CHAPTER 4

CURRENT SCENERIO

4.1 Failure of Government

Despite the fact that ICMR as well as NIOH have highlighted again and again that there are incidents of upto 54% silicosis in factories and mines in India, none of the state Government acknowledges the existence of it and there are no cases reported to DGFASLI or DG mines and safety in last 2 years. However independent studies by DGFASLI DG mines and safety and various NGO's and research groups clearly established not only the existence but also the death due to it. In fact there is hardly any figure available with central and state government on silicosis. There are many reasons for it.

4.1.1 The majority of the working population belongs to the unorganized sector, which is not in the purview of current legislation in occupational health. Accidents, despite being visible, are still grossly underreported in the Indian context. The reporting of insidious occupational diseases therefore stands little chance. If we analyse the details of the workers who die because of their work environment, we would find that, surprisingly, most of them succumb to occupational diseases like silicosis and other work-related illnesses. This is contrary to the common belief that most work-related deaths are caused by accidents. In most places, occupational safety and health invariably means prevention of accidents; very little attention is paid to occupational diseases. Therefore, an accident-free workplace by no means implies a safe workplace.

4.1.2 Occupational diseases -- including silicosis caused by various

materials in the workplace, including asbestos, carcinogenic (cancer-causing) chemicals, silica, cotton, dust, and radiation, job stress and work shifts -- usually take a long time to develop (from a few months to more than 10 years). And given changing work practices, most industries tend to hire workers on short-term contract. By the time they develop a disease, therefore, it is almost impossible to link it to their work.

4.1.3 Not many doctors are able to correctly diagnose an occupational disease. In fact, in most of the cases, silicosis are often wrongly diagnosed as tuberculosis. In a community where having a doctor is a privilege, an OSH specialist is simply out of the question.

4.1.4 The National Policy on Safety, Health and Environment at Workplace was declared in February 2009 seeking to cover the formal and informal sectors. However, the policy does not have detailed guidelines to enable enforcement of health and safety at workplace. Further, there is a dearth of research and statistics on incidence/prevalence of occupational diseases and injuries in the country (SWITCH Asia 2010).

4.1.5 The informal sector has blurred boundaries between home and workplace of the workers, since they often undertake agricultural or cottage industry activities within their homes. Only 5 to 15 percent of the population has access to any form of occupational health services.

4.1.6 It is quite shocking the there is no budgetary allocations under the National Policy on Safety, Health and Environment at work place either with the Labour Ministry, which is the principal Ministry under the National Policy to monitor the compliance or with various line ministries or the State Governments to ensure

compliance with the mandate of the Policy. Not only the National Policy on Safety, Health and Environment, the overall allocation for OSH is extremely low. Although the Government of India had formulated several policies for Occupational Health & Safety in different times, the sufferers could not reap the benefits due to the poor implementation of those policies. The National Human Rights Commission held a meeting under Chairmanship of Justice Dr. Shivraj V. Patil, Hon'ble Member with the Secretary, Ministry of Labour & Employment in April 2007. The meeting was attended by senior officials from Ministry of Labour & Employment and its attached & subordinate offices. It was then decided that a national programme on elimination of silicosis in all occupations should be prepared and implemented. The expenditure involved in the proposed project shall be met from the plan scheme of the DGFASLI under the XII Five Year Plan. It was also decided that the total budget for the remaining three years of the XI Plan would be Rs. 14.21 Crore for all the States. But even after a few years, no significant improvement has been be taken place. This could be found it by scrutinizing the budget documents as all the policies/ programmes are reflected in the Government Budget.

The Detailed Demand for Grants shows that Ministry of Labour & Employment allocated Rs. 72.17 crore in 2010-11 (Budget Estimates) on the major Head **Working Condition & Safety.** Under this Major Head, Rs. 8.73 crore was allocated for **'Strengthening of DGFASLI & Occupational Safety and Health in Factories Ports and Docks'** and only Rs. 3 lakhs was earmarked for medical treatment. Rest of the amount, i.e., major share of the Rs. 72.17 crore was meant for Salaries, Domestic Travel Expenses, Office Expenses, Advertising and other minor works.

As per the proposed National Silicosis Control Programme, Ministry of

Labour & Employment is supposed to allocate total **Rs. 14.21** crore in 2009-10, 2010-11 and 2011-12 budgets to run the scheme **'Identification and Elimination of Silicosis in India.'** However, in the last two budgets there was only some token allocation of Rs. 9 lakhs in each year and the entire amount was meant Domestic Travel and Office expenses.

As far as the Ministry of Health & Family Welfare (MoHFW) is concerned, there is no separate allocation for occupational health. However, ministry allocates certain amount of money for the Indian Council of Medical Research (ICMR). Out of this, ICMR spends some amount of funds for National Institute of Occupational Health (NIOH). This is the only policy driven allocation from the MoHFW for occupational health. But the budgets of NIOHs are not visible in the detailed demand for grants of MoHFW. Except this, there might be some other expenditure from the ministry as well. Say for instance, MoHFW allocates some amount of funds for the ***Lala Ram Swarup Institute for TB & Allied Diseases and VallabhBhai Patel Chest Hospital.*** From these kinds of expenditures, silicosis patients can be benefited. However, allocations are small and only a very small fraction of those go to occupational health. Also, there is no budgetary allocations under the National Policy on Safety, Health and Environment at work place either with the Labour Ministry, which is the principal Ministry under the National Policy to monitor the compliance or with various line ministries or the State Governments to ensure compliance with the mandate of the Policy. Not only the National Policy on Safety, Health and Environment, the overall allocation for OSH is extremely low.

PRASAR, an NGO actively persuing the cause of Silicosis, gather information through Right to Information Act (RTI) about budgetary allocation of various state for occupational health disease and they found that Not a single state

or union territory could provide any information about their budgets for occupational safety and health (Table-15). Even the nodal agencies could not provide any information about their budget. It is quite surprising. Also none of the States/ UTs could provide any information on occupational diseases. Few of them gave some information on fatal and non-fatal injuries. But the figures are very inconsistent compared to the data provided by ILO or such other organizations.

