1 General Information

1.1 DGFASLI

The Directorate General of Factory Advice Service & Labour Institutes (DGFASLI), formerly known as Chief Adviser of Factories, was set up in 1945 in Delhi, with the objective of advising the Central and State Governments on administration of the Factories Act, and liaising with factories inspection services in the States. The office was subsequently shifted to Mumbai in 1966.

DGFASLI achieved significant importance as an attached office of the Ministry of Labour and Employment, Government of India serving as a technical arm to assist the Ministry in formulation of National policies on Occupational Safety and Health in Factories and Docks.

The Dock Workers (Safety, Health and Welfare) Act 1986 and the Regulations 1990 provide for Safety, Health and Welfare of dock workers. These are enforced by the DGFASLI through the Inspectorates of Dock Safety set up in all the major ports in India.

1.2 Functions:

- Rendering advice and carrying out support research activities for the administration of the Factories Act, 1948 and the Dock Workers (Safety, Health and Welfare) Act, 1986.
- Co-ordinating technical and legal activities to facilitate uniform standards of enforcement of safety and health in manufacturing and port sectors.
- Administration of the Dock Workers (Safety, Health & Welfare) Act, 1986 and Regulations framed there under and enforcing these in the major ports of the country.
- Educating and training employers and employees on matters relating to safety and health.
- Conducting promotional activities by operating schemes for (i) recognition of good suggestions under Vishwakarma Rashtriya Puraskar and good (ii) worker's outstanding contribution in organizations, under Prime Minister's Shram Awards; and (iii) safety performance under National Safety Awards (on behalf of the Ministry).

- Co-operating with International agencies like ILO, WHO, UNDP and advising Central Government in the adoption of international standards concerning safety and health.
- Training of foreign nationals and rendering expert advice to developing countries.
- Building Competence of enforcement agencies.
- Issuing approval to flameproof electrical enclosures.
- Collecting and disseminating information and material relating to safety and health.

1.3 Organisation

DGFASLI organisation comprises of the headquarters, the 5 Labour Institutes and 11 Inspectorates of Dock Safety.

- Headquarter situated in Mumbai
- Central Labour Institute in Mumbai
- Regional Labour Institutes in Kolkata, Chennai, Kanpur and Faridabad
- Inspectorates of Dock Safety at Mumbai, Kolkata, Chennai, Kandla, Mormugao, Tuticorin, New Mangalore, Cochin, Visakhapatnam, Paradip and Jawaharlal Nehru Port. The Inspectorate of Dock Safety at Ennore is being setup.

In 1959, the Central Labour Institute, Mumbai was established under UNDP Project as a socio-economic laboratory and as a national institute dealing with scientific study of human aspects of industrial development. Subsequently, Regional Labour Institutes were established at Kolkata, Kanpur and Chennai to serve as Regional Centres. The construction of the Regional Labour Institute at Faridabad is complete. The laboratories and other infrastructural facilities are under commissioning. The detailed organisation structure is given in **Appendix I**

The Labour Institutes are fully equipped with necessary laboratory facilities for conducting studies and surveys in the field of safety and health. The Institutes are also having conference facilities fully supported with modern audio-visual equipment. Industrial Safety, Health and Welfare Centres are also established at these Labour Institutes. Apart from this Mobile Safety Exhibition Vans are also available for taking the message of Safety and Health to the doorsteps of factories. Training Centres and Safety Exhibition Centres are also established in some of the inspectorates of dock safety.

1.4 Human Resource

Total:

The human-resource in the organization comprises of engineers, medical doctors, industrial hygienists, industrial physiologists, industrial psychologists, statisticians, audio-visual experts, artists etc.

The manpower strength of the organization is given in table 1.1

127

Tuble 1.11. Multipower Strength of the organization us on 1.11.2000							
Units	Technical	cal Administrative			Total		
	Sanct- ioned	In- Position	Sanct- ioned	In- Position	Sanct- ioned	In- Position	
Headquarters	14	10	57	46	71	56	
CLI.Mumbai	98	61	91	73	189	134	
4 RLIs*	79	44	76	59	155	103	
Dock-Safety Inspectorates	22	12	31	26	53	38	

 Table 1.1: Manpower strength of the organization as on 1.1.2008

* The posts at RLI, Faridabad are yet to be created

213

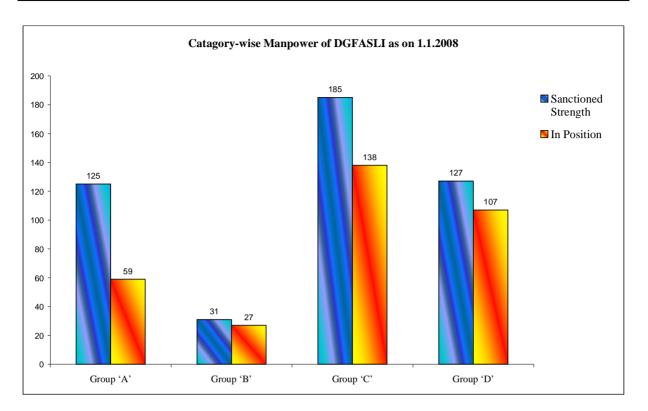
Chart 1.1

255

204

468

331



2 Budget

The allocation of funds for the various constituents and plan schemes of the organisation for 2007-2008 and 2008-2009 of the XI th Five year plan is given below:

<i>.</i>		
(in	' 000 '	$\mathbf{P}_{\mathbf{C}}$
111	000	1/2/

Sl.No.	SCHEMES	Revised Estimates 2007-2008	Budget Estimates 2008-2009
A. NO	N-PLAN		
1	DGFASLI & IDS	33310	40240
2	Research & Training (CLI & RLIs)	71690	92260
	Total: (NON-PLAN)	105000	132500
B. PLA	N		
1	Establishment of Regional Labour Institute at Faridabad	33770 (C.W.) 20000	20900 (C.W.) 10000
2	Strengthening of DGFASLI Organisation and OSH in Factories and Ports	12230	167000 C.W. (150000)
	Total: (PLAN)	46000 (C.W.)20000	187900 (C.W.)160000
GRAN	ND TOTAL:	151000 (C.W.)20000	320400 (C.W.)160000

3 Plan Schemes

Eleventh Five Year Plan

During 2007-2008, two Plan Schemes under the XIth Five Year Plan are taken up by DGFASLI for implementation, namely 1) Strengthening of DGFASLI organization and OSH in Factories & Ports and (2) Establishment of Regional Labour Institute at Faridabad. The plan scheme at serial No. 1 has been created by merging the following five plan schemes operated during Xth Five Year Plan namely

- 1. Development of Safety & Health Information System & Data Bank
- 2. Improvement and Strengthening of Enforcement System for Safety and Health of Dock Workers in Major Ports
- 3. Establishment of a System of Chemical Safety and Monitoring of Occupational Health Status of Workers Employed in Hazardous Industries
- 4. Application of Ergonomics and Improvement in Working Conditions and Productivity in Factories, Docks and Small and Medium Scale Enterprises.
- 5. Reorganization and Strengthening of the DGFASLI and Establishment of Special Cells

Plan Scheme I: Strengthening of DGFASLI organization and OSH in Factories & Ports

Objectives:

To strengthen the infrastructure facilities at DGFASLI organization including Central Labour Institute at Mumbai & Regional Labour Institutes located at Chennai, Kanpur & Kolkata, and Inspectorates Dock Safety at the eleven major ports for improving occupational safety and health status of workers in factories, ports and docks throughout the country thereby contributing to prevention of occupational injuries and diseases.

Table 3.1: Achievements (January to December 2007)

Sl.	Activities	200	7 - 08
No.		Targets	Achievement
1.	Upgradation of various laboratories at	To be spread	Equipment for
	CLI & RLIs	over the entire	some laboratories
		plan period	procured
2.	a) Development of National Inventory	4	2
	on OSH information and follow up		
	b) Upgradation and development of	*	6
	data bases		
	c) Development of Application	*	5
	Programmes		
	d) Material Safety Data Sheet (MSDS)	*	12
	on request		
	e) Industry-wise safety and health	2	-
	information		
	f) INDOSHNEWS Publication	4	4
	g) Publication of Manuals, brochures,	2	-
3.	Implementation of minimum agenda	*	1
	for e Governance		
4.	Conduction of specialized training	25	26
	programmes, seminars, workshops		
5.	Conduction of studies/surveys/audits	25	15
6.	Enforcement activities in major	1500	1376
	ports(inspection of ships, container		
	ship, loose gears, docks, container		
	yards, hazardous installations, etc.)		
7.	Testing of Respiratory & Non	300	359
	Respiratory PPE		
8.	Procurement of audio-visual and	To be spread	On going process
	communication equipment & software	over the entire	
	for production of video films, posters,	plan period	
	etc.		

* No targets could be fixed

Plan Scheme II: Establishment of Regional Labour Institute at Faridabad.

Objectives:

The objective of the Scheme is to cater to the needs of the Northern region in the areas of safety and health, which at present, due to the heavy workload of RLI, Kanpur, are not effectively met. The RLI at Faridabad will serve the States of Punjab, Haryana, Himachal Pradesh and Jammu & Kashmir, Union territory of Chandigarh and the National Capital Territory of Delhi.

Sl.	Activities	2	007 - 08
No.		Targets	Achievement
1.	Creation of vatious posts	14	The matter has
			been taken up with
			the Ministry
2.	Setting up of laboratories	To be	Under
		spread over	commissioning
		this period	
3.	Short duration training programme	3	2
4.	Training programme for Target Groups	-	-
	i.e. Factory Inspectors/Safety Officers		
	etc.		
5.	One year Post Diploma Course in	-	-
	Industrial Safety for Safety Officers		
6.	3 months course - Associate Fellow of	-	-
	Industrial Health for Medical Officers		
7.	6 weeks Certificate course on	1	-
	Industrial Hygiene		
8.	Developing Statewise OSH inventory	-	-
9.	Training programmes for small and	2	1
	medium enterprises		
10.	Research/Studies/Surveys	1	1
11.	National Seminar/Workshops	-	-
12.	Publication	-	-

 Table 3.6: Achievements (January to December 2007)

4 Safety and Health Improvement in Factories, Docks and Construction

4.1 Co-ordination in the Administration of the Factories Act, 1948

The Factories Act, 1948 is the principal and comprehensive Act of the Parliament which provides for the requirements concerning safety, health and welfare amenities needed by workers employed in factories. The provisions of the Act are applicable to the factories as defined under Section 2m(i), 2m(ii) or notified under Section 85 of the Act by the State Governments.

The Ministry of Labour and Employment at the Centre is accountable to the Parliament for proper enforcement of the Act. Uniformity in the application of the provisions of the Act in various States/Union Territories is achieved by circulating the Model Rules prepared by DGFASLI, which are incorporated by them in their State Factories Rules with necessary modifications to suit local needs. In the task of framing the Model Rules and achieving uniformity in the standards of enforcement, the DGFASLI, on behalf of the Ministry of Labour and Employment, enlists the cooperation and involvement of the State Governments by convening annually a Conference of Chief Inspectors of Factories. The Conference discusses all matters relating to the administration of the Act as well as proposed amendments. Besides, the Conference also serves as a forum for discussion of the progress made in the techniques and methods of prevention of accidents and illhealth in factories.

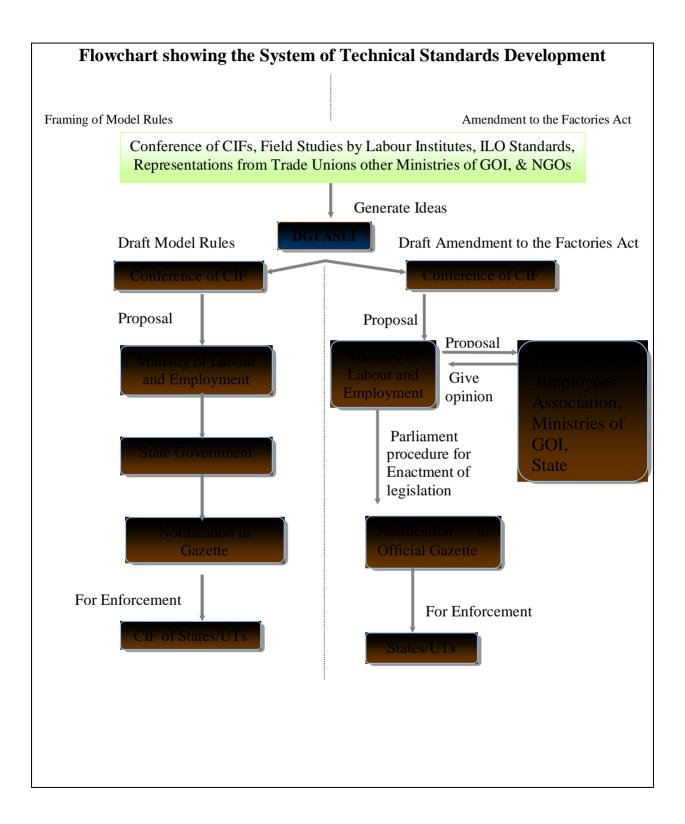
During the year the following major activities were carried out:

4.1.1 International/ILO instruments on Safety and Health:

Prepared comments/reports on the ILO instruments.

- ILO form for Reports on the application of unratified Conventions and Recommendations, in particular, Convention No. 155, accompanying Recommendation and the Protocol of 2002.
- ILO form for Reports on the application of Ratified Conventions (Article 22 of the Constitution)
- The Promotional Framework for Occupational Safety and Health Convention, 2006 (No.187)
- Observations of the ILO Committee of experts on ratified Convention No. 90 concerning 'Night work of young persons (Industry)".
- ILO Convention No.174 concerning Prevention of Major Industrial

Accidents.



4.1.2 National level policies and programmes

- A national level programme on control of silicosis in factories has been formulated at the instance of the National Human Rights Commission.
- Meeting of the committee constituted by the Ministry of Labour and Employment for examining the viability of ratification of ILO Convention (No. 162) concerning Safety in the Use of Asbestos.

4.1.3 Comments/clarifications etc. on the provisions of the Factories Act, 1948 and other related issues

Comments on statutes related instruments, reports, clarifications on the statutory provisions and other related issues were prepared.

Sl.No.	Particulars	Nos.
1	Statutes and Amendments	11
2	Reports of the Task Force / Committees	3
3	Non statutory Standards, Guidelines	2

The various Reports examined include those relating to Policy on creating Information Technology Investment Regions; Report of the committee constituted by the Government of Maharashtra for taking Review of the provisions of the Factories Act. 1948; Comments received from various organizations on the proposed amendments to the Factories Act. 1948; etc.

4.1.4 Parliament Questions/Assurances

Prepared replies to 19 Parliament Questions and sent to Ministry of Labour and Employment concerning:

- Violation of Labour Laws.
- Deaths in medium and heavy industries.
- Environmental Effects of Asbestos
- Fatal accidents.
- Protection of women from work related diseases.
- Welfare Schemes for Industrial Workers.
- Calling Attention Notice on Violation of Labour Laws by the Multi National

companies

- Accidents and deaths at workplace.
- Working hours norms.
- Labour Law for Women Working in Night Shifts.
- Rights of Women Workers.
- Accident Occurred in Industrial Units.
- BPO and Call Centres under Labour Laws.
- Increase in number of shifts.
- Safety of Women Workers.
- Hazardous Radio Active and Explosive materials.
- Safety and Security of Employees
- Employment of Women in Industries
- Charges against M/s. Vedanta Resources Ltd.

4.1.5 Others:

Prepared reports, comments, status etc., on the following:

- Action Taken Report on the Recommendations of the Parliamentary Standing Committee on Labour (Eighteenth Report)
- Representation received from Asbestos Products Manufacturers' Association regarding inclusion of Chrysotile in the Prior Informed Consent (PIC) List of Rotterdam Convention.
- Status of Notification of Rules regarding Maximum Permissible Weight in line with the provisions under ILO Convention No. 127.
- Outcome Budget 2007-08
- Examination for One Month Certificate Course on Safety and Health for Supervisors employed in Hazardous Process factories, held at Reliance Industries Ltd., Jamnagar.
- Demands for Grants 2007-08.
- Agenda for 41st Session of Indian Labour Conference.
- Writ Petition No. 110 of 2006 with People's Right and Social Research Centre (PRASAR) V/s. Union of India and others.
- Material for publication in 'India A Reference Annual 2008' (Ministry of Labour & Employment).
- Material for inclusion in the annual article '60th ' year of independence a kaleidoscopic view of labour activities' in the issue of indian labour journal

(Labour Bureau, Shimla).

- Material for inclusion in The Indian Labour Year Book-2006 (Labour Bureau, Shimla).
- Global Plan of Action on Workers Health 2008-2017- formulated during the 60th World Health Assembly (WHA) Geneva, Switzerland.
- Material for inclusion in the Pocket Book of Labour Statistics 2007 published by Labour Bureau.
- Material for Indian Labour Statistics 2006.
- Joint inspections of pesticides units for granting manufacturing license.
- Participation in meetings of committees constituted by BIS/ AERB.

