ANNUAL REPORT OF ACTIVITIES -2003

- Centre for the Improvement of Working Conditions & Environment Lahore
- Industrial Relations Institute Lahore
- Child Labour Resource Centre



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Preface

The improvement of safety, health and working conditions of the workers result in better productivity, satisfactory work performance and economic growth. The Labour & Human Resources Department Punjab is the focal government agency striving for welfare of the workers through its various wings. Medical treatment and related facilities are provided to the workers by the Punjab Employees Social Security Institution. The housing, education marriage grants and other financial benefits to the workers are arranged through the Workers' Welfare Board. The labour laws including those relating to compensation, health and safety and working conditions are enforced through the Directorate of Labour Welfare.

The Centre for Improvement of Working Conditions and Environment is our focal training, advisory and information-providing institution. We have further strengthened this institution by integrating the existing Industrial Relations Institute into the Centre. Thus the scope and sphere of the activities of this institution has been considerably enhanced, which is reflected in the present Annual Report. I am really impressed by the response from the users of services of this Centre, who have expressed appreciation and have asked for different kinds of information of services.

As this is the only institution of its kind in the country, it can play vital role in policy formulation and devising implementation strategies for occupational safety, health and environment in the country. It is ideally suited to act as the focal national institution in the field of occupational safety and health and support other provinces as well, through training, research and advisory services.

Major (R) Shahnawaz Badar Secretary Labour & Human Resources Department Government of Punjab Foreword

It gives me immense pleasure to introduce the annual report of Centre for the

Improvement of Working Conditions and Environment, (CIWCE) Lahore. This

Centre is the focal institution within the Directorate of Labour Welfare Punjab,

providing information, training and advisory services to the industry, workers and

concerned agencies for the improvement of working conditions and environment.

It is encouraging for us that the industry has given full backup and support to the

activities of CIWCE and has joined hands with us in reducing the toll of accidents

and diseases at the workplaces.

During 2002, the Industrial Relations Institute was also integrated into the

CIWCE, thus enhancing its sphere of activities to include training on labour laws,

weights and measures and other areas, in which laws enforcement is carried out by

the Directorate of Labour Welfare Punjab.

A special feature of the activities of CIWCE for the year 2003 was the focus on

child labour specially the hazardous forms of child labour. The CIWCE assisted

the Federal Government in identifying the potential hazardous occupations for

child labour, which led to national consensus list of hazardous occupations for

child labour. A Child Labour Resource Centre has also been established at

CIWCE, which is a milestone in the efforts of Directorate of Labour Welfare to

network the stakeholders on this issue.

Zarar Haider

Director Labour Welfare

Punjab

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An Introduction to the CIWC&E

The Centre for the Improvement of Working Conditions & Environment (CIWC&E), was established in Lahore by the Directorate of Labour Welfare Punjab, assisted by ILO/UNDP, at a total cost of Rs.33.38 million including a foreign exchange component of Rs. 11.5 million (in the form of equipment, expert services and training of professional staff of the Centre). The construction of building started in 1985 and was completed in 1988, when the Centre became operational.

It is a pioneering institution in Pakistan with professionally trained staff, modern laboratories and facilities for assisting the industry in combating safety, health and environmental problems at the workplaces. The total number of staff working at CIWC&E is 33, which include hygienists, safety, engineers, chemists, technicians and secretarial staff.

The principal aim of this Centre is to combat the safety, health and working environment hazards in the industries in Punjab, and to create awareness and change the attitudes of the employers/workers regarding safety, health and working environment.

Sphere of Activities of the CIWCE

- **Training & Education:** Training courses on safety, health and environmental problems for workers, supervisors, managers, trade union representatives and safety & health professionals are arranged
- **Research:** Research into safety, health and environmental problems in the industry is carried out.
- **Information:** Information services on request on problems of safety, health and environment.

- **Monitoring:** Monitoring and analysis of most chemical and physical health hazards in the workplace is carried out.
- Advisory Services: The professional staff of CIWC&E can carry out OSH audits and provide advisory services for the solution of the problems of safety, health and working environment.

Activities-2003

Hostel for Trainees Approved for CIWCE

The Government of Punjab has agreed to provide funds amounting to Rupees 11.86 million for the construction of a well-equipped and furnished hostel for the trainees of Centre for the Improvement of Working Conditions and Environment. This is a major breakthrough for the CIWCE, as it was extremely difficult and expensive for the trainees from other cities to come and attend training and other events organised by CIWCE. This hostel will be able to accommodate 25-30 trainees at nominal cost to them. The layout and design of a 2 storied hostel building has been approved by the government. Now the final working drawings are under preparation. The construction is likely to start by March, 2004 and will be completed in about 9 months, so we expect that the hostel will be ready for the trainees by the beginning of year 2005. With the addition of hostel we will be able to welcome our trainees from other provinces and even from regional countries to come and participate in the training and other activities we organise for the promotion of occupational health and safety at work.

Project for strengthening and upgradation and strengthening of facilities of CIWCE Approved

Besides approving a hostel for trainees of CIWCE, the Government of Punjab has also approved a major project for the procurement of new equipment and upgradation of existing training, information, advisory and other services of CIWCE. The government has approved an amount of Rupees 19.65 million, to be spent in next two years on the procurement of new equipment for the laboratories of CIWCE. The present equipment was purchased in 1980. Important items, which have been approved include:

Name of Item	Purpose for which required
Atomic absorption spectrophotometer	Analysis of working environment and other samples for heavy metals and provision of consultancy services.
Portable infrared gas analyzer	To check the working environments for airborne toxic chemicals, provision of consultancy services to industry
Direct reading meters for multiple gases	Provision of consultancy services to industry
Colour detection tubes for toxic gases/vapours	Provision of consultancy services to industry
Pulmonary Function testing equipment	Monitoring of occupational health and provision of consultancy services to industry
Water testing equipment (ions, BOD, COD, pH, conductivity, TDS and other pollution criteria)	Provision of consultancy services to industry
Stack gas analyzer	Provision of consultancy services to industry
Passive samplers for organic chemicals and toxic gases	Provision of consultancy services to industry
Purchase of accessories, chemicals and spares for the existing equipment of CIWCE to make them fully operational	Provision of consultancy services to industry
Books, journals, CDs videos	To equip the library and training sections of the CIWCE

Besides the purchase of equipment, major chunk of funds has been allocated for the preparation and production of training, materials, carrying out training and awareness activities in the enterprises and upgradation of existing equipment.

This is the first time since its establishment, that the CIWCE has received major government assistance, which testifies to the commitment of government

of Punjab in promoting occupational health and safety in the province. We also request our friends and partners through this report to join hands with us to get the best out of this largesse.

Training and Education-2003

Mobile Training Unit

Keeping in view the limitations of the workers and industries particularly the small scale enterprises and the lack of accommodation facilities for trainees from outside of Lahore, a mobile training unit has been established in order to bring the training services of the CIWC& at the doorsteps of the industrial enterprises. For



this purpose the van of the CIWC&E was turned into Mobile Training Unit in 1998. This unit has been equipped with audio-visual equipment and materials. The training staff of CIWCE coordinates and travel to the industrial enterprises and holds brief orientation sessions for workers, supervisors and managers and distributes free literature. This unit has been a huge success with the industry. The activities of this unit continued at full pace during 2002. This unit traveled to the industrial units even in the far flung areas of the province. One day workshop in each unit were conducted in which safety, health and environment related topics pertinent to those enterprises were discussed.

The month wise details of the training workshops held by this unit since in 2003 are given below:

The important topics discussed in these workshops include:



- Chemical Safety at workplace
- Noise control and prevention & hearing conservation
- Machine-guarding
- Ergonomics as a tool for enhancing productivity
- Fire prevention and fire fighting
- Basic emergency first aid and CPR
- Work in confined spaces
- Accident investigation
- Selection and use of personal protective equipment
- Management of heat stress
- Industrial lighting
- Construction safety
- Electrical safety
- Hazardous waste management
- Compliance with national and international health safety and environmental laws and standards
- Formation and work of safety committees

During the year 2003, 142 sessions were held by the Mobile training unit, in which 4861 workers, managers and owners of the enterprises participated.