4.1.7 Lack of infrastructure at district level in almost all the states is also reason for high occurrence of silicosis. There are hardly any specialized doctore, or the X-ray machinewih WHO recommended specification which are used for chest x-rays. This results in often misinterpretation of silicosis as tuberculosis and hence treatment for TB which do not help in silicosis. Despite the fact that there is statutory provision for the appointment of Certifying surgeons who are eligible to declare or certify any occupational health disease like silicosis in a worker, the in position of these surgeons in various state reflects that occupational health hazards have been at the least priority for various state government. where life of lakhs and lakhs workers employed in these hazardous job is at the risk, there are hardly any availability of medical practitioners and Certifying Surgeons who are competent enough to diagnose and certify any occupational disease like silicosis. The basic provisions like availability of ambulance vans , compounders ambulance room etc are also not provided by the employers as can be seen from the information gathered by DGFASLI(Table- 13)

4.1.8 Interaction with Shri S.S.Waghe, director in the office of DG FASLI revealed that thought silicosis is very much prevelemt in India, no case has been reported in last two years. This is because there are no specialized Medical officer with the office of DG FASLI or DG mines & safety and with limited numbers of 5/6

docotors, it is difficult to cover whole of the country and state have not show any inclination to recruit specialized doctors. It was further revealed that though Act empowers them to inspect any Factory premises without notice but in practice, it is not possible as Factory Inspector who is appointed by state is the one whose presence is often necessary for visit and many times there is hardly any cooperation. Regulatory bodies, including the inspectorates, are ill-equipped and severely understaffed. According to a DGFASLI report (1998), the country has 1400 safety officers, 1154 factory inspectors, and 27 medical inspectors. These numbers are grossly inadequate even for the inspection of formal units that only employ about only 8 percent of India's total workforce, leaving apart 92% workforce in informal units.

4.1.9 Authority for occupational safety and health is allotted to Ministry of Labour under the Government of India allocation of Business Rules. The Ministry of Labour, Government of India and Labour Departments of the State and Union Territories are responsible for overseeing the safety and health of workers. Directorate General of Mines Safety (DGMS) and Directorate General Factory Advice Services & Labour Institutes (DGFASLI) also assist the Ministry in the technical aspects and enforcement of occupational safety and health legislation in mines, factories and ports sectors, respectively. Every state has an office of Chief Inspector of Factories who is responsible for enforcement of Factories Act, 1948. The health surveillance of workers is carried out by factory management and cases of notified diseases, including silicosis, are to be reported to the Chief Inspector of Factories. All factories, unless specifically exempted, are covered by ESI Act which regulates medical and other benefits to the employees and compensation for occupational diseases through Employee State Insurance Corporation. DGFASLI advises the Union Government on matters relating to Factories Act, 1948. It also

conducts surveys and studies relating to occupational health hazards and detection of occupational diseases. Similarily, the office of Directorate General of Mines Safety (DGMS) under Ministry of Labour,, Government of India is responsible for enforcement of Mines Act, 1952. The organization is headed by the Director-General of Mines Safety. The health surveillance and medical examination of workers are primarily the responsibility of mine management. Inspectors from Directorate General of Mines Safety, inspect the mines for compliance with provisions of Mines Act and subordinate legislations. The officers from Occupational Health Cadre of DGMS specifically inspect and evaluate medical records of mining companies for occurrence of occupational diseases. However there is no central body which can coordinate between various ministries like Ministry of health, labour, environment, various central and state enforcement agencies and this result in exploitation of labour.

4.1.10 The regulatory agencies because of their limited manpower and resources are not able to enforce the statutory requirements for detection, prevention and control of silicosis. Effective enforcement of regulation requires enforcement efforts to be well targeted and focussed. In the absence of basic information on the nature and level of exposure and preventive measures undertaken by firms in various sectors, it is difficult for the regulators to set priorities for enforcement. There is also a lack of accountability on the part of enforcement agencies for detection of silicosis. Monitoring by the agencies is poor and the lack of comprehensive data/information exacerbates the problem. Regulatory bodies, including the inspectorates, are ill-equipped and severely understaffed and inadequate even for the inspection of formal sector units that only employ about 8-10 per cent of India's total workforce. The fines and penalties for non-compliance, if any, are low, and the penalty structure is insensitive to the degree of default or the

pattern of offence (occasional or repeated violations). Air monitoring is necessary to determine if inspected enterprises are in compliance with Indian silica exposure limits for workers. The technical ability of the enforcement agencies in India to measure silica dust in the work environment is limited. Regulators have no access to proper sampling equipment and accredited analytical laboratories.

4.1.11 There is also a lack of accountability on the part of enforcement agencies. This may, among others, stem from the lack of clear measurable targets set for them, absence of mechanisms for evaluation of monitoring and enforcement systems, lack of awareness, and training.

4.1.12 Government procurement practices fail to adequately take into account silica dust hazards. As most large infrastructure projects including highways, roads, dams, railways, and many buildings are designed and purchased with public sector resources, there is an opportunity to impact dust control practices. These projects consume large amounts of rock and other construction materials with silica, which creates a direct link between government and the silica dust problem. Currently general guidelines are in place that fails to specify the nature and extent of dust controls necessary to sufficiently reduce exposures.

4.1.13. National efforts on TB control fail to incorporate prevention initiatives such as silica dust controls. No coordinated efforts are being made to provide drug therapy to people with silicosis. There is general lack of awareness among workers and employers about occurrence of silicosis. There appears a trade-off between livelihood and health risks about which workers are under-informed/ misinformed. Unfortunately, many workers are either employed as temporary or through middle man (not a licensed contractor) where provisions of Factory Act and ESI Act are not implemented, so are not benefitted by these Government schemes.

4.1.14 Apart from lack of infrastructure facilities for diagnosis of silicosis and awareness among medical practitioners, one of the reason why cases of silicosis are not diagnosed, misdiagnosed, and/or treated as tuberculosis is that there is a disincentive to diagnose silicosis cases as that can trigger compensation under insurance schemes, which is not the case with a diagnosis of TB. Even the Employees' State Insurance Corporation (ESIC), which has its own dispensaries and hospitals, fails to diagnose and/or reporting cases of silicosis. Moreover, there is also no compensation provided to workers who develop silica related disease after they leave insurable employment.

4.1.15 Environmental guidelines and regulations fail to protect communities from exposure to silica dust. Furthermore, these regulations are sometimes counterproductive by forcing industries to spread out over larger areas by mandating minimum distances that they must be from adjacent stone crushers. Large numbers of facilities are also built and operate without approvals. Other limitations in existing siting regulations include:

a. Lack of requirements for securing a water source and/or adequate electricity.

b. No specific requirements for dust control systems, or rigid barriers and enclosures around facilities.

c. No provisions restricting "temporary" residential dwellings from being located on worksites (e.g., construction or stone crusher sites).