4.1.6 Implementation of the Right to Information Act 2005

Furnished replies to the requests for information sought under Right to Information Act, 2005

- Annual Leave with Wages applicable to workers employed in factories under the Factories Act, 1948.
- Qualification for appointment of Safety officer
- Correspondence between CIF Kerala and DGFASLI on the Status of health, safety and environment in Steel Industries of Kanjikkode industrial area Palakkad, Dist-Kerala

4.1.7 Ship Breaking

With a view to improve Occupational Safety and Health in the Ship Breaking Yards DGFASLI carried out the following activities :

- DGFASLI has proposed special provisions for ship breaking industry to be included under Rule 75 of the existing Model Rules framed under Section 41 of the Factories Act 1948 regarding safe handling and disposal of hazardous wastes, measures to be taken to prevent any explosion; including "gas free certificate for hot work" from the Chief Controller of Explosives.
- In pursuance to the Supreme Court order dated 28th October,2003 in the Writ Petition NO. 657 of 1995, the Inter Ministerial Committee (IMC) was constituted. The IMC, in its 5th meeting held on 1-2-2006 had asked DGFASLI to identify Personal Protective Equipments (PPEs) suitable to workers working in specific operations of ship breaking. DGFASLI carried out a survey to assess the use of PPE in the ship breaking yards at Alang. It has been observed, the PPEs such as helmet and shoes are being provided by the owners of the ship breaking

yards and the same are also being used by the workers. However, PPEs such as organic vapor respirators, ear muffs, ear plugs, leather aprons, leg guards are not provided to the workers for different operations carried out in the ship breaking yards.

4.2 Administration of the Dock Workers (Safety, Health and Welfare) Act, 1986 and the Regulations framed there under and the Environment (Protection) Act, 1986 and the Rules framed there under:

The Dock Workers (Safety, Health and Welfare) Act, 1986 and the Regulations, 1990 framed there under cover safety, health and welfare aspects of all the workers engaged in dock-work, whether in loading or unloading of cargo on board ship, alongside it or in transit sheds, warehouses or yard etc., within the port premises including those engaged in chipping and painting of ships. These statutes are in line with ILO Convention No.152 on Occupational Safety and Health (Dock Work).

Administration of the Act and the Regulations in major ports is carried out by the Ministry of Labour and Employment, through DGFASLI, Mumbai. The Director General is the Chief Inspector of Dock Safety appointed under the Act. The Chief Inspector of Dock Safety is also an authority for enforcement of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 framed under the Environment (Protection) Act, 1986, in the major ports.

The above statutes are enforced by the Inspectors posted at Inspectorate Dock Safety at all the major ports viz. Mumbai, Kolkata, Chennai, Kandla, Mormugao, New Mangalore, Cochin, Tuticorin, Visakhapatnam, Paradip and Jawaharlal Nehru Port except Ennore where the Inspectorate is yet to be set up. Presently, the enforcement in this Port is carried out by the Inspectors posted at Inspectorate Dock Safety, Chennai. Inspectors also enforce the Marking of Heavy Packages Act, 1951 and Rules framed there under in the major ports.

The main function of the inspectorates is to ensure the compliance with the provisions under the statutes. The statutory responsibilities of inspector include inspection of ships, tankers, loose-gears, container-handling equipment, docks, container-yard and terminal, hazardous installations and isolated storages, tanks, carrying out the investigation of accidents (fatal and serious) and dangerous occurrences, prosecution of employers, attending to complaints, providing advisory services and conducting safety promotional activities like training programmes, workshops, celebration of safety week etc.

The Inspectorates also prosecute the agency responsible for serious violation of

any provision of the Act and Regulations framed there under.

The 9^{th} Meeting of the Advisory Committee constituted under Section 9 of the Dock Workers (Safety, Health & Welfare) Act, 1986 was held at Mumbai Port on 4^{th} & 5^{th} December 2007. Shri S.K.Saxena, the Director General, FASLI and Chief Inspector Dock Safety inaugurated the meeting. The Committee members including, Dy.Chairman, Mumbai Port Trust, Dy.Secretary, Ministry of Labour & Employment and Trade Union officials attended the meeting.

Sl. No.	Ports	Ship	Dock	Gear	Isolated Storage / Pipelines	Other Visits
1.	Mumbai	133	62	132	00	197
2.	J.N. Port	25	47	08	00	54
3.	Kandla	170	49	178	18	240
4.	Mormugao	128	53	136	03	39
5.	Kolkata	132	148	122	12	170
6.	Paradip	102	14	95	08	39
7.	Visakhapatnam	109	15	109	02	95
8.	Chennai	77	114	164	00	202
9.	Cochin	32	55	37	12	51
10.	New Mangalore	123	127	123	13	102
11.	Tuticorin	133	61	109	00	24
	Total	1164	745	1213	68	1213

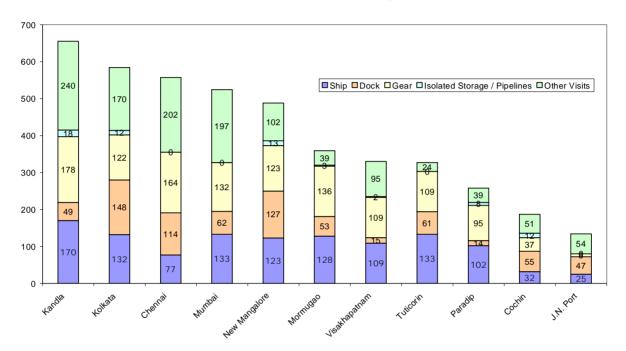
 Table 4.1: Details of Inspections and other visits in Ports during 2007.

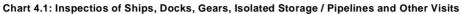
Table 4.2 :	Details of Prosecution in Ports during	2007
--------------------	--	------

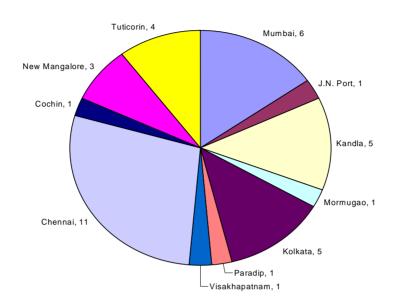
Sl. No.	Ports	Pending from previous year	Launched during the year	Decided during the year	Convicted
1.	Mumbai	06	03	03	03
2.	J.N. Port	02	-	-	-
3.	Kandla	10	04	-	-
4.	Mormugao	-	-	-	-
5.	Kolkata	03	-	-	-
6.	Paradip	01	-	-	-
7.	Visakhapatnam	03	01	-	-
8.	Chennai	04	02	_	_
9.	Cochin	-	02	01	01

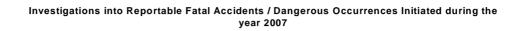
10.	New	02	_	_	-
	Mangalore				
11.	Tuticorin	01	-	-	-
	Total	32	12	04	04

Note:: - indicates nil









Sl.No.	Ports	Pending from previous year	Initiated during the year	Concluded during the year
1.	Mumbai	05	06	09
2.	J.N. Port	02	01	02
3.	Kandla	03	05	05
4.	Mormugao	01	01	01
5.	Kolkata	01	05	03
6.	Paradip	02	01	02
7.	Visakhapatnam	03	01	03
8.	Chennai	09	11	13
9.	Cochin	02	01	02
10.	New Mangalore	02	03	03
11.	Tuticorin	01	04	02
	Total	31	39	45

Table	4.3:	Details	of	Investigations	into	Reportable	Fatal	Accidents/
Dange	rous Oc	ccurrence	es 20	007		_		

Table 4.4: Dock Safety Committee meetings conducted/Safety Weekscelebrated during 2007

Sl.No.	Ports	Committee Meetings	Safety Weeks
1.	Mumbai	04	-
2.	J.N. Port	04	01
3.	Kandla	03	-
4.	Mormugao	03	-
5.	Kolkata	07	-
6.	Paradip	04	01
7.	Visakhapatnam	03	01
8.	Chennai	*04	01
9.	Cochin	04	01
10.	New Mangalore	04	01
11.	Tuticorin	04	01
	Total	44	07

* Including 2 Safety Committee Meetings at Ennore Port

4.3 Safety and Health in Construction Sector:

The Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act was enacted in 1996. The Central Government is the appropriate government for notifying the rules and regulations under the Act as well as the enforcement of the provisions under the said Rules, in respect of establishments in relation to which Central Government is the appropriate government under the Industrial Disputes Act, 1947. In respect of other establishments, the State Government is the appropriate government for notifying the Rules and enforcing the provisions. It is pertinent to state that DGFASLI had done the entire work of drafting the above said Act 1996 as well as framing of the Central Rules of 1998 made thereunder.

DGFASLI is involved in policy matters related to the administration of the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996. The Director General, FASLI is a member on the Central Advisory Committee constituted under Rule 10 of the Central Rules of 1998.

DGFASLI was entrusted with the task of processing applications in respect of approval of Competent Persons under Rule 2(j) of the Central Rules, 1998. DGFASLI processed about 46 applications for granting competency under the said Rules for the purpose of testing, examination or annealing and certification of lifting appliances, lifting gears, wire ropes or pressure plants and equipment and forwarded the recommendations to the Ministry of Labour and Employment for appointment of competent persons.

4.4 (a) National Studies and Surveys

In its efforts towards helping the Central Government in formulation of standards for inclusion in statutes on Safety and Health in Factories and Ports, DGFASLI undertakes national studies and surveys, to ascertain the status of working conditions, safety and health in factories and docks.

Table 4.5 : National Studies and Surveys undertaken during 2007

Sl. No.	Title	Status
1.	Assessment of Capability and Management of Occupational Safety & Health in the States of India. During the year, reports of Bihar, Tripura and Uttaranchal were completed; and reports of Chattisgarh was under progress.	Under Progress
2.	Safety, Health & Ergonomics study of child labour (ILO Project)	Under Progress

(b) State level Studies and Surveys are under taken in the State in certain priority areas to ascertain status of Safety Health and Environment at work place.

Sl.	Title	Status
1	Investigation of accident in Sodium Chlorate storage area of Shree Shyam Board & Paper Mills Ltd., Kashipur Uttaranchal	Completed
2	Use of PPE in ship-breaking units in the state of Gujarat	Completed

4.5 Unit Level Consultancy Studies

Unit level consultancy studies are carried out at the request of the management and reports are submitted for implementation of the recommendations for further improvement in factories concerned. The institute-wise details of these studies are given in **Annexure I.**

Sl.	Area	No. of Consultancy Studies		
No.		Completed Under Pro		
1	Safety Audit	15	7	
2	Occupational Health	1		
3	Airborne Contaminants	13	3	
4	Noise Level	2		
5	Ventilation study	2		
6	HAZOP	5	1	
7	Safety Audit-MAHC	8	1	
8	Ergonomic Evaluation	9		
9	Risk Assessment	1		
10	Industrial hygiene	2		
	Total:	58	12	

 Table 4.7 Unit level consultancy studies undertaken during 2007

4.6 Education and Training

DGFASLI organises workshops, seminars, training programmes etc. for the benefit of industries, ports, enforcement officials etc.

4.6.1 Seminars:

Seminars are organized on the basis of findings and recommendations of various national studies; unit level studies and surveys; and issues and priorities of national concern. These seminars provide platform for discussing various issues related to safety and health; and recommend national level/ State level/ Unit level action plan in respective area of concern.

Standard Reference Note of DGFASLI 2007



Shri.S.K.Srivastava, IAS, Joint Secretary Ministry of Labour & Employment, delivering his address at the inauguration of the National Workshop on Status of Implementation of Provisions relating to Silicosis on 31st August 2007 at Central Labour Institute, Mumbai

Sl. No.	Title	Venue	Date	Partic- ipants	Organi- sations
1.	Occupational Safety, Health &				
	Environment-	CLI,			
	Innovations/challenges	Mumbai	18/04/2007	20	7
2.		CLI,			
	Right to Information Act, 2005	Mumbai	13/04/2007	30	1
3.	Seminar on Lifting Machinery and Pressure Vessels. (Collaberation with NSC Mah.Chapter/DISH, Maharashtra)	West End Hotel	13/06/2007	107	58
4	Seminar on Process Safety in Chemical Industry (In collaboration with Indian	CLI,			
	Chemical Council)	Mumbai	07/12/2007	40	25
	Total			197	91

Table 4.8: Seminars conducted during 2007

Further, to upgrade the technical knowledge of officers and scientific staff of the organization, 4 Professional Interaction & Update Seminar (PIUS) and 5 Satellite Professional Interaction & Update Seminar (SPIUS) are organized.

Table 4.9: Satellite Professional	Interaction	Update Seminars	(SPIUS)
	Inter action	C paulo Sommans	$(D \perp L C D)$

S.	Title	Date	No. of
No.			Participants
1.	Update on 47 th Conference of CIFs.	19/9/2007	40
2.	Occupational Health & Safety Systems	23/10/2007	42
	for DGFASLI & CIFs.		
3.	Testing Methods and Procedures and	19/11/2007	36
	Facilities for Non-Respiratory		
	Protective Equipment in NRTL		
4.	Initiation of Silicosis by GOI	20/12/2007	35
	Total		153

	Tuble 1101 I folessional interaction & optime Schimar (1105)				
Sl	Title	Date	No.	of	
No			Participants		
1	Managing Process Safety of Major	20/06/2007	39		
	Hazard Facilities on Western				
	Australia				
2	Safety aspects of Testing & High	28/9/2007	70		
	Voltage Electric System				
3	Ergonomic Perspective of	30/10/2007	48		
	Industrial Safety & Health				
4	Low Back Pain Causes, Prevention	30/11/2007	45		
	& Control				
5	Measuring in Process Safety	6/12/2007	32		
	Total	·	234		

Table 4.10: Professional Interaction & Update Seminar (PIUS)

4.6.2 Workshops:

The workshops are organized to enhance the skills of the participants in dealing with matters connected to safety, health, productivity and environment etc.

Table 4.11 : Workshops conducted during 2007

Sl. No.	Title	Partici-	Organi-
		pants	sations
1.	Three days workshop on ergonomics, its application in industry for improvement of	20	1
-	safety, health & productivity	20	1
2.	Workshop on Safey Audit	16	7
3.	Workshop on Safe Handling of Chemicals for Safety Committee Members of Hazardous	21	10
4	Industries	21	10
4.	Workshop on "Monitoring of Work		
	Environment"	9	15
5.	Hazards and Operability (HAZOP) Study	21	9
6.	Training Workshop on Safe Handling of Chemicals for Safety Committee Members in		
	Hazardous Industries	10	2

	Total	301	202
14	Team Building for Health, Safety & Welfare at Work	20	6
13.	Team Building for Health, Safety & Welfare at Work	21	8
12.	National Workshop on "Development of Strategies for National Level Survey on identification and prevention of Silicosis"	40	40
11.	Three day Workshop on "Safety Audit Concept and Practice"	32	20
10.	Workshop on Higher Productivity & Better Place to Work	40	40
9.	Workshop on Higher Productivity & Better Place to Work	26	26
8.	Workshop on Industrial Noise Control	8	5
7.	Training Workshop on Selection & Quality Assurance for Effective use of PPE	17	13

4.6.3 Professional Programmes:

To fulfill the need of qualified Safety officers, and Factory Medical Officers in the industry, the organisation conducts one year Advance Diploma Course in Industrial Safety and three months "Associate Fellow of Industrial Health" Certificate Course respectively. In order to meet the demands of supervisors competent to handle and supervise hazardous processes in industries, a one month certificate course in industrial safety and health was started at CLI Mumbai as well as RLI Kolkata, Kanpur and Chennai.

Sl.	Participants and Area	Programmes	Participants	Organisations
1	Advance Diploma in Industrial	4	146	123
	Safety for Safety Officers			
2	AFIH – certificate course in occupational health for Factory	2	66	63
	Medical Officers			
	One-month Certificate Course for Supervisory Personnel in hazardous processes factories	2	25	19
	Total:	8	237	205

Table 4.10: Professional Programmes- 2007

4.6.4 Longer Duration Training Programmes

Specialised training programmes are conducted for identified target groups such as Senior Managers, Safety Officers, Factory Medical Officers, Supervisors, Trade Union Officials and Safety Committee members from Industry. Basic course for inspectors of factories who are freshly recruited is conducted to impart technical knowledge and skills in the field of safety and health. In view of the need for inspection of specific industries and Major Accident Hazards units, specialised courses are also conducted for senior inspectors.

Some of the programmes are exclusively conducted for the union-leaders where joint participation of management personnel and union representatives from industries are the special features of some programmes.