Conference on Challenges and Opportunities in Safety, health and Environment in Pakistan

A one-day conference on "Challenges and Opportunities in Safety, health and Environment in Pakistan" was held on January 06, 2003. The conference was attended by more than 50 professionals, academics, top government officials and others. The outline of the conference is given below:

8:30 a.m9:30 a.m. Registration of Participants
--

Inaugural Session	
9:30 a.m9:35 a.m.	Recitation from the Holy Quran
9:35 a.m9:40 a.m.	Introductory remarks by Mr. Saeed Awan, Director CIWCE, Lahore
9:40 a.m 9:45 a.m.	Statement by Dr. Muhammad Akram, Associate Director, Environmental Health and Safety, Colombia University, New York, USA.
9:45 a.m 9:50 a.m.	Statement by Mr. Iftikhar Mehmood Randhawa, Coordinator Webcop/Employers Federation of Pakistan
9:50 a.m 10:00 a.m.	Statement from the Secretary Labour & Manpower, Government of the Punjab
10:00 a.m10:30 a.m.	Refreshments

Working Session-I (Occupational Safety and Health)		
Chair Muhammad A	Chair Muhammad Akram, Ph.D, CH MM-Columbia University, USA	
10:30 a.m10:50a.m.	Sharing of USA Experiences in Implementation	
	and Promotion of Occupational Safety and Health	
	Dr. Muhammad Akram, Associate Director,	
	Environmental Health and Safety, Columbia	
	University, NY, USA	
10:50 a.m. – 11:10	Development Trends and Future Perspectives of	
a.m.	Occupational Health and Safety in Pakistan	
	Mr. Saeed Awan, Director, Centre for the	
	Improvement of Working Conditions and	
	Environment, Lahore	
	Occupational HealthThe ICI Pakistan	
11:30.m.	Experience	
	Dr. D.N. Farooki, Occupational Health Manager,	
	ICI Pakistan	
11:30 a.m. – 12:45		
a.m.	Discussion & recommendations	

Working Session-II (Environment)		
Chair Muhammad Akram, Ph.D, CHMM-Columbia University, USA		
1:00.pm1:20 p.m.	Major Environmental Laws in USA	
	Dr. Abdul H. Khalid Hazardous Waste Specialist from USA	

1:20 p.m1:40 p.m.	Experience of ICTP Project in Treatment of Hazardous Waste in Tanneries.
	Mr. Javed Cheema, Coordinator ICTP Project, Pakistan Tanners Association
1:40 p.m2:00 p.m.	Final Presentation of Recommendation to Attendees and Media. Management of Municipal Solid Waste in Urban Areas of Pakistan
	Dr. Ata-ul-Haq, Green Technology, Lahore
2:00 p.m2:45 p.m.	General Discussion to establish an organization of Environmental Health, and Safety Professionals in Pakistan.
2:45 p.m3:00 p.m.	Final Presentation of Recommendation to Attendees and Media.
3:00 p.m3:15 p.m.	Closing Remarks
3:30 p.m.	Lunch

A detailed report of the Conference is under preparation and will soon be shared with our valued readers, but the recommendations which were finalsied during the conference are of paramount importance. A summary of these recommendations is presented below:

Recommendations for improvement of occupational health and safety in Pakistan

The participants of Conference were invited to express their views about the challenges faced in the area of occupational safety and health and make practicable suggestions for improvement in the current situation. A number of useful recommendations were finalized which identify the steps to be taken by the stakeholders including the government, professionals, employers, workers' representatives, educational & training institutions, international organizations

and others.

- 1. National Safety and Health Council: The National OSH Council as proposed in the Labour Policy-2002 should be established immediately and made into and effective organisaiton. For this purpose it has to backed up by professional expertise. Therefore 50% members of this Council should be health and safety professionals. This Council should have a broad mandate for proposing the technical, legal and voluntary standards and Codes of Practice related to occupational safety and health. This Council should have sufficient budget and should meet frequently at least in the initial phases. It may also be provided funding to hire national and international experts for providing guidelines on various issues.
- 2. In order to cope with the challenges of globalization, modern technical safety and health standards should be adopted including limits for airborne contaminants in workplaces, and these standards should be frequently reviewed for updating.
- 3. Industry specific technical standards and voluntary codes of practice specially for textile industry, tanneries, power plants, should be adopted.
- 4. Effective inter-agency liaison within the government sector should be established especially between the Ministry and Departments of Labour and the Ministry and Department of Health at both Federal and Provincial level. The representatives from Ministries of Health and Environment should be included in National Safety and Health Council.
- 5. The workers in those sectors which due to some reason are not covered by laws (construction, agriculture, transport, informal sector etc.) should also be provided information and training through a focal institution and media to protect themselves form accidents and diseases at work.

- 6. It is recognized that present labour/factory inspection system cannot meet the requirements of modern days challenges. The inspectorates should be beefed up by induction of professionals of Safety, Health and Environment. The existing inspectors should also be required to undergo intensive training.
- 7. The government should encourage establishment of consultancy businesses in OSH area and criteria should be set in the laws for these agencies. The evaluations of OSH in enterprises carried out by the accredited consultancy companies should be approved by the government. These consultancy companies can support the enforcement of technical OSH standards, which the inspectorates are not capable of.
- 8. All enterprises employing more than 200 workers (whether permanent or contract) should be asked to hire a safety, health and environment officer. The minimum qualifications for such an Officer should be prescribed in the law.
- 9. Diploma, MSc and PhD level programmes in disciplines of occupational health and safety should be started to prepare a professionally trained cadre of manpower in the country. The government and industry should sponsor such educational and training programmes at least for the next 5 years. The national OSH Council should also work to promote OSH education and training in the country.
- 10. A national focal institution on OSH should be established in order to facilitate legal reforms, research, publication and evolving training curricula on different OSH disciplines. The existing Centre for the Improvement of Working Conditions and Environment in Lahore can be given this status, as it has already an experience of over 15 years in the area. This institution can provide on-job training to the professionals and can start certification of existing professionals.

- 11. The existing accident and disease reporting and recording system has become dysfunctional. Stiff penalties should be imposed for not or under reporting.
- 12. All the Chambers of Commerce and Industry should establish safety, health and environment cells. Where environment cells have been established, their mandate should be enhanced to cover OSH area as well.
- 13. The government should allocate funding for promotion of awareness, training, information dissemination and research in OSH.
- 14. Awards should be started for the enterprises having good track record of OSH.

Recommendations for improvement of environmental conditions

The participants of Conference after the session on Environment discussed the current drawbacks and ways to overcome them. Following specific recommendations were finalized during this session:

- 1) It was agreed that the provisions of Pakistan Environmental Protection Act (PEPA) specially the National Environmental Quality Standards (NEQS) were not being implemented. It was felt that the government should enforce the laws strictly.
- 2) There is a need to bring about special environmental standards for special industries for example tanneries, textile, power production etc.
- 3) No provision was made in the present laws for contingency plans in case of natural or man made environmental disasters. No provision for a contingency plan to save marine environment in

- case of major oil spill was in pace. Such plans have to be adopted and rehearsed urgently.
- 4) The present laws do not take into consideration the special requirements of different areas. For example Baluchistan and Sindh have marine environment to protect, which NWFP has mountainous and water reservoirs to care for. It was emphasized that provinces should make their Environmental Rules urgently to give protection to their own ecosystems and environment.
- 5) The subject of environment should be added in the school curricula to create awareness at grass roots level.
- 6) Communities should be involved in law making process, only them sustainable strategies can be worked out.
- 7) An environmental impact of all urban development and infrastructure projects should be carried out before undertaking any development.
- 8) The use of indusial and municipal waste water for irrigation should be strictly prohibited.
- Use of excess pesticides and fertilizers should be discourages and farmers should be educated on adopting environmental friendly agri-practices.

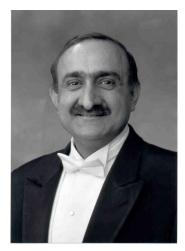
Formations of an Association of OSHE Professionals

During the recently held Conference and training courses, a strong need was felt to form an association of the occupational, safety, health and environmental professionals in Pakistan, in order to provide them with the professional forum for exchange of views and professional build-up. Tentative the name PEOSHA (Pakistan Environmental, Occupational Safety & Health Association) has been proposed initially to be based at CIWCE. The by-laws and other formalities of this association are being worked out, more

information will be provided to our readers through the forthcoming issues of our newsletter.

Tariq Sultan Pasha joins CIWCE after completing PhD

Tariq Sultan Pasha has recently joined the CIWCE after the completion of Ph.D. in Environmental Science from the University of Kuopio, Finland. The title of his doctoral dissertation was 'Occupational Health and Safety Profile of Punjab, Pakistan and Strategies for its Improvement' on 14.11.2003 at University of Kuopio, Finland. Mr Pasha is now working as an Occupational Hygienist at CIWCE. He worked in Finland under the



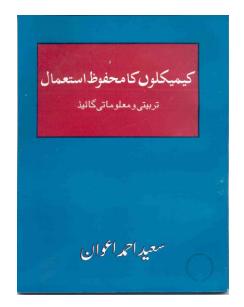
supervision of Prof. Jyrki Liesivuori and Prof. Pentti Kalliokoski.

Introduction to the training Guides prepared by CIWCE

Over the years, the CIWCE has developed a large number of training, information and publicity materials on different aspects of safety, health and environment. Many of the training videos and CD-ROMs have been donated by the friends of CIWCE from abroad. These materials are a valuable asset for us, as they form the backbone of our training and information services. The training materials of CIWCE have been designed by us keeping in view the cultural realities, knowledge and skill levels and requirements of workers in Pakistan keeping in view our experience and interactions with them over the last 16 years. Lot of pictures, cartoons and diagrams have been used which are suitable for illiterate and semi-literate workers, even those belonging to informal and non unorganized sectors of economy. Below is given an introduction of important training guides developed by CIWCE:

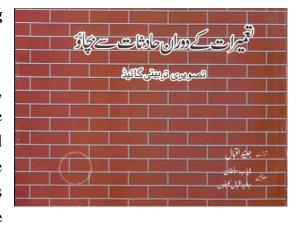
Safe Use of Chemicals

This is guidebook aimed at training of supervisors and other staff who are responsible for safe use of chemicals at the workplace. The book contains simple and easy to understand information on the properties of chemicals, entry routes, safety and health problems caused by them and contains instructions for safe use of chemicals, emergency measures and fire-fighting. Total pages are fifty in addition to safety data sheets of chemicals most commonly found in the workplaces in Pakistan



Accident Prevention during Construction (Picture book)

Construction is a high risk sector, which is not regulated in Pakistan. The workforce is mostly illiterate, seasonal and migratory in nature much more prone to accidents. This guidebook has been prepared keeping in view the



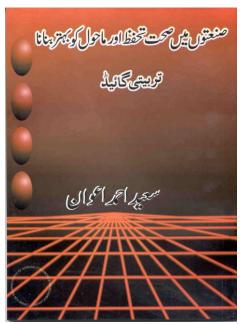
safety requirements of the workers in construction sector. All the book is in the form of cartoons, in which the right and wrong methods and approached during construction have been explained. Total pages are 58, which cover topics like; working at heights, use of ladders, handling, transport and storage of materials at construction sites, use of vehicles at construction sites, essential precautions during handling of tools, machines and chemicals at workplaces, lifting of weights, and precautions during blasting.