4.1.16 Many cases of silicosis are not notified to enforcement agencies by industry. Limitations in reporting system and data collection and thus poor and unreliable statistics on the incidence and prevalence of silicosis also makes it difficult for the government to come up with effective strategies in terms of the

design and monitoring and enforcement of regulation, victim compensation, and allocation of resources.

4.1.17 There is no central registry for cases of silicosis. Limitations in the reporting system, data collection and the unreliable statistics on the incidence and prevalence of silicosis also makes it difficult for the government to come up with effective strategies in terms of both the design, monitoring and enforcement of regulation.

4.1.18. Medical examinations and health surveillance are not carried out by industry. There is also a lack of public resources to provide medical services and adequate screening and diagnositic testing for silica-related diseases. Workers do not report cases of silicosis for the fear of losing the job. There are no penalties for retaliation or for dismissing a worker who reports an occupational disease that would subject the individual to possible compensation under workers compensation insurance. The country has been slow to adopt protective conventions under the International Labour Organization (ILO). Although the principal health and safety laws have been amended from time to time to bring in more detailed safety provisions for workers, these have lagged in adopting effective interventions promoted by various international conventions and successfully implemented by a number of countries. For instance, the ILO has 18 conventions that are targeted at addressing the issue of occupational safety and health (OSH). Though India has ratified 41 ILO conventions and treaties on labor welfare and labor rights to date, it has ratified only three conventions on OSH.

4.2 Lacunaes in Laws

The Constitution of Indian, in its directive principles, recognizes the right of

workers to live with safety and dignity. However, despite series of Labour laws related to working hours, conditions of service and employment in India (Appendix 1) and International Labour Organization Conventions ratified by India(Appendix 2), the conditions of workers employed in Hazardous factories and mines is very pathetic and there is more or less complete failure in the compliance of statuary provisions leading to the gross violation of their Rights to have dignified life including right to health. In fact, existing legislation, policies and rules protecting workers are grossly inadequate as they cover only four sectors - factories, mining, ports, and construction. Again, much of this legislation covers workers in larger enterprises employing more than a certain number of workers. The Factory Act (1948), for instance, covers only those registered establishments employing more than 10 people with aid of power or 20 people without the aid of power. More than 90 percent of the Indian labour force does not work in factories and hence they fall outside the purview of the act. The act provides guidelines on working conditions in hazardous places, but does not have provisions to safeguard workers' rights against occupational disease and related hazards. A number of occupational health and safety laws are applicable only in a fragmented manner. These regulations have specific objectives to cover the problems of occupational health and safety to a limited extent. Some of the legislation covers all workers but in practice the rules have been blatantly violated by the employers in providing occupational health and safety facilities to informal workers in small enterprises (SWITCH Asia 2010).

The scrutiny of information/ data collected by DGFASLI in 2009 on the status of safety and health measures as well as the compliance level with the statutory standards in factories state wise reveals that:

1. there are 324761 registered factories across the country of which

270294 are working, employing 13,100,129 workers. However against this huge work force there are only 2642 safety officers (Table 9), 3096 welfare officers (Table 14) and only 6809 Factory Medical Officers(Table 13) which speaks about the status of non compliance of the statuary provisions related with appointment of these key persons in the factories as per factories Act 1948 and related Rules. Despite being mandatory, of 70294 working factories only 1920 factories have on site emergency plans. (Appendix 3)

2. As per DGFASLI report (Table 3) of total 324761 factories registered across the country, there are approximately 24046 hazardous factories, employing about 1949977 workers. Data collected by them further reveals that there are only 938-sanctioned post of Inspector of Factories to supervise these factories of which only 604 are in position. Interestingly the states like Gujrat, Maharashtra, Jharkhand, Chhattisgarh, Uttar Pradesh, Haryana etc where the number of hazardous factories (Table 4&5) as well as cases of silicosis have been reported in large number, not only the post sanctioned are very low but even they are not filled. For e.g in Chhattisgarh, there are 619 Hazardous industries having 115858 worker employed in these factories but there are only 15 sanctioned post of Inspector of Factories of which only 7 are in position. Similarly in Gujrat and Maharashtra, there are 5871 and 4944 hazardous factories with sanctioned post of 124 and 131 Inspectors of Factories against which 46 and 69 Inspectors are in position respectively. With few inspectors to supervise the compliance of the various provisions by employers or owners, the implementation becomes faulty. The perusal of records (Table 7) shows that of total 24046 hazardous factories across the country, only 13468 were inspected by Inspector of Factories in 2009.

3. Apart from the Inspectors of Factories, there are statutory provisions

for appointment of specialized Inspectors like Medical Inspector, Chemical Inspectors and Hygiene Inspectors but the information collected by DGFASLI clearly reflect that most of the state either do not have sanctioned post or even if they have, it is not filled. (Table 5)

4. Despite the fact that there is statutory provision for the appointment of Certifying surgeons who are eligible to declare or certify any occupational health disease like silicosis in a worker, the in position of these surgeons in various state reflects that occupational health hazards have been at the least priority for various state government. where life of lakhs and lakhs workers employed in these hazardous job is at the risk, there are hardly any availability of medical practitioners and Certifying Surgeons who are competent enough to diagnose and certify any occupational disease like silicosis and without the certification worker will not be eligible for the medical treatment as well as compensation as well as rehabilitation package if he is not in position to continue with his work.(Table 6)

5. The perusal of Data collected by DGFASLI regarding state wise Prosecution and Conviction under section 92 &Section 96A for the year 2009 reveals long pendency, slow trial minimum conviction and almost nil imprisonment for the violator of these statutory provision There is more stress on the fine imposed but for a hazardous disease like Silicosis which is a silent killer disease whether mere imposing fine for failure is in commensurate with the culpability of offence where a person is loosing his life, leaving behind his family depending upon him for their survival is an area of concern. (Table 8) E.g In Gujrat there were previous pending cases to the tune of 24866 with about 1344 cases added during year 2009 but of this only 942 cases were decided in year 2009 resulting in conviction of 690 people. However there is not a single case of imprisonment and all this conviction resulted into imposition of fine only.

Hence, Despite all the constitutional and legal provisions, there is rampant cases of silicosis and as has been observed by the civil societies Court as well as NHRC, the states are in denial mode of accepting the existence of this killer disease because the disease is actually not reported because of various reasons like:-

1) its reporting does not suits worker, employer, health care institution as well as enforcement agencies.