The institute-wise details of Longer Duration Training Programmes and Professional Programmes are given in **Annexure-II**

Sl.	Participants and Area	Programmes	Participants	Organisations
A.	Inspectors of Factories			
	Basic course	2	23	17
	Refresher course	1	6	4
	Chemical Safety	1	11	8
	MAHC	1	14	9
B.	Management Personnel			
	Industrial Safety	7	154	111
	Industrial Hygiene	2	38	14
	Occupational Health	5	139	78
	Industrial Physiology	9	95	49
	Ergonomics	2	24	10
	Staff Training	4	69	24
	MAHC	2	40	18
	Hazardous substances	2	46	26
	Environmental Pollution	2	39	17
C.	Trade Union Leaders/Worke	ers/Joint Particip	oation	
	Industrial Safety	2	65	10
	Chemical Safety	2	44	20
	Indl. Psychology	7	140	42
	Dock Safety	1	35	1
	Total:	52	982	458

Table 4.11: Longer Duration Training Programmes - 2007

4.6.5 Need Based In-Company Training Programmes:

On the request of managements, various disciplines of DGFASLI conduct incompany need based training programmes for the benefit of cross-section of personnel from respective units. Such programmes are designed after proper identification of needs of the defined target through preliminary discussions with the managements. The institute-wise details of the need-based in - company Training Programmes are given in **Annexure – III**

Table 4.12: Need based in - company Training Programmes conducted during2007

Sl.No.	Level of Participants	Programmes	Participants	Organisations
1.	Management Personnel	6	212	6
2.	Supervisors	18	419	18
3.	Trade Union Leader/Workers/Joint Participation	2	60	2
	Total	26	691	26

4.6.6 Short Duration Training Programmes:

DGFASLI also organises short duration (1 - 2 days) training programmes for the benefit of supervisors, workers, workers representatives from factories. Such programmes are organised in the field of Safety, Health, Hygiene, Psychology, etc. The institute-wise details of Short Duration Training Programmes are given in **Annexure IV.**

Sl. No.	Level of Participants	Progra- mmes	Partici- pants	Organis -ations
1.	Supervisors	8	99	26
2.	Trade Union Leader/ Workers/ Joint Participation	3	65	15
3.	Management Personnel	4	105	11
4.	Students of Educational Institutions	7	161	7
	Total:	22	430	59

Table 4.13: Short Duration Training Programmes in 2007

4.6.7 Appreciation and Promotional Programmes:

Each of the Labour Institutes at Mumbai, Kolkata, Kanpur and Chennai has an Industrial Safety Health and Welfare Centre and "Mobile Safety Exhibition Van". The exhibition vans are equipped with daylight film/video projection system and other audio visual equipment. There are also half day appreciations programmes conducted at various laboratories and divisions of the organization.

During the year 2007, 3713 beneficiaries visited the Industrial Safety, Health and

Welfare Centres at CLI Mumbai and RLI Kolkata, Kanpur and Chennai.

Sl.No.	Institute	Visitors to	Progr- ammes	Benefi- ciaries	Organ- isation
1.	CLI Mumbai	Appreciation Programmes	217	4161	280
		SHW Centre	99	2211	267
2.	RLI Kolkata	Appreciation Programmes	31	575	154
		SHW Centre	28	538	209
3.	RLI Chennai	Appreciation Programmes	25	801	28
		SHW Centre	18	780	150
4.	RLI Kanpur	Appreciation Programmes	1	25	1
		SHW Centre	2	54	48
5.	Dock Safety	Appreciation Programmes	1	14	8
		SHW Centre	6	130	31
	Total	Appreciation Programmes	275	5576	471
		SHW Centre	153	3713	705

Table 4.14: Appreciation and Promotional Programmes in 2007

4.7 Technical Advice

Technical advice and guidance are provided to industries and port users on various aspects relating to control of hazards, prevention of accidents and occupational diseases, work environment, productivity etc.

Sl.No.	Institute	No. of Units
1.	Dock Safety Inspectorates	8
2.	Central Labour Institute, Mumbai 16	
3.	Regional Labour Institute, Kolkata8	
4.	Regional Labour Institute, Chennai7	
5.	Regional Labour Institute, Kanpur 1	
	Total:	40

 Table 4.15: Technical Advice rendered in 2007

4.8 Testing of Personal Protective Equipment

The respiratory and non-respiratory protective equipment testing laboratories at the Central Labour Institute, Mumbai undertake performance tests of canisters, masks, helmets, safety shoes, safety goggles, safety belts, welding glasses etc.

Sl.No.	Type of Personal Protective Equipment	Personal Protective Equipments tested
1.	Non-Respiratory Equipment	307
2.	Respiratory Equipment	86
	Total:	393

 Table 4.16: Personnel Protective Equipment tested in 2007

4.9 Approval of Flameproof Electrical Enclosures

Use of flame/explosion - proof electrical enclosures is mandatory in hazardous units where flammable environment exists. The control on quality of such flameproof electrical enclosures is assured through test methods as stipulated in IS: 2148-1981. DGFASLI is the approving agency for these enclosures for the purposes of the Factories Act. The approvals are issued on the basis of inspection of units manufacturing these equipments and the test reports of recognized Testing Laboratories such as CPRI and CMRI.

Table4.17: Approval of Flameproof Electrical Enclosures during the year2007

Applications received	05
Approvals issued	4 manufacturers for 11 flame-proof electrical enclosures
Inspection visits	2 Manufacturing units.

4.10 Talks

The officers of the organisation deliver talks on special topics in programmes organized by outside agencies to disseminate latest technical information with

specific reference to national studies, unit level studies, surveys conducted. They are also publishing papers and articles and presenting them in important symposia, workshops and seminars

Sl.No.	Institute	No. of Talks	Partici -pants	Organ- isations
1.	DGFASLI (HQ)*	23	633	170
2.	Central Labour Institute, Mumbai	18	1002	109
3.	Regional Labour Institute, Kolkata	2	155	2
4.	Regional Labour Institute, Chennai	5	187	5
5.	Regional Labour Institute, Kanpur	2	170	2
6.	Regional Labour Institute, Faridabad	0	0	0
	Total:	50	2147	288

Table 4.18:Talks delivered during 2007

* Comprising of Factory Advice Service & Dock Safety Divisions.

4.11 Presentation of Papers/Articles/Reports Publication of Articles/Papers:

The contribution of DGFASLI officers in preparation of papers and articles and presenting/publishing them in important symposia, workshops and seminars are highlighted as under.

Sl. No.	Title Paper/Article	Periodicals/Events	Date
1.	Physiological research for heat stress & ventilation as per the provisions of the		
	Factories Act, 1948	University of Calcutta, Kolkata	09/01/2007
2.	Ergonomics in Industry as a tool for Safety, Health & Productivity.	University of Calcutta, Kolkata	09/01/2007
3.	Basic OHS Necessity for National Progress	IAOH-Mumbai Branch, Worli	07/07/2007

Table	4.19:	Presentation	of Papers	in 2007
-------	-------	--------------	-----------	---------

4. Physiological cost of various kitchen operation in Industrial operation in Industrial operation in Industrial operation in Industrial operation in Irwin College, New Delhi 07/08/2007 5. "Status of Occupational Health in India and the Sri Ramachandra Medical College, World" 08/08/2007 6. Formulating risk reduction culture Seminar on "Safety, Health & Environment" at Nagpur 30/08/2007 7. Safety Management Concepts & Realities Environment" at Nagpur 30/08/2007 8. Need for Workers Workshop on "Participatory participation in Safety Approach to Safety Management" Kolkata 19/11/2007 9. Ergonomic evaluation of fuel pump operation in an engineering industry Bhopal 10/12/2007 10 Heat stress and ventilation level in a chemical plant International Conference at the Institute of Agricultural Science, Bhopal 10/12/2007 11 Ergonomic so bagging International Conference at the operation in a fertilizer Institute of Agricultural Science, plant Bhopal 10/12/2007 12 Dispersion Modelling and Impact calculation for liquefied flammable Seminar on "Process Safety" at Hotel gases with special Orchid (Organised jointly by ICC, reference to conditions in DGFASL1 and I.Chem.Engrs.UK, & I India 07/12/2007 13 LO Morkshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh 26/11/2007]
in Industrial operationIrwin College, New Delhi07/08/20075."Status of Occupational Health in India and the World"Sri Ramachandra Medical College, Chennai08/08/20076.Formulating reduction cultureSeminar on "Safety, Health & Environment" at Nagpur30/08/20077.Safety Management"Safety convention 2007" Seminar organized by the Institution of Engineers (India)05/09/20078.Need for Workers yarticipation in Safety participation in Safety Approach to Safety Management" Kolkata19/11/20079.Ergonomic evaluation of fuel pump operation in an engineering industry poperation la fertilizer operation in a fertilizer plantInternational Conference at the Institute of Agricultural Science, an engineering industry Bhopal10/12/200710Heat stress and operation in a fertilizer operation in a fertilizer plantInternational Conference at the Institute of Agricultural Science, Bhopal10/12/200711Ergonomics of bagging operation in a fertilizer plantInternational Conference at the Institute of Agricultural Science, Bhopal10/12/200712Dispersion Modelling and Impact calculation for liquefied flammable gases with special of couptional in a fertilizer indiaChem.Engrs. USA)07/12/200713IndiaChem.Engrs. USA)07/12/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and Hygiene26/11/2007	4.	Physiological cost of		
5. "Status of Occupational Health in India and the World" Sri Ramachandra Medical College, Chennai 08/08/2007 6. Formulating reduction culture risk Environment" at Nagpur 30/08/2007 7. "Safety Management Concepts & Realities Engineers (India) 05/09/2007 8. Need for Workers participation in Safety Management Workshop on "Participatory Approach to Safety Management" Kolkata 05/09/2007 9. Ergonomic evaluation of fuel pump operation in an engineering industry Bhopal International Conference at the Institute of Agricultural Science, chemical plant 10/12/2007 10 Heat stress and operation in a fertilizer plant International Bhopal Conference at the Institute of Agricultural Science, bhopal 10/12/2007 11 Ergonomics of bagging operation in a fertilizer plant International Bhopal Conference at the Institute of Agricultural Science, bhopal 10/12/2007 12 Dispersion Modelling and Impact calculation for liquefied flammable gases with special Country Paper on status of occupational health Seminar on "Process Safety" at Hotel gases with special of cocupational health and health at Dhaka, Bangladesh 07/12/2007 13 ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh 26/11/2007 14 "HIV/AIDS, a global concern - its relevance in </td <td></td> <td>various kitchen operation</td> <td>Platinum Jubilee Celebration at Lady</td> <td></td>		various kitchen operation	Platinum Jubilee Celebration at Lady	
Health in India and the World"Sri Ramachandra Medical College, Chennai08/08/20076.Formulating reduction culturerisk Environment" at Nagpur30/08/20077."Safety Management Concepts & Realities"Safety convention 2007" Seminar organized by the Institution of Engineers (India)30/08/20078.Need for WorkersWorkshop Approach to Safety Management" Kolkata05/09/20079.Ergonomic evaluation of fuel pump operation in an engineering industryInternational BhopalConference at the Institute of Agricultural Science, Bhopal10Heat stress and reference for in a fertilizer plantInternational BhopalConference at the Institute of Agricultural Science, Bhopal11Ergonomics of bagging operation in a fertilizer plantInternational Conference at the Institute of Agricultural Science, Bhopal10/12/200712Dispersion Modelling aad Impact calculation for liquefied flammable gases with special reference to conditions in IndiaChem. Engrs. USA)07/12/200713IndiaChem. Engrs. USA)07/12/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and Hygiene26/11/2007		in Industrial operation	Irwin College, New Delhi	07/08/2007
World"Chennai08/08/20076.Formulating reduction culturerisk Environment" at Nagpur30/08/20077."Safety Management Concepts & Realities"Safety convention 2007" Seminar organized by the Institution of Engineers (India)05/09/20078.Need for WorkersWorkshop Management05/09/20079.Ergonomic evaluation of fuel pump operation in 	5.	"Status of Occupational		
6. Formulating risk Seminar on "Safety, Health & Environment" at Nagpur 30/08/2007 7. "Safety Management Concepts & Realities" Engineers (India) 05/09/2007 8. Need for Workers Workshop on "Participatory participation in Safety Approach to Safety Management" Kolkata 19/11/2007 9. Ergonomic evaluation of fuel pump operation in Institute of Agricultural Science, an engineering industry Bhopal 10/12/2007 10 Heat stress and ventilation level in a fustitute of Agricultural Science, chemical plant International Conference at the Institute of Agricultural Science, an engineering industry Bhopal 10/12/2007 11 Ergonomics of bagging International Conference at the periation in a fertilizer Institute of Agricultural Science, plant Bhopal 10/12/2007 12 Dispersion Modelling and Impact calculation for liquefied flammable Seminar on "Process Safety" at Hotel gases with special Orchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I India 07/12/2007 13 ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh 26/11/2007 14 "HIV/AIDS, a global concern - its relevance in Programme on Health and Hygiene 26/11/2007		Health in India and the	Sri Ramachandra Medical College,	
reduction cultureEnvironment" at Nagpur30/08/20077."Safety Convention 2007" Seminar organized by the Institution of Engineers (India)05/09/20078.Need for WorkersWorkshop on "Participatory participation in Safety Approach to Safety Management" Kolkata05/09/20079.Ergonomic evaluation of fuel pump operation in an engineering industryInternational BhopalConference at the fuel pump operation in Institute of Agricultural Science, an engineering industryInternational BhopalConference at the participation in a firstitute of Agricultural Science, an engineering industry10Heat ventilation level in a operation in a fertilizer plantInternational BhopalConference at the Institute of Agricultural Science, an engineering industry11Ergonomics of bagging operation in a fertilizer plantInternational BhopalConference at the Institute of Agricultural Science, and Impact calculation for liquefied flammable gases with special Orchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I IndiaO7/12/200713ILO Workshop on the Promotional frame work on occupational safety of occupational healthILO Workshop on Issues, Strategies & programme on Health and Hygiene		World"	Chennai	08/08/2007
7. Safety Management Concepts & Realities "Safety convention 2007" Seminar organized by the Institution of Engineers (India) 8. Need for Workers participation in Safety Management Workshop on "Participatory participatory participation in Safety Approach to Safety Management" Management 19/11/2007 9. Ergonomic evaluation of fuel pump operation in an engineering industry International Conference at the Institute of Agricultural Science, chemical plant 10/12/2007 10 Heat stress and ventilation level in a chemical plant International Conference at the Institute of Agricultural Science, plant 10/12/2007 11 Ergonomics of bagging operation in a fertilizer plant International Conference at the Institute of Agricultural Science, plant 10/12/2007 12 Dispersion Modelling and Impact calculation for liquefied flammable gases with special Country Paper on status of occupational health Seminar on "Process Safety" at Hotel game work on occupational safety and health at Dhaka, Bangladesh 07/12/2007 13 ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh 26/11/2007 14 "HIV/AIDS, a global concern - its relevance in Workshop on Issues, Strategies & Programme on Health and Hygiene	6.	Formulating risk	Seminar on "Safety, Health &	
SafetyManagement Concepts & Realitiesorganized by the Institution of Engineers (India)05/09/20078.Need for Workers participation in Safety ManagementWorkshop on "Participatory participation in Safety Approach to Safety Management" (Management19/11/20079.Ergonomic evaluation of fuel pump operation in an engineering industryInternational Conference at the Bhopal10/12/200710Heat stressstress and institute of Agricultural Science, an engineering industryInternational Conference at the Bhopal10/12/200711Ergonomics of bagging operation in a fertilizer plantInternational Conference at the Bhopal10/12/200712Dispersion Modelling and Impact calculation for liquefied flammable gases with special (Chem. Engrs. USA)Or/12/200713IndiaChem. Engrs. USA)07/12/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneSciences Argicultural Science Agricultural Science, at thotel gases with special Orchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I India07/12/2007		reduction culture	Environment" at Nagpur	30/08/2007
Concepts & RealitiesEngineers (India)05/09/20078.Need for WorkersWorkshop on "Participatory participation in Safety Management"Approach to Safety Management" International Conference at the fuel pump operation in an engineering industryInternational Conference at the Agricultural Science, International Conference at the Institute of Agricultural Science, chemical plant10/12/200710Heat stress and ventilation level in a operation in a fertilizerInternational Conference at the Institute of Agricultural Science, Bhopal10/12/200711Ergonomics of bagging operation in a fertilizerInternational Conference at the Institute of Agricultural Science, Bhopal10/12/200712Dispersion Modelling and Impact calculation for liquefied flammableSeminar on "Process Safety" at Hotel gases with special Orchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I India07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and Hygiene26/11/2007	7.		"Safety convention 2007" Seminar	
Concepts & RealitiesEngineers (India)05/09/20078.Need for WorkersWorkshop on "Participatory participation in SafetyApproach to Safety Management" (Management19/11/20079.Ergonomic evaluation of fuel pump operation in an engineering industryInternational BhopalConference at the Agricultural Science, International10/12/200710Heat stress and ventilation level in a operation in a fertilizerInternational BhopalConference at the Agricultural Science, International10/12/200711Ergonomics of bagging operation in a fertilizerInternational BhopalConference at the Institute of Agricultural Science, Bhopal10/12/200712Dispersion Modelling and Impact calculation for liquefied flammableSeminar on "Process Safety" at Hotel gases with special Orchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I India07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and Hygiene26/11/2007		Safety Management	organized by the Institution of	
participation in Safety ManagementApproach to Safety Management" Kolkata19/11/20079.Ergonomic evaluation of fuel pump operation in an engineering industryInternational BhopalConference at the Agricultural Science, 10/12/200710Heat ventilation level in a chemical plantInternational InternationalConference at the Agricultural Science, Institute of Agricultural Science, Bhopal10/12/200711Ergonomics of bagging operation in a fertilizer plantInternational BhopalConference at the Institute of Agricultural Science, Dispersion Modelling and Impact calculation for liquefied flammable gases with special Orchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I India07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneYorkshop			Engineers (India)	05/09/2007
ManagementKolkata19/11/20079.Ergonomic evaluation of fuel pump operation in an engineering industryInternational BhopalConference Agricultural Science, an engineering industryInternational BhopalConference Agricultural Science, anticultural Science, chemical plantInternational BhopalConference Agricultural Science, anticultural Science, chemical plantInternational BhopalConference Agricultural Science, at the science, anticultural Science, plantInternational BhopalConference Agricultural Science, at the and internationalInternational Conference at the International Conference Agricultural Science, plantInternational International Conference Agricultural Science, at the International Dispersion Modelling and Impact calculation for liquefied flammable gases with special Orchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I IndiaO7/12/200713ILO Country Paper on status of occupational health and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and Hygiene26/11/2007	8.	Need for Workers	Workshop on "Participatory	
9. Ergonomic evaluation of fuel pump operation in an engineering industry International Conference at the fuel pump operation in an engineering industry Bhopal 10/12/2007 10 Heat stress and ventilation level in a chemical plant International Conference at the presence 10/12/2007 11 Ergonomics of bagging operation in a fertilizer International Conference at the plant 10/12/2007 12 Dispersion Modelling and Impact calculation for liquefied flammable Seminar on "Process Safety" at Hotel gases with special Orchid (Organised jointly by ICC, reference to conditions in 07/12/2007 13 ILO Workshop on the Promotional frame work on occupational safety of occupational health and health at Dhaka, Bangladesh 26/11/2007 14 "HIV/AIDS, a global Workshop on Issues, Strategies & concern - its relevance in Programme on Health and Hygiene		participation in Safety	Approach to Safety Management"	
Image: Second		Management	Kolkata	19/11/2007
an engineering industryBhopal10/12/200710Heat stress and ventilation level in a chemical plantInternational Conference at the Agricultural Science, bhopal10/12/200711Ergonomics of bagging operation in a fertilizer plantInternational Conference at the Institute of Agricultural Science, Bhopal10/12/200712Dispersion Modelling and Impact calculation for liquefied flammable gases with special IndiaSeminar on "Process Safety" at Hotel gorthic (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I India07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneYeine	9.	Ergonomic evaluation of	International Conference at the	
10HeatstressandInternationalConferenceatthe10HeatstressandInternationalConferenceattheventilationlevelin aInstituteofAgriculturalScience,chemical plantBhopal10/12/200711Ergonomics of bagging operation in a fertilizerInternationalConferenceattheplantBhopal10/12/200712DispersionModelling and Impact calculation for liquefied flammableSeminar on "Process Safety" at Hotel gases with special Orchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I India07/12/200713ILOWorkshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneYeine		fuel pump operation in	Institute of Agricultural Science,	
Ventilation level in a chemical plantInstitute of Agricultural Science, Bhopal10/12/200711Ergonomics of bagging operation in a fertilizerInternational Conference at the Institute of Agricultural Science, Bhopal10/12/200712Dispersion Modelling and Impact calculation for liquefied flammable gases with special IndiaSeminar on "Process Safety" at Hotel Orchid (Organised jointly by ICC, DGFASLI and I.Chem.Engrs.UK, & I India07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneWorkshop on Issues, Strategies & Programme on Health and Hygiene		an engineering industry	Bhopal	10/12/2007
chemical plantBhopal10/12/200711Ergonomics of bagging operation in a fertilizer plantInternational Conference at the Institute of Agricultural Science, Bhopal10/12/200712Dispersion Modelling and Impact calculation for liquefied flammableBeminar on "Process Safety" at Hotel gases with special Orchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I India07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneWorkshop on Issues, Strategies & Programme on Health and Hygiene	10	Heat stress and	International Conference at the	
11Ergonomics of bagging operation in a fertilizer plantInternational International Conference at the Institute of Agricultural Science, Bhopal10/12/200712Dispersion Modelling and Impact calculation for liquefied flammable gases with special IndiaSeminar on "Process Safety" at Hotel gorchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I India07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneWorkshop on the at the Programme on Health and Hygiene		ventilation level in a	Institute of Agricultural Science,	
11Ergonomics of bagging operation in a fertilizer plantInternational Conference Agricultural Science, Bhopal10/12/200712Dispersion Modelling and Impact calculation for liquefied flammable gases with special IndiaSeminar on "Process Safety" at Hotel gorchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I India07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneWorkshop on the at the Programme on Health and Hygiene		chemical plant	C	10/12/2007
operation in a fertilizer plantInstitute of Agricultural Science, Bhopal10/12/200712Dispersion Modelling and Impact calculation for liquefied flammableSeminar on "Process Safety" at Hotel gases with special Orchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I India07/12/200713ILO Workshop on the Promotional frame work on occupational safety of occupational health10/12/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and Hygiene26/11/2007	11		International Conference at the	
plantBhopal10/12/200712DispersionModelling and Impact calculation for liquefied flammable gases with special orchid (Organised jointly by ICC, reference to conditions in IndiaSeminar on "Process Safety" at Hotel gorchid (Organised jointly by ICC, reference to conditions in DGFASLI and I.Chem.Engrs.UK, & I O7/12/200713ILO Workshop on the Promotional frame work on occupational safety of occupational health07/12/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and Hygiene26/11/2007				
and Impact calculation for liquefied flammable gases with special IndiaSeminar on "Process Safety" at Hotel Orchid (Organised jointly by ICC, DGFASLI and I.Chem.Engrs.UK, & IIndiaOrchid (Organised jointly by ICC, DGFASLI and I.Chem.Engrs.UK, & I13ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh14"HIV/AIDS, a global concern - its relevance in Programme on Health and Hygiene		-	C .	10/12/2007
and Impact calculation for liquefied flammable gases with special IndiaSeminar on "Process Safety" at Hotel Orchid (Organised jointly by ICC, DGFASLI and I.Chem.Engrs.UK, & IIndiaOrchid (Organised jointly by ICC, DGFASLI and I.Chem.Engrs.UK, & I13ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh14"HIV/AIDS, a global concern - its relevance in Programme on Health and Hygiene	12	· ·		
for liquefied flammable gases with special reference to conditions in IndiaSeminar on "Process Safety" at Hotel Orchid (Organised jointly by ICC, DGFASLI and I.Chem.Engrs.UK, & I Chem. Engrs. USA)07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneWorkshop on the Arategies & Programme on Health and Hygiene		-		
gaseswithspecial pecial reference to conditions in IndiaOrchid (Organised jointly by ICC, DGFASLI and I.Chem.Engrs.UK, & I 07/12/200713IndiaChem. Engrs. USA)07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneWorkshop on Health and Hygiene		-	Seminar on "Process Safety" at Hotel	
reference to conditions in IndiaDGFASLI and I.Chem.Engrs.UK, & I Chem. Engrs. USA)07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneWorkshop on Health and Hygiene		-		
IndiaChem. Engrs. USA)07/12/200713ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneWorkshop on Issues, Strategies & Programme on Health and Hygiene				
13ILO Workshop on the Promotional frame work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Frogramme on Health and HygieneWorkshop on Issues, Strategies & Programme on Health and Hygiene			_	07/12/2007
Country Paper on status of occupational healthframe work on occupational safety and health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneWorkshop on Issues, Strategies & Programme on Health and Hygiene	13			
of occupational healthand health at Dhaka, Bangladesh26/11/200714"HIV/AIDS, a global concern - its relevance in Programme on Health and HygieneEnd	-	Country Paper on status	-	
14 "HIV/AIDS, a global Workshop on Issues, Strategies & concern - its relevance in Programme on Health and Hygiene		• •	· ·	26/11/2007
concern - its relevance in Programme on Health and Hygiene	14	*		
	-			
Administration at RLI, Chennai 1//12/2007		industry"	Administration at RLI, Chennai	17/12/2007

