



A BRIEF STUDY ON SAFETY, HEALTH AND ENVIRONMENTAL MANAGEMENT SYSTEM IN MICRO, SMALL & MEDIUM ENTERPRISES

Shahnawaz Rampuri

(Registration No. 11A100030115)

Under the guidance of

Dr. Swapnil Sheth

DEPARTMENT OF ENVIRONMENTAL SCIENCE

ABSTRACT:- The potential for expansion of MSME is rather strong. It has been the primary driver of economic growth in India. The many obstacles that micro, small, and medium-sized enterprises (MSME) must overcome limit their potential for expansion. The obstacle presented by the budget is significant. The majority of micro, small, and medium-sized enterprises (MSMEs) have trouble acquiring appropriate and timely financial support. The insufficient funding causes the expansion plans to be halted in the middle of the process, which ultimately results in growth being compromised.

From their inception, micro, small, and medium-sized enterprises (MSME) have struggled to get funding that is both enough and timely.

The ability of MSME units to self-finance is far more important than their ability to borrow from institutions (which is more preferred option by large companies). In order to finance their daily operations, micro, small, and medium enterprises (MSME) typically seek financial assistance in the form of bank loans from public sector banks, regional rural banks, and urban co-operative banks. This is due to the fact that MSME are typically very small in size, have a lower risk desire, and take a more conservative stance.

KEYWORDS:- MSME, ENVIRONMENT, RISK CONTROL, SAFETY, EHSMS

Recognition of the value of Workplace Health and Safety (Occupational health & safety) qualifications and the worldwide standard that have recently been produced in this field has grown in recent years. Several examples of them are shown below.

OHSAS 18001: It is the British standard for Occupational Management Systems for Health and Safety. Its major mission is to assist organisations of all sizes and types in adopting and successfully implementing best practises in occupational safety and health. To aid businesses in formulating policies and objectives that account for legal requirements and knowledge of the dangers involved with OSH, the document focuses heavily on the construction of OSH goals. It was updated in 2017 to make it easier for businesses to conform to their existing management systems, and the new standards are more directly tied to the structure of ISO 9000 and 14000. Now OHSAS 18001 is replaced through ISO 45001.

Systems for management data that are integrated: They are written in a broad enough sense to be used by any form of organisation. Environment, health, and safety (EHS) concerns that may be reasonably expected to fall within the jurisdiction of the respective organisations get the lion's share of attention. Some of the building blocks of this framework include things like environmental concerns, identifying hazards, assessing risks, setting goals, measuring progress, and keeping tabs on things.

In addition to these standards, the International Labour Organization (ILO) and the Health and Safety Executive (HSE) give the instructions on this very crucial and significant matter. The following is a list of some important considerations:



HSG65: It is a well-known handbook that was established by the Health and Safety executive, and it was primarily written for line managers, executives, and owners who wish to monitor the Health and Safety arrangement in their organisations. It expands recommendations to make it possible for organisations to achieve a balance between the structural and behavioural components of occupational safety and health.

ILO Guidelines: The purpose of these standards and guidelines for occupational safety and health is to provide a one-of-a-kind worldwide model that is compatible with many other management systems, standards, and guidelines on both the national and international levels.

ILO INITIATIVES ON OCCUPATIONAL SAFETY AND HEALTH

The International Labor Organization (ILO) was established in 1919, and India was one of the original members of the organisation. The establishment of international labour standards in the form of conventions and recommendations is the most significant method of action that can be taken by the International Labor Organization (ILO). Conventions are binding international treaties that may be ratified by countries that are members of the convention. The International Labor Organization has ratified a variety of treaties and recommendations throughout the years.

Despite the fact that India has traditionally had a fairly favourable attitude towards the standards of the International Labour Organization (ILO), the country has only ratified three of the 18 ILO conventions that are designed to ensure occupational safety and health (OSH) in various industries. The Convention on Safety and Health, number 155, has not been ratified as of yet. (Mohan Babu Yarlagadda et al.)

The reason for this is because India adheres to the principle of only ratifying agreements that are in accordance with the provisions of such conventions, and this is the reason why this is the case.