2) The occupational health and safety under the law is responsibility of concerned factory or mines and not the state, including health surveillance of risky group and in case of victims there rehabilitation as well as compensation. DGFASLI and DGMS are concerned monitoring agencies again it is the duty of the concerned industry to notify the existence of disease and not the state. The state agencies are only responsible for enforcement of law,

3) The employer has been assighned the task of pre-employement medical check-up, yearly medical check-up, free medical treatment to ill worker and providing suitable rehabilitation package tp worker with permanent disability find it not cost effective it they comply with these provisions. One should not forget that maximum benefoit is the most important criteria for the employer/ owner.

4) The fact that failure to comply with law by employer and failure to notify the disease is not an offence in the law is one of the biggest drawback in the law as all the liabilities have been given to the employer but without any accountability or deterrence.

5) Even at Government level there are multifarious agencies and ministries like ministry of mines, labour, industry health as well as state government but there is no common coordinating agency to approach this problem in an integrated way. Every state has an office of Chief Inspector of Factories who is responsible for enforcement of Factories Act, 1948. The Act is enforced by Chief Inspector of Factories in the State through offices in important cities and industrial areas headed by Director of Factories. Inspectors of Factories visit the factories for compliance from time to time and report to the Director of Factories. A notice for improvement is given to the factory management whenever short comings are observed and if necessary take legal action can be taken against the factory. The health surveillance of workers is carried out by factory management and cases of notified diseases, including silicosis, are to be reported to the Chief Inspector of Factories. All factories, unless specifically exempted, are covered by ESI Act which regulates medical and other benefits to the employees and compensation for occupational diseases through Employee State Insurance Corporation. DGFASLI advises the Union Government on matters relating to Factories Act, 1948. It also conducts surveys and studies relating to occupational health hazards and detection of occupational diseases. Similarily, the office of Directorate General of Mines Safety (DGMS) under Ministry of Labour,, Government of India is responsible for enforcement of Mines Act, 1952. The organisation is headed by the Director-General of Mines Safety. The field organisation has a two-tire network of field offices. The entire country is divided into six-zones, each under the charge of a Deputy Director-General with regional offices under each zonal office. The health surveillance and medical examination of workers are primarily the responsibility of mine management. Inspectors from Directorate General

of Mines Safety, inspect the mines for compliance with provisions of Mines Act and subordinate legislations. The deficiencies observed during inspections are pointed out by issuing a violation letter and the management is asked to rectify the deficiencies within specified time. Legal action is also taken against the delinquent mine management for repeated or serious violations. The officers from Occupational Health Cadre of DGMS specifically inspect and evaluate medical records of mining companies for occurrence of occupational diseases. However ther is no central body which can coordinate between various ministries like Ministry of health, labour, environment, various central and state enforcement agencies and this result in exploitation of labour.

6) There is inadequate enforcement of legislation and hardly there is any accountability of enforcement agencies and industries in case of failure

7) Absence of health surveillance programme in industries as well as absence of a central registry to register the cases of silicosis. NHRC is perusing for the health survey of workers for last many years but the state have not responded till date.

8) Lack of awareness among workers, employer as well as enforcement force about the existing legal provisions. Also, in most of the cases, workers are brought through middleman or contractors on contract. They work for small period and then they go back to parent place or other job. The disease like silicosis takes time to develop and by the time worker develop it, he might have changed jobs or place and hence fixing responsibility for treatment or rehabilitation on employer becomes difficult.

9) lack of proper health infrastructure and facilities for diagnosis and management and often interpreting silicosis as tuberculosis and no health surveillance scheme

10) The oldest legally provisioned act is the Factory Act and Mining Act. The Factory Act, 1948 deals with occupational health and safety and with welfare of workers employed in a factory. But only 10 percent of laboures works in factories. The rest 90 percent of the workforce does not come under the Act. This act was amended in 1987 after the Bhopal gas tragedy. A special chapter on occupational health and safety was added to take care of the workers of hazardous industries quite shocking.

4.3 National Policy for Occupational Health 2009

After the Bhopal gas tragedy, amendments were made in the Factory Act (1987) and this was a turning point for policy making in India on issues of occupational health and safety, especially in hazardous industries. In later years, the view has gained ground that besides the normative argument for ensuring minimum conditions of work for all workers, there are also strong economic arguments for providing these conditions. Improved working conditions will result in better health conditions and improved productivity of the workers. As a result of increasing pressure on the Government, the Planning Commission of India constituted a working group on occupational health and safety. The Directorate General, Factory Advice Service & Labour Institutes (DGFASLI), Ministry of Labour prepared a policy document on the same. The National Commission on Labour drafted a bill in 2002 on occupational safety and health at the workplace seeking to extend a worker's right to safe working conditions in the organized as well as informal sector including the textile and craft sector. The bill however failed to

become an act. In 2004, the National Commission on Enterprises in the Unorganized Sector (NCEUS) set up by the UPA Government, prepared two draft bills – (i) Unorganised Sector Workers Social Security Bill, 2005, and (ii) Unorganised Sector Workers (conditions of work and livelihood promotion) Bill, 2005. While the former one was passed, after several modifications, the latter, dropped. The Government of India declared a 'National Policy on dealing with conditions of work and livelihood promotion was Safety, Health and Environment at Workplace' on 20 February 2009. This policy seeks to protect workers' right to a safe working environment in all units in the organized as well as informal sector. However, this policy at best can only be called a document of intent and hence, at the enforcement level, it is not likely to bring about the desired compliance to health and safety rules at workplace (SWITCH Asia 2010).

The Government of India has adopted the National Policy on Safety, Health and Environment at Workplace. The preamble of the policy states that the fundamental purpose of this National Policy on Safety, Health, and Environment at workplace, is not only to eliminate the incidence of work related injuries, diseases, fatalities, disaster and loss of national assets and ensuring achievement of a high level of occupational safety, health and environment performance but also to enhance the well-being of the employee and society, at large. The policy seeks to bring the national objectives into focus as a step towards improvement in safety, health and environment at workplace performance. There is also proposal to enact a comprehensive Occupational Health and Safety Act which will cover all occupations and a draft Occupational Health and Safety Bill, 2002 19 is under consideration of the government for enactment. The proposed measures include:

- assisting and encouraging State Governments in their efforts to assure safe and healthy working conditions;

- providing for research, information, education, training and statistics in the field of safety and health and for some connected matters.

When enacted, this Act will replace existing rules relating to occupational health and safety when notified by the Central Government.

