
Statistical Study of Employees in Small Scale Wood Industries of Nanded District, Maharashtra, India

Aniket Avinash Muley

*Department of Statistics, School of Mathematical Sciences
Swami Ramanand Teerth Marathwada University, Nanded, Maharashtra, India*

ABSTRACT

This paper focuses on exploration of employees in Small Scale Wood Industries (SSWI) in Nanded district. Here, our aim is to elaborate the employees in SSWI, specially made the use of descriptive statistics to identify the nature of the data set. Various interesting hidden patterns are comes out to in the study. Finally, in future perspective one can use this information for the establishment of SSWI or similar types of industries.

Keywords: Statistical analysis, Wood industry, Nanded, Employee.

INTRODUCTION

The major wood processing industries in Nanded district are typically large capacity facilities industry such as large sawmills, furniture industries and timber depot. Nanded district comes mostly from the natural high forest zone of the country. The most important wood products, produced, consumed and traded in sawn-wood, plywood, particle board, news-print, printing and writing paper and other paper boards. The objective of this paper is to perform exploratory analysis of employees in SSWI of Nanded district and to study the skilled workers in SSWI in terms of their qualification, experience, any professional training taken by them.

MATERIAL AND METHODS

The Study Area

The Nanded district is geographically located at 18°15' North latitude and 77°7' to 78°15' east longitude. Since 1960, in the Nanded DIC 1272 small scale industries were registered. There are 117 SSWI in Nanded district. Among that, 28 SSWI are registered to the District Industrial Centre (DIC), 115 were registered to Government Forest office, Nanded and 13 were registered to both. The distribution of SSWI is: 61 and 56 are located at urban and rural area respectively. In Nanded district there are 16 Taluka places in which Nanded Tehsil itself having 57; Degloor is 9; Mukhed, Hadgaon and Kandhar are 7; Kinwat have 6; Loha tehsil have 4; Bhokar, Biloli, Dharmabad and Himayatnagar are having 3; Ardhapur tehsil and Mudkhed are having 2 SSWI. There is no SSWI in Mahur and Umri tehsil of Nanded district.

Research Methodology

In this study, primary as well as secondary data have been collected. Initially, secondary data is collected from District Industrial Centre (DIC) and Government Forest office, Nanded In the present study, for primary data collection included the spot assessment (Robson, 1993) for physical appraisal of safety environment, structured questionnaire (Busha and Harter, 1980) and participatory approaches (Babbie, 1975). The respondents are made up of mill workers, machine operators, etc. These methods of data collection were used in similar reported work of Aiyelari et al., (1998); Aiyelari et al., (1997); Cole and Ogungbe (1987); and Lehman (1962). In the present study, census of all sawmills in the study area. The target population observed is 600 within the study area is the employees of the samples 432 of them in SSWI sawmills. The questionnaires were used for data analysis. The collected data was analyzed using descriptive statistics (Gomez and Gomez, 1984) and to achieve this, percentages, frequencies, tables and chart were employed.

RESULTS AND DISCUSSION

The diversity of employee’s according to gender-wise distribution males (100%) were engaged in SSWI actions. to Age-wise distribution classification. 136 of the employee’s having age group is between 31-40 years, 126 of them 41-50 years age group, 112 are between 20-30 years, 53 of them are of above 50 years old and 5 of them are less than 20 years old age group. The details of educational qualification among the employee’s, 131of the employee’s having their education upto primary, 127 of them are illiterate, 123 of them are upto high school level, 35 of them upto higher secondary, 13 of them are graduated and 3 of them are postgraduates.

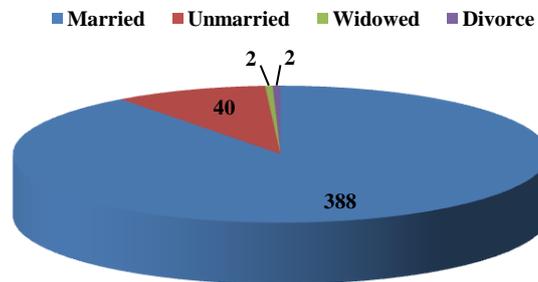


Fig1. Employee’s marital status

This pie chart (Fig. 1) describes the marital status of the employees, 388 of them are married, 40 are unmarried, 2 of them widowed and divorced.