TABLE 1.1: ELEMENTS OF SAFETY AND HEALTH, STATUTORY REQUIREMENTS AND COMPLIANCE TO STANDARDS

Elements	Factories Act 1948	OHSA S 18001	IS18001	HS(G) 65	ILO Guidelines
Commitments towards legal requirements	Yes	Yes	Yes	Yes.	Yes
Employee involvement	Yes	No	Yes	Yes.	No
Performance of employees	Yes	No	No	No	Yes
Appropriate to size and nature of organisation	No	Yes	No	No.	No
Education and training	Yes	No	Yes	Yes.	Yes
Performance reporting in annual reports	Yes	No	No	No	No
Decision making	Yes	No	No	No	No.
OSH objectives	No	Yes	Yes	Yes.	Yes
Communication	Yes	Yes	Yes	Yes.	Yes



Translation to regional language	Yes	No	No	No	No
Periodic review	Yes	Yes	Yes	Yes.	Yes
Continuous improvement	No	Yes	Yes	Yes.	No

Source: Mohan Babu Yarlagadda , 2020

The information shown in Table 1.4 illustrates which aspects of the Safety, Health, and Welfare of Employees in Factories Act, IS 18001 certification, HSG standards, OHSAS 18001, and ILO recommendations are present and which do not exist. The table makes it clear that all of them put a significant amount of importance on communicating with their workers in order to distribute information and conducting periodic evaluations for the purpose of reinforcement. In addition to this, the liberalisation that started in India in 1991 served as a stimulus for it, which had a significant role in its development. Since that time, several rules have been enacted to encourage and promote the expansion of the economy; yet, there has been very little action made to improve the working conditions of labourers. It has been shown that dangerous working conditions are one of the primary factors that lead to the deaths of working workers and the impairment of working employees (Pandita et al). According to the calculations of the International Labor Organization, around 4.03,000 individuals lose their lives in India due to issues that are associated with their jobs. This equates to 46 deaths per hour (Sanjiv et al)

TABLE 1.1: NUMBER OF FATAL, NON-FATAL, TOTAL INJURIES AND THEIR FREQUENCY RATE REPORTED IN FACTORIES

Year	Fatal Injuries		Non Fatal Injuries		Total Injuries	
	Number per one lakh mandays worked	Frequency Rate	Number per one lakh mandays worked	Frequency Rate	Number per one lakh mandays worked	Frequency Rate per one lakh mandays worked
2011	627	0.07	27737	3.17	28364	3.24
2012	540	0.13	19913	4.75	20453	4.88
2013	525	0.08	15907	2.42	16432	2.50
2014	562	0.05	14458	1.28	15020	1.33
2015	613	0.05	14163	1.21	14776	1.27
2016	1068	0.08	18844	1.34	19912	1.42
2017	821	0.09	14469	1.64	15290	1.73
2018	478	0.07	5494	0.81	5972	0.88
2019	668	0.09	5983	0.77	6651	0.85



2010	1064	0.06	10,111	0.58	11,175	0.64
2021	1083	0.07	9,358	0.65	10,441	0.72

Source: labourbureau.nic.in

Note: Data is based on returns received under Factories Act, 1948

The number of people who have died as a result of their injuries has increased over the last decade, as seen in Table 1.5. It's possible that this might be attributable to the growing number of production problems over time, as well as the decreased attention devoted to the workers' health and safety. Although though the total number of fatal injuries has increased from 627 in 2011 to 1083 in 2021, the frequency rate has reduced throughout this time period. On the other hand, the total number of non-fatal injuries that have been recorded has declined from 27,737 in 2011 to 9,358 in 2021.

CONCLUSION

The primary contribution of this research has been a better understanding of how SMEs think about safety and a heightened awareness of safety issues among the participants. Improved cleaning, enhanced layout, and the usage of personal protective equipment (PPE) are just a few examples of the straightforward suggestions that have been put into effect in many units without requiring a large investment of cash. During our tours, we saw that most SMEs were using antiquated methods of manufacturing, which inevitably led to an increase in the already-high risk levels present in many of the facilities we visited. Employees in different departments seldom worry about being hurt on the job since minor injuries are so prevalent. The results of studies like these, conducted specifically for SMEs, may greatly enhance public and private sector efforts to promote safer workplaces.

RECOMMENDATIONS

1. Workers in the food, bottling, safety devices, and construction equipment industries were vocal in their disapproval of the company's lighting arrangements. Thus, companies need to pay greater attention to lighting settings. To avoid any eye strain from inadequate illumination, this might be accomplished by installing artificial lights.
2. Companies on a smaller scale should work to improve their waste management systems. To achieve this goal, businesses might use systems to handle waste. To avoid stuffiness and congestion in the office, proper seating arrangements must be created for all personnel.
3. Medium-sized businesses, in order to protect their workers' health, should provide clean restrooms with sanitised urinals and toilets, since the spread of disease via improper bathroom hygiene is a real concern. To do this, it is necessary to provide staff with training on how to properly use and maintain the restrooms, as well as to deploy a workforce specifically responsible for cleaning and maintaining the restrooms.
4. It is important for businesses of a moderate size to have spittoons strategically placed so that workers do not damage the building by spitting on the walls. Dust and fumes may be eliminated with the use of anti-dust technology, dust suppressant, and air purifiers.
5. Having regular health camps for workers is one way for businesses of all sizes to promote healthier workplaces.
6. The association between health and job contentment indicates that if workers have a positive view of their health, they are more likely to be satisfied with their jobs.
7. Enforce to effective Safety, Health & Environmental Management System to control organizational risk to prevent any potential harm such as injury, fatality, environment degradation etc.



