

to make a living, even in a precarious environment contributed to this incidence.

Objectives The objectives of this study are:

- To provide capacity building to help this group of workers learn concepts for improving work conditions and understand the risks in mining;
- To provide awareness on various approaches of workplace health and safety promotion as regards mining.

Methods One hundred and seventy four(74) participants were randomly selected for this training.

Modules

- Hazard identification and risk assessment.
- First aid
- Mercury Exposure and related risks
- lead exposure and related risks
- Safer mining practice
- Personal Hygiene
- Personal protective equipment (PPE) used in mining

Results The Health and safety knowledge of the ASGM workers were increased. The capacity building process enabled the workers to recognise risks associated with mining and therefore know how to implement safety measures by using PPE and by learning about safety improvement concepts.

Discussion Our findings suggest that positive attitudes toward promoting safe working conditions and practices can be fostered among the ASGM workers.

630 STATUS OF REGULATIONS ON HEALTH AND SAFETY IN MINING IN KENYA SINCE ENACTMENT OF THE OCCUPATIONAL HEALTH AND SAFETY ACT,2007

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Introduction Large and small scale Mining in Kenya has been in practice for close to 100 years. This includes mining of minerals like soda ash, gold, flourspar, gemstones, quarrying. As an occupation with varied risks, regulation has been used in many countries to ensure the health, safety and welfare of workers is taken care of. There have been various regulations governing some aspects of mining in Kenya including health and safety. Such laws were enacted as early as 1940 for the Mining Act CAP 306 and 1951 for the Factories Act CAP 514 whose purpose was to make provision for health, safety and welfare of persons employed in factories and other places.

Methods A systematic review was conducted after setting the research questions. Online databases and sources were identified to conduct the review. The articles under review were limited to law provisions on health and safety in mining in Kenya. Online sources used include Kenya law reports database, the Extractives Baraza, the Ministry of Labour Website and Ministry of Mining Website.

Results Laws and Regulations that touch on health and safety in mines which were enacted before the Occupational Health and Safety Act,2007 have since been repealed. The Mining Act of 2016 replaced Mining Act CAP 306 where small scale mining has been recognised as a legal activity. However, there are no specific regulations on the health and safety provisions for this group of workers. Kenya has not ratified a number of International Labour Organisation(ILO) conventions on health and safety.

Conclusion Kenya has taken notable steps in ensuring mining industry has regulations that govern its operations. Having artisanal and small scale mines recognised as a legal activity are indicative of these steps among others. The findings also indicate the need to have rules that are specific to the industry.

819 ASSESSMENT OF THE IMPACT OF MINING ON THE ENVIRONMENT AND HEALTH IN DRC (DEMOCRATIC REPUBLIC OF CONGO)

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Introduction DRC is endowed with enormous mining potential, the exploitation of which promises great hope of economic development. However, the various activities carried out during several years of operation have led to negative environmental and social impacts. The exploitation of mineral deposits has had deleterious effects on the biophysical, socio-economic and health aspects of the surrounding populations.

Methods Systematic and impartial assessment of mining activities was conducted in terms of environmental impacts, waste management, implementation of environmental control mitigation measures, and emergency plan, according to national regulations and requirements of The World Bank. Field study required visits to the sites in the Provinces of Katanga, Kasai Oriental and Kasai Occidental, collection of samples of water and soil, collection of health data, and interviews with key personnel including representatives of mining companies, miners and surrounding populations.

Result Samples of surface water, groundwater and soil were collected and analysed along with surveys on occupational health and safety issues including noise and observations carried out by the group of experts on the basis of literature in the field. The contaminants that were above the standard included Silver, Arsenic, Copper, Molybdenum, Chromium, Zinc, Manganese, Mercury, Potassium and Sulphur, Nitrites and Nitrates, and suspended organic matter. Resulting population displacements had quite disruptive social effects and serious risks of impoverishment on aboriginal families and residents and damage to the environment.

Discussion Issues of waste management, liquid effluents, especially acid mine drainage, and the enormous excavation holes were quite noticeable. The analysis revealed exceedance of the current standards of DRC, WHO or Quebec, concerning the quality of surface and ground water, and soil quality. This mission laid the groundwork for an awareness of the dangers that threaten the environment in general, and especially the populations living in the vicinity of explored mining sites along with mitigation measures.

907 OVERCOMING THE LEGACY OF OCCUPATIONAL LUNG DISEASES IN MINeworkERS IN SOUTHERN AFRICA – HEALTH SERVICES AND COMPENSATION

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