15				Seminar on "Industrial Process Safety
	Industrial	Safety	_	Management" jointly organized by
	Policy,	Legal	and	the Ministry of Labour &
	Regulatory	issues		Employment and FICCI, New Delhi 22/11/2007

Table 4.20: Publication of Papers/Articles - 2007

Sl.No.	Title	Periodical/Events	Date
1.	Occupational Backpain - A Myth &	INDOSHNEWS	
	Misery at Shopfloor	VOL. 11 No.3	15/03/2007
2.		INDOSHNEWS	
	Stress and its preventive management	VOL11 No.3	15/03/2007
3.	Occupational & Environmental Health	INDOSHNEWS	
	problems in Fertilizer Plant	VOL. 11 No.4	22/02/2007

4.12 CIS National Centre for India:

As a CIS National Centre for India CLI provides information and services on:

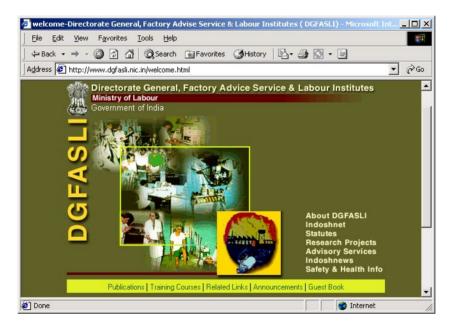
- Microfiche reference
- Awareness on current events
- Information access through CD-ROMs of ILO, WHO, etc.
- MSDS
- DISPERSION MODELS

4.13 INDOSHNEWS Newsletter:

In order to create Safety and Health awareness and to project the services offered by the organisation and its achievements DGFASLI brings out a Quarterly newsletter "INDOSHNEWS". This quarterly newsletter is intended to reach to the people round the globe and bring about awareness in matters related to safety and health, highlight important issues, latest developments, current events in the area of safety and health. During 2007 **four** volumes of INDOSHNEWS were brought out.

4.14 DGFASLI website homepage

The DGFASLI website <u>www.dgfasli.nic.in</u> is a source of information on various safety and health related matters.



DGFASLI website www.dgfasli.nic.in

4.15 Observance of Safety Week, Fire Safety Week, etc:

Safety Week:

Safety week celebrations were held at the Ports of Kolkata, Visakhapatnam Chennai, New Mangalore, Cochin and Tuticorin. During the celebrations, various safety promotional activities like safety poster competitions, safety quiz contest, first-aid and fire fighting demonstrations and appreciation programmes were organized for benefit of dock workers and their families.

5 Safety Awards

To appreciate the contribution made by the factories and docks towards producing quality goods and providing efficient services in safe and healthy conditions the following awards are being given.

5.1 Prime Minister's Shram Awards (PMSA)

The Prime Minister's Shram Awards (PMSA) were instituted in 1985, for the workers (as defined in Industrial Disputes Act, 1947) in recognition of their outstanding contributions in organizations both in public and private sector and who have distinguished record of performance, devotion to duty of a high order, specific contribution in the field of productivity, proven innovative abilities, presence of mind and exceptional courage and also to the workmen who have made supreme sacrifice of laying down their lives in the conscientious discharge of their duties.

It has been decided from the year 2004 onwards that the private sectors shall also be included within the ambit of Prime Minister's Shram Awards and the workers in the private sector units employing 500 or more workers and engaged in manufacturing and productive processes will be eligible to apply for these awards. The number of awards has been increased from 17 to 33.

The awards, in orders of precedence, are: Shram Ratna, Shram Bhushan, Shram Vir/Veerangana and Shram Shri/Devi. The recognition consists of a Sanad and cash award of Rs. Two lakh (1 award), Rs. one lakh (4 awards), Rs. 60,000 (12 awards) and Rs. 40,000 (16 awards) respectively.

5.2 Vishwakarma Rashtriya Puraskar & National Safety Awards:

The DGFASLI on behalf of the Ministry of Labour and Employment has been implementing the Vishwakarma Rashtriya Puraskar (VRP) since 1965 (earlier known as Shram Vir National Awards) and the National Safety Awards scheme since 1960. These schemes were modified in 1970 and again in 1977. The schemes presently in operation are as follow:

(i) Vishwakarma Rashtriya Puraskar: It is designed to give recognition at the national level to outstanding suggestions resulting in (i) higher productivity (ii) improvement in safety and working conditions (iii) savings in foreign exchange (import substitution as well as quality and safety of products), (iv) improvement in overall efficiency of the establishments. It covers workers employed in factories

and docks. The prizes are grouped in three classes i.e. CLASS (A) - 5, CASH AWARD OF RS.50,000/- EACH, CLASS (B) - 8, CASH AWARD OF RS.25,000/- EACH AND CLASS(C) - 15, CASH AWARD OF RS.10,000/- EACH.

(ii) National Safety Awards: National Safety Awards are given in recognition of outstanding safety performance on the part of the industrial establishments covered under the Factories Act 1948, the employers covered under the Dock Worker (Safety, Health and Welfare) Act 1986 and Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996. Shields and Citation Certificates are awarded to Winners and Runners Up. Schemes I to VI are meant for factories and construction sites and Schemes VII and VIII are for Ports.

Achievement in 2007

The Awards presentation function for Vishwakarma Rashtriya Puraskar and National Safety Awards for the Performance year 2005 was held on 17.10.2007 at Vigyan Bhavan, New Delhi and the awards were presented to the awardees by the Hon'ble Minister of State for Labour & Employment Shri. Oscar Fernandes. Total 221 applications were received for Vishwakarma Rashtriya Puraskar-2005, out of which 28 applications were adjudged for granting of awards. The ninety nine workers have shared these 28 awards. Total 341 applications were received for Vishwakarma for State for National Safety Awards, out of which 95 applications have been adjudged for granting of awards. These awards were presented to 56 winners & 39 runners-up under both the schemes.

Performance Year	Vishwakarma Rashtriya Puraskar				
	Applications	Awards			
2001	118	18			
2002	184	18			
2003	246	28			
2004	249	28			
2005	221	28			

Table 5.1:	Details	of	number	of	applications	received	for	Vishwakarma
Rashtriya I	Puraskar	and	l the num	ıber	r of awards gi	ven durin	ig th	e last 5 years :

Performance Year	U	in Indian y in Rupees	Savings in Foreign Currency in Rupees			
	Recurring	Non-Recurring	Recurring	Non-Recurring		
2001	204693124	30965730	2940000	35871500		
2002	990132800	310103000	28115000	57972000		
2003	150,58,61,000	506,91,00,000	834,29,80,600	237,85,13,600		
2004	230,28,74,300	12,24,04,900	172,22,59,700	6,15,71,100		
2005	47,25,19,700	21,47,25,000	4,72,25,000	82,50,000		

Table 5.2: Details of the estimated annual savings in rupees resulting from the suggestion during the last 5 years :

Table 5.3 : The details of National Safety Awards under different schemes for	•
the period 2001 – 2005 are given below :	

Performance	National	SCHEMES									
Year	Safety Awards	Ι	II	III	IV	\mathbf{V}	VI	VII	VIII	IX	X
2001	Applications	120	97	55	57	17	26	4	4		
	Awards	25	17	9	11	4	5	1	2		
2002	Applications	127	101	76	68	45	37	4	3		
	Awards	23	16	12	13	11	10		2		
2003	Applications	135	107	26	24	24	19	31	30	4	1
	Awards	26	18	11	13	9	8	9	10		1
2004	Applications	112	42	28	27	29	25	27	29	3	3
	Awards	26	29	11	12	10	9	10	11		
2005	Applications	73	36	26	27	32	34	31	29		
	Awards	23	14	09	10	10	10	10	09		

Chart 5.1

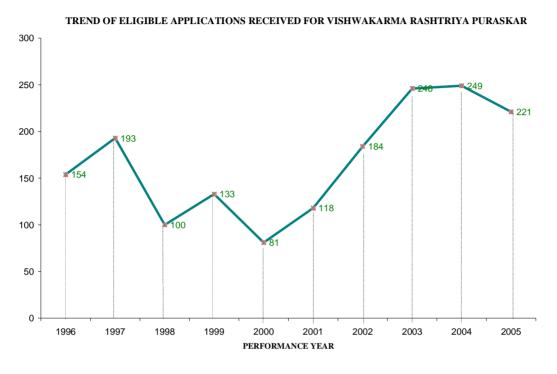
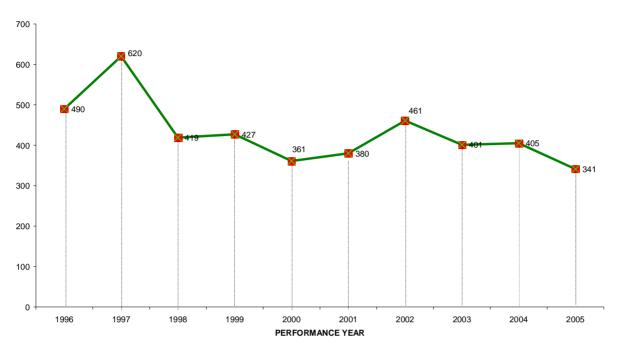


Chart 5.2



TREND OF ELIGIBLE APPLICATIONS RECIEVED FOR NATIONAL SAFETY AWARDS

6 Human Resource Development

The officers of the Organisation are deputed to training programmes organised by various agencies within the country and abroad, for exposure to the latest technical developments that are taking place in the field of Industrial Safety and Health. The details of such participation during the year are given below:

Sl.No.	Area/Institute	Period	No. of officers trained
1	ILO/Korea Fellowship Training Programme on "OSH in small Construction" organized by Korean Occupation Safety & Health Agency (KOSHA), Seoul Republic of Korea.	7-18 Aug.	1

Table: 6.2 National

Sl.No. Area/Institute Period No. of officers
--

			trained
1	International Conference on Asbestos at Maulana Azad Medical College, New Delhi	3 Dec.	2
2	13th National Seminar on Updates in industrial, and Environmental Health at Indian Society of Health Administrators, Bangalore	27~29 Nov.	2
3	Industrial Application of Environmental Monitoring Equipment at Vashi, Navi Mumbai	15 Nov.	1
4	Refresher Course for in-service ISS officers on "Management Development" at H.C.M. Rajasthan State Institute of Public Administration	9~13 Oct.	1
5	Gait and Motion Analysis, 2006 at Holy Family Hospital, Bandra	16~17 Sept.	1
6	Seminar on "Analytical Instruments used in air pollution Monitoring" Organised at Park Hotel, Kolkata	30 Aug.	1
7	7th ILO-DGMS National training Workshop on prevention of Pneumoconiosis in Mining Industries at India Habitat Centre, New Delhi	31 July- 4Aug.	1
8	National Conference on Occupational Safety, Health & Environment at Vigyan Bhavan, New Delhi	6 April	2
9	Training Programme on "Health Aspects of Chemical Accidents" conducted by NIOH. Ahmedabad & ROCH(E), Kolkata at Salt Lake City, Kolkata	29~30 March	5
10	Ergonomics in industry for safety, health & productivity at SNDT Women's University, Juhu, Mumbai	10 March	8
11	Seminar on Awareness programme on Chemical Weapons Conventions at Hotel Radha Park Inn Chennai	20 Feb.	2
12	Bench Marking of HSE in Oil Industry at Marriat Restaurant, Goa	1~3 Feb.	1

7 Occupational Injuries in Factories & Ports

The statistics of factories is collected and compiled by the Labour Bureau on the basis of the Annual Returns/Reports in respect of the Factories Act 1948, furnished by various States/Union Territories. The information relating to occupational injuries in factories given in this chapter is based on the statistics provided by Labour Bureau up to the year 2004(P).