REFERENECS:-

1. Asif M and Fisscher Olaf A.M., “An examination of strategies employed for the integration of management systems,” *TQM Journal*, vol. 22, no. 6, pp. 648–669, 2010.
2. B.Zhang, J. Bi, Z. Yuan, J. Ge, B. Liu, and M. Bu, “Why do firms engage in environmental management? An empirical study in China,” *J. Clean. Prod.*, vol. 16, no. 10, pp. 1036–1045, 2021.
3. C.Trierweiler, A. C. Bornia, M. F. S. Gisi, D. Spennassato, B. C. Severo-Peixe, and M. J. R. Rotta, “an Exploratory Survey on the Topic Integrated Management Systems,” *Brazilian J. Oper. Prod. Manag.*, vol. 13, no. 2, p. 184, 2016.
4. E.Bottani, L. Monica, and G. Vignali, “Safety management systems : Performancedifferences between adopters and non-adopters,” *Saf. Sci.*, vol. 47, no. 2, pp. 155– 162, 2019.
5. E.Lafuente and J. Abad, “Analysis of the relationship between the adoption of the OHSAS 18001 and business performance in different organizational contexts,” *Saf.Sci.*, vol. 103, no. September 2017, pp. 12–22, 2018.
6. F.Testa, F. Rizzi, T. Daddi, N. M. Gusmerotti, M. Frey, and F. Iraldo, “EMAS andISO 14001: The differences in effectively improving environmental performance,”*J. Clean. Prod.*, vol. 68, pp. 165–173, 2014.
7. G.Papadopoulos, P. Georgiadou, C. Papazoglou, and K. Michaliou, “Occupationaland public health and safety in a changing work environment: An integratedapproach for risk assessment and prevention,” *Saf. Sci.*, vol. 48, no. 8, pp. 943–949,2010.
8. H.Khanna, S. C. Laroyia, and D. D. Sharma, “A survey on Indian Experience on Integrated Management Standards (IMS),” *Int. J. Qual. Reserach*, vol. 3, no. 3, pp.1–11, 2020.
9. Honkasalo, “Occupational health and safety and environmental management systems,” *Environ. Sci. Policy*, vol. 3, no. 1, pp. 39–45, 2000.
10. J.P. T. Domingues, P. Sampaio, and P. M. Arezes, “Analysis of integrated management systems from various perspectives,” *Total Qual. Manag. Bus. Excell.*, vol. 3363, no. April, pp. 1–24, 2014.
11. Kauppila, J. Härkönen, and S. Väyrynen, “Integrated Hseq Management Systems : Developments and Trends,” *Int. J. Qual. Res.*, vol. 9, no. 2, pp. 231–242,2015.
12. K.Y. Lo, M. Pagell, D. Fan, F. Wiengarten, and A. C. L. Yeung, “OHSAS 18001certification and operating performance: The role of complexity and coupling,” *J. Oper. Manag.*, vol. 32, no. 5, pp. 268–280, 2014.
13. L.S. Robson, S. Macdonald, G. C. Gray, D. L. Van Eerd, and P. L. Bigelow, “A descriptive study of the OHS management auditing methods used by public sector organizations conducting audits of workplaces: Implications for audit reliability and validity,” *Saf. Sci.*, vol. 50, no. 2, pp. 181–189, 2012.
14. R.L. Granerud and R. S. Rocha, “Organisational learning and continuous improvement of health and safety in certified manufacturers,” *Saf. Sci.*, vol. 49, no.7, pp. 1030–1039, 2011.
15. R.M. Choudhry, D. Fang, and S. Mohamed, “The nature of safety culture: A surveyof the state-of-the-art,” *Saf. Sci.*, vol. 45, no. 10, pp. 993–1012, 2017.
16. Salomone, “Integrated management systems: experiences in Italian organizations,” *J. Clean. Prod.*, vol. 16, no. 16, pp. 1786–1806, 2018.
17. Santos, M. Ferreira Rebelo, and R. Silva, “The integration of standardized management systems: managing business risk,” *Int. J. Qual. Reliab. Manag.*, vol. 34, no. 3, pp. 395–405, 2017.
18. Zutshi and A. S. Sohal, “Integrated management system:The Experience of three Australian organizations,” *J. Manuf. Technol. Manag.*, vol. 16, no. 2, pp. 211–232,2015.