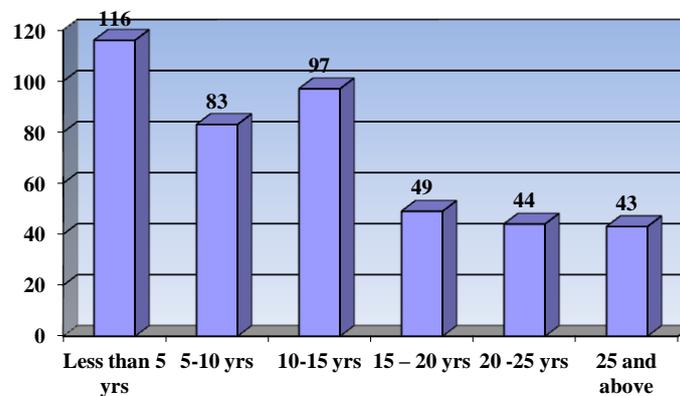


Fig2. Employee’s experience

Fig.2 shows that, 116 of the employees are less than five years experience. 97 of them having 10-15 years experience, 83 are having 5-10 years experience, 49 of them are 15-20 years experience, 44 of them 20-25 years and 43 of them 25 and more years experience in this field.

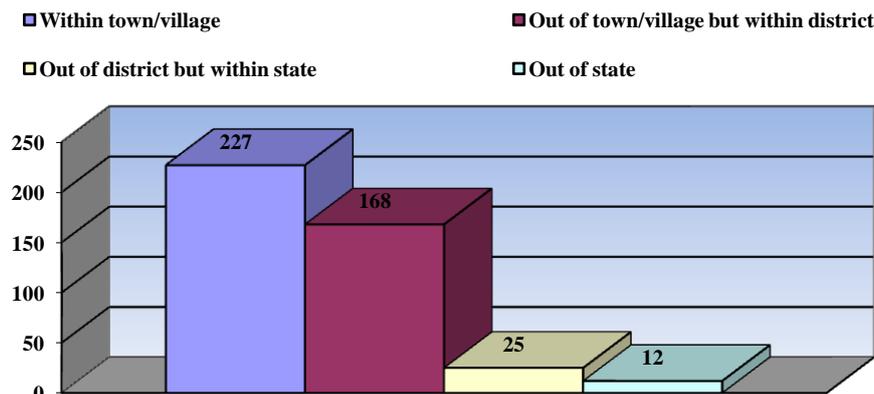


Fig3. Employees place of residence

In this investigation (Fig.3), 227 of the employees are resident of within the same town/ village. 168 of the employees are from other village but within the same district. 25 of the employees are resident of other district and 12 coming from other state.

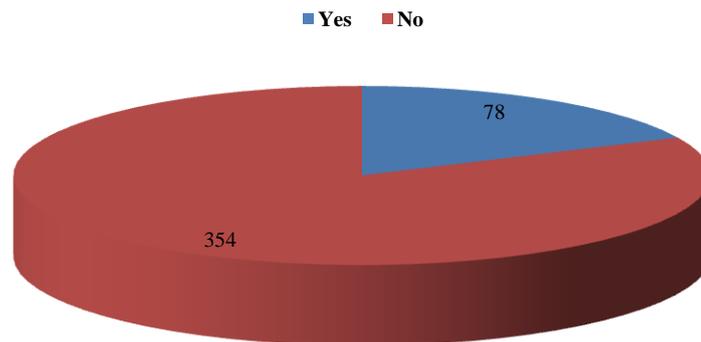


Fig4. Employees involved in any accident/injury

From Fig. 4 it is observed that, number of injury cases reported while undertaking specific responsibilities in SSWI is as indicated. Out of 432 employees only 78 were injured at the time of job in SSWI.

