

Working conditions in the sawmill industry in the opinion of employees and employers on the example of a medium-sized plant (case study)

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Abstract: *Working conditions in the sawmill industry in the opinion of employees and employers on the example of a medium-sized plant (case study).* The sawmill industry is characterized by relatively high occupational risk, triggered mainly by difficult physical working conditions (including oversize dust, noise exceeding the legal limit, contact with dangerous equipment and machines). In addition, inaccurate work organization, lack of full mechanization of machining operations and presence of harmful impregnating agents, preservatives and retardants are problems often reported in the sawmill industry. At the same time, due to lack of adequate financial resources, the employees of wood processing plants frequently work on an obsolete and depleted machinery park, which affect the overall assessment of working conditions. This profession is mentioned among the occupations characterized by a comparatively high level of accidents amongst all sectors of national economy. The paper presents the most significant conclusions derived from performed research.

Keywords: sawmill industry, physical working conditions, rural areas

OBJECTIVE, METHOD AND SCOPE OF THE STUDY

The main objective of the study was to identify the employees and employers opinions of the sawmill industry in the rural areas of Opole Voivodeship about the quality of working conditions. An additional aim was to investigate the awareness of employees and their supervisors in the field of occupational risks and non-compliance with applicable health and safety rules.

The study was performed in a medium-sized company engaged in the processing of wood in the district of Opole and Kluczbork. The company consists of two plants. The first plant is engaged in production of pallets, while the second is the sawmill offering roof truss, scantlings, battens, soffit panel floorboards and terrace boards, garden furniture and pine bark. Throughout more than 20 years of its operation on the market, the company has become the leading manufacturer of wood products in Opole region. Its products are offered both on domestic and international markets. At the same time, the company serves as an advice body and willingly meets the individual requirements of clients. The strength of sawmill and pallet production plant are short delivery time and transport with unloading service that complement the range of services offered. At the beginning of its operation, the company employed approximately 10 workers. With the development and growing range of products and services offered, further staff was employed. For several years, the average employment falls within the range 53-63 people, depending on the number of orders.

The questionnaire contained 25 questions. The research was conducted in March and April 2015. All manual laborers (i.e. 45 persons) and five persons holding managerial positions participated in the survey.

Based on the widely accepted classification of working conditions, the questions from the questionnaire comprised four basic issues. The first group of questions was related to motivation to undertake job in the audited company and job characteristics. The issues from the second group of questions included issues connected to compliance with safety rules and their usefulness in the opinion of respondents. The third group of questions concerned issues related to the assessment of physical working conditions. The scope of these questions checked, hence, the knowledge and the awareness of employees and employers regarding the

need for security against threats arising from the work in harmful and onerous conditions. The fourth group of questions included the opinion of respondents on the employment conditions and interpersonal relationships in the workplace (employee – supervisor). At the end of the survey, the general views of respondents on working conditions were also sought.

COURSE, ANALYSIS OF TEST RESULTS

While analyzing the information obtained through the survey, it can be seen that in the examined plants, the advantage of respondents were men aged 41 - 50 years. These were mostly people with basic education level. The dominance of men in this industry is primarily due to the specific nature of its operation, which often does not fit or is too heavy for women (e.g. milling operation). In terms of job seniority in the analyzed company, a significant percentage (i.e. more than half of the employees) accounted for respondents with a relatively short job experience, i.e. up to 5 years. This demonstrates a high rotation of workers, which can be caused by various factors both, internal and external (e.g. low remuneration, lack of contracts of indefinite duration, poor working conditions, the ability to find work in similar conditions).

It is worth noting that 1/5 of the employees were persons with extensive professional experience (i.e. employees with job experience over 12 years). Seventy percent of employees are residents of the village, which undoubtedly is due to the fact that both plants are located in rural areas.

Place of work and its characteristics

One of the important elements affecting the quality of working conditions is the reason to choose this particular job by employees. When choosing job, people are guided by different factors. The most important of them are presented in the table below.

Tab. 1 Reasons of choosing job in the surveyed plants declared by the employees

Question 1	Why did you undertake job in the timber industry	Surveyed plants
a)	It is in line with my education	17,7%
b)	It takes account of my education	22,2%
c)	It is the only plant near the place where I live	51,1%
d)	It gives the opportunity to develop	13,3%
e)	It gives the opportunity of employment	84,4%
f)	It gives the opportunity of high earnings	11,1%
g)	Other reasons	-

Source: Own calculations based on surveys. It was possible to choose more than one