7.1 Profile of Industrial Injuries in Factories

Under the Factories Act, 1948, injuries resulting from industrial accidents, by reasons of which the person injured is prevented from attending to work for a period of 48 hours or more immediately following the accident, are recorded. The important indices on injuries are Frequency Rate (FR) and Incidence Rate (IR). The Frequency Rate is defined as number of total injuries per 1, 00,000 man-days worked. The Incidence Rate is the number of injuries per 1000 workers employed in the factories.

7.2 All India Industrial Injuries and Rates:

The statistics of number of working factories, employment therein, number of fatal and non-fatal injuries and their rates for the years 2000-2004 (P) are given in table 7.1 to the extent available from **Labour Bureau**

As per the statistics given in table 7.1, the industrial injuries are consistently reducing during the period 2000-2004 (P) and except for the year 2001. The frequency rate of injuries is also declining.

The incidence rate of injuries is decreased from 10.93 in the year 2000 to 2.21 in the year 2004 which is remarkable. The fatal injuries increased from 486 in 2000 to 562 in 2004. However the frequency rate and incidence rate of fatal injuries do not show any definite trend.

Year	No. of Working Factories	Estimated Average daily Employment (in	Average daily Injuries		Frequency rate		Incidence Rate	
		thousand)	Fatal	Total	Fatal	Total	Fatal	Total
1	2	3	4	5	6	7	8	9
2000	121604	4226	486	23976	0.07	3.6	0.22	10.93
2001	144800	5733	627	28364	0.07	3.24	0.19	8.67
2002	141085	6330	540	20453	0.13	4.88	0.16	6.14
2003	111895	4927	525	16432	0.08	2.50	0.11	3.33
2004(P)	158991	6802	562	15020	0.05	1.33	0.08	2.21

 Table:7.1
 Statistics of Employment, Industrial Injuries, etc. in Factories

Note: Data is based on the returns received under Factories Act. 1948 from States/UTs through Labour Bureau correspondence

(P): Provisional

Limitations of the data as stated by Labour Bureau Chandigarh:

1 Figures for 2000 excludes A & N, Arunachal Pradesh, Bihar, Chattisgarh, Dadra & Nagar Haveli, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand..Lakshadweep, Manipur, Mizoram, Nagaland, Sikkim Tamil Nad, Uttar Pradesh, Uttaranchal and West Bengal, ,

2 Figures for 2001 excludes A & N, Arunachal Pradesh, Bihar, Chattisgarh, Dadra & Nagar Haveli Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand., Karnataka, Kerala, Lakshadweep, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim , U.P., Uttaranchal and West Bengal, ,

3 Figures for 2002 excludes Arunachal Pradesh, Bihar, Chattisgarh, Dadra & Nagar Haveli, Delhi Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala, Lakshadweep, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim, U.P., Uttaranchal and West Bengal,

4 Figures for 2003 excludes Arunachal Pradesh, Bihar, Chattisgarh, Dadra & Nagar Haveli, Delhi Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Kerala, Lakshadweep, Manipur, Mizoram, Meghalaya, Nagaland, Sikkim, Tamil Nadu, U.P., Uttaranchal and West Bengal.

5 Figures for 2004 (P) excludes A & N, Arunachal Pradesh, Bihar, Chattisgarh, Dadra & Nagar Haveli, Delhi, Gujarat, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Lakshadweep, Manipur, Mizoram, Nagaland, Pondicherry, Sikkim, Uttar Pradesh, Uttaranchal and West Bengal,

6 The Number of injuries has been given on the basis of notices of accidents whereas the rates have been worked out on the basis of Annualr Return

Table 7.2: State-Wise Total Number of Industrial Injuries In Factories (2000 – 20)									
Union Territory	2000	2001	2002(P)	2003(P)	2004(P)				
Andaman & Nicobar	NA	NA	37(-)	53(-)	NA				
Andhra Pradesh	3241(121)	3010(118)	2316(99)	1976(100)	1911(91)				
Arunachal Pradesh	NA	NA	NA	NA	NA				
Assam	139(6)	149(15)	62(11)	65(6)	78(12)				
Bihar	NA	NA	NA	NA	NA				
Chandigarh	24(1)	4(-)	5(-)	81(11)	3(-)				
Chattisgarh	NA	NA	NA	NA	NA				
Dadra Nagar Haveli	NA	NA	NA	NA	NA				
Delhi	43(9)	28(6)	NA	NA	NA				
Goa	NA	142(4)	185(13)	145(3)	166(12)				
Gujarat	NA	6417(175)	NA	NA	NA				
Haryana	NA	NA	245(34)	181(25)	198(64)				
Himachal Pradesh	NA	NA	NA	NA	NA				
Jammu Kashmir	NA	NA	NA	NA	NA				
Jharkhand	NA	NA	NA	NA	NA				
Karnataka	1044(NA)	NA	2132(44)	2013(50)	1262(45)				
Kerala	NA(15)	NA	NA	NA	305(9)				
Lakshadweep	NA	NA	NA	NA	NA				
Madhya Pradesh	3321(51)	2232(32)	1947(49)	2065(48)	1525(29)				
Maharashtra	11873(168)	9679(178)	7616(150)	6416(159)	5479(161)				
Manipur	NA	NA	NA	NA	NA				
Meghalaya	47(2)	NA	NA	NA	9(-)				
Mizoram	NA	NA	NA	NA	NA				
Nagland	NA	NA	NA	NA	NA				
Orissa	1031(30)	812(20)	709(34)	700(49)	694(40)				
Pondicherry	856(2)	592(4)	559(5)	581(8)	NA				
Punjab	1049(35)	492(5)	458(8)	404(7)	199(7)				
Rajasthan	1300(44)	2555(33)	1997(57)	1748(58)	1286(52)				
Sikkim	NA	NA	NA	NA	NA				
Tamil Nadu	NA	2245(37)	2172(36)	NA	1928(40)				
Tripura	8(2)	7(NA)	5(-)	4(1)	3(-)				
Uttar Pradesh	NA	NA	NA	NA	NA				
Uttaranchal	NA	NA	NA	NA	NA				
West Bengal	NA	NA	NA	NA	NA				
Total:	23976(486)	28364(627)	20453(540)	16432(525)	15020(562)				

Table 7.2: State-Wise Total Number of Industrial Injuries In Factories (2000 – 2004(P))

Note: (i) NA = Not Available, (ii) - = Nil, (iii) Figures in brackets pertain to "Fatalities" and are included in the total, (iv) P = Provisional. (v) For limitations of data refer note of Table 7.1 Source: Labour Bureau, Shimla & Chandigarh

The state-wise frequency rate of injuries and incidence rate of injuries are given in the table 7.3

and 7.4 respectively. Further, industry wise injuries and their incidence rate is given in table 7.5

State/UTs	2000	2001	2002	2003	2004(P)
Andaman & Nicobar	NA	NA	1.70 (-)	4.17(-)	NA
Andhra Pradesh	2.29 (0.09)	3.39 (0.13)	2.16 (0.09)	1.93 (0.10)	1.73(0.08)
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	097 (0.04)	1.69 (0.17)	0.52 (0.09)	1.61(0.06)	0.78(0.12)
Bihar	NA	NA	NA	NA	NA
Chandigarh	0.94 (0.04)	0.22 (-)	0.12 (-)	2.15(0.29)	0.09(-)
Chattisgarh	NA	NA	NA	NA	NA
Daman & Diu	NA	NA	NA	NA	NA
Delhi	0.24 (0.05)	0.17 (0.04)	NA	NA	NA
Goa	NA	1.67 (0.05)	1.81 (0.13)	1.38 (0.03)	1.51(0.11)
Gujarat	NA	7.73 (0.21)	NA	NA	NA
Haryana	NA	NA	0.17 (0.02)	0.52 (0.07)	0.32(0.10)
Himachal Pradesh	NA	NA	NA	NA	NA
Jammu & Kashmir	NA	NA	NA	NA	NA
Jharkhand	NA	NA	NA	NA	NA
Karnataka	NA	NA	2.28 (0.05)	2.02(0.05)	1.06(0.04)
Kerala	3.09 (0.04)	NA	NA	NA	0.90(0.03)
Lakshadweep	NA	NA	NA	NA	NA
Madhya Pradesh	7.51 (0.12)	7.71 (0.11)	4.86 0.12)	3.90(0.09)	1.51(0.03)
Maharashtra	4.14 (0.06)	4.96 (0.09)	3.22 (0.06)	2.75(0.07)	2.50(0.07)
Manipur	NA	NA	NA	NA	NA
Meghalaya	5.80 (0.25)	NA	NA	NA	1.49(-)
Mizoram	NA	NA	NA	NA	NA
Nagaland	NA	NA	NA	NA	NA
Orissa	3.20 (0.11)	2.24 (0.06)	2.06 (0.10)	2.16 (0.15)	2.06(0.12)
Pondicherry	5.91 (0.01)	4.34 (0.03)	246.21 (2.20)	255.90(3.52)	NA
Punjab	2.74 (0.08)	3.12 (0.03)	1.21 (0.02)	1.14 (0.02)	0.61(0.02)
Rajasthan	3.35 (0.11)	6.44 (0.08)	5.05 (0.14)	4.63 (0.15)	3.21(0.13)
Sikkim	NA	NA	NA	NA	NA
Tamil Nadu	NA	0.67 (0.01)	0.65 (0.01)	NA	0.55(0.01)
Tripura	1.48 (0.37)	1.29 (-)	0.95 (-)	0.58 (0.14)	0.49(-)
Uttar Pradesh	NA	NA	NA	NA	NA
Uttaranchal	NA	NA	NA	NA	NA
West Bengal	NA	NA	NA	NA	NA
Total:	3.60 (0.07)	3.24 (0.07)	4.88(0.13)	2.50(0.08)	1.33(0.5)

 Table:7.3
 Frequency Rates of Industrial Injuries in Factories during 2000-2004(P)

Note: (i) F.R. = Frequency Rate per lakh man-days worked (ii) NA = Not Available,(iii) (-) = Nil or

Negligible, (v) Figures in bracket pertain to "Fatalities" and are included in the total, (vi) P = Provisional. For limitations of the data as stated by Labour Bureau, Chandigarh. Please refer note under table 7.1 Source: Labour Bureau, Chandigarh & Shimla.

State/UTs	2000	2001	2002	2003	2004(P)
Andaman & Nicobar	NA	NA	5.11 (-)	10.14 (-)	NA
Andhra Pradesh	730 (0.27)	6.97 (0.27)	5.90 (0.25)	2.76 (0.14)	2.50(0.12)
Arunachal Pradesh	NA	NA	NA	NA	NA
Assam	290 (0.13)	3.47 (0.35)	1.58 (0.28)	1.69 (0.06)	0.79(0.12)
Bihar	NA	NA	NA	NA	NA
Chandigarh	2.60 (0.11)	0.49 (-)	0.56 (-)	5.59(0.76)	0.22(-)
Chattisgarh	NA	NA	NA	NA	NA
Daman & Diu	NA	NA	NA	NA	NA
Delhi	0.76 (0.16)	0.53 (0.11)	NA	NA	NA
Goa	NA	4.41 (0.12)	5.58 (0.39)	3.22 (0.07)	3.91(0.28)
Gujarat	NA	23.98 (6.65)	NA	NA	NA
Haryana	NA	NA	2.83 (0.39)	0.50 (0.07)	0.36(0.11)
Himachal Pradesh	NA	NA	NA	NA	NA
Jammu & Kashmir	NA	NA	NA	NA	NA
Jharkhand	NA	NA	NA	NA	NA
Karnataka	NA	NA	6.70 (0.14)	2.01(0.05)	1.42(0.05)
Kerala	5.80 (0.08)	NA	NA	NA	0.75(0.02)
Lakshadweep	NA	NA	NA	NA	NA
Madhya Pradesh	24.50 (0.38)	18.34 (0.25)	15.26 (0.38)	4.96 (0.12)	3.22(0.06)
Maharashtra	12.50 (0.18)	12.02 (0.22)	9.77 (0.19)	5.28(0.13)	4.44(0.13)
Manipur	NA	NA	NA	NA	NA
Meghalaya	17.07 (0.73)	NA	NA	NA	2.01(-)
Mizoram	NA	NA	NA	NA	NA
Nagaland	NA	NA	NA	NA	NA
Orissa	7.82 (0.27)	8.00 (0.20)	6.88 (0.33)	5.34 (0.37)	5.32(0.31)
Pondicherry	46.63 (0.11)	20.84 (0.14)	19.70 (0.18)	10.51(0.14)	NA
Punjab	10.86 (0.31)	7.58 (0.05)	3.94 (0.07)	0.88 (0.02)	0.41(0.01)
Rajasthan	10.82 (0.37)	20.01 (0.26)	16.05 (0.46)	4.68 (0.16)	3.33(0.13)
Sikkim	NA	NA	NA	NA	NA
Tamil Nadu	NA	3.01 (0.26)	1.87 (0.03)	NA	1.50(0.03)
Tripura	4.20 (1.05)	2.08 (-)	2.35 (-)	0.12 (0.03)	0.09(-)
Uttar Pradesh	NA	NA	NA	NA	NA
Uttaranchal	NA	NA	NA	NA	NA
West Bengal	NA	NA	NA	NA	NA
Total:	10.93 (0.22)	8.67 (0.19)	6.14 (0.16)	3.33(0.11)	2.21(0.08)

 Table:7.4
 Incidence Rates of Industrial Injuries in Factories during 2000-2004(P)

Note: (i) I.R. = Incidence Rate per 1000 workers employed, (ii) NA = Not Available,(iii) (-) = Nil or Negligible, (v) Figures in bracket pertain to "Fatalities" and are included in the total, (vii) P = Provisional. **For limitations of the data as stated by Labour Bureau, Chandigarh. Please refer note under table 7.1** Source: Labour Bureau, Chandigarh & Shimla.