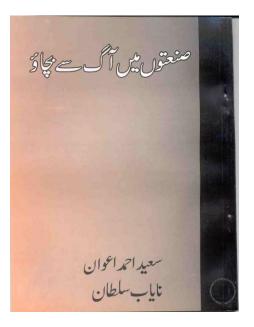
Improving Safety, Health and Environment in Industry

This guidebook containing 82 pages of illustrated lessons on important aspects of health prevention of safety, and environment topics like; covers and impact of industrial environment activities on environment and methods to control pollution. Other topics covered working environment include and interactions of man, machinery and environment, industrial noise and hazards of chemicals. This book covers complex issues and presents them in a user-friendly format in Urdu suitable to the training needs of workers and supervisors in the country.



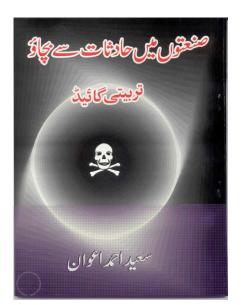
This guidebook (72 pages) contains essential information for prevention of fire and explosions in the industry





Accident Prevention in Industry

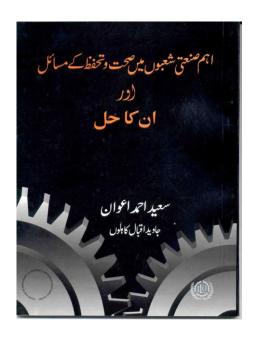
This guidebook is meant for safety supervisors and discusses the principles of industrial safety. The principles and practices of machine guarding, access control, handling and transport of materials in the



workplace, placarding, carrying out safety risk assessments, accident investigation have been discussed in a simple manner

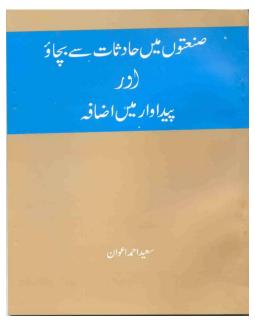
Safety and Health Problems in Important Industries-Their Solution

This is a guidebook discussing safety and heath problems in important industrial sectors in Pakistan. The sectors discussed include tanneries, textile industry, power production, cement manufacture, chemical industry, garments industry. In each sector, the specific hazards faced by workers based on the experience in Pakistan, are discussed, also are given solutions to control the hazards in each sector.



Ergonomic Lessons (Safety and Productivity at workplace)

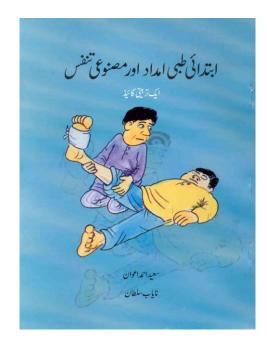
This training guide presents important lessons of ergonomics in a simple and user-friendly manner. Lot illustrations have been used, problems faced by women workers have been specially highlighted. Most of the guidelines given in the book, relate safety with the productivity at the workplace. The main areas covered include handling and transport of materials. use of hand tools, enhancing productivity through safety, improving design of the



workplace, lighting improvement at the workplace, improving workplace environment.

First Aid and Resuscitation at workplace

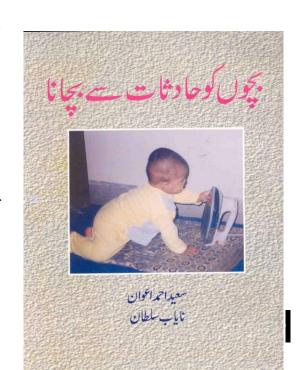
This is a full colour training guidebook of first aid and resuscitation. Illustrations and photographs depicting local scenes have been used to prepare the readers to become effective first aid providers specially in the industrial settings. The principles and sequences of mouth to mouth and cardiopulmonary resuscitation have been explained with the help of photographs as well as user-friendly description. Specific topics covered include: artificial emergency measures,



respiration principles and techniques, care of the victim, first aid, heart attack, fractures, burns, electric shocks, inhalation of gas and smoke, drowning, heat stroke, asthma etc.

Safety of children at home (for parents)

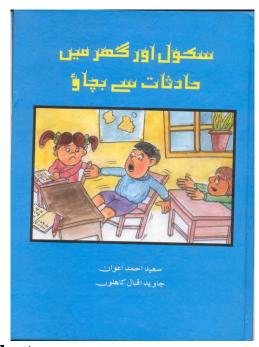
This is a guidebook for the parents to look after the safety of their near and dear ones. This book explains how to make the home safe for the child. This is a must-read for the parents of toddlers and young children. Extensive photographs,, illustrations



and graphics have been used to explain the topic. The main themes of the guidebook include: special measures to prevent accidents to children, asphyxiation, spills of scalding liquids, falls from heights, ingestion of poisonous materials, drowning, burns, cuts, accidents during play, road accidents, cycling accidents, emergency first aid, things to keep at home to provide first aid to the kids.

Safety at school and home (colour guide for children)

This is colourful primer for the children , who have just learned to read and write. It gives illustrations on how to prevent accidents home at playground. Also it gives comic illustrations of bad habits and gives the children useful lessons on how to cope with intimidation and bullying, how to behave in class and playground and bad habits which should be avoided.



Risk Assessment Surveys of Working Environment in the Industry

Like the preceding years, the industry approached the CIWCE to carry out risk assessment surveys of various occupational health, safety and environmental hazards in their premises. These surveys were intended to provide useful data essential for controlling these hazards. Following surveys need special mention:

Details of Risk Assessment Surveys on Safety, Health and Environment in the Industry Carried Out by CIWCE in 2003

Š	Sr.	Factory	Service Provided
-	1.	Kohinoor Textile Mills	Noise Level, Dust Level, Light Level Survey.

	Rawalpindi	
2.	Kohinoor Hosiery Mills	Noise, Dust and Light Level
	Raiwind.	
3.	Rafhan Uni level (Pvt.)	Heat Stress assessment, Audiometry Dust
	Ltd. Bhai Pheru.	Level survey
4.	Master Textile Mills	Pulmonary Function test, Audiometry
	Raiwind	
5.	Pakistan Tobacco Co.	Dust Level survey
	Jhelum	

Occupational Health and Safety Risk Assessment of Child Labour in Hazardous Sectors

The centre for the Improvement of Working Conditions and Environemnt was requested by the ILO Office in Pakistan and the government to carry out OSH risk assessment studies in some hazardous sectors of economy, where child labour is found. This was major activity of CIWCE in 2003 which has resulted in a unique insight into the life and health and safety hazards of child workers hitherto ignored. These studies have proved to be an important source of information for the Time Bound Programme for the elimination of hazardous forms of child labour from the country being launched by the Government of Pakistan with the technical support of ILO-IPEC. Below are give highlights of the findings of the studies, which are yet to be published:

Occupational Health and safety problems faced by child workers in Glass Bangles industry

During the manufacture of glass bangles, the workers specially the children are exposed to a number of hazards which include:

- Heat stress
- Cuts & bruises
- Exposure to organic solvents

Cramped workplaces

Study Background

A total of 109 child workers from glass bangle sector in Hyderabad (54 boys and 55 girls) alongwith, 21 adults, who had been working in the glass bangle industry since childhood were examined for health and safety risks they face. A control group of 42 school-going non-working children (15 males and 27 females) from the same three localities as the working children were also examined. The data of health and safety indicators of working children was compared with that from control group.

The child workers were involved in most of the processes concerned with bangle making, Girls worked at homes, while boys worked at homes as well as workshops. Most common tasks of the child workers were printing, furnace/oven work, joining and leveling.

General health Indicators

- Most of the child workers (64%) reported disturbed sleep, 10% reported physical punishment by parents/elders. Majority (66%) disliked the work they did. Bedwetting was reported by 1.8% of working and 2.3% of control group children.
- Availability of meat in the diet was similar in the working and control group children.
- The basic health indicators (height, weight, pulmonary functions) when compared across the same age groups, were similar for the working and control group children of the same gender and age group.
- Personal hygiene of the child workers in glass bangles sector was very poor compared with control group.

The ratios of anaemia, palpable lymph nodes, and worm infestation were similar and high in both the control group and working children, while the working children reported higher vertigo/headache and ratio of goiter (15%) was also higher in working children than the control group (9.5%).

Respiratory Diseases

■ The incidence of respiratory diseases and disorders (pain chest, cough, TB, dysponea) was much higher in the working children than the control group. The ratios increased dramatically in the adults.

Skin Problems

A sizeable proportion of working children and adults suffered from skin problems (cuts/bruises and burns)), which were not found in the control group children.

Musculo-skeletal disorders

■ The ratios of musculo-skeletal disorder like cumulative trauma disorders, low back pain and pain neck and shoulder were high in the working than the control group, these ratios further increased in the adults.