4.4 Suggestions for changes in existing Laws

The existing statutory provisions have completely failed in giving access to their Rights to worker employed in hazardous work as has been explained in detail in previous paragraphs. Firstly they cover only 8-10 percent of workers deployed in only formal sectors. Secondly, all onus or liability for health and safety of worker including compensation up to rehabilitation has been placed on employer but without an deterrence and accountability for failure. There for, apart from strengthening the health infrastructure and enhancing the man- power of enforcement agencies by Government, there is also urgent need to carry out the necessary changes in the legal provisions, wherever necessary and also to strengthen the implementation of existing provisions in place. Some of the important suggestions in provisions among existing laws are given below;

4.4.1 The Factories Act 1948

- Every person employed in the dangerous operations shall be examined by a medical practitioner possessing requisite qualification within 15 days of employment. No person shall be allowed to work after 15 days of employment unless certified fit for such employment by the medical practitioner.

- The periodic medical examination of the employee. Certificate of fitness and health register shall be kept readily available for inspection by the authority.

- Directions to all the industries to preserve health records of each workman for a period of 40 years from the date of beginning of the employment or 10 years after the cessation of the employment, whichever is later. The Honorable Supreme Court has given this particular direction in case of Consumer Education & Research Centre and others vs. Union of India which deals with Asbestosis.

(Relevant Section: Section 41C)

- All the processes where silica dust is generated is hazardous in nature and therefore they should be notified by all Sate Governments under the factories Act, 1948.

(Relevant Section: Section 85)

- All the manufacturing process/operations where silica dust is generated should be declared as dangerous operations and the state government should frame rules under this provision.

(Relevant Section: Section 87)

4.4.2 The Mines Act, 1952

- Inspection of mines should be made compulsory every six months by the inspectors and the report to be made public. It should be made a part of this statute requirement. Chief Secretary of the State to be responsible for the implementation.

- Rules for inspection of dust producing areas should be framed and implemented with clear mention of all the activities to be inspected upon. The report should be made available to all workers and posted on the website of the concerned authority. Any violations of the prescribed limits should be strictly punished.

- Threshold limits for silica dust environment should be reviewed periodically.

(Relevant Sections: Section 5 to 9 & 11 & 22)

- Occupational Health Survey to be made compulsory after every 6 months

(Relevant Section: Section 9A)

- All inspection reports and information gathered should be made public and the existing secrecy provision should be removed.

(Relevant Section: Section 10)

- There is a need for strict implementation of Section 23. However, fine for not reporting any accident is a paltry sum of Rs 500 or imprisonment upto 2 months. This penalty should be enhanced.

(Relevant Sections: Section 23 and 70)

- Every person employed in the dangerous operations shall be examined by a medical practitioner possessing requisite qualification within 15 days of employment. No person shall be allowed to work after 15 days of employment unless certified fit for such employment by the medical practitioner.

- Each worker working in the hazardous process area should be periodically examined medically after every 6 months on the expenses of the employer. Medical examination should also be carried out at the time of cessation of employment.

- On the basis of above examination, if Silicosis is detected, the same will be notified to the concerned authorities.

(Relevant Section: Section 25, 26 and 27)

4.4.3 Workman's Compensation Act, 1923

- The payment for medical expenses should be made by the employer directly to the hospital/doctor and workers should get cashless treatment facility.

- Amount of compensation is calculated as per disability percentage. For Silicosis victims, this disability should be considered as 100% as per High Court of Gujarat order under case number 3449 of 1999 (Babubhai vs. ESIC)

- Mechanisms for ensuring enforcement of the compensation order should be set-up. Compensation should be delivered within a period of 1 month from the date of order.

- In both the Acts (Employee Compensation Act, 1923 & ESI Act, 1948) a qualifying period is necessary to claim compensation. This has been a hindrance for workers to claim compensation. This should be removed and any worker found to be suffering from Silicosis (no matter for how long the employment was) should be compensated.

(Relevant Sections: Section 3, Schedule II and III)

4.4.5 Employees' State Insurance Act, 1948

- This Act is applicable to the Factories of the organized sector. Suitable amendments are to be made so as to provide the benefit of this Act to all the workers including those in unorganized sector.

- Supreme Court directions in case of Customer Education & Research Centre and others vs. Union of India which deals with Asbestosis should be made applicable with regards to Silicosis-

1. "The ESI Act and the Workmen's Compensation Act provide for payment of mandatory compensation for the injury or death caused to the workmen while in employment. Since the Act does not provide for payment of compensation after cessation of employment, it becomes necessary to protect such persons from the respective dates of cessation of their employment till date. Liquidated damages by way of compensation are accepted principles of compensation. In the light of the law above laid down and also on the doctrine to tortuous liability, the respective factories or companies shall be found to compensate the workmen for the health hazards which is the cause for the disease with which the workmen are suffering from or had suffered pending the writ petitions. Therefore, the factory or establishment shall be responsible to pay liquidated damages to the workmen concerned."

2. "All the factories whether covered by this ESI Act or the Workmen's compensation Act or otherwise are directed to compulsory insure health coverage to every workers."

- Amount of compensation is calculated as per disability percentage. For

Silicosis victims, this disability should be considered as 100% as per High Court of Gujarat order under case number 3449 of 1999 (Babubhai v/s ESIC).

(Section 52A and Schedule III)

4.4 Efforts of Civil Societies:

Where factory, mines management, enforcement agencies and government has failed in looking into the plight of workers effected from silicosis and other occupational hazards, Civil society has played a significant role in promoting occupational safety and health through public interest litigation (PIL). While enforcement of legislation remains inadequate in India, the constitutional right of the people/communities coupled with the Right to Information Act, these organizations have brought this sensitive issue not only to the knowledge of SC and apex human Right Body, NHRC but also has created pressure on government for improvement in enforcement and compliance of the law. In NHRC alone more then 72 cases have been reported There is an overwhelming amount of litigation concerning whether a particular injury or disease is employment-related or not because only conditions acquired on the job come under the provisions of the Workmen's Compensation Act and the Employee State Insurance (ESI) Act. However, a number of litigations have raised issues that are more general in nature but at the core address the fundamental right to safe and healthy work environment. as they relate to possible protections that may be afforded to those occupationally exposed to silica. In addition, these cases can be effective in raising awareness and improving enforcement. Some of the important PIL which brought significant attention towards the plight of workers suffering from occupational health hazards are as follows:-

4.4.1 Consumer Education and Research Centre v Union of India (1995(3) SCC(42)

In Consumer Education and Research Centre v Union of India, (1995(3) SCC 42) the Supreme Court was concerned with the rights of employees in the asbestos manufacturing industry. This was public interest litigation on the work conditions and their health effects on workers. The Supreme Court held that the right to health of a worker is an integral facet of a meaningful right to life. Lack of health denudes his livelihood. The compelling economic need to work in an industry should not be at the cost of the health and vigor of the worker. Facilities and opportunities, as enjoined in Article 38, should be provided to protect the health of the worker. Provisions for medical tests and treatment improve a worker's health, increasing production and making service more efficient. The court further held that continued treatment, while in service or after retirement, is a moral, legal and constitutional duty of the employer and the State. Therefore, health and medical care is a fundamental right.