Table 7.5: Industrial Injuries and their Incidence Rate per Thousand Workers Employed by Important Industries

	lustries									1		
Sl.N o.	Industry	NIC	20	00	20	001	20	002	20	03	200	4(P)
0.		Code	Total No.of Injur-ies	Rate per 1000 Workers	Total No.of Injur-ies	Rate per 1000 Workers	Total No.of	Rate per 1000 Workers	Total No.of Injur-ies	Rate per 1000 Workers	Total No.of Injur-ies	Rate per 1000 Workers
1	2	3	4	5	6	7	8	9	10	11	12	13
1.	All Textiles	17.18	9077 (34)	15.645	10586 (64)	10.15	7276 (39)	6.14 (0.03)	5332 (39)	6.53 (0.05)	4172 (66)	3.22 (0.05)
2.	Manufacture of Paper & paper products & printing, publishing & allied products	21.22	1144 (19)	12.405	1153 (22)	7.23	1088 (25)	4.46 (0.10)	976 (23)	4.92 (0.12)	617 (19)	2.40 (2.07)
3.	Manufacture of Chemicals & Chemical products (Except products of Petroleum and coal)	24	1358 (79)	6.38	1947 (125)	4.98	988 (78)	2.86 (0.23)	944 (78)	2.50 (0.21)	982 (54)	1.67 (0.09)
4.	Manufacture of Non- metallic mineral products	26	1024 (42)	7.39	1274 (64)	8.32	992 (36)	6.55 (0.24)	799 (46)	2.50 (0.14)	821 (52)	1.87 (0.12)
5.	Basic metal and alloys Industries	27	3432 (77)	20.00	2149 (57)	11.66	1449 (87)	7.58 (0.46)	1370 (79)	3.97 (0.23)	1130 (78)	2.84 (0.20)
6.	Manufacture of metal products & Parts(except machinery & transport equipment)	28	784 (15)	8.44	1149 (19)	7.94	876 (17)	5.05 (0.10)	659 (16)	2.32 (0.06)	723 (37)	1.85 (0.09)
7.	Manufacture of machinery, machine tools & parts (except electrical machinery)	29.30	1424 (15)	34.37	1692 (19)	10.81	1141 (21)	2.59 (0.05)	993 (19)	3.26 (0.06)	923 (25)	2.49 (0.07)
8.	Manufacture of transport equipment and parts	34.35	1572 (19)	8.065	1698 (10)	6.34	1703 (24)	4.39 (0.06)	1184 (12)	3.93 (0.04)	1399 (36)	3.57 (0.09)
9.	Electricity, Gas and Steam	40	199 (8)	5.37	662 (22)	10.59	333 (28)	5.53 (0.47)	274 (31)	3.17 (0.36)	399 (32)	3.58 (2.29)
	Total of (Sl.No. 1 to 9 Industries) :	15846		20014 (308)	13.11	22310 (402)	15846 (355)	3.96 (0.09)	12531 (343)	4.13 (0.11)	11166 (399)	2.63 (0.09)
	* Total of All Industries :			23937 (486)	10.93 (0.22)	28364 (627)	20453 (5.40)	6.14 (0.16)	16432 (525)	3.33 (0.11)	15020 (562)	2.21 (0.08)

Note : (i) Figures in brackets indicate "Fatalities" and are included in the Total, (ii) P = Provisional (iii)* The figures for All Industries include the figures of other industries apart from above Industries shown

For Limitations of data refer footnote of table 7..1

Source: Labour Bureau, Chandigarh by correspondence

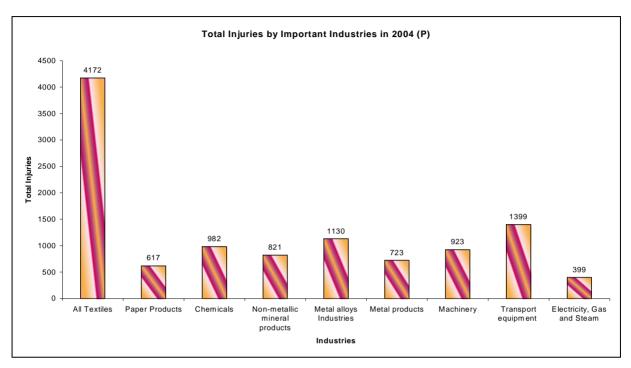
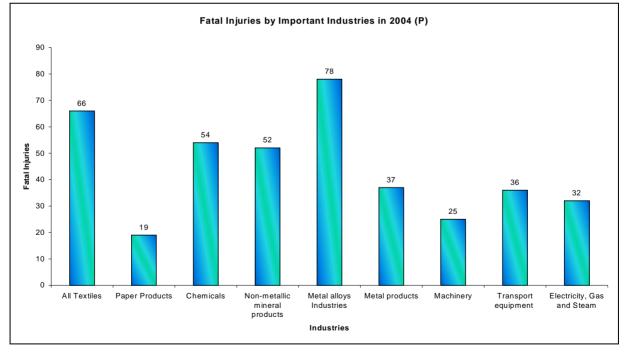


Chart 7.1

Chart 7.2



Note: i) Data is based on the returns received only. ii) P=Provisional Source: Labour Bureau, Chandigarh. For Limitations of data refer footnote of table 7.1

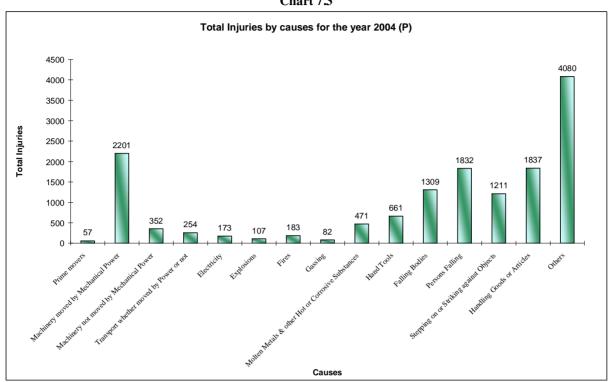
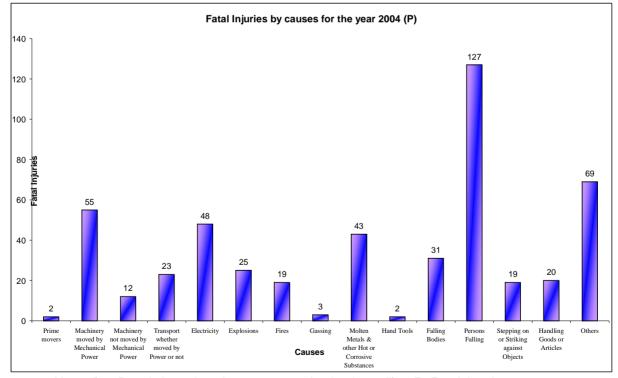


Chart 7.3

Chart 7.4



Data is based on the returns received only. P=Provisional Note: i) ii) Source : Labour Bureau Chandigarh For Limitations of data refer footnote of table 7.1

7.6 Accident Trend in Docks

Table 7.6 shows that Mumbai Port accounts for maximum injuries and Chennaiport accounts for maximum dangerous occurrences. Kandla, Mumbai, Chennai Ports account for maximum fatal injuries. However with the efforts of the Inspectorates in creating safety awareness among all personnel connected with dock work , chart 7.5 shows that number of accidents have registered a decrease from 351 in 1997 to 158 in 2007. Among fatal injuries there is no significant change, as depicted in chart 7.6.

As per the analysis of reportable accidents depicted in chart 7.7 and chart 7.8, unitized and break-bulk cargo accounts for the maximum number of injuries whereas stepping on, striking against, struck by etc. are the major causes for these accidents during the year 2007.

Sl. No.	Ports	FATAL	TOTAL	Dangerous
				Occurrences
1.	Mumbai	03	42	05
2.	J.N. Port	00	11	03
3.	Kandla	03	08	02
4.	Mormugao	01	08	00
5.	Kolkata	03	28	00
6.	Paradip	01	10	01
7.	Visakhapatnam	01	06	01
8.	Chennai	8 *	18*	06
9.	Cochin	00	13	04
10.	New Mangalore	01	05	00
11.	Tuticorin	02	09	00
	Total	23*	158*	22

Table 7.6: Port-wise Dangerous Occurrences Fatal and Non-Fatal Injuries during 2007

P=Provisional * Including 2 fatal & 3 reportable accidents of Ennore Port

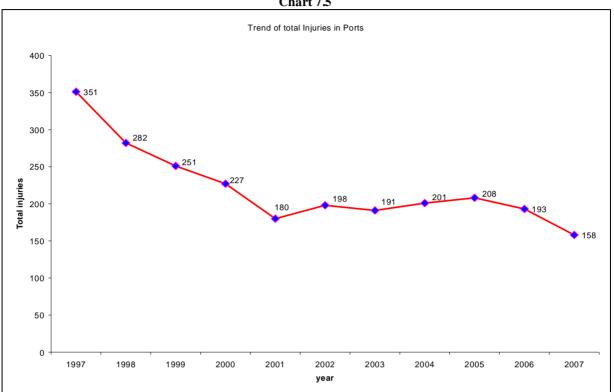


Chart 7.5

Chart 7.6

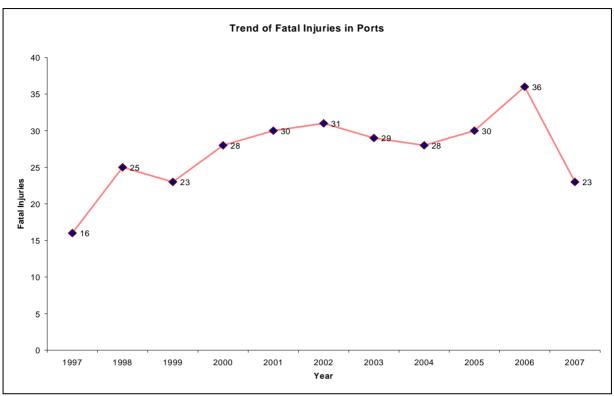
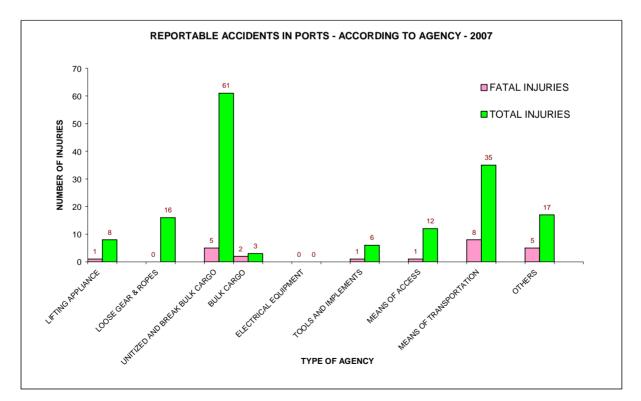


Chart 7.7



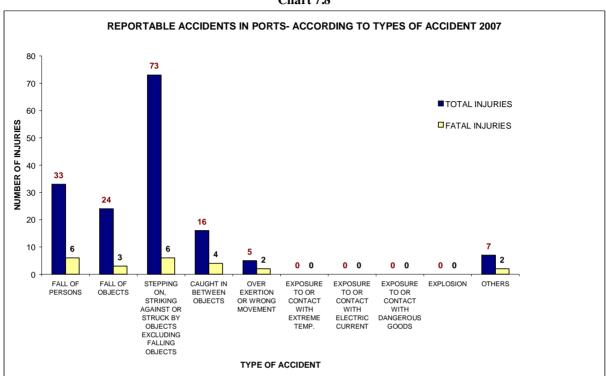


Chart 7.8

54

8 International Statistics on Occupational Injuries

The International Labour Organisation (ILO) publishes the country-wise Labour Statistics in its Year Book. These statistics contains information on:

- (i) Economically active population
- (ii) Employment
- (iii) Hours of work
- (iv) Wages
- (v) Labour cost
- (vi) Consumer price indices
- (vii) Occupational injuries
- (viii) Strikes and lock outs

In order to have a comparative analysis of the Indian situation with regard to occupational injuries in manufacturing sector, the effort is being made to use the information published in the ILO Year Book of Labour Statistics available in respect of some of the developed countries. In this context it is felt that, the information relating to total injuries alone would be in appropriate measure for comparison of the status. Therefore, the rate of injuries has been taken as a basis of comparison. The country-wise rate of reported fatal injuries and non-fatal injuries in manufacturing sector are given in table 8.1 & table 8.2 respectively, for the period 1993-2002. The incidence rate of fatal injuries per one lakh workers employed is highest in respect of India which varies from 38 in 1996 to 16 in 2002, The lowest rate is achieved in United Kingdom which varies from 1.6. to 1.1 during the period. However, it is to be noted that the rate of fatal injuries in India is consistently decreasing during the period 2000 – 2002.

In respect of rate of non-fatal injuries per one lakh workers employed, India has demonstrated much better performance compared to the countries like Canada, France, Italy and Denmark. Further, the rate is consistently decreasing during the period 1993-2002.

empio	V										
Sl.No	Country	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
1	Canada*	7	7.4	7.1	7.4	7.9	7.6	8.3	9.2	_	_
2	United States	4	4	3	3	4	3	4	3	3	-
3	Austria	5.3	4.8	4.3	5.1	5.7	4.2	4.2	4.2	3.9	-
4	France*	4.3	4.7	3.9	4	4	3.8	3.8	-	_	-
5	Italie*	7	6	6	6	6	7	6	5	-	-
6	United Kingdom	1.6	1.2	1.1	1.3	1.4	1.6	1.1	1.2	1.3	-
7	Australia*	7	6	7	5	4	4	2	3	1	3
8	Denmark	3	5	3	3	3	3	3	2	2	-
9	Hungary	-	4.17	5.29	5.76	3.24	2.96	3.12	2.88	2.61	2.71
10	Sweden	3.5	4.6	1.3	2.1	2.3	1.7	1.7	0.7	1.4	-
11	India**	20	20	20	38	19	16	18	22	19	16

Table 8.1: Country wise rate of reported fatal injuries in Manufacturing Sector per one lakh workers employed

*Compensated injuries,

- Not available

Source : Year Book of Labour Statistics 2003, published by ILO Geneva

** Reported injuries published by Labour Bureau, Shimla

THe82 Cartryviserated reported Nonfetel injuries in Man featuring Setor per coekthwalkes	
employed	

SNO	Cartry	1998	1994	195	1996	1997	1998	1999	200	201	202
1	Grada*	629	6348	59B	5475	5314	5050	4887	5045	-	-
2	UnitedStates#	104	104	99	92	89	85	8	7.8	7	-
3	France	5397	526	512	5132	5107	592	5155	-	-	_
4	Italie	5 99	5654	5407	4804	4851	4786	4715	-	-	-
5	UnitedKington	BI	1323	1190	1186	1234	1166	1299	1191	1157	_
6	Antralia	-	-	I	-	3224	3011	2912	2571	2486	2395
7	Demark	3510	364	4011	372	3789	3571	3429	3404	3219	-
8	Hungary	-	1637	1661	1522	1464	1333	BV7	1166	12Ð	1234
10	Svæden	1625	1544	1441	1333	1272	B6 4	14B	1488	1377	_
11	Inda**	2438	2151	1638	1650	1623	11B	1111	1071	8 48	598

Nte:#Repotedripuiesper20000housvalked(pixaesedororly), *Conpersatedinjuies -Nttaaidde Sure: YerBikol door Seisics 203 published y 1. OGreea * Repotedrijuies published y 1. door Breey Sinta

9 Key Data in Manufacturing Sector (Data collected by DGFASLI)

9.1 The DGFASLI receives information relating to factories covered under the provisions of the Factories Act, 1948 from States and Union Territories from time to time. This information is mainly collected through FAS Forms as well as through correspondence as and when required. It is entered in the data bank specially created at DGFASLI for disseminating any specific information as and when necessary. However, due to non-receipt of statistics from all the States and Union Territories, there are limitations to the use of this data bank. Though this information can be used for knowing the state-wise status of safety and health as well as compliance level with statutory standards in factories, no national level statistics can be prepared for arriving at conclusive inferences. However, the information can definitely be used for estimation of various trends. It is emphasized here that the information given in the following pages/tables should be referred to with these limitations in mind and State Governments/Union Territory Administration concerned may be contacted/approached for ascertaining the correctness or the updated information

Statistics of Factories at a Glance:	200	<u>)6(Estimates)</u>
Registered Factories	:	288926
Working Factories	:	238012
Employment - Men	:	9258846
- Women	:	1458922
Injuries - Total	:	28405
- Fatal	:	1042
Employment- Safety Officers	:	1706
- Welfare Officers	:	2110
- Factory Med. Officers	:	1840
Safety Committees	:	9315
MAH Factories	:	1689
On-site Emergency Plans	:	1369
Canteens	:	4009
Creches	:	4035

	Registered	Working	Total	Female	Male
States	Factories	Factories	Employment	Workers	Workers
Andaman & Nicobar Islands	37	37	5120	247	4873
Andhra Pradesh	39130	28094	781137	180878	600259
Arunachal Pradesh*		••			
Assam	3280	2073	114203	3630	110573
Bihar	6560	5781	74810	30	74780
Chandigarh	778	440	12515	414	12101
Chattisgarh					
Daman & Diu & Dadra &					
Nagar Hawelli	4776	3790	87170	26400	60770
Delhi					
Goa	721	708	48050	6650	41400
Gujarat	31238	22480	1038134	46857	991277
Haryana					
Himachal Pradesh					
Jammu & Kashmir	1147	781	27765	1718	26047
Jharkhand	10431	6885	234828	5023	229805
Karnataka	10995	10378	949098	276564	672534
Kerala	18043	17039	408204	209253	198951
Lakshawdeep*					
Madhya Pradesh	12865	8539	387970	6304	381666
Maharashtra					
Manipur					
Meghalaya	114	113	7177	607	6570
Mizoram*					
Nagaland	729	464	21800	2125	19675
Orissa	3045	2135	145965	5642	140323
Pondicherry	2742	2044	69023	10286	58737
Punjab	16251	15919	550353	2446	547907
Rajasthan	10111	10111	409799	7650	402149
Sikkim*					
Tamil Nadu	38976	29038	1369376	424549	944827
Tripura	1555	1555	47897	8895	39002
Uttar Pradesh	13552	12584	1003000	21498	981502
Uttaranchal	1322	1237	89660	10422	79238
West Bengal	13640	13204	898605	19665	878940
Total	242038	195429	8781659	1277753	7503906

Table 9.1: State-wise Status of Employment in Factories during 2006(P)

Note: * Factories Act, 1948 not yet introduced/ No registered factories

P : Provisional

.. Not Available

Source: Correspondence with Chief Inspector of Factories of States/UTs

Table 9.2:	Hazardous	Factories 2((cb) as on	2006 (P)
-------------------	-----------	--------------	------------	----------

