ABSTRACT

Diversity and abundance of raw material, comparative export-import potential and low cost are some of the distinct features of the Indian Footwear Industry. It is a labour intensive industry and concentrated in small and cottage sectors. This industry's contribution to employment as well as Indian economy is significant. Footwear Industry sector is mostly consisting of unorganized labour forces. Although in India a lot of development has taken place to improve the quality modern equipments but very little attention has been paid on the well being of the vast unorganized footwear manufacturing work forces. Therefore, an attempt has been made in the present study to focus on the difficulties usually they encounter while performing different footwear manufacturing. The objective of this study is to enhance productivity for the betterment of their health and safety.

The result of questionnaire study showed that footwear manufacturing is highly skillful job (96%) and demand repetitive movement of body segments (100%). Most of them felt pain (96%) during work at lower back (100%), legs (100%) and hand (70%). The environmental conditions viz., the thermal and illumination levels of the work areas are not within the recommended levels.

The analysis of working postures by RULA showed that 69.6% of the postures required changes immediately whereas 26.1% needs further investigation and changes soon. The statistical analysis of heart rate and blood pressure measured before and just after work showed significant result. Similar statistical finding is observed in the pulmonary function test parameters of control and experimental group. Analysis of accident of the sectors selected in this research study from the questionnaire revealed that 84.5% of the footwear making workers has a history of some or the other kind of accident associated with their occupation. Cut (62.1%) and laceration (14.8%) are the major types of injuries affecting mainly fingers (62.1%) and hand (70%). These accident data when compared with that of organized footwear sectors, it was observed that both the sectors have similar pattern of accidents but the number of occurrence of accident in organized sector is much less. The study of productivity was done by detail method study of the
soleman and upperman. Result of method study of both the workers showed that many processes of footwear manufacturing are repetitive and there are many delays which can be eliminated. Hence ergonomically modifying the processes of footwear manufacturing the productivity of soleman is increased by 8% and upperman by 11%.

The present study documents the fact that the footwear manufacturing workers are exposed to deplorable work environment and suffer from a host of disorders.