The court observed that the Employees State Insurance Act and Workmen's Compensation Act provide for payment of mandatory compensation for injury or death caused to the workman while in employment. Since the Act does not provide for payment of compensation after cessation of employment, it becomes necessary to protect such persons from the respective dates of cessation of their employment till date. Liquidated damages by way of compensation are accepted principles of compensation. The court, while allowing the petition, ordered, in respect of the asbestos industry:

1. to maintain and keep maintaining the health record of every worker up to a minimum period of 40 years from the beginning of the employment or 15 years after retirement or cessation of the employment whichever is later;

2. air sampling with membrane filter tests to detect asbestos fibers;

3. ensure coverage to all workers whether by Employees State Insurance Act or Workmen's Compensation Act.

4.4.2 Beedi Worker's Union Vs State of Tamil Nadu (AIR 1993 SC 410)

In this case, the issue was concerned with the work conditions of employees in beedi manufacturing and allied industries. A large number of children are employed in this occupation. The Supreme Court passed directions:

In view of the health hazard involved in the manufacturing process, every worker including children, if employed, should be insured for a minimum amount of Rs 50,000 and the premium should be paid by the employer and the incidence should not be passed on to the workman.

4.4.3 Bandhua Mukti Morcha v Union of India (1984, 3, SCC161; AIR 1984, SC 802)

This matter was concerned with the issue of release of bonded laborers especially from stone quarries in Haryana. The Supreme Court appointed a committee to look into work conditions in stone quarries. The committee's report stated that due to a large number of stone-crushing machines operating at the site, the air was laden with dust making it difficult to breathe. Workers were forced to work and were not allowed to leave the quarries. They did not even have clean water to drink and were living in jhuggies with stones piled one on top of the other as walls, and straw covering the top, which did not afford them any protection against the sun and the rain and which were so low that a person could hardly stand inside them. A few workers were suffering from tuberculosis. Workers were not paid

compensation for injuries caused in accidents arising in the course of employment. There were no facilities for medical treatment or schooling for children. The court held:

It is the fundamental right of every citizen under Article 21 to live with human dignity, free from exploitation. This right to live with human dignity enshrined in Article 21 derives its life and breath from the Directive Principles of State Policy and particularly Clauses (e) and (f) of Article 39 and Articles 41 and 42 and at least, therefore, it must include protection of the health and strength of workers, men and women, and children of tender age, against abuse,

Opportunities and facilities for children to develop in a healthy manner and in conditions of freedom and dignity, educational facilities, just and humane conditions of work and maternity relief. The Supreme Court also issued various directions to the state and central governments; some of the important directions concerning health inter-alia, includes:

1. ensure that mine leasees and stone-crusher owners start supplying clean drinking water to workers on a scale of at least two liters for every worker.

2. ensure that conservancy facilities in the form of latrines and urinals are provided.

3. ensure that appropriate and adequate medical and first-aid facilities are provided to workers.

4. ensure that every worker who is required to carry out blasting with explosives is not only trained under the Mines Vocational Training Rules, 1966 but also holds first-aid qualification and carries a first-aid outfit whilst on duty, as required by Rule 45 of the Mines Rules, 1955.

5. ensure that proper and adequate medical treatment is provided by the mine leases and owners of the stone-crushers to workers employed by them as also to members of their families, free of cost, and such medical assistance shall be made available to them without any cost of transportation or otherwise, and the doctor's fees as also the cost of medicines prescribed by the doctors, including hospitalization charges, if any, shall also be reimbursed to them.

6. ensure that the provisions of the Maternity Benefit Act, 1961, the Maternity Benefit (Mines and Circus) Rules, 1963 and the Mines Crèche Rules, 1966, where applicable in any particular stone quarry or stone-crusher unit, are given effect to by the mine leasees and stone-crusher owners.

7. report all injuries or disease acquired in the course of his employment, and immediately report this fact to the chief inspector or inspecting officers of the central government and/or the state government, and such inspecting officers shall immediately provide legal assistance to the worker with a view to enabling him to file a claim for compensation before the appropriate court or authority.

8. Inspecting officers of the central government, as also of the state government, will visit every stone quarry and stone-crusher unit at least once a fortnight and ascertain whether any worker has been injured or is suffering from a disease or illness. If so, they will immediately take all necessary steps to provide medical and legal assistance.

4.4.4 Peoples Union for Democratic Rights Vs Union of India (1982,3, SCC 235; AIR 1982 SC 1473)

Also known as the Asiad Construction Workers case. A bench of the Supreme Court had expressed that the State is under a constitutional obligation to see that there is no violation of the fundamental right of any person, particularly when he belongs to the weaker section of the community and is unable to wage a legal battle against a strong and powerful opponent who is exploiting him. The central government is therefore bound to ensure observance of social welfare and labor lawsenacted by Parliament for the purpose of securing to the workmen a life of basic human dignity in compliance with the Directive Principles of State Policy. The State of Haryana must therefore ensure that mine leasees or contractors, to whom it is giving its mines for stone quarrying operations, observe various social welfare and labor laws enacted for the benefit of the workmen. This is a constitutional obligation which can be enforced against the central government and the State of Haryana by a writ petition under Article 32 (5).

4.4.5 People's Rights and Social Res. Centre v/s Union of India (writ petition no. 110 of 2006 came for hearing on March 5, 2009).

The National Human Rights Commission, one of the respondents in this case, presented to the court the results of a survey regarding the problem of silicosis which is affecting a large number of people working at the premises of stone crushers, stone quarry, construction work, glass factories, quartz crushing factories, stone mines and other silicon dust producing plants. The preliminary report of NHRC shows that the problem of silicosis is prevalent in many States. The court directed the Ministry of Health and Ministry of Labor, Union of India to extend all further assistance to the NHRC to conduct a more comprehensive additional survey in

this regard. The Supreme Court made the additional order that the NHRC may take up the specific and confirmed cases of persons who are suffering from silicosis and shall recommend providing immediate medical relief to them through the concerned authorities and in case of those persons, who died because of silicosis, may provide for compensation through the concerned authorities. The court noted that the senior counsel appearing for the petitioner shall bring to the notice of the Court on the next date of hearing as to which States are to be impleaded as necessary parties/respondents in this matter. It was directed that this matter be listed for hearing after six weeks.