States	No. of Hazardous Factories	No. of Workers
Andaman & Nicobar Islands	0	0
Andhra Pradesh	1055	
Arunachal Pradesh*		
Assam	13	6746
Bihar	94	2081
Chandigarh	0	0
Chattisgarh		
Daman & Diu & Dadra & Nagar Hawelli	46	1450
Delhi		
Goa	208	26640
Gujarat	4286	241093
Haryana		
Himachal Pradesh		
Jammu & Kashmir	10	1500
Jharkhand	80	25169
Karnataka	1103	152011
Kerala	797	27717
Lakshadweep*		
Madhya Pradesh	752	69067
Maharashtra		
Manipur		
Mizoram*		••
Meghalaya	25	3206
Nagaland	1	54
Orissa	352	62536
Pondicherry	204	17811
Punjab		
Rajasthan	878	91747
Sikkim*		
Tamil Nadu	12462	317689
Tripura	14	1013
Uttar Pradesh	2286	283403
Uttaranchal	262	33326
West Bengal	3106	211163
Total	28034	1575422

Note: * Factories Act, 1948 not yet introduced/ No registered factories Source: Correspondence with CIFs of states and UTs

.. Not Available

P : Provisional

State		ectors	<u> </u>	cialist	, i i i i i i i i i i i i i i i i i i i	ifying	No. of	
			Insp	oector	Sur	geon	Factories	
	Sanct-	In-	Sanct-	In-	Sanct-	In-	Inspected	
	ioned	position	ioned	position	ioned	position		
Andaman & Nicobar								
Islands	2	2	0	0	0	0	9	
Andhra Pradesh	76	63	2	2	0	0	6888	
Arunachal Pradesh*								
Assam	30	23	1	1	3	0	454	
Bihar	21	10	4	3	0	0	10191	
Chandigarh	0	6	0	0	0	0	19	
Chattisgarh								
Daman & Diu & Dadra &								
Nagar Hawelli	1	1	0	0	0	0	220	
Delhi							••	
Goa	8	5	2	2	0	0	247	
Gujarat	96	63	10	6	0	0	14769	
Haryana								
Himachal Pradesh								
Jammu & Kashmir	5	4	0	0	0	0	713	
Jharkhand	26	14	0	0	0	0	2523	
Karnataka	46	44	2	2	0	0	7682	
Kerala	52	49	10	7			11396	
Lakshadweep*								
Madhya Pradesh	41	31	1	1	0	0	2214	
Maharashtra								
Manipur							••	
Mizoram*								
Meghalaya	3	3	0	0	0	0	41	
Nagaland	3	3	0	0	0	0	367	
Orissa	26	20	2	1	1	1	2335	
Pondicherry	8	8	3	3	1	1	1710	
Punjab	27	14	5	5	0	0	2564	
Rajasthan	39	33	6	6	0	0	6550	
Sikkim*								
Tamil Nadu	133	109	0	0	9	7	29038	
Tripura	5	5	0	0	0	0	1041	
Uttar Pradesh	45	27	2	1	0	0	5046	
Uttaranchal	2	3	0	0	0	0	228	
West Bengal	51	35	15	9	0	0	2988	
Total	746	575	65	49	14	9	109233	

Table 9. 3: Inspectors of Factories and Certifying Surgeons for the year 2006 (P)

Note: * Factories Act, 1948 not yet introduced/ No registered factories, **P**: Provisional, ... Not Available, \$:The State Government has appointed additional Inspectors of Factories as per the provisions contained in Sub Sec 2B of the FactoriesAct.1948, # CMO/ Civil Surgeons at district level are appointed / notified as civil surgeons **Source**: Correspondence with Chief Inspector of Factories of States/UTs

State	Pending from previous year	Launched during the year	Decided during the year	Convic- tion	Imprison- ment (Person)	Total fine imposed(Rs.)
Andaman & Nicobar						
Islands	0	0	0	0	0	0
Andhra Pradesh	2210	829	680	514	13	3052450
Arunachal Pradesh*						
Assam	0	44	0	86	0	0
Bihar	2075	10	0	0	0	0
Chandigarh	0	26	17	17	0	58500
Chattisgarh						
Daman & Diu & Dadra & Nagar						
Hawelli	0	0	0	0	0	0
Delhi						
Goa	11	21	4	4	0	85000
Gujarat	26980	2907	2566	888	0	5878675
Haryana						
Himachal Pradesh						
Jammu & Kashmir	108	3	1	1	1	0
Jharkhand	263	10	0	0	0	0
Karnataka	295	114	94	43	0	766220
Kerala	77	64	48	29	2	223250
Lakshawdeep*				••		
Madhya Pradesh	3349	296	298	161	0	777020
Maharashtra						
Manipur						
Mizoram*				••		
Meghalaya	0	0	0	0	0	0
Nagaland	0	0	0	0	0	0
Orissa	940	108	4	0	0	0
Pondicherry	2	23	22	23	0	130500
Punjab	1158					
Rajasthan	909	61	56	46	5	395700
Sikkim*						
Tamil Nadu	10759	5792	4097	3923	0	12294850
Tripura	4	1	1	1	0	500
Uttar Pradesh	2063	236	173	143	0	548800
Uttaranchal	46	22	1	0	0	60000
West Bengal	435	84	51	34	0	559000
Total	51684	10651	8113	5913	21	24830465

Table 9. 4: Prosecution and Convictions under Section 92 & Section 96A for the year 2006 (P)

Note: * Factories Act, 1948 not yet introduced/ No registered factories

P : Provisional .. Not Available

Source: Correspondence with Chief Inspector of Factories of States/UTs

	2005 2006		200	7(P)		
		Non		Non		Non
	Fatal	Fatal	Fatal	Fatal	Fatal	Fatal
State	Injuries	Injuries	Injuries	Injuries	Injuries	Injuries
Andaman & Nicobar						
Islands	0	87	0	71		
Andhra Pradesh	134	1626	176	1334	156	1622
Arunachal Pradesh*						
Assam	5	49	5	50	11	65
Bihar	4	130	5	15	11	28
Chandigarh	1	1	0	7	0	4
Chattisgarh	73	582				
Daman & Diu & Dadra						
& Nagar Hawelli	5	15	8	29	10	27
National Capital of Delhi	17	33	14	50	16	30
Goa	15	187	8	196	10	181
Gujarat	200	5574	184	4843	222	3151
Haryana	38	234	30	35	60	40
Himachal Pradesh	3	12	1	18	10	9
Jammu & Kashmir	1	125		118	1	306
Jharkhand	23	151		243	21	105
Karnataka	34	1259	64	1371	107	1225
Kerala	18	377	13	577	22	172
Lakshadweep*			10	577		1,2
Madhya Pradesh			33			
Maharashtra	173	4137	175	4223	197	3351
Manipur					177	5551
Mizoram*	••	••				
Meghalaya					2	2
Nagaland				1	2	
Orissa			 74	 479		
Pondicherry	-	245	12	249	8	208
Punjab	6 56	148	48	139	35	136
Rajasthan	52	148	61	1129	58	1145
Sikkim*	54	12/4	01	1127	50	1143
Tamil Nadu		 1545		 1198	60	1089
Tripura	2	3	40	5	1	0
Uttar Pradesh	78	193	118	235	78	182
Uttaranchal	10	55	31	59	19	44
West Bengal	64	28288	75	24761	68	17096
Total Note: * Factories Act 1948 not	1135	48145	1211	42456	1264	30686

Table 9.5: Fatal and Non-fatal Injuries in Factories (P)

Note: * Factories Act, 1948 not yet introduced/ No registered factories P: Provisional, ... Not Available

Source: Correspondence with Chief Inspector of Factories of States/UTs

Table 9.6.	State-wise status	of Safety C)fficers (SO) i	n factories	during 2006(P)
1 abic 7.0.	State-wise status	UI Salety C	Miles (50) I	I laciories	u u u u u u u u u u u u u u u u u u u

State	Factories requiring SO under 40-B(1)	SO required under 40- B(1)	Factories appointing SO under 40-B(1)	SO appointed under 40- B(1)
Andaman & Nicobar	0	0	0	0
Andhra Pradesh	97	140	81	95
Arunachal Pradesh*				
Assam	3	3	7	11
Bihar	23	42	22	37
Chandigarh	2	2	2	2
Chattisgarh			••	••
Daman & Diu & Dadra & Nagar				
Hawelli	10	15	25	15
Delhi				
Goa	4	4	9	12
Gujarat	335	394	342	424
Haryana				
Himalchal Pradesh				
Jammu & Kashmir	3	3	3	3
Jharkhand	179	179	161	161
Karnataka	121	144	94	116
Kerala	31	31	30	30
Lakshadweep*			••	
Madhya Pradesh	89	104	76	84
Maharashtra				••
Manipur				••
Mizoram*				
Meghalaya	0	0	0	0
Nagaland	3	3	3	3
Orissa	58	132	56	119
Pondicherry	3	3	2	2
Punjab				
Rajasthan	43	43	43	43
Sikkim*				
Tamil Nadu	197	197	149	149
Tripura	1	1	0	0
Uttar Pradesh	227	263	105	127
Uttaranchal	18	13	13	14
West Bengal	252	279	248	259
Total	1699	1995	1471	1706

Note: * Factories Act, 1948 not yet introduced/ No registered factories ... Not available P: Provisional, .. Source: Correspondence with Chief Inspector of Factories of States/UTs

State	Factories	Factories
	Requiring	Having
Andaman & Nicobar	0	0
Andhra Pradesh	0	0
Arunachal Pradesh*		••
Assam	13	13
Bihar	160	112
Chandigarh	2	2
Chattisgarh		••
Daman & Diu & Dadra & Nagar Hawelli	42	50
Delhi		••
Goa	19	12
Gujarat	3743	3379
Haryana		
Himachal Pradesh		
Jammu & Kashmir	18	20
Jharkhand	17	17
Karnataka	981	721
Kerala	576	457
Lakshadweep*		••
Maharashtra		••
Madhya Pradesh	877	820
Meghalaya	36	24
Manipur		
Mizoram*		
Nagaland	0	0
Orissa	376	354
Pondicherry	27	27
Punjab		
Rajasthan	439	365
Sikkim*		
Tamil Nadu	836	699
Tripura	0	0
Uttar Pradesh	4230	1249
Uttaranchal	260	172
West Bengal	560	560
Total	13212	9053

Table 9.7: Declaration of Safety Policy for the year 2006 (P)

Note: * Factories Act, 1948 not yet introduced/ No registered factories .. Not Available P: Provisional

State	Factories	Factories
State	Requiring	Having
Andaman & Nicobar	0	0
Andhra Pradesh	836	752
Arunachal Pradesh*		
Assam	13	13
Bihar	122	104
Chandigarh	2	2
Chattisgarh		
Daman & Diu & Dadra & Nagar Hawelli	47	55
Delhi		
Goa	19	25
Gujarat	3320	3052
Haryana		
Himachal Pradesh		
Jammu & Kashmir	18	20
Jharkhand	17	17
Karnataka	678	553
Kerala	382	331
Lakshawdeep*		•
Madhya Pradesh	563	530
Maharashtra		
Manipur		
Mizoram*		
Meghalaya	20	10
Nagaland	0	0
Orissa	124	124
Pondicherry	29	29
Punjab		
Rajasthan	437	284
Sikkim*		••
Tamil Nadu	1320	1252
Tripura	14	1
Uttar Pradesh	2681	1417
Uttaranchal	260	185
West Bengal	559	559
Total	11461	9315

Table 9.8 : Constitution of Safety Committee for the year 2006(P)

Note: For remaining states Factories Act, 1948 not yet introduced/ No registered factories

.. Not Available

P : Provisional

State	Factories Requiring	Factories Having
Andaman & Nicobar	2	2
Andhra Pradesh	131	126
Arunachal Pradesh*		
Assam	13	13
Bihar	4	4
Chandigarh	0	0
Chattisgarh		
Daman & Diu & Dadra & Nagar Hawelli	0	8
Delhi		
Goa	16	16
Gujarat	530	530
Haryana		
Himachal Pradesh		
Jammu & Kashmir	4	4
Jharkhand	22	22
Karnataka	77	77
Kerala	33	38
Lakshadweep*		
Madhya Pradesh	59	59
Maharashtra		
Manipur		
Mizoram*		
Meghalaya	4	4
Nagaland	2	2
Orissa	31	31
Pondicherry	4	4
Punjab		
Rajasthan	103	103
Sikkim*		
Tamil Nadu	129	110
Tripura	2	2
Uttar Pradesh	115	114
Uttaranchal	15	15
West Bengal	85	85
Total	1381	1369

Table 9.9: On-site Emergency Plan (in respect of MAH Units) as on 2006(P)

Note: * Factories Act, 1948 not yet introduced/ No registered factories

P: Provisional .. Not Available

Source: Correspondence with Chief Inspector of Factories of States/UTs

Table 9.10: Medical Facilities in fa	Full time	Retainership	Factories	Factories
	MO	or part-time	having	having
		MO	Ambulance	Ambulance
State	Appointed	Appointed	Van	Rooms
Andaman & Nicobar	0	0	2	2
Andhra Pradesh	145	0	186	0
Arunachal Pradesh*				
Assam	0	0	0	0
Bihar	33	36	13	28
Chandigarh**	1	1	1	1
Chattisgarh		••		••
Daman & Diu & Dadra & Nagar	1	25	5	8
Hawelli				
Delhi				
Goa	18	7	14	3
Gujarat	188	2918	391	426
Haryana				
Himachal Pradesh	••			••
Jammu & Kashmir	6	0	6	5
Jharkhand	0	0	0	42
Karnataka	196	161	184	273
Kerala	33	57	29	25
Lakshadweep*	••	••		
Madhya Pradesh	83	293	84	109
Maharashtra				
Manipur				
Mizorm*				
Meghalaya	2	17	5	6
Nagaland	0	0	0	0
Orissa	42	20	52	52
Pondicherry	8	22	9	9
Punjab				
Rajasthan	91	0	0	91
Sikkim*				
Tamil Nadu	159	136	150	365
Tripura	1	1	0	1
Uttar Pradesh	495	180	523	136
Uttaranchal	9	36	14	21
West Bengal	329	75	331	315
Total	1840	3985	1999	1918

Table 9.10: Medical Facilities in factories for the year 2006 (P)

Note: * Factories Act, 1948 not yet introduced/ No registered factories P : Provisional. ... Not Available ,

Source: Correspondence with CIFs of states and UT

** Covered under E.S.I. Act.

State	Cant	teen	Shelter, Re Lunch		Creches		
State	Factories Requiring	Factories Having	Factories Requiring	Factories Having	Factories Requiring	Factories Having	
Andaman & Nicobar	3	3	8	8	0	0	
Andhra Pradesh	362	351	518	498	478	410	
Arunachal Pradesh*		••					
Assam	35	63	53	78	18	28	
Bihar	32	31	32	31	2	2	
Chandigarh	5	5	5	5	2	2	
Chattisgarh							
Daman & Diu &							
Dadra & Nagar							
Hawelli	50	65	100	120	85	85	
Delhi							
Goa	21	47	11	120	29	8	
Gujarat	475	467	903	883	196	182	
Haryana							
Himachal Pradesh	••	••					
Jammu & Kashmir	29	37	34	46	1	1	
Jharkhand	40	29	70	70	10	9	
Karnataka	534	507	756	720	1000	876	
Kerala	160	160	304	304	249	249	
Lakshadweep*	••						
Madhya Pradesh	178	176	329	326	46	42	
Maharashtra							
Manipur							
Mizoram*							
Meghalaya	3	2	7	2	3	1	
Nagaland	13	13	15	15	0	0	
Orissa	124	124	152	152	53	36	
Pondicherry	28	28	49	31	3	3	
Punjab							
Rajasthan	142	142	397	397	22	22	
Sikkim*							
Tamil Nadu	1010	989	2112	2059	2332	1967	
Tripura	3	3	3	3	1	1	
Uttar Pradesh	387	272	488	288	143	55	
Uttaranchal	74	74	109	109	30	25	
West Bengal	436	421	677	715	31	31	
Total	4144	4009	7132	6980	4734	4035	

Table 9.11: Canteens, Shelters, Rest Rooms and Creches for the year 2006 (P)

Note: For remaining states Factories Act, 1948 not yet introduced/ No registered factories

.. Not Available, P : Provisional

State/UTs	Factories Requiring	Factories Having	Officers Required	Officers Appointed
Andaman & Nicobar	1	0	0	0
Andhra Pradesh	150	125	179	144
Arunachal Pradesh*				
Assam	4	5	4	89
Bihar	26	24	28	25
Chandigarh	2	2	2	2
Chattisgarh				
Daman & Diu & Dadra & Nagar	4	4	4	4
Hawelli				
Delhi				
Goa	14	12	14	12
Gujarat	296	273	310	283
Haryana				
Himachal Pradesh				
Jammu & Kashmir	4	4	4	4
Jharkhand	60	60	60	60
Karnataka	280	243	322	238
Kerala	49	36	49	36
Lakshadweep*				
Madhya Pradesh	101	101	119	119
Maharashtra				
Manipur				
Mizoram*				
Meghalaya	1	1	1	1
Nagaland	3	3	3	3
Orissa	63	63	121	121
Pondicherry	7	7	10	7
Punjab				
Rajasthan	89	89	95	97
Sikkim*				
Tamil Nadu	338	315	338	315
Tripura	1	1	1	1
Uttar Pradesh	252	204	274	216
Uttaranchal	28	22	29	21
West Bengal	220	220	317	312
Total	1993	1814	2284	2110

Table 9.12: Welfare Officers for the year 2006(P)

 Note: For remaining states Factories Act, 1948 not yet introduced/ No registered factories

 ... : Not available

 P : Provisional

S.No	State/Union territory Model Rules						
1.	Andaman & Nicobar Islands	No hazardous unit, hence Rules Not applicable					
2.	Andhra Pradesh	Notified					
3.	Arunachal Pradesh	The Factories Act is not being implemented.					
		Hence Not Notified					
4.	Assam	Notified					
5.	Bihar	Notified					
6.	Chandigarh	Notified in Punjab Factories Rules					
7.	Chattisgarh	*					
8.	Daman, Diu, Dadra & Nagar Haveli	Under process					
9.	National Capital Territory of Delhi	Notified					
10.	Goa	Notified					
11.	Gujarat	Notified					
12.	Haryana	Notified					
13.	Himachal Pradesh	Not Notified					
14.	Jammu & Kashmir	Not Notified					
15.	Jharkhand	*					
16.	Karnataka	Notified					
17.	Kerala	Notified					
18.	Lakshadweep	No hazardous unit, hence Rules Not applicable					
19.	Madhya Pradesh	Notified					
20.	Maharashtra	Notified					
21.	Manipur	Draft submitted for Govt. approval					
22.	Meghalaya	Notified					
23.	Mizoram	No hazardous unit, hence Rules Not applicable					
24.	Nagaland	Draft submitted for Govt. approval					
25.	Orissa	Notified					
26.	Pondicherry	Notified					
27.	Punjab	Notified					
28.	Rajasthan	Notified					
29.	Sikkim	The Factories Act is not being implemented.					
		Hence Not Notified					
30.	Tamil Nadu	Notified					
31.	Tripura	Not Notified (will be placed before the Govt.					
		approval)					
32.	Uttar Pradesh	Notified					
33.	Uttaranchal	(Not Notified)					
34.	West Bengal	Notified					
··**"	Newly created States	· · · · · · · · · · · · · · · · · · ·					

 Table 9.13: Notification of Model Rules framed under the Factories (Amendment) Act, 1987

 S.No
 State/Union territory

 Model Rules

"*": Newly created States.