Dehydration

■ Some working children (8.3%) and adults (9.5%) showed symptoms of dehydration caused by excessive water loss due to high heat in the processes they were involved coupled with insufficient fluid intake.

Solvent toxicity

A sizeable number of working children (11.9%) and adults (19.0%) showed symptoms of neurobehavioral problems probably caused by exposure to organic solvents and chemicals specially in printing and spray related tasks.

Eye disorders

Incidence of conjunctivitis of the eye (due to allergens and irritants in the workplace or poor hygiene) was triple in the working children than the control group. Similarly 23.8% of adults suffered from trachoma, a painful and dangerous eye disorder.

What to do?

The working hours of these children have to be reduced and they should be given opportunity to play and get education. Model worksites should be created with good safety controls, where adults should work. The children should work only on less hazardous jobs only after they have attended the school.

Occupational Health and safety problems faced by child workers in coal mining sector

Coal mining is carried out in all provinces of Pakistan. Varying level of technology is used to extract coal. Most of the mines in Punjab and NWFP are small, and rely on low tech methods. Child workers also work in some mines. Mining is a hazardous work, which exposes the workers to a number of hazards, which include:

- Coal and mineral dust exposure
- Heat stress
- Cuts/bruises
- Long work hours
- Risk of roof falls
- Eye injuries
- Heavy loads (40-50 kg)
- Trip and falls
- Machine hazards
- Electric shocks

Study Background

A total of 80 child workers (all males) from coal mines situated in Choa Saidan Shah in Chakwal District of Punjab and Cherat in Nowshhara Districts of NWFP alongwith 66 adults, who had been working in the coal mining since childhood were examined for health and safety risks they face. A control group of 40 school-going non-working children (all male) from Choa Saidan Shah area were also examined. The data of health and safety indicators of working children was compared with that from control group.

Most of the child workers were involved in digging/cutting and manual hauling and transport of coal inside and outside the mines. Some were working as cooks etc.

General health Indicators

- The living conditions of the mine workers were also very poor, using temporary mud/stone shelters, very poor toilet facilities, and poor sleeping arrangements.
- The mean age of working children was 16.3 years and the respondent children ranged from 7-17 years. The mean age for starting work for respondent children was 12.8 years.
- All the children lived near the mines in temporary shelters alongwith their adult and child coworkers.
- Majority of the child workers (55%) reported disturbed sleep, none reported physical punishment, 66% disliked the work they did. Most of them were smokers (15%) or chewed tobacco or *naswar* (55%)
- Availability of meat in the diet was much better in the working than the control group children.
- The ratios of health complaints described by working and control group children were different, the main complaints of working children were headache, backache, joints pain and fatigue, while for control group common cold and diarrhea was most frequent health complaint.
- The basic health indicators (height, weight) when compared across the same age groups, were similar in the working children and control group children of same age.
- The baseline data of pulmonary health indicates better pulmonary health in the working children than the control group.
- Personal hygiene of the child and adult workers in coal mines was very poor compared with control group.
- The ratios of anaemia and palpable lymph nodes was higher in the control group, while headache and worm infestation were more common the working children

Injuries

33% of children and 49% of adults reported injuries during work, which included cuts, slips, heat related problems, and eye injuries.

Respiratory Diseases

The ratio of chronic respiratory diseases and disorders (disponea, chronic bronchitis) was much higher in the working children than the control group. The ratios of acute problems (pain chest and cough) was higher in the control group. The ratios of respiratory disorders increased dramatically in the adults.

Abdominal pain

The ratio of pain abdomen was higher (24%) in the working children than the control group (5%).

Musculo-skeletal disorders

The ratios of musculo-skeletal disorder like low back pain and pain neck and shoulder were very high in working than the control group children.

Dehydration

Ratios of urine abnormalities was higher in the working children than the control group, indicating dehydration and infections.

Eye disorders

Prevalence of conjunctivitis of the eye (due to allergens and irritants in the workplace or poor hygiene) was triple in the working children than the control group. Similarly 23.8% of adults suffered from trachoma, a painful and dangerous eye disorder.

What to do?

Children should be completely banned form working inside the mines. Better occupational health and safety controls and medical coverage should be provided to mining workers. All children specially those in the mining communities should be provided with educational opportunities.

Occupational Health and safety problems faced by child workers in Fishing/Ship-breaking sectors

Fishing and ship-breaking provide an important source of livelihood to a large population along the coastal belt of Pakistan. While ship-breaking is concentrated around Gadani Shipyard in Baluchistan near Karachi, fishing is scattered all along the coastal belt in Sindh and Baluchistan. Besides adults, child workers are also fund in both these sectors. The main hazards encountered by workers in these sectors are summarised below:

Fishing	Ship-breaking
 Heat stress Heavy weights are lifted Odd and long working hours Sleep deprivation Cuts/bruises Biological hazards in the form of fungi and Diesel smoke inhalation Fuel and lubricant exposure to skin during operation and repair of boats Uncomfortable posture Drowning at sea Substance abuse 	 Explosions from escaping flammable materials Fires Burns Toxic vapors and gas inhalation Postural problems Asphyxiation High noise exposure Substance abuse Heavy loads

Study Background

A total of 93 child workers involved with deep sea fishing and fish cleaning processing from Gadani in coastal region of Balochistan, as well as 21 adult workers from the fisheries sector, who had been working since childhood were examined for health and safety risks they face. Another 21 child workers and 4 adults from ship-breaking sector were included in the study.

A control group of 40 school-going non-working children from the same localities as the working children were also examined. The data of health and safety indicators of working children was compared with that from control group.

The male child workers in fisheries were involved as helpers to collect the fish catch from the nets and store it before it is transported back to harbour. The female child workers were involved in fish cleaning for domestic use as well for sale in the market. The child workers in the ship-breaking sector were involved as helpers to the skilled adult workers and did cleaning, manual handling, drilling, spray painting hammering and other jobs.

All the workers in ship-breaking were immigrants from Punjab or NWFP, while the workers in fisheries belonged to local area.

Majority of child respondents (51% in fisheries and 66% in ship-breaking) had never attended school, others had dropped out from primary classes.

General health Indicators

• Majority of the children in both sectors observed 10-12 or more hours of work a day. The work routine in case of fishing was very tough and most of the time the workers had to keep awake. All the children in ship-breaking sector, lived with other male coworker sin dilapidated shacks constructed from salvaged packing materials, while the fisheries workers also lived in one-room shacks or rooms with their parents or relatives.

- Most of the child workers (95%) in fisheries reported disturbed sleep s a major health related complaint.
- Availability of meat in the diet was common and mostly consisted of fish.
 The diet in the fisheries was unbalanced and depended heavily on fish, with
 little use of vegetables and pulses. The meat usage patter was similar in the
 working and control group children.
- The height and weight when compared across the same age groups, were similar for the working and control group children.
- Personal hygiene of the child workers in both sectors was very poor compared with control group.
- The ratios of anaemia, palpable lymph nodes, and worm infestation were similar in the control group as well as the working children from both sectors.

Respiratory Problems

The incidence of respiratory diseases and disorders (pain chest, cough, dysponea) was similar in the working children and the control group. The ratios increased dramatically in the adults.

Skin problems

A sizeable proportion of working children and adults suffered from skin problems (cuts/bruises and burns)), which were not found in the control group children. Many of the children in fisheries were found with skin discoloration due to fungal infections, many had festering skin lacerations on the legs.

Musculo-skeletal disorders

The ratios of musculo-skeletal disorders like low back pain, pain neck and shoulder and generalized body weakness were high in the working children from both sectors, than the control group, these ratios further increased in the adults.

Heat Stress

The adults from both sectors showed symptoms of dehydration and urinary tract infections caused by excessive water loss due to heat stress in their work as well as due to low consumption of water and unsanitary toilet conditions.

Addictions

Incidence of Oral submucosal fibrosis was very high (29%) in child workers and 33.3% in adult workers in fisheries. This was attributed to excessive use of betel and chemical products (Gutka) chewed by these workers to keep themselves awake.

Eye problems

Incidence of conjunctivitis of the eye (due to allergens and irritants in the workplace or poor hygiene) was high in the working children than the control group. Similarly 24.7% of working children from fisheries and 17% of adults in fisheries and 25% from ship-breaking suffered from trachoma, a painful and dangerous eye disorder.

Abdominal problems

Abdominal pains, motions and tenderness in abdomen was common in the working children and adults.

What to do?

Working hours for children in all sectors should be regulated. These children should be given opportunities for participation in positive recreational activities, games, and provided education whether formal or non formal. Almost all the activities in ship-breaking sector were too hazardous for the children below the age of 18. Such operations exposed the workers to grave and life threatening hazards. Engagement of children for such activities should be banned. The communities should be made aware of the hazards faced by children as result of their work. They need to be educated on how to prevent hazards. Adult productivity should also be enhanced through better working conditions ands skill training

Occupational Health and safety problems faced by child workers in Scavenging sector

During the recent years, the scavenging of garbage for useful items like glass, plastic, wood, metals etc., has become a lucrative business. The arrival of refugees from Afghanistan has swelled the ranks of scavengers and this has become a well organized trade mainly in the big metropolitan cities of the country. Besides the adults, a number of child workers are seen prowling the garbage dumps, commercial and municipal waste sites and even hospital waste sites.

The children and adults involved in this sector face severe risks to their health and safety, which are compounded by long working hours, lack of access to basic housing, sanitation and health facilities, and malnutrition.

