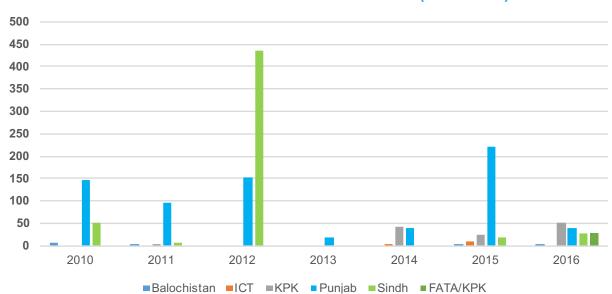
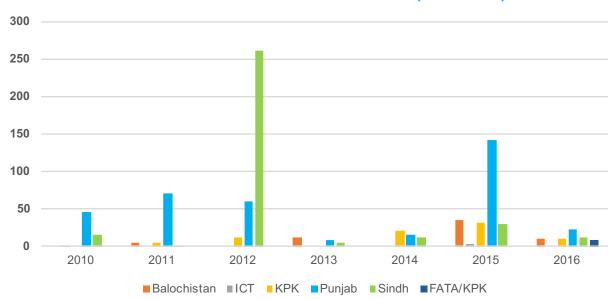


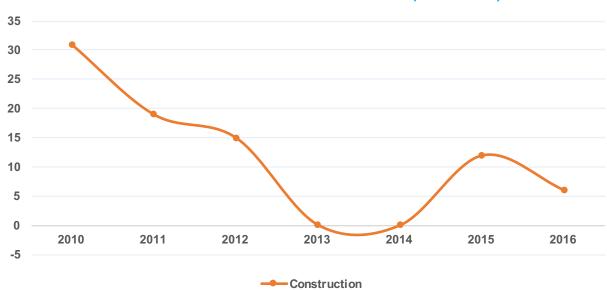
Table 57: Province-wise Deaths Reported (2010-2016)									
	2010	2011	2012	2013	2014	2015	2016		
Balochistan	0	5	0	11	0	34	10		
ICT	1	0	0	0	0	2	0		
KPK	0	5	12	0	21	31	10		
Punjab	46	71	59	9	15	141	23		
Sindh	16	1	261	5	11	29	12		
FATA/KPK	0	0	0	0	0	0	8		

Table 58: Sector-wise Injuries Reported (2010-2016)									
Sector	2010	2011	2012	2013	2014	2015	2016		
Construction	31	19	15	0	0	12	6		
Services	87	55	10	3	4	27	36		
Manufacturing	87	38	563	16	59	232	70		
Mines	0	9	0	0	20	24	34		

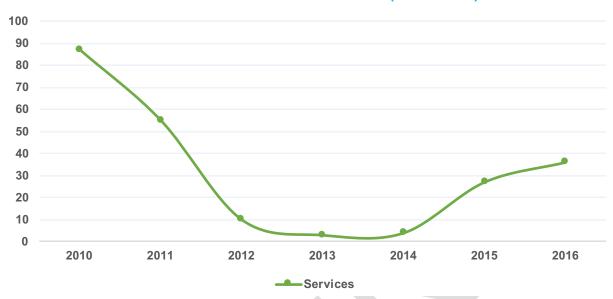
### **PROVINCE-WISE DEATHS REPORTED (2010-2016)**

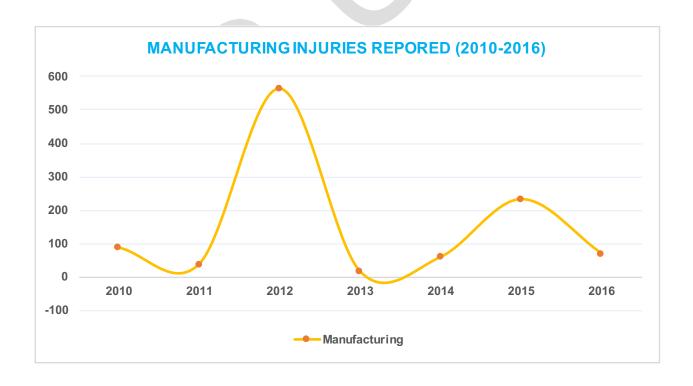


## **CONSTRUCTION INJURIES REPORED (2010-2016)**



## **SERVICES INJURIES REPORED (2010-2016)**





## **MINES INJURIES REPORED (2010-2016**

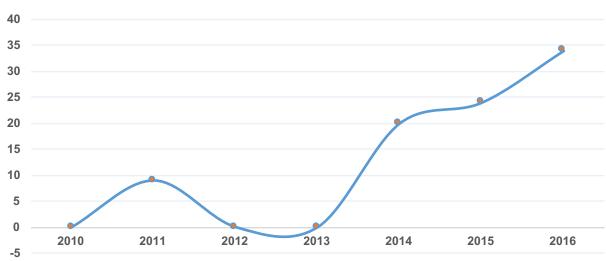


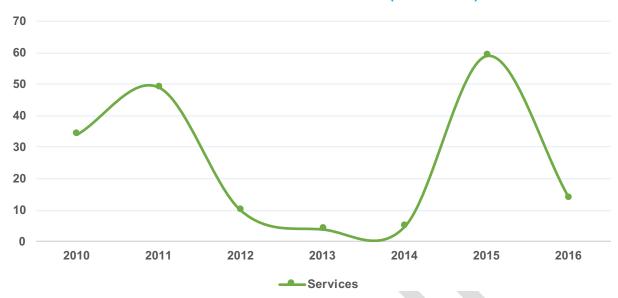


Table 59: Sector-wise Deaths Reported (2010-2016)								
Sector	2010	2011	2012	2013	2014	2015	2016	
Construction	31	19	15	0	0	12	6	
Services	87	55	10	3	4	27	36	
Manufacturing	87	38	563	16	59	232	70	
Mines	0	9	0	0	20	24	34	

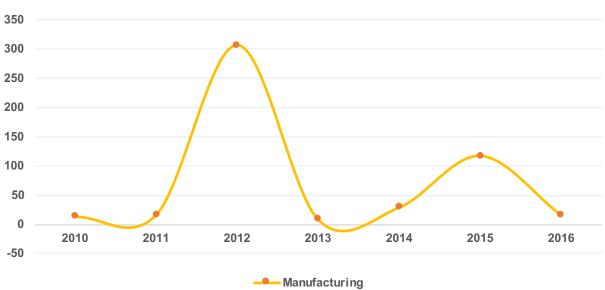
## **CONSTRUCTION DEATHS REPORED (2010-2016)**

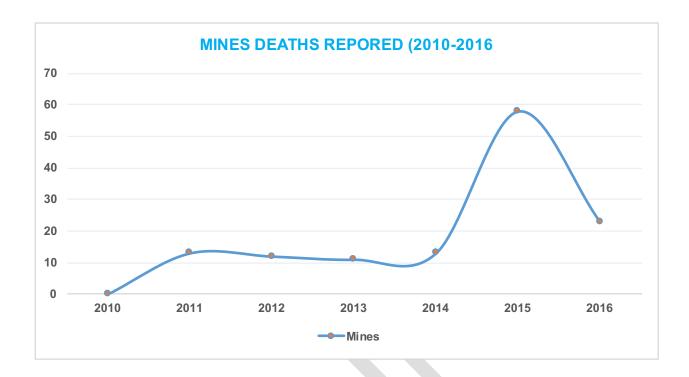


#### **SERVICES DEATHS REPORED (2010-2016)**



#### **MANUFACTURING DEATHS REPORED (2010-2016)**





The data in table 60 onward shows only those reported incidents where injuries and deaths surpassed a certain limit:

- occupational injuries must be equal to or greater than 5
- occupational fatalities under the incident must be equal to or greater than 3

Table 60: Injuries Reported (2010)					
Description of Accident	Sector	No. of Injuries	Location		
			City	Province	
Ammonia Leaks in a Factory	Factory	53	Lahore	Punjab	
Gas Tanker Explosion	Services	50	Hyderabad	Sindh	
Roof Collapse	Services	9	Lahore	Punjab	
Murder of worker	Services	7	Quetta	Baluchistan	
Roof Collapse	Factory	6	Lahore	Punjab	
Roof Collapse	Services	6	Lahore	Punjab	
Gas explosion in Shop	Services	5	Lahore	Punjab	

Table 60-A: Deaths Reported (2010)					
<b>Description of Accident</b>	Sector	No. of Deaths	Location		
			City	Province	
Gas Tanker Explosion	Services	14	Hyderabad	Sindh	
Oil Tanker explosion	Services	5	Faisalabad	Punjab	
Murder of worker	Services	4	Quetta	Baluchistan	
Workers died in a well	Services	3	Bahakar	Punjab	

Table 61: Injuries Reported (2011)					
<b>Description of Accident</b>	Sector	No. of Injuries	Location		
			City	Province	
Fire explosion	Services	15	Multan	Punjab	
Roof Collapse	Services	10	Lahore	Punjab	
Fire explosion	Factory	8	Lahore	Punjab	
Gas cylinder explosion	Services	5	Kot Abdul Malik	Punjab	
Gas cylinder explosion	Services	5	Karachi	Sindh	

Table 62: Deaths Reported (2011)					
Description of Accident	Sector	No. of Deaths	Location		
			City	Province	
Gas cylinder explosion	Services	15	Sheikhupura	Punjab	
Gas Pipeline explosion	Services	12	Lahore	Punjab	
Explosion	Chemical Factory	8	Lahore	Punjab	
Crain touches high voltage cables	Services	6	Lahore	Punjab	
Mine explosion	Mine	5	Orakzai	KPK	
Mine explosion	Mine	5	Mastung	Baluchistan	
Fire explosion	Factory	3	Lahore	Punjab	
Mine explosion	Mine	3	Lahore	Punjab	

Table 63: Injuries Reported (2012)					
Description of Accident	Sector	No. of Injuries	Location		
			City	Province	
Fire explosion	Factory	435	Karachi	Sindh	
Fire explosion	Factory	45	Lahore	Punjab	
Boiler Blast	Factory	24	Lahore	Punjab	
Injuries due to gas	Factory	20	Lahore	Punjab	
Accident	Agriculture	18	Vehari	Punjab	
Explosion of melted iron	Factory	7	Lahore	Punjab	
Roof Collapse	Factory	7	Lahore	Punjab	
Furnace Blast	Factory	6	Lahore	Punjab	

Table 64: Deaths Reported (2012)						
<b>Description of Accident</b>	Sector	No. of Deaths		Location		
			City	Province		
Fire explosion	Factory	258	Karachi	Sindh		
Fire explosion	Factory	25	Lahore	Punjab		
Boiler Blast	Factory	13	Lahore	Punjab		
Mine Explosion	Mine	12	Mansehra	KPK		

Table 65: Injury Reported (2013)					
Description of Accident Sector No. of Injuries Location					
			City	Province	
A boiler explosion	Factory	13	Faisalabad	Punjab	

Table 66: Deaths Reported (2013)					
<b>Description of Accident</b>	Sector	No. of Deaths	Location		
			City	Province	
Piosonous gas	Mine	8	Loralai	Balochistan	
A boiler explosion	Factory	3	Faisalabad	Punjab	
Collapsed metalic framework	Factory	3	Karachi	Sindh	
Mining Accident	Mine	3	Loralai	Balochistan	

Table 67: Injuries Reported (2014)					
Description of Accident	Sector	No. of Injuries	Location		
			City	Province	
Gas factory blast	Factory	17	Lahore	Punjab	
Occupational Hazards	Factory	15	Haripur	KPK	
Under construction ice factory collapse	Factory	13	Peshawar	KPK	
Boiler blast	Factory	8	Sheikhupura	Punjab	
Explosion in a Mine	Mine	7	Khewra	Punjab	
Explosion in Mine	Mine	5	Orakzai Agency	KPK	

Table 68: Deaths Reported (2014)						
Description of Accident	Sector	No. of Deaths	Lo	ocation		
			City	Province		
Occupational Hazards	Factory	12	Haripur	KPK		
Factory Blast	Factory	5	Karachi	Sindh		
Gas factory blast	Factory	4	Lahore	Punjab		
Explosion in a gypsum mine	Mine	3	Khewra	Punjab		
Blast in coal mine	Mine	3	Orakzai Agency (Hangu)	KPK		
Factory Gas Leakage	Factory	3	Vehari	Punjab		

Table 69: Injuries Reported (2015)					
Description of Accident	Sector	No. of Injuries	Location		
			City	Province	
Factory collapse	Factory	100	Lahore	Punjab	
Boiler Blast in factory	Factory	19	Gujranwala	Punjab	
accident due to factory roof collapse	Factory	18	Lahore	Punjab	
Factory boiler explosion	Factory	17	Gujranwala	Punjab	
Laboureres killed in Neelam Jehlum Hyderoelectric project blast	Services	16	Muzaffarabad	Azad Kashmir	
Coalmine Explosion	Mine	10	Doli (Orakzai Agency)	KPK	
workers suffer burns in scrap explosion	Factory	9	Gujranwala	Punjab	
Blast in Pharamaceutical Factory	Factory	9	Islamabad	ICT	
Gas cylinder blast	Factory	9	Lahore	Punjab	
Labourers buried alive in mine collapse	Mine	7	Safi Tehsil (Mohand Agency)	КРК	
Ammonia Gas Cylinder explosed in ice factory	Factory	6	Chichawatni	Punjab	
Labourere died in factory roof collapse	Construction	6	Karachi	Sindh	
workplace accident due to boiler blast	Factory	5	Lahore	Punjab	
Boiler Blast in factory	Factory	5	Chiniot	Punjab	

Table 70: Deaths Reported (2015)					
Description of Accident	Sector	No. of Deaths	Loc	ation	
			City	Province	
Factory collapse	Factory	46	Lahore	Punjab	
Labourers buried alive in Mine collapse	Mine	10	Safi Tehsil (Mohand Agency)	KPK	
Electrocution	Services	9	Godhpur Village (Muzaffargarh)	Punjab	
Boiler Blast in factory	Factory	8	Gujranwala	Punjab	
Coalmine Blast	Mine	8	Duki (Loralai)	Baluchistan	

Boiler explosions	Factory	8	Gujranwala	Punjab
Factory roof collapse due to boiler blast	Factory	7	Gujranwala	Punjab
Suffocation in mine	Mine	7	Quetta	Baluchistan
Coalmine collapse	Mine	7	Quetta	Baluchistan
FESCO linemen electrocuted last three months	Services	7	Faisalabad	Punjab
Factory boiler explosion	Factory	6	Gujranwala	Punjab
Coalmine Explosion	Mine	6	Doli (Orakzai Agency)	KPK
workers died due to inhaling toxic gas	Factory	6	Karachi	Sindh
workers killed in steel factory fire	Factory	5	Lahore	Punjab
Traffic accidents in different territories and worker electrocuted	Services	5	Karachi	Sindh
Attempt to weld oil tanker caused fire	Services	5	Lahore	Punjab
accident due to factory roof collapse	Factory	4	Lahore	Punjab
Accident due to Boiler Explosion	Factory	4	Faisalabad	Punjab
Blast kills miners	Mine	3	Doli (Orakzai Agency)	KPK
Blast in stone crushing plant	Factory	3	Taxila	Punjab
Miners killed in explosion	Mine	3	Loralai	Baluchistan
Labourers electrocuted in an under-construction house	Services	3	Lahore	Punjab
Workers killed while cleaning sewerage line	Services	3	Jhang	Punjab
Labourers electrocuted	Services	3	Lahore	Punjab

Table 71: Injuries Reported (2016)				
Description of Accident	Sector	No. of Injuries	Location	
			City	Province
Miners' deaths	Mine	27	Orakzai	FATA/KPK
Cylinder blast in two factories	Manufacturing	26	Gujranwala + Multan	Punjab
Manufacturing roof collapse	Manufacturing	17	Shikarpur	Sindh
Fire breaks out in faactory	Manufacturing	16	Hayyatabad	KPK
Accident during maintainance of hydropower project tunnel	Services	13	Mansehra	KPK
workers fall unconscious while working on dam	Services	12	Landi Kotal	KPK
Sugar Mill boiler explosioon	Manufacturing	9	Toba Tek Singh	Punjab
Labourers killed in Orakzai mine blast	Mine	6	Doli (Orakzai Agency)	KPK
Fire breaks out in Warehouse	Services	6	Karachi	Sindh

Table 72: Deaths Reported (2016)				
Description of Accident	Sector	No. of Deaths	Location	
			City	Province
Sugar Mill boiler explosioon	Manufacturing	10	Toba Tek Singh	Punjab
Miners' deaths	Mine	8	Orakzai	FATA/KPK
Labourers killed in Orakzai mine blast	Mine	5	Doli (Orakzai Agency)	KPK
Labourers killed as house collapses	Construction	4	Nauthia (Peshawar)	KPK
Mine collapse in Surrange and Dumki areas	Mine	4	Quetta	Balochistan
Workers died due to suffocation	Services	3	Khairpur	Sindh
Three miners suffocate in Loralai	Mine	3	Loralai	Balochistan
Labourers suffocate in sewage disposal	Services	3	Luddan (Vehari)	Punjab
Fire breaks out in Warehouse	Services	6	Karachi	Sindh



#### Annex - A: Status of Provincialization of Labour Laws after Devolution (2010)

	Law	Status
	Khyber Pakhtunkhwa	
1	Industrial Relations Act, 2010	Approved
2	Factories Act, 2013	Approved
3	Minimum Wages Act, 2013	Approved
4	Industrial and Commercial Employment (Standing Orders) Act, 2013	Approved
5	Industrial Statistics Act, 2013	Approved
6	Payment of Wages Act, 2013	Approved
7	Workers Compensation Act, 2013	Approved
8	Maternity Benefits Act, 2013	Approved
9	Prohibition of Employment of Child Act, 2015	Approved
10	Bonded Labour System (Abolition) Act, 2015	Approved
11	Shops and Establishments Act, 2015	Approved
	Punjab	
1	Employment of Children Act, 1991	Approved
2	Restriction of Employment of Children Act, 2015	In process
3	Employment (Record of Services) Act, 1951	Approved
4	Factories Act, 1934	Approved
5	Minimum Wages Ordinance, 1961	Approved
6	Road Transport Workers Ordinance, 1961	Approved
7	West Pakistan Industrial and Commercial Employment (Standing Orders) Ordinance, 1968	Approved
8	West Pakistan Maternity Benefits Ordinance, 1958	Approved
9	Workers Children (Education) Ordinance, 1972	Approved
10	Workmen's Compensation Act, 1923	Approved
11	Bonded Labour System (Abolition) Act, 1973	Approved
12	Payment of Wages Act, 1936	Approved
13	Industrial Statistics Act, 1942	In process
14	Employees Cost of Living (Relief) Act, 1973	Approved
15	Minimum Wages for Unskilled Workers Ordinance, 1969	Approved
16	West Pakistan Shops and Establishments Ordinance, 1969	Approved
17	Essential Personnel (Registration) Ordinance, 1948	In process
18	Provincial Employees Social Security Ordinance, 1965	Approved
19	Punjab Industrial Relations Act	Approved
20	Punjab Prohibition of Child Labour at Brick Kilns Ordinance, 2016	Approved

	Balochistan	
1	Industrial Relations Act, 2010	Approved
2	Employees Cost of Living (Relief) Act	In process
3	Employment (Record of Services) Bill, 2015	In process
4	Prohibition of Employment of Children Bill, 2015	In process
5	Essential Personnel Bill, 2015	In process
6	Factories Bill, 2015	In process
7	Minimum Wages Bill, 2015	In process
8	Standing Orders Bill, 2015	In process
9	Industrial and Commercial Bill, 2015	In process
10	Industrial Statistics Bill, 2015	In process
11	Payment of Wages Bill, 2015	In process
12	Workmen Compensation Bill, 2015	In process
13	Workers Children Education Bill, 2015	In process
14	Shops and Commercial Establishments Bill, 2015	In process
	Sindh	
1	Industrial Relations Act, 2013	Approved
2	Factories Act, 2015	In process
3	Payment of Wages Act, 2015	In process
4	Terms of Employment (Standing Orders) Act, 2015	Approved
5	Workers Compensation Act, 2015	Approved
6	Shops and Establishment Act, 2015	Approved
7	Employees Old-age Benefits Institution (EOBI) Act, 2014	Approved
8	Companies Profit (Workers Participation) Act, 2015	In process
9	Employees Social Security Act, 2015	Approved
10	Minimum Wages Act, 2015	Approved
11	Workers Welfare Fund Act	Approved
12	Occupational Safety and Health Act, 2015	In process
13	Home Based Workers Act, 2015	In process
14	Road Transport Workers Act, 2015	In process
15	Employment of Children Act, 2015	In process
16	Bonded Labour System (Abolition) Act, 2015	In process
17	Workers Children Education Act, 2014	In process

### Annex - B: Schedule III - List of Occupational Diseases Under Workmen's Compensation Act 1923

Occupational disease	Employment
PA	ART A
Anthrax	Any employment—  (a) involving the handling of wool, hair, bristles or animal carcasses or parts of such carcasses, including hides, hoofs and horns; or  (b) in connection with animals infected with anthrax; or  (c) involving the loading, unloading or transport of any merchandise.
Compressed air illness or its sequelae.	Any process carried on in compressed air.
Poisoning by lead tetra-ethyl.	Any process involving the use of lead tetra-ethyl.
Poisoning by nitrous fumes.	Any process involving exposure to nitrous fumes.
PA	ART B
Lead poisoning or its sequelae [excluding poisoning by lead tetra-ethyl].	Any process involving the use of lead [or any of its preparations or compounds except lead tetraethyl].
Phosphorous poisoning or its sequelae	Any process involving the use of phosphorus or its preparations or compounds.
[Mercury poisoning or its sequelae.	Any process involving the use of mercury or its preparations or compounds.
Poisoning by benzene and its homologues, or the sequelae of such poisoning.	Handling benzene or any of its homologues and any process in the manufacture or involving the use benzene or any of its homologues.
Chrome ulceration or its sequelae.	Any process involving the use of chromic acid or bichromate of ammonium, potassium or sodium, or their preparations.
[Arsenical poisoning or its sequelae.	Any process involving the production, liberation or utilization of arsenic or its compounds.
Pathological manifestations due to— (a) radium and other radio-active substances; (b) X-rays.	Any process involving exposure to the action of radium, radioactive substances, or X-rays.
Primary epitheliomatous cancer of the skin.	Any process involving the handling or use of tar, pitch, bitumen, mineral oil, paraffin, or the compounds, products or residues of these substances.
Silicosis	Any process involving the grinding, cleaning, fitting, casting and crushing of stones.

# Annex - C: The Schedule on Hazardous Occupations & Processes issued under Section 4 of Employment of Children Act, 1991

## PART I OCCUPATIONS

Any occupation connected with-

- (1) transport of passengers, goods or mail;
- (2) work in a catering establishment at a railway station, involving the movement of a vendor or any other employee of the establishment from one platform to another or into or out of a moving train;
- (3) work relating to the construction of a railway station or with any other work where such work is done in close proximity to or between the railway lines; and
- (4) a port authority within the limits of any port.

#### PART II PROCESSES

- (1) Work inside underground mines and above ground quarries including blasting and assisting in blasting.
- (2) Work with power driven cutting machinery like saws, shears, guillotines and agricultural machines, thrashers, fodder cutting machines.
- (3) Work with live electrical wires over 50 volts.
- (4) All operations related to leather tanning process e.g., soaking, de-hairing, liming, chrome tanning, de-liming, pickling, defleshing, ink application.
- (5) Mixing and manufacture of pesticides and insecticides; and fumigation.
- (6) Sandblasting and other work involving exposure to free silica.
- (7) Work with exposure to all toxic, explosive and carcinogenic chemicals e.g., asbestos, benzene, ammonia, chlorine, manganese, cadmium, sulphur dioxide, hydrogen sulphide, sulphuric acid, hydrochloric acid, nitric acid, caustic soda, phosphorus, benzidene dyes, isocyanates, carbon tetrachloride, carbon disulphide, epoxy resins, formaldehyde, metal fumes, heavy metals like nickel, mercury chromium, lead, arsenic, beryllium, fiber glass.
- (8) Work with exposure to cement dust in cement industry.
- (9) Work with exposure to coal dust.
- (10) Manufacture and sale of fireworks and explosives.
- (11) Work at the sites where liquid (liquefied) petroleum gas (LPG) and compressed natural gas (CNG) is filled in cylinders.
- (12) Work on glass and metal furnaces; and glass bangles manufacturing.
- (13) Work in the cloth weaving, printing, dyeing and finishing sections.
- (14) Work inside sewer pipelines, pits and storage tanks.
- (15) Stone crushing.
- (16) Lifting and carrying of heavy weight (15kg and above), especially in transport industry.
- (17) Carpet- weaving.
- (18) Working two meters or more above the floor.
- (19) All scavenging including hospital waste.
- (20) Tobacco processing and manufacturing including niswar and bidi making.
- (21) Deep-sea fishing, commercial fishing and processing of fish and seafood.
- (22) Sheep-casing and wool industry.
- (23) Ship-breaking.
- (24) Surgical instruments manufacturing specially in vendors' workshops.
- (25) Spice- grinding.
- (26) Work in boiler house.
- (27) Work in cinemas, mini cinemas and cyber clubs.
- (28) Mica cutting and splitting.
- (29) Shellas manufacturing.
- (30) Soap manufacture.
- (31) Wool cleaning.
- (32) Building and construction industry.
- (33) Manufacture of slate pencils, including packing.
- (34) Manufacture of products from Agate."

Notification. S.R.O. 1280(1)/2005, dt. 20-12-2005. Gaz. of Pak., Extra., Pt. I, December 27, 2005

<sup>\*</sup> Khyber Pakhtunkhwa, in its Khyber Pakhtunkhwa Prohibition of Employment of Children Act, 2015, has added the process "work at oil & gas fields including rigs" in its list of hazardous processes where workers under 18 cannot be engaged.