S.No	State/Union territory	MAHC Rules, 1997
1.	Andaman & Nicobar Islands	No hazardus unit, hence Rules Not applicable
2.	Andhra Pradesh	Notified
3.	Arunachal Pradesh	The Factories Act is not being implemented. Hence not applicable
4.	Assam	Notified
5.	Bihar	Draft Rules Sent for Publication
6.	Chandigarh	Notified
7.	Chattisgarh	*
8.	Daman, Diu, Dadra & Nagar Haveli	Notified
9.	National Capital Territory of Delhi	Notified
10.	Goa	Notified
11.	Gujarat	Notified
12.	Haryana	Sent for notification
13.	Himachal Pradesh	Not Notified
14.	Jammu & Kashmir	Not Notified
15.	Jharkhand	Notified
16.	Karnataka	Notified
17.	Kerala	Notified
18.	Lakshadweep	No hazardus unit, hence Rules Not applicable
19.	Madhya Pradesh	Notified
20.	Maharashtra	Notified
21.	Manipur	Not Notified
22.	Meghalaya	Notified
23.	Mizoram	No hazardous unit, hence Rules Not applicable
24.	Nagaland	Not Notified
25.	Orissa	Notified
26.	Pondicherry	Draft notification under consideration of Govt.
27.	Punjab	Notified
28.	Rajasthan	Notified
29.	Sikkim	The Factories Act is not being implemented. Hence not applicable
30.	Tamil Nadu	Notified
31.	Tripura	Notified
32.	Uttar Pradesh	Notified
33.	Uttaranchal	Notified
34.	West Bengal	Draft sent for notification

Table 9.14: Notification of Major Accidents Hazard Control Rules

* Newly created States. Source: Correspondence with CIFs of states and UTs

ANNEXURE-I

	UNIT LEVEL CONSULTANCY STUDIES – 2007													
SI. No.	Area	CLIM	UMBAI	RLI KO	OLKATA	RLI C	HENNAI	RLI K	ANPUR		RLI DABAD			
		Comp-	Under	Comp-	Under	Comp-	Under	Comp-	Under	Comp-	Under			
		leted	Progress	leted	Progress	leted	Progress	leted	Progress	leted	Progress			
1	2	3	4	5	6	7	8	9	10	11	12			
1	Safety Audit	4	3	6	4	1	-	4	-	-	-			
2	Occupational Health	-	-	1	-	-	-	-	-	-	-			
3	Airborne Contaminants	12	3	1	-	-	-	-	-	-	-			
4	Noise Level	2	-	-	-	-	-	-	-	-	-			
5	Ventilation study	2	-	-	-	-	-	-	-	-	-			
6	Maximum Credible Loss Scenario	-	-	-	-	-	-	-	-	-	_			
7	HAZOP	2	1	-	-	-	-	3	-	-	-			
8	Safety Audit- MAHC	8	1	-	-	-	-	-	-	-	-			
9	Risk Assessment	-	-	-	-	1	-	-	-	-	-			
10	Ergonomic Evaluation	9	-	-	-	-	-	-	-	-	-			
11	Heat Stress	-	-	-	-	-	-	-	-	-	-			
12	Industrial Hygiene Survey	-	-	1	-	-	-	1	-	-	-			
13	Dispersion Modeling	-	-	-	-	-	-	-	-	-	-			
14	Environmental Conditions	-	-	-	-	-	-	-	-	-	-			
	Total:	38	8	9	4	2	-	8	-	-	-			

UNIT LEVEL CONSULTANCY STUDIES – 2007

ANEXTEI

LOOPRDRAID IRANGHORAMAS-207

S	PatiopatsadAca	CI M				RICH	NA MA	RIK			TOBAD	D	HOS
•	•						•		1		•		
		Roga	Patio-	Aga	Partici-	Aga	Patici-	Roga	Patici-	Acga	Patici-	Acga	Patio-
		nmas	parts	nmas	parts	nnes	parts	nmas	parts	rimes	parts	nme	parts
A	InputosofFatories												
	Basic	1	126)	1	11(11)	-	-	-	-	-	-	-	-
	Rieterause	1	6(4)	-	-	-	-	-	-	-	-	-	-
	Cremical	-	-	1	11(8)	-	-	-	-	-	-	-	-
	Reference MAHC	-	-	-	-	1	149)	-	-	-	-	-	-
B	StayClicas												
	ADS	1	53(4)	1	17(15)	1	44(38)	1	3(3)	-	-	-	-
	Rhehrare	-	-	-	-	-	-	-	-	-	-	-	-
C	FatoyMelel Cilices												
	ATH	1	54(51)	1	12(12)	-	-	-	-	-	-	-	I
	Reference	-	-	-	-	-	-	-	-	-	-	-	-
D	Magnat Resond												
	Indutrial Safety	5	115(85)	-	-	1	19(15)	1	20(11)	-	-	-	-
	Indutial Hgiere	2	38(14)	-	-	-	-	-	-	-	-	-	-
	Caption Health	3	6250	1	24(17)	-	-	-	-	-	-	1	53(11)
	Indutrial Physiology	9	95(49)	-	-	-	-	-	-	-	-	-	-
	Egonius	2	24(10)	-	-	-	-	-	-	-	-	-	-
	Saf Tianing	4	69(24)	-	-	-	-	-	-	-	-	-	-
	Indutial Productivity	-	-	-	-	-	-	-	-	-	-	-	-
	IndutryBychology	-	-	-	-	-	-	-	-	-	-	-	-
	MAC	1	1910)	-	-	-	-	1	21(8)	-	-	-	-
	HAOP	-	-	-	-	-	-	-	-	-	-	-	-
	Hzachssbares	-	-	2	4626)	-	-	-	-	-	-	-	-
	HzachsRoeses	-	-	1	30	-	-	1	22(18)	-	-	-	-
	Riskassessnært	-	-	-	-	-	-	-	-	-	-	-	-
	ConstructionSafety	-	-	-	-	-	-	-	-	-	-	-	-
	Environmental Rilutants	1	21(8)	1	189)	-	-	-	-	-	-	-	-
E	TraceUtionLeades/vorkers	Jint Pat	iciption							•			
	Indutrial Safety	-	-	1	45(1)	-	-	1	199)	-	-	-	-
	Staf Training	-	-	-	-	-	-	-	-	-	-	-	-
	Indutial Productivity	-	-	-	-	-	-	-	-	-	-	-	-
	Ind. Rychology	7	140(42)	-	-	-	-	-	-	-	-	-	-
	HzachsSibtanes	-	-	-	-	-	-	-	-	-	-	-	-
	Cienical Safety	-	-	-	-	1	26B)	1	187)	-	-	-	-
	Figurnius	-	-	-	-	-	-	-	-	-	-	-	-
	DakSafety	-	-	-	-	-	-	-	-	-	-	1	35(1)
	Tital:	38	78(39)	10	18(10)	4	11875)	6	13283)	-	-	2	8(12)

Nie: Figues inhadet indet en nherofognisations

ANNEXURE- III

IN SI.	COMPANY Participants and Area	CLIM		RLI KO		RLI CH	IENNAI	RLI KA	ANPUR	RI FARID	LI ABAD
No.		Progra- mmes	Partici- pants								
A.	Management l	Personnel									
	a) Industrial Safety	18	408 (18)	-	-	-	-	-	-	-	-
	b) Occupati- onal Health			-	-	-	-	-	-	-	-
	c) Industrial Physiology	1	37 (1)	-	-	-	-	-	-	-	-
	d) Industrial Ergonomics	3	135 (3)	-	-	-	-	-	-	-	-
	e) Productivity	-	-	-	-	-	-	-	-	-	-
	f) Staff Training			-	-	-	-	-	-	-	-
	g) Industrial Psychology	2	51 (2)	-	-	-	-	-	-	-	-
	h) MAHCA			-	-	-	-	-	-	-	-
B.	Trade Union L	eaders/wor	kers/ Joint]	Participatio	n						
	a) Industrial Safety			-	-	-	-	-	-	-	-
	b) Industrial Hygiene	-	-	-	-	-	-	-	-	-	-
	c) Occupational Health	1	35(1)	-	-	-	-	-	-	-	-
	d) Industrial Psychology	1	25(1)	-	-	-	-	-	-	-	-
	e) Dock Safety			-	-	-	-	-	-	-	-
	Total:	26	691 (26)	-	-	-	-	-	-	-	-

IN COMPANY TRAINING PROGRAMMES - 2007

Note: Figures in bracket indicate number of organisations.

Standard Reference Note of DGFASLI 2007

ANNEXURE-IV

SI.	Participants and Area	CLIM	UMBAI	RLI KO	IKATA	RLI CH	IENNAI	RLI KANPUR		INSP-DOCK SAFETY	
No.		Progra- mmes	Partici- pants	Progra- mmes	Partici- pants	Progra- mmes	Partici- pants	Progra- mmes	Partici- pants	Progra- mmes	Partici- pants
1	Industrial Safety			3	53 (3)						
2	Industrial Hygiene	1	18 (8)	3	65 (15)						
3	Dock Safety			1	15 (1)					7	84 (25)
4	Industrial Ergonomics	2	82 (2)								
5	Industrial Physiology	3	69 (3)								
6	Industrial Psychology	2	44 (2)								
7	МАНСА										
	Total:	8	213(15)	7	133 (19)					7	84 (25)

SHORT DURATION (1-2days) TRAINING PROGRAMMES - 2007

Note: Figures in bracket indicate number of organisations

Standard Reference Note of DGFASLI 2007

List of Contact Officers

APPENDIX-III

As	on	29.4.2008
	• • • •	

		AS 011 23.4		
Sl.No.	Name and Designation	Office	Residence	
А.	DIRECTORATE GENERL FACTORY ADVICE SERVICE & LABOUR INSTITUTES	PBX No. 91-22-24092203		
	1. Shri. S.K.Saxena, Director General	24074358	24091526(D)	
	2. Shri S.G.Darvhekar, Deputy Director General and CPIO	Ext-203	24073760(D) Ext.207	
	3. Dr. A.K. Chakrabarti, Deputy Director General	226		
	4. Shri G.M.E.K. Raj, Director (Safety), In-Charge Dock Safety Division & MIS	Ext-270		
	5. Shri K. Balasubramanium, Director (Safety), In-Charge Awards Division	Ext-290		
	6. Shri. V.B. Sant, Director (Staff Training /Productivity), In-Charge Factory Advice Service Division	Ext-263	24037532(D) Ext.333	
	7. Shri B.D.Dubey, Director (Industrial Hygiene)	273	206	
B.	CENTRAL LABOUR INSTITUTE, MUMBAI	PBX No. (022) 24092203		
	1Shri. P.C. Ghosh, Director (Industrial Physiology), In-Charge Industrial Physiology &Ergonomics	Ext-309	Ext-217	
	 Dr. M. Rajaram, Director(Staff Training), In-Charge Staff Training, Productivity and Small Scale Cell 	Ext-291	Ext-214	
	3. Dr. R.B.Raidas, Director (Industrial Medicine), In-Charge Industrial Medicine Division	Ext-247	Ext-210	
	 Dr. S.S.Waghe, Director (Industrial Medicine), In-charge Cell for Monitoring Silicosis 	Ext- 250		
	5. Shri. S. S. Gautham Director(I.H), In-Charge MAHCA, and Env. Engg. Division and Rajbhasha Adhikari	Ext-256	208	
	6. Shri.P.B.Pal Director(I.H), In-Charge Industrial Hygiene Division	Ext- 255	215	
	7. Shri. H. Viswanathan, Director (Safety), In-Charge Industrial Safety Division and Communication	Ext-233		
	8. Dr. R.K.Elangovan, Director (Safety), In-charge Safety Division (Safety Audits, Safety Centre & Workshop)	232		
	 Shri P.K.Mohanty, Deputy Director (Ind.Psy.) In-charge Industrial Psychology & HOO 	305	219	
С	REGIONAL LABOUR INSTITUTE, KOLKATA			
	Shri. U.K. Das, Director –In-Charge & Head of Office	25343254 26342735 25342732	25345547	
D	REGIONAL LABOUR INSTITUTE, KANPUR		1	
~	Shri S.B.Mathur, Director-In-Charge	2218691	2235941	
	& Head Of Office	2218692 2218745	2219355	
Е	REGIONAL LABOUR INSTITUTE, CHENNAI		1	
	Shri. S. Bharathi, Director-In-Charge & Head Of Office	22355690 22350737	-	
		22351569		
F	REGIONAL LABOUR INSTITUTE, FARIDABAD	0.4070.54	1	
	Dr A. Singh, Director (Industrial Psychology)	2437064 2439022	-	

Sl.No.	Name and Designation	Office	Residence				
G	INSPECTORATE DOCK SAFETY, MUMBAI						
	Shri. B N. Jha, Deputy Director (Safety)	022-22613391	23759989				
	& Head of Office	22692180					
Η	INSPECTORATE DOCK SAFETY, KANDLA						
	Shri., V.J. Gonsalves, Addl. Asstt. Director(Safety),	02836-270249	270724				
	& Head of Office						
Ι	INSPECTORATE DOCK SAFETY, MORMUGAO						
	Shri D. Gnanasundaram, Addl.Asstt.Director(Safety)	0832-2517334	-				
	& Head of Office (IDS Mormugao)						
J	INSPECTORATE DOCK SAFETY, JNP						
	*	022-27471584	-				
K	INSPECTORATE DOCK SAFETY, KOLKATA						
	Shri. Amar Singh, Deputy Director (Safety)	033-22830718	26225840				
	& Head of Office	22830719					
L	INSPECTORATE DOCK SAFETY, PARADIP						
	Shri S.N. Ghosh, Addl. Asstt. Director(Safety)	06722-222413	222368				
	& Head of Office						
Μ	INSPECTORATE DOCK SAFETY, VISAKHAPATNAM						
	Shri. K.S. Patkotwar, Addl. Asstt. Director (Safety)	0891-2563857	2559854				
	& Head of Office						
Ν	INSPECTORATE DOCK SAFETY, CHENNAI	1					
	Shri. G. P. Nijalingappa, Deputy Director (Safety)	044 -25220888	25362687				
	& Head of Office	25246419					
0	INSPECTORATE DOCK SAFETY, TUTICORIN						
	Shri. K. Sukumaran, Asstt. Director (Safety)	0461-2352372	2252272				
	& Head of Office						
Р	INSPECTORATE DOCK SAFETY, COCHIN						
	Shri B.S. Chavan, Addl. Asstt.Director(Safety)	0484 -2666532	2667068				
	& Head of Office						
Q	INSPECTORATE DOCK SAFETY, NEW MANGALORE						
	Shri. Karunesh Shrivastava, Addl. Asstt. Director (Safety)	0824 -2407781	2407857				
	& Head of Office						

* Operated from Inspectorate Dock Safety Mumbai.