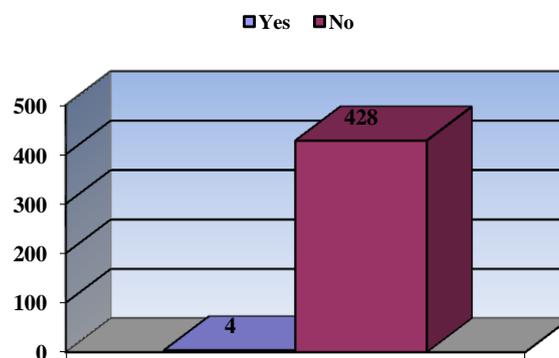


Fig5. Number of employees attended training on safety

Fig. 5 shows that, number of employees attended training taken on safety are 4 only out of 432 employees.

CONCLUSION

Based on the investigation it is concluded that, the categories of workers in SSWI acquired their skills and expertise on the job and years of work experience. It is observed that, most of the employees are having primary level education only. However, they lack the professional safety approach to their work. Attentions to safe work environment and organization are not adequate. The total accidents/ injuries are found in 78 employees. Also, only four of the companies had safety policies in place, but responsibility to provide the appropriate personal protection device, to have a safe work environment by increasing insuring plans to their SSWI. In future, in realistic conditions safety legislation, complete systems approach should be formed and monitored in the industry to guide the management to reduce or eliminate workplace hazards.

ACKNOWLEDGEMENT

Author would like to thank University Grant Commission for providing financial support under Major Research Project (F. No.42-44/2013(SR), 20 Dec. 2013, Statistics).

REFERENCES

- [1] Aiyelari, E.A., Cole, A.H. and Alababan, B.A.(1997): An evaluation of human energy requirements in gari production in Ibadan, South-western Nigeria. *African Journal of Root and Tuber Crops*. 3(1): 12 – 15.
- [2]] Aiyelari, E.A., Ndaeyo, N.U. and Hyuma, I. (1998): Ergonomic evaluation of fuel power requirement in gari frying. *Journal of Topical Forest Researches* 14(1): 92 – 101.
- [3] Aruofor. R.O. (2000). Review and improvement of data related to wood-products in Nigeria. EC-FAO Partnership Programme (1998-2001) *Tropical forestry Budget line B7-6201/97-15/VIII/FOR PROJECT GCP/INT/679/EC*.
- [4] Babbie, E. (1986). *The practice of social research*. California, USA: Wadsworth Publishing, pp. 30.
- [5] Busha, C. H. and Harter, S. P. (1980) *Research methods in librarianship: techniques and interpretation*. San Diego: Academic press, 53.
- [6] Cole, A. H., & Ogungbe, R. F. (1987). Food intake and energy expenditure of Nigerian female students. *British journal of nutrition*, 57(03), 309-318.
- [7] Forestry Statistics (2003). *Policy Information Group, Ministry of Agriculture and Forestry*, Wellington.
- [8] Gomez, K. A and Gomez, A. A (1984) *Statistical procedure for Agricultural research*. 2nd Edition. John Wiley & Sons, New York.
- [9] IFC, 2007. Environmental, health, and safety guidelines sawmilling and manufactured wood products. *International Finance Corporation*. April 30, 2007
- [10] Jekayinfa, S. O. (2007). Ergonomic Evaluation and Energy Requirements of Bread-baking Operations in South Western Nigeria. *Agricultural Engineering International: CIGR Journal*.
- [11] Michael, J. H., & Wiedenbeck, J. K. (2004). WOOD PRODUCTS INDUSTRY. *Forest Products Journal*, 54(10), 9.
- [12] Lehmakn, G. (1958). Physiological measurements as a basis of work organization in industry. *Ergonomics*, 1(4), 328-344.
- [13] Work-Related Fatalities Study Team. (1998). Work-related traumatic fatalities in Australia, 1989 to 1992: Summary report. *Sydney: National Occupational Health and Safety Commission*.
- [14] (NOHSC, 1999). Work-related traumatic fatalities involving timber activities in Australia, 1989 to 1992. The second work-related fatalities study, 1989 to 1992. *Epidemiology Unit, National Occupational Health and Safety Commission Sydney, May 1999*
- [15] Robson, C. (1993). Real world research: A resource for social scientists and practitioners-researchers. *Massachusetts: Blackwell Publishers*.

AUTHOR’S BIOGRAPHY

Dr. Aniket Avinash Muley, Assistant Professor in Statistics, School of Mathematical Sciences, S.R.T.M. University, Nanded, has published more than 20+ papers in National/International Journals.