From the orders of the above cases it can be inferred that the courts have passed broad but clear directions to help improving the work conditions for workers and the overall ambient environmental quality for communities. The rulings have given a clear signal to the market that the costs of prevention and mitigation of occupational health and safety hazards should be borne by those liable under the law. Therefore, PILs can be seen as a significant deterrent for the non-compliant industry at the same time important tool in helping raise awareness among the victims.

5.5 Efforts of NHRC

Taking note of the serious implications associated with silicosis disease and the adverse impact on human rights of people affected by it, as well as considering the fact that a large number of silicosis cases have been brought to the notice of the Chairperson and Members of the National Human Rights Commission, it has taken serious view of the whole issue and is constantly perusing this matter with central ministries and state and central authorities and enforcement agencies. NHRC treats Silicosis is both a health issue and a human rights issue.

It has an impact not only on the right to life but also on the right to live with dignity of all those affected and their families.

Enquiring into the cases reported in NHRC in some of which Commission has also made direct enquiries by sending teams from Its Investigation Division to places in Rajasthan, Gujarat and Madhya Pradesh. it was found that there are umpteen numbers of cases in the country, and that, too, of poor labourers working in the unorganized sector, who have been worst affected by silicosis. A number of them had lost their lives following their protracted illness. Taking into account the grave threat that silicosis poses to the workers; the Commission also organized National Conference to discuss various aspects of this health issue. involving government officials and representatives of non-governmental organizations, followed by subsequent regional meetings to pursue the status of its recommendation.

The NHRC has taken a serious view of the callous approach adopted by the Government, especially at the State level towards silicosis. During the course of one of its National Review Meetings on Health convened on 6 March 2007, the Commission had categorically pointed out that silicosis is an occupational hazard that needs necessary Government intervention involving convergent action of the Ministries of Industry, Labour and Health, the National Institute of Occupational Health and the National Institute of Miners' Health (NIMH). The Commission recommended a comprehensive legislation and an effective operational mechanism to ensure the required care and rehabilitation of all affected persons and their families as well as prevention of further cases.

As a follow-up of its recommendation for convergence, the NHRC organized a meeting of various stakeholders on 24 April 2007. The participants to this meeting

included representatives from the Ministry of Labour and Employment along with its Directorate General of Mines Safety, Dhanbad and Directorate General, Factory Advice Service and Labour Institutes, Mumbai as well as the Ministry of Health and Family Welfare and its National Institute of Occupational Health (NIOH), Ahmadabad. In this meeting, NHRC expressed concern over the fact that even though silicosis is a "notified disease" under the Factories Act, 1948, there is no authentic reporting system pertaining to people affected by silicosis. After extensive deliberations, the following short-term and long-term recommendations were made by the NHRC:

Short Term

- Carry out vigorous publicity campaigns by making use of the electronic and print media at all levels in order to create awareness among workers, employers and medical practitioners about silicosis being a health hazard.

- Identify and monitor States/Union Territories with high number of silicosis cases.

- The identified States/Union Territories should issue a notification under Section 85 of the Factories Act so that the law is applicable also to entrepreneurs employing less than 10 labourers and they along with their employees become aware about their vulnerability to silicosis.

- The case study pertaining to Madhya Pradesh should be thoroughly studied and analyzed in order to comprehend the steps taken by the State with regard to the issue of silicosis prevention, health care and insurance in a convergent and comprehensive manner.

- Collect survey reports already available with different agencies to identify and map pockets with incidence of silicosis. The concerned State Government officials should then be summoned by NHRC for monitoring of steps being taken by them.

- Work towards removal of existing deficiencies in the context of silicosis prevention in the States/Union Territories including the enforcement machinery so as to ensure their overall efficacy.

- The Ministry of Labour and Employment to prepare a background paper for launching a national programme for eradication of silicosis.

- Work out a compensation package for victims of silicosis or next of kin affected by silicosis as well as its modalities.

- Invite select NGOs to share their experience of combating the problem of silicosis.

Long-Term

- Deliberate on the adequacy of existing laws and whether there is a need for separate/specific legislation on the issue.

- Constitute a National Working Group or a National Task Force or a National Core Group on Silicosis. The concerned Group or Task Force must work within the given time-frame and make recommendations which in turn may be taken-up with the Central/State Governments, as the case may be.

Constitution of National Task Force

In response to the above recommendations, the NHRC constituted a National Task Force on Silicosis under the chairmanship of one of its Members. The Task Force convened its first meeting in the NHRC on 6 September 2007.

The Task Force recognized the inadequacy of information base and need for creating a sound database regarding silicosis through a survey. Migration of labour was considered to be the main cause for lack of authentic information/data. During the course of the meeting, the situation regarding notification of silicosis under Section 85 of the Factories Act, 1948 was also reviewed. After extensive deliberations and detailed discussions, the following action points were identified:

- Emphasize that States/Union Territories have to assume primary responsibility for this issue.

- The Ministry of Labour and Employment to follow-up with States/Union Territories who have not yet issued notifications under Section 85 of the Factories Act, 1948.

- All States/Union Territories to undertake a survey either themselves or by engaging a public or private research institution.

- The Ministry of Labour and Employment to make available to NHRC a comprehensive survey form which covers all information required on silicosis and also focuses on the preventive mechanisms of States/Union Territories.

- Before the commencement of the required survey, there is a need to organize a pre-survey meeting. This meeting should be used as a forum to sensitize

the State/Union Territory officials about the issue of silicosis and related safety of workers.

- Consider involving Panchayats in monitoring health-related aspects of silicosis.

In order to work out the details concerning the format of the survey and pre-survey meetings with all the States/Union Territories, a meeting on silicosis was convened in the NHRC on 29 October 2007. In the said meeting, it was suggested that along with giving the tolerable limits of dust level, the proforma prepared for the survey should indicate a list of engineering measures to minimize dust level and should also enclose a list of preventive methods. In this meeting, the Directorate General, Factory Advice Service & Labour Institutes (DGFASLI) was also requested to provide a list of confirmed cases of silicosis, which the Commission could take up as individual complaints.

Subsequently, in a meeting convened in the NHRC on 1 May 2008, it was reiterated that silicosis is an occupational hazard and could only be prevented if the working conditions of workers are properly regulated and needful precautions are adhered to by the employers, both in the organized and unorganized sector. It was further observed that none of the States/Union Territories have a policy that encompasses preventive, curative and rehabilitative measures that could be taken for the benefit of silicosis victims. Accordingly, NHRC directed that the Union Government and the States/Union Territories should furnish complete information with regard to the following points:

(i) What steps the Government is taking to prevent and ultimately eliminate the problem of silicosis, within how much time-fame and how it proposes to monitor its actions?

