



# Ergonomics in the Informal Sectors in Central Indian Context

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### Opinion

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## Opinion

In a labour intensive country like India, Ergonomics has immense applications in different informal sectors in India. As 70% of the Indian population stays in rural areas and almost all of these are in different informal sectors like agriculture, craft and different service sectors, it's important that the focus is on the informal sectors to boost the economy of the country and generate employment for the local youths.

Informal or unorganized sectors are those, which are not under any governmental regulations, and thus the people involved in this profession are not covered under any benefits like leaves, retirement benefits, sickness benefits or the benefits of stipulated working hours. The people in this sector have to work seven days a week without any day off as because it's a concept of "no work and no pay" for them.

Informal sectors in central India are of different types. Agriculture is one major sector where a large number of local youths are employed as this region is very fertile and home to some of the best agricultural produces in the country. Craft like marble carving, garment manufacturing, cane and bamboo products, bicycle repairing, snacks manufacturing, are other informal sectors employing the local population and thus supporting the local economy in the long run.

As a labour intensive industry with no safety regulations, majority of the workforce in these sectors are exposed to ergonomic risk factors for work related musculoskeletal disorders. Many of these risk factors involve working at awkward postures for prolonged time, along with forceful exertions and repetitive actions. This does not give adequate rest to the parts of the body for recovery in the event of micro wear and tear of the different soft tissues of the body. This is coupled an extreme hot and humid environment which further reduces the workers' productivity and affects the quality of the task [1-5].

Until date, there have been very little consolidated efforts in the above-mentioned informal sectors and there is enough scope for the application of ergonomic to enhance productivity. Any ergonomic intervention in such sectors demands an organized effort. The first starts with the diagnosis of the problems. This is where low cost tools like questionnaire, direct observation and activity analysis, photography and videography as low cost tools helps in getting an insight into the nature, location and the quantum of the ergonomic problems. These are tools, which can be used by anyone with very little training. After the diagnostic phase comes the phase, where the ergonomist has to decide where and how the intervention has to take place. The intervention could be in the form of hand tool design. It could be also be in the area of workstation design in tandem with the user's anthropometric dimensions. At times ergonomic intervention extends to process design where the workers are taught how to perform a particular task so that it delays the onset of fatigue and increases productivity.

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