The main health and safety hazards faced by child workers in this sector can be classified into following categories:

- * Exposure to toxic and hazardous materials from searching with bare hands into the potentially dangerous waste sites.
- * Injuries from bruises and cuts by sharp objects in the waste.

- * Ingestion of contaminated and putrefying foodstuffs leading to illnesses.
- * Musculoskeletal problems due to lifting of heavy loads and their manual transportation
- * Exposure to harmful biological agents including fatal and communicable diseases from the hospital and municipal waste sites.
- * Abuse in the form of violence and verbal and physical assault
- * Malnutrition and poor healthcare resulting in impeded physical development.
- * Poor housing and living conditions exposing the workers to a number of health and other hazards.

Study Background

- A total of 102 scavenging children (93 boys and 9 girls) from Lahore city alongwith, 25 adults, who had been working as scavengers since childhood were examined for health and safety risks they face.
- A control group of 52 school-going non-working children (all male) from working class localities in Lahore were also examined. The data of health and safety indicators of working children was compared with that from control group.
- The scavengers were involved in collecting and sorting of urban/commercial/industrial/hospital wastes and were interested mostly in paper, plastic, glass, metal edibles and bones.
- Majority of the children told that they had started working as scavengers when they were in the age group of 10-14 years.
- Most of scavengers (60%) told that they lived alongwith other adult and child co-workers at the places provided by either the contractor or rented. In some cases, 8-10 workers (children and adults) slept on one *charpoy* or floor of a room.

General health Indicators

- Most of the scavengers worked very early (around 4:00 a.m.) and late in night, while rested or sorted the collected items in the noon. Mean working hours for children were 11 hours.
 - Most of the child workers (95%) reported disturbed sleep, some reported physical punishment (19%), most (60%) disliked their work.
 - A sizeable proportion (21%) of the working children told that they ate edibles from the scavenged items. Use of meat in diet was much higher in the working children than the control group, which was attributed to cultural differences.
 - 62% of children and 84% of adults reported injuries during work, which included cuts, falls, road accidents, dog bites and violence.
 - Body aches and pains (caused by malnutrition, excess loads, long and odd working hours) were the most frequent health related complaints of the working children. Ratio of these complaints was significantly higher in the working children than the control group.
 - The basic health indicators (height, weight, pulmonary functions) when compared across the same age groups, were much poor in the working children than the control group children of same age groups.
 - Personal hygiene of the child scavengers was very poor compared with adults or control group.
 - The ratios of anaemia, palpable lymph nodes, and worm infestation was much higher in the working children than the control group and the differences were statistically significant.

Respiratory Problems

The ratio of respiratory diseases and disorders (pain chest, cough, chronic bronchitis, TB, dysponea) was much higher in the scavenging children than the control group. In most cases the difference in proportions was statistically significant. The ratios of ENT disorders (Rhinitis, tonsillitis and ear infections) were 2-8 times higher in the working children than the control group.

Skin problems

A higher proportion of scavenging children and adults suffered from skin problems (cuts/bruises, scabies, dermatitis) than the control group children.

Musculo-skeletal disorders

Musculo-skeletal disorder like low back pain and pain neck and shoulder were very common in the working children and the ratios were statistically significant compared with those in the control group.

Eye problems

Eye problems were 2 times more common in the scavenging children than the control group.

What to do?

This sector despite being and important economic activity has remained largely invisible for the government agencies, NGOs, social protection institutions, education and health service providers. A large number of contractors and businessmen are thriving on the work of scavengers, who have largely remained deprived of the economic benefits of the business. While it provides a means of earning livelihood for vulnerable and poor segments of society, its impact on the health, safety, education and well being of child workers is a cause of great concern. By reduction in working hours of the children major improvements can be made in their health and safety profile. Working hours for children in all sector should be regulated. Children should not be allowed to work on such occupations from 8:00 p.m. to 8:00 a.m. These children should

be given opportunities for participation in positive recreational activities, games, and provided education whether formal or non formal. This will result in reduction of their working hours. The hospital waste items particularly syringes, infusion bags, medicine bottles are valuable items for scavengers. Therefore they like to collect these items, thus exposing themselves and the general public through them to grave health risks. There is need to adopt a strict hospital and healthcare waste management law, requiring the generators to be responsible for their waste. Awareness programmes and healthcare facilities should be started for the scavenging communities.

Occupational Health and safety problems faced by child workers in Surgical instruments manufacturing sector

The manufacture of surgical instruments is an important industry in Sialkot and its surrounding areas. The child workers are also involved during different stages of the manufacturing of surgical instruments particularly in the "vendor workshops". A number of safety and health hazards are faced by workers in the surgical instruments industry, these are summarized below:

- Machinery related accidents in forging, grinding, drilling, and milling operations.
- Electrical hazards in all sections where machinery is used due mainly to improper wiring.
- Exposure to metal dust in most operations particularly filing, grinding and polishing operations.
- High noise exposure in grinding and forging operations.
- Heat stress in hot operations (annealing, forging etc.) as well as in most workshops, due to poor ventilation.
- Exposure to toxic and corrosive chemicals like sulphuric acid, nitric acid, trichloroethylene in certain operations.
- Slip, trip and fall hazards in most workshops due to poor house-keeping.
- Poor lighting conditions in most workplaces.
- Uncomfortable posture causing musculo-skeletal problems.

• Repetitive strain injuries in filing, grinding, and polishing operations.

Study Background

- A total of 101 child workers from surgical instruments workshops (all boys) from Sialkot area along with, 15 adults, who had been working in the surgical manufacturing industry since childhood were examined for health and safety risks they face.
- A control group of 58 school-going non-working children (all male) from the same localities as the working children were also examined. The data of health and safety indicators of working children was compared with that from control group.
- The child workers were involved in a variety of tasks carried out at small workshops in the surgical manufacturing sector. The main tasks carried out by respondents included; Filing, grinding, polishing fitting, cutting, riveting and electro polishing.
- The mean age of working children was 12.5 years and the respondent children ranged from 7-17 years. Mean age for starting work in surgical sector for the respondents was 9.5 years.
- The mean experience of working children was s 2.9 years, while that of adults it was 10.4 years.

General health Indicators

- Majority of the child workers (95%) reported disturbed sleep, 40% reported physical punishment by parents/elders., 40% disliked the work they did. Bedwetting was reported by 2% of working but none of control group children, 8% of working children while none of control group were smokers.
- Availability of meat in the diet was better in the working than the control group children.

- 50% of children and 40% of adults reported injuries during work, which included mainly cuts and eye injuries.
- The ratios of health complaints described by working and control group children was not similar, some complaints were more common in the working children, but some others were more common in the control group.
- The basic health indicators (height, weight, pulmonary functions) when compared across the same age groups, were much poor in the working children than the control group children of same age groups.
- Personal hygiene of the child workers in surgical instruments workshops was very poor compared with adults or control group.
- The ratios of anaemia and palpable lymph nodes was higher in the control group, while headache/vertigo and intestinal worms were more common in the working children.

Respiratory Problems

The ratio of respiratory diseases and disorders (dysponea and bronchitis) was much higher in the working children than the control group. Cough was more prevalent in the control group. The ratios of ENT disorders (Rhinitis, tonsillitis) were similar in the working children and the control group children.

Skin problems

A sizeable proportion of working children and adults suffered from skin problems (cuts/bruises/burns, scabies and boils) Dermatitis was more common in the control group.

Musculo-skeletal disorders

The ratios of musculo-skeletal disorders like Carpal Tunnel Syndrome (40.6%), low back pain (82.2%) pain neck and shoulders (84.2%) and

callosities (8.9%) were much higher in the working children than the control group.

Eye problems

Prevalence of conjunctivitis of the eye (due to irritants in the workplace or poor hygiene) was 22.8% in working children and 13.8% in control, group.

What to do?

There is a need to eliminate child labour in hazardous processes, while young persons should be inducted into the industry through proper training including training on occupational safety and health hazards and their prevention. Model worksites should be started to demonstrate good practices of OSH and rehabilitation of child labour and skill training. If complete withdrawal may not be possible, the working hours of the children should be regulated and reduced and they should be given an opportunity for education. The workshops should also be brought in the cover of social security health facilities.

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- Exposure to metal dust in most operations particularly filing, grinding and polishing operations.

- High noise exposure in grinding and forging operations.
- Heat stress in hot operations (annealing, forging etc.) as well as in most workshops, due to poor ventilation.
- Exposure to toxic and corrosive chemicals like sulphuric acid, nitric acid, trichloroethylene in certain operations.
- Slip, trip and fall hazards in most workshops due to poor house-keeping.
- Poor lighting conditions in most workplaces.
- Uncomfortable posture causing musculo-skeletal problems.
- Repetitive strain injuries in filing, grinding, and polishing operations.

Study Background

- A total of 101 child workers from surgical instruments workshops (all boys) from Sialkot area along with, 15 adults, who had been working in the surgical manufacturing industry since childhood were examined for health and safety risks they face.
- A control group of 58 school-going non-working children (all male) from the same localities as the working children were also examined. The data of health and safety indicators of working children was compared with that from control group.
- The child workers were involved in a variety of tasks carried out at small workshops in the surgical manufacturing sector. The main tasks carried out by respondents included; Filing, grinding, polishing fitting, cutting, riveting and electro polishing.
- The mean age of working children was 12.5 years and the respondent children ranged from 7-17 years. Mean age for starting work in surgical sector for the respondents was 9.5 years.
- The mean experience of working children was s 2.9 years, while that of adults it was 10.4 years.

General health Indicators

- Majority of the child workers (95%) reported disturbed sleep, 40% reported physical punishment by parents/elders., 40% disliked the work they did. Bedwetting was reported by 2% of working but none of control group children, 8% of working children while none of control group were smokers.
- Availability of meat in the diet was better in the working than the control group children.
- 50% of children and 40% of adults reported injuries during work, which included mainly cuts and eye injuries.
- The ratios of health complaints described by working and control group children was not similar, some complaints were more common in the working children, but some others were more common in the control group.
- The basic health indicators (height, weight, pulmonary functions) when compared across the same age groups, were much poor in the working children than the control group children of same age groups.
- Personal hygiene of the child workers in surgical instruments workshops was very poor compared with adults or control group.
- The ratios of anaemia and palpable lymph nodes was higher in the control group, while headache/vertigo and intestinal worms were more common in the working children.

Respiratory Problems

The ratio of respiratory diseases and disorders (dysponea and bronchitis) was much higher in the working children than the control group. Cough was more prevalent in the control group. The ratios of ENT disorders (Rhinitis, tonsillitis) were similar in the working children and the control group children.

Skin problems

A sizeable proportion of working children and adults suffered from skin problems (cuts/bruises/burns, scabies and boils) Dermatitis was more common in the control group.

Musculo-skeletal disorders

The ratios of musculo-skeletal disorders like Carpal Tunnel Syndrome (40.6%), low back pain (82.2%) pain neck and shoulders (84.2%) and callosities (8.9%) were much higher in the working children than the control group.

Eye problems

Prevalence of conjunctivitis of the eye (due to irritants in the workplace or poor hygiene) was 22.8% in working children and 13.8% in control, group.

What to do?

There is a need to eliminate child labour in hazardous processes, while young persons should be inducted into the industry through proper training including training on occupational safety and health hazards and their prevention. Model worksites should be started to demonstrate good practices of OSH and rehabilitation of child labour and skill training. If complete withdrawal may not be possible, the working hours of the children should be regulated and reduced and they should be given an opportunity for education. The workshops should also be brought in the cover of social security health facilities.

Occupational Health and safety problems faced by child workers in Tanneries

The tanning of hides and skins is one of the oldest manufacturing industry in the sub-continent. The processes in tanning entail a number of health and safety risks for the workers. Small sized tanneries in Kasur employ children besides the adult workers. A brief description of safety and health hazards are faced by workers in the tanneries is summarized below:

- Accidents, slippery, wet and greasy floors form a serious hazard in all parts of a tannery.
- Unfenced pits and vats used for soaking or tanning are always a potential cause of fatal injury by drowning and scalds.
- There are many hazards connected with the operating parts of the various machines, which can be briefly summarized as caused by revolving drums, in-running rollers and knives.
- Hand tools may cause serious injury specially during un-hairing, defleshing operations.
- Gassing by hydrogen sulphide or carbon dioxide may occur during cleaning out of tanning pits.
- Workers engaged in handling, transferring, curing, soaking, trimming and weighing of infected hides and skins may contract this disease. Cutaneous anthrax spores find their entry into the body through skin abrasions such as cuts, scratches, and minor injuries. Pulmonary anthrax is caused by inhaling dust containing spores.
- Dusts of vegetable tanning materials lime and leather and chemical mists and vapours arising in the various processes may be responsible for causing chronic bronchitis. Main exposures usually occur around the rotating drums and at shaving and buffing machines.
- Chrome ulceration may occur in chrome tanning, especially on the hands. Many chemicals used at all stages of the tanning processes may cause dermatitis.
- Use of corrosive chemicals like sulphuric acid may lead to serious accidents during handling and mixing.
- Formaldehyde is used during ink spray. Short-term exposure to formaldehyde can cause watery eyes, nausea, coughing, chest tightness, wheezing, skin rashes, allergenic reactions, and burning sensations in the eyes, nose, and throat. Long-term exposure to low levels of formaldehyde may cause respiratory difficulty, eczema, and

sensitization. Formaldehyde is classified as a human carcinogen and has been linked to nasal and lung cancer, and with possible links to brain cancer and leukemia

Study Background

A control group of 54 school-going non-working children (all male) from the same three localities as the working children were also examined. The data of health and safety indicators of working children was compared with that from control group.

The child workers were involved in most of the tanning processes, notably loading, unloading, drum operation, pit tanning, un-hairing, headpiece processing, defleshig, shaving & buffing Some of the working children (11%) belonged to pit tanneries, 80 % to the drum tanneries and the remaining to allied occupations. The mean age of working children was 13 years and the respondent children ranged from 7-17 years. Most of the children told they had started working when they were between 8-10 years old.

General health Indicators

- Majority of the child workers (80%) reported disturbed sleep, 41% reported physical punishment by parents/elders. Majority (52%) disliked the work they did. Bedwetting was reported by 6.3% of working but none of control group children.
- 52% of children and 43% of adults reported injuries during work, which included slips, chemical accidents and burns.
- The basic health indicators (height, weight, pulmonary functions) when compared across the same age groups, were much poor in the working children than the control group children of same age groups.

- Personal hygiene of the child workers in tanneries was very poor compared with adults or control group.
- The ratios of anaemia, palpable lymph nodes, oedema, clubbing of nails and worm infestation was higher in the working children than the control group.

Respiratory Problems

The ratio of respiratory diseases and disorders (pain chest, cough, TB, dysponea) was much higher in the working children than the control group. The ratios increased dramatically in the adults.

Skin problems

A sizeable proportion of working children and adults suffered from skin problems (cuts/bruises, scabies, dermatitis, chrome ulceration), which were not found in the control group children.

Musculo-skeletal disorders

The ratios of musculo-skeletal disorder like low back pain and pain neck and shoulder were very similar in the working and control group children, but were very high in the adult workers, which is indicative of cumulative effects of work in tanning sector.

Eye problems

Incidence of conjunctivitis of the eye (due to allergens and irritants in the workplace or poor hygiene) was double in the working children than the control group

There is a need to eliminate child labour in hazardous processes, while young persons should be inducted into the industry through proper training including training on occupational safety and health hazards and their prevention. Model

worksites should be started to demonstrate good practices of OSH and rehabilitation of child labour and skill training. If complete withdrawal may not be possible, the working hours of the children should be regulated and reduced and they should be given an opportunity for education. The workshops should also be brought in the cover of social security health facilities.

Designing of Ergonomic Carpet Loom

The carpet weaving is an important cottage industry in Pakistan, millions of people depend on it for their livelihood. A study by CIWCE carried out in 2001, showed that majority of the workers in this sector, specially the child workers suffer from musculo-skeletal problems in the form of pains and aches in back, shoulders, neck and limbs. The main cause of these problems was traced to the poor design of the workplace, which has not undergone any change over the decades. The workers have to squat either in lotus position or on their toes in poorly lit work areas. The Centre for Improvement of Working Conditions and Environment has embarked on a programme to design the workstation in carpet weaving, making it more suitable to adult workers and enhancing their productivity, by providing them an ergonomically designed loom, better lighting and ventilation. The carpet manufacturers and ILO-IPEC are supporting this initiative. The prototype of a new loom is being tested, on which the workers have the option either to sit on a stool or work in standing position. Foot and arm rests have been provided and the winding mechanism of carpet has been improved, the existing winding operation is very risky and results in severe injuries to the workers. More details of the new work station will be made available soon.

Website of CIWCE

Major changes are being made in the outlook and content of the website of CIWCE available at www.ciwce.org.pk It will be updated more frequently in future. An interactive forum is also being launched to post your inquiries. You will soon notice the changes. Please keep in touch with us through our site and suggest how we can make it even more useful.

Child Labour Resource Centre

Building Networks to Combat Child Labour

Introduction

Child labour is not an isolated phenomenon. It is an outcome of a multitude of socio-economic factors and has roots in poverty, lack of opportunities, explosive rate of population growth, growing unemployment, uneven distribution of wealth and resources, outdated social customs and norms and a plethora of other factors. Elimination of child labour is one of the top priorities of present government. Keeping this in view a National Policy and Plan of Action to eliminate child labour has been announced by Government of Pakistan. The Labour and Human Resource Department is the main agency spearheading the government efforts for combating child labour in Punjab. A Child Labour Resource Centre (CLRC) has been established in Township Lahore by the Labour Department.

Objective

The main objective of CLRC is to provide a platform to the stakeholders for networking and sharing their experiences and launching joint efforts to combat child labour.

Activities

 Networking of the stakeholders particularly the NGOs, trade unions, students/teachers, employers, government agencies, journalists, local councilors, political leaders and academia for joint action to combat child labour.

- Establishment of reference centre having publications on child labour issue from all over the world and encourage research by universities and other institutions on different aspects of child labour.
- Preparation of training materials for the government inspectors, social workers, and other stakeholders.
- Holding of regular training sessions for all the stakeholders focusing mainly on identification of "worst forms of child labour" and direct and indirect interventions for elimination of such child labour.
- Holding of consultative meetings, workshops and seminars for planning joint action on child labour issue by all social partners.
- Interaction with international donor agencies for mobilizing support to the initiatives by different partners.

World Days Against Child Labour observed

Each year 12th of June is observed as World Day Against Child Labour. Like the previous year, a mega event was arranged by the CLRC with the collaboration of other partners notable the ILO-IPEC carpet project and NGOs. Over 3000 child workers from different sectors participated besides the general public, celebrities, and political leaders. The Chief Minister of Punjab Ch. Pervez Elahi was the chief guest on this occasion. He expressed full solidarity with the cause of child workers and promised his full support and commitment to eradicate child labour though education and poverty alleviation. Entertainment programmes





Chief Minister of Punjab Ch. Pervez Elahi was the Chief Guest on World Day Against Child Lbaour

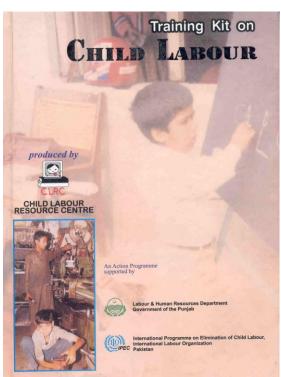
were arranged for the children and adults on this occasion.

Training Kit on Child Labour Developed

A major achievement of Child Labour Resource Centre was the development of a Training Kit on Child Labour, which is extensively being used for the training of government officials, trade unions, NGOs and other stakeholders. This Kit was welcomed by all the social partners even the various ministries of Government of Pakistan as ked for copies of this Kit. As can be seen from the contents of this Kit given below, this Kit covers whole rage of topics related to child labour.

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- 1.2 Global Dimensions of Child Labour
- 1.3 Magnitude of Child Labour in Pakistan
- 1.4 Child Labour in Selected Industries and Sectors
- 1.5 Child Labour in Agriculture
- 1.6 Hazardous Forms of Child Labour
 - 1.6.1 Hazardous Child Labour in Pakistan

Module 2 Important Economic and Social Indicators of Pakistan

- 2.1 Child Labour as an outcome of Economic Indicators
- 2.2 Economic consequences of Child Labour
- 2.3 Social, Economic and Demographic Profile of Pakistan
 - 2.3.1 Population
 - 2.3.2 Economy of Pakistan
 - 2.3.3 Education and Literacy Profile of Pakistan

- 2.3.4 Health care system in Pakistan
- 2.3.5 Organization of Health System
- 2.4 Labour Force Data
- 2.5 Poverty and Income Disparities
 - 2.5.1 Some vital Social indicators

Module 3 Learning from the Experience of Others Examples of Good Practices for Combating Child Labour from around the world

3.1	National Policies	and Law	
	3.1.1	Ensuring support and protection of the whole child	
	3.1.2	Increasing years of compulsory schooling	
	3.1.3	Making education practical in style and content	
	3.1.4	Offering sanctions and rewards	
	3.1.5	Instituting district and local child labour laws	
	3.1.6	Getting political commitment	
3.2	Public Awareness		
	3.2.1	Maximizing use of the media	
	3.2.2	Using documentaries of Child Labour	
	3.2.3	Organizing largescale national events, Marches and rallies	
	3.2.4	Targeting public messages	
2.2	3.2.5	Using theatre, Drama, Shows	
3.3	Building capacity	to address child labour	
	3.3.1	Cultivating a core group of activists	
	3.3.2	Organising networks	
3.4	3.3.3	Training in planning tools	
3.4	Actions to be Taken by the Government		
	3.4.1	Creating a Child Labour unit	
	3.4.2	Using national training institutions	
	3.4.3	Mobilizing government action through highlevel commitment	
	3.4.4	Mobilizing government agencies against hazardous work	
	3.4.5	Training labour inspectors to work with social partners	
	3.4.6	Training labour inspectors through research participation	
3.5	3.4.7	Improving government action through publicprivate linkages	
3.3	Working with unions		
	3.5.1	Including a child labour clause in collective bargaining agreements	
3.6	3.5.2	Mobilizing trade unions	
5.0	Capacity Building of Employers		
3.7	3.6.1	Influencing employers through other employers	

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	Action at Community level		
	3.7.1	Creating community child labour committees	
3.8	3.7.2	Training local officials as change agents	
	Direct Action with	n children	
3.9	3.8.1	Preventing forced labour	
	Children in Crime		
3.10	3.9.1	Release and reintegration of smugglers	
	Children in factor	ybased work	
3.11	3.10.1	Reducing risk in hazardous factory work	
	3.10.2	Skills training and subsidies for factory workers	
	3.10.3	Education and training for factory workers	
	Children doing ou	atside physical labour	
3.12	3.11.1	Protection of boys and girls in seabased trades	
	3.11.2	Releasing and reintegrating of scavengers through education	
	Children in Family and homebased work		
	3.12.1	Releasing and reintegrating domestic helpers	
3.13	3.12.2	Preventing the recruitment of domestic workers	
	3.12.3	Protecting children in home weaving through education policies	
	Children in legal	streettrades	
3.14	3.13.1	Training for children who work on the street	
	3.13.2	Assisting migrant children	
	3.13.3	Communitybased education and economic activities	
	3.13.4	Reaching Children to prevent their recruitment into abusive situations	
	Children in subsis	tence production	
	3.14.1	Protection of children in smallholding agriculture	

Module 4 Legal Aspects of Child Labour – Role and Importance of Child Labour Inspection

- 4.1 Back ground
- 4.2 Principles of Child Labour Protection and Inspection
 - 4.2.1 The Basis of Labour Inspection
 - 4.2.2 Inspection as a public functions
 - 4.2.3 Cooperation with Social partners
 - 4.2.4 Cooperation with the Stakeholders
 - 4.2.5 Universality of the Coverage
- 4.3 International standards and child labour
- 4.4 Conventions and Recommendations on Labour Inspections
- 4.5 Conventions and Recommendations on Child Labour
- 4.6 Convention ratified by Pakistan
- 4.7 National Policy and Plan of Action to Combat Child Labour
- 4.8 Role of International Agencies in Combating Child Labour
- 4.9 Liaison with Government Agencies
- 4.10 Cooperation with NGOs
- 4.11 Role of Legislation in combating child labour
- 4.12 Constitution of Islamic Public of Pakistan
- 4.13 West Pakistan Shop & Establishment Ordinance 1969
- 4.14 Employment of Children Act 1991
 - 4.14.1 Occupations
 - 4.14.2 Processes
- 4.15 Bonded Labour Systems (Abolition) Act 1992
- 4.16 Enforcement of Laws of Combat Child Labour
 - 4.16.1 Functions of Labour Inspection system
 - 4.16.2 Conditions for Effective Labour Inspection
 - 4.16.3 Role of Inspector as Social Monitor/Counselor
 - 4.16.4 Inspection of Health and Safety provisions
 - 4.16.5 Proposed Inspection Form for the Inspection visit to a Workplaces
 - 4.16.6 Methodology of conducting Inspections
- 4.17 Identification Withdrawal & Rehabilitation
 - 4.17.1 Identification
 - 4.17.2 Withdrawal
 - 4.17.3 Rehabilitation

Module 5 Methodologies For Survey And Situational Analysis of Child Labour

- 5.1 Methods of Data Collection
- 5.2 The Survey Instruments and Key Variables
- 5.3 Sampling Design for Householdbased Child Labour Survey
- 5.4 Collecting data and Information
 - 5.4.1 National Child Labour Surveys
 - 5.4.2 Rapid Assessments
 - 5.4.3 Baseline Surveys
- 5.5 Other Surveys
 - 5.5.1 Establishmentbased Survey
 - 5.5.2 Street Children Survey
 - 5.5.3 Schoolbased Survey

Module 6 Hazards faced by child workers

- 6.1 Exposure to occupational hazards
- 6.2 Occupational Diseases faced by child workers
- 6.3 Prevention of Injuries to Children
- 6.4 Strategies for reduction of OSH problems to child workers
 - 6.4.1 Reduction in Working Hours
 - 6.4.2 Awareness Programmes
 - 6.4.3 Ergonomic Design of the Workplaces
 - 6.4.4 Elimination or substitution of hazardous chemicals
 - 6.4.5 Exercises & Recreation
 - 6.4.6 Improvement of lighting in the Workplaces
- 6.5 Capacity Building,

Module 7 Child Abuse

- 7.1 Forms of Abuse A Closer Look
- 7.2 Consequences of Child Abuse
- 7.3 Where and How Abuse Takes Place

Module 8	Empowering the Improverished 1 – An introduction to
	microfinance and credit schemes

8.1	What is Micro credit		
8.2	What is microfinance		
8.3	The Importance of S	Savings	
	8.3.1	Personal savings management	
	8.3.2	Development good savings habits	
	8.3.3	Bringing savings in to the national economy	
8.4	Assisting the Under	privileged	
8.5	Aga Khan Rural Support Programme (AKRSP)		
8.6	National Rural Support Programme (NRSP)		
8.7	Punjab, Rural Support Programme (PRSP)		
8.8	Sarhad Rural Suppo	ort Corporation (SRSC)	
8.9	Balochistan Rural S	support Programme (BRSP)	
8.10	Sindh Graduates Association (SGA)		
8.11	Thardeep Rural Development Programme (TRDP)		
8.12	Lachi Poverty Reduction Programme (LPRP)		
8.13	Ghazi Barotha Development Organization (GBTI)		

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A2	ILO Convention 138, Minimum Age Convention, (1973)	173
A3	ILO Convention "Worst Forms of Child Labour Convention" (1999)	181
A4	Social Accountability (SA 8000)	189

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В6	The Bonded Labour System (Abolition) Act 1992	213

Crash Training Programme held for the Inspecting Officers of Labour Department and related stake holders

A crash training programme was launched in May 2003, during which 13 training courses were held for the officers of Labour department as well as other agencies from he districts government particularly the Social Welfare Department and the NGOs ILO monitors and project managers of different child labour related projects. Over 250 participants benefited from this training, which was the first of its kind held. The imports modules from training kit were introduced to these participants, who were prepared to play more effective role in combating child labour.

Training Courses held for the inspecting officers from NWFP

The expertise of CLRC was also used by the Labour Department in NWFP, who sent all their inspecting officers to attend two training courses organized by CLRC. It was for the first time that the training services of

the CLRC have been used by the other provincial governments.



Group photo of offices from NWFP with the Secretary Labour & Human Resource Punjab Maj ® Shahnawaz Badar

Training of Social Welfare Officers on Child Domestic Workers

A 2-days training course was held for the officers of Social Welfare Department to prepare them to play effective role in alleviating the sufferings of child domestic servants. This was gain the first course focused entirely on the problems of child domestic workers, which have been relatively ignored in all programmes aimed at rehabilitation of child labour.

Consultations on Child Labour held

A series of consultative workshops were held by the CLRC in different districts of Punjab to apprise the key stakeholders on the worst forms of child labour and seek their opinion to tackle such child labour in their respective districts. These workshops were actively participated by the relevant district government officers, employers, trade unions, NGOs, media and related stakeholders. The venues and important issues discussed in these workshops are given below:

Location	Theme
Sialkot	Rehabilitation of child workers in
	surgical instruments industry
Rawalpindi	Rehabilitation of child workers in
	scavenging
Kasur	Rehabilitation of child workers in
	tanneries
Toba Tek Singh/Faisalabad	Rehabilitation of child workers in
	carpet industry
Multan	Rehabilitation of child workers in
	carpet industry

Activities of Industrial Relations Institute

Details of Training Courses Held at IRI in 2003

Sr. #	Dates	Subject	Name of	Total No. of
	- - 1 00		Participants	Participants
1.	6,7-1-03	Crash training programme for	Departmental	15
		Labour Inspector W&M &L.O	offices	
2	12 14 1 02	W&M Act.	LOS/List	1.4
2.	13,14-1-03	-do-	-do-	14
3.	20,21-1-03	-do-	-do-	12
4.	27,28-1-03	-do-	-do-	16
5.	3,4-2-03	Crash training course under W & M Act.	-do-	20
6.	10,11-2-03	-do-	-do-	16
7.	24,25-2-03	-do-	-do-	20
8.	6-3-03 to	3 days training programme for	Manager	28
	8-03-03	Managers Human Resource Employment Exchange.	Employment	
9.	17-3-03 to	3 days training course on Labour	Management	29
	19-3-03	Administration.	workers	
			departmental	
			officers	
10.	24-3-03	One day training course on IRO	departmental	15
			officers	
11.	28-4-03	One day training course statutory	departmental	11
		Monitoring right of workers	officers	
12.	30-4-03	-do-	-do-	11
13.	17-5-03	One day crash training programme	departmental	10
		on child labour.	officers,	
			NGO's ILO	
			representatives	
14.	19-5-03	-do-	-do-	12
15.	21-5-03	-do-	-do-	15
16.	26-5-03	-do-	-do-	16
17.	28-5-03	-do-	-do-	16
18.	2-6-03	-do-	-do-	11
19.	4-6-03	-do-	-do-	9
20.	9-6-03	-do-	-do-	19
21.	11-6-03	-do-	-do-	18
22.	23-6-03	-do-	-do-	11
23.	-do-	New inspection regime	Departmental Officers	34
24.	26-6-03	One day crash training programme	Departmental	11
		on child labour	Officers	
			NGO/ILO	
25	26.6.02	Non-Longotion D.	Representative	1.4
25.	26-6-03	New Inspection Regime	Departmental	14

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			Inspection	
26.	27-6-03	-do-	-do-	14
27.	7-7-03	One day crash training programme	Departmental	12
		on child labour	Officers	
28.	9-7-03	-do-	-do-	18
29.	25-8-03	One day training programme on New	Departmental	10
		Inspection Regime & working of	Officers	
		W&M		
30.	27-8-03	-do-	-do-	10
31	22 to 24-9-	3 days training course on workmen	-do-	10
	03	compensation Act. 1923.		
32.	13,14-10-	Two days training programme on	-do-	10
	03	shops and establishment ordinance		
		1969.		
33.	17-18-10-	Two days training programme on	-do-	19
	03	child labour for inspecting officers of		
		Labour Deptt. NWFP		
34.	2,3-12-03	Two training programme on	Social Welfare	15
		domestic child labour	Deptt. Officers	
			NWFP	
				521

Appendix-A

Response to the Activities-2003

Below are given the excerpts from letter written by various individuals, who benefited from the information training and advisory services provided by CIWCE in 2003

It is nice to hear about a Pakistan based Health and Safety initiative. We are an apparel buying house. We would like to be kept informed of any activities organized by you and we will definitely participate.

Mr. Kashif Izhar Compliance & QA Matrix Sourcing

We have established an Occupational Health Services (OHS) for delivering preventive health services to our workers. I am a medical doctor working fulltime for OHS. I am interested to see your expert help in our endeavour.

Dr Muhammad Sajid Occupational Health Services Attock Refinery Limited, Rawalpindi

I am a student of environmental sciences i am in need of any information regarding any industrial accident in Pakistan to do one of my assignments regarding occupational health and safety. Ii will be grateful if you provide me with relevant data or information.

Miss Ayesha Student of Environmental Sciences Kinnaird College, Lahore

I just heard the news about explosion in Sambaryal near Sialkot. I know it is common in Pakistan. No body tells about chemicals and hazards related to these hazardous substances and how to handle them I was in Saddar Karachi last month where there are shops/stores selling dangerous chemicals as if they are grocery products. Some of them were dangerous chemicals. It is very busy street in Saddar Karachi where chemicals are sold. No one cares about such things. No proper label or identification. Teaching common people how to handle dangerous chemicals is important.

There should be some strict rules and regulations. It is suicide, killing innocent people. Thanks for your regular communication; we have received annual report of CIWCE for the year 2001, which is informative and contains lot of very useful information. We do hope that the communication will continue with each other for the improvement of working condition and environment for the workers.

Dr. A. H. Khalid USA

We would like to acknowledge with thanks the receipt of complimentary copy "CIWCE Annual Report" This publication, being valuable addition to our Information resource center, has been placed in the library, and will be used extensively by our members. We will appreciate if you please enlist our name for regular mailing of such informative and useful documents.

Mr. Shafiq Ahamd Library Officer Lahore Chamber of Commerce & Industry

I saw in your Annual report that the Urdu ICSC CD-Rom has been published. Congratulations!

Many thanks for the copy of the CIWCE annual report of activities which has arrived safely. Your organisation is making significant leaps forward in securing better working conditions for workers of all ages. I was particularly interested in the "Study of Occupational Health and Safety Risk of Child Labour in the Carpet Weaving Sector"

Sheila Pantry, OBE BA FCLIP Sheila Pantry Associates Ltd 85, The Meadows, Todwick, Sheffield, UK

I am working as a Safety professional in Kingdom of Saudi Arabia I am

interested in attending training organized by CIWCE, please let me know the details.

Masood Rizvi Saudi Arabia

I am interested in determining if there are currently occupational exposure limits covering Pakistan. If so, I would like to determine how I could get a copy of these exposure limits and how I would then keep the list up to date.

Linda Roberts Chemwatch Australia

I would like to know about the information collection system about occupational safety and health in Pakistan. Can you provide me some data regarding any surveillance / surveys by the Labour Department? I shall be in contact in contributing some efforts towards better working environment and safety for our fellow countrymen

Dr. Shahid Sethi Institute of Public Health Lahore

I am the registered student of PhD. I need of literature and research papers relevant to my topic i.e. "Occupational Health And Safety" especially in developing countries and with the reference of Pakistan

Nazia Malik University of Agriculture Faisalabad

I am a PhD student at University of Surrey Roehampton, researching on Bonded Labour in South Asia. I have come across a study carried in 1993 by the Centre, and I am trying to obtain a copy. I would very much appreciate if you could possibly help me with this enquiry.

Lorena D. Arocha School of Business & Social Sciences University of Surrey Roehampton London I would be very interested in learning more about the handling of CTS (Carpal Tunnel Syndrome) in your country including information on treatment/outcomes, adjudication, other statistical data etc.

Dan Neufeld, President, HCI USA

I reiterate my best wishes for the staff of CIWCE and appreciate your praisworthy work for the improvement of occupational safety and health in your country.

Docteur Jan Sedlák Geneva Switzerland

Our organization is working in different fields like education and health. We would appreciate if you can send us training kit on child labour developed by you.,

Ahmed Khan Bhugri Joint Secretary Sindh Graduates Association Badin

I have worked within the health and safety profession for over 10 years working in the UK and Europe within various industries. I am keen to develop links with pioneering institutions to assist with my understanding of the development and direction of safety within the Europe and Asia. I would be grateful if you could provide details of any safety steering groups, safety journals, membership organization that could provide such a foundation to my learning if I can return such a gesture by offering any support or guidance to CIWCE, then please do not hesitate to contact me.

Julie Bennett UK

We are from Loss Prevention Association of India Ltd., a not-for-profit twenty-five-year old safety organisation in India sponsored by the public sector general insurance companies. Would like to collaborate with you in promoting the cause of safety in Pakistan. We have developed excellent safety educational products. For more info you may please log on to www.lpaindia.org.

K A Manavalan Loss Prevention Association, India