(ii) Whether the Government has undertaken any survey regarding the prevalence of silicosis? If yes, the total number of victims identified and the status of their treatment.

(iii) How many complaints have been received by the States/Union Territories regarding the problem of silicosis and what steps have been taken by the Government?

(iv) What steps have been taken to implement Schedule No. XIII prepared by the Directorate General Factory Advice Service and Labour Institute under model Rule 120 framed u/s 87 of the Factories Act, 1948?

(v) How many Hospitals/Treatment Centres exist for diagnosis and treatment of the occupational disease – silicosis?

(vi) Whether a policy has been formulated for simplifying the procedure to enable the workers to file claims for compensation?

(vii) Whether the States/Union Territories have paid any compensation to the victims of silicosis? If yes, the details of such persons and the amount paid.

(viii) What steps are contemplated by the Government to ensure that the workers employed in industries/ factories/quarries/mines receive compensation?

(ix) Whether the Government has evolved any policy for prevention and cure of silicosis and payment of compensation to the persons working in the unorganized sector?

(x) Whether the Government proposes to constitute any Board or set-up any fund for the rehabilitation and insurance of all the workers affected by silicosis?

Action Relating to Supreme Court Directions

Looking at the gravity of the problem, the Supreme Court of India while hearing a Writ Petition (Civil) No. 110/2006 (People's Rights and Social Research Centre (PRASAR) vs Union of India and Others), passed an interim order on 5 March 2009, whereby it issued directions to the Union Ministries of Health and Labour & Employment to provide all necessary assistance to the NHRC for any action concerning silicosis. In the said order, it further directed that the NHRC may take up specific and confirmed cases of persons suffering from silicosis and recommend providing immediate medical relief to them through the concerned authorities. In cases of death on account of silicosis, NHRC may facilitate in providing compensation to the families of the deceased through the authorities concerned.

In view of the directions given by the Supreme Court, the Commission has adopted a two-pronged approach to tackle the issue of silicosis. Firstly, it is giving focused attention to the individual cases and is making recommendations to the States/Union Territories to provide monetary compensation to the victims along with rehabilitation measures including medical relief. Secondly, it is recommending to the States/Union Territories to take preventive, remedial and rehabilitative measures for dealing with the problem of silicosis.

Constitution of Expert Group on Silicosis

In order to deal with the problem of silicosis in the country by ensuring necessary preventive, remedial and rehabilitative measures, the Commission constituted an Expert Group on Silicosis under the chairmanship of one of its Member. The other Members are :

- Director General, Directorate General of Factory Advice Services Labour Institute, Mumbai (M/o Labour & Employment, Government of India);
- Director General, Directorate General of Mines Safety, Dhanbad (M/o of Labour & Employment, Government of India);
- Director, National Institute of Occupational Health, Ahmedabad (Ministry of Health & Family Welfare, Government of India);
- Representative of M/o Commerce & Industry, Government of India;
- Representative of M/o Environment and Forests, Government of India;
- Representative, People's Rights and Social Research Centre (PRASAR), New Delhi;
- Advocate, Supreme Court of India, New Delhi; and
- Joint Secretary (Programme & Administration), NHRC, New Delhi.

The first meeting of the Expert Group was convened in the NHRC on 5 January 2010. After detailed discussions, the Expert Group identified the following silicosis-prone industries:

- All stone quarries and crushers
- Quartz mining
- Foundries
- Sand blasting

- Ceramics industries
- Gem cutting and polishing
- State/pencil industries
- Construction
- Glass manufacture industries
- Other mining industries

The Expert Group further suggested practical and implementable measures encompassing preventive, remedial and rehabilitative aspects in addition to important aspects relating to payment of compensation for tackling the problem of silicosis. Based on the advice tendered by the Members of the Expert Group and extensive consultations held with all the stakeholders, the NHRC has evolved a set of recommendations on various dimensions – preventive, remedial, rehabilitative measures and compensation to the affected persons. These recommendations were later forwarded to the Chief Ministers of all the States/Union Territories by the Chairperson of the Commission.

National Conference on Silicosis

The NHRC on 1 March 2011 organized a National Conference on Silicosis in New Delhi. Its objective was to assess the action taken by the States/Union Territories on the recommendations made by the NHRC with regard to preventive, remedial, rehabilitative and compensation aspects. Besides, NHRC wanted to know from the States/Union Territories, the action taken on the ten points made by it in the meeting convened on 1 May 2008. The other objective was to discuss the

present status with various non-governmental organizations and technical institutions dealing with the issue of silicosis. The important recommendations that emerged from the National Conference are annexed (Annex. III). Some of the important recommendations are as follows:

- All States/Union Territories should complete a detailed survey of their industries within 6 months, unless specific time-period is indicated by the NHRC.

- The NHRC will hold review meetings of concerned officials from few States/ Union Territories in batches every two months.

- Silica detection equipment should be provided to factory inspectorate to identify industries producing silica.

- All persons affected by silicosis should be treated as Below Poverty Line families.

- Separate programme(s) specially targeting silicosis victims should be designed and it should cover health education as well as livelihood /social security.

- Many hazardous factories which continue to function need to be closed.

- States/Union Territories should initiate criminal proceedings against the factory owners under the provisions of Indian Penal Code and Factories Act, 1948 wherever the labourers have contracted silicosis.

- Silicosis is a public health issue and it should be taken up at the national level.

- The Government of Madhya Pradesh has done some relocation of industries from residential area to industrial area successfully. This example may be replicated in other States/Union Territories as well.

- Gujarat High Court has passed order to the effect that all cases of silicosis be given 100% disability. ESIC should resolve to make it a rule.

- All State Factory Inspectorates should have at least one Industrial Hygiene Expert.

- ESI Act is applicable to units employing less than 10 in Mandsaur. The pattern adopted in Mandsaur should be replicated in all the States/Union Territories of the country.

- All civil hospitals should have a separate OPD for occupational diseases.

- All the workers migrating from one State/Union Territory to another could be given identity cards to make it easier for the treating doctors to get the history of the work place, their exposure to the silica dust, working conditions and health conditions of the workers.

However despite all these efforts and having rounds of interaction and discussions with Chief Secretaries, Labour secretaries and medical authorities of sates, the results are not so positive. Even most of the sates have not got the survey done on Performa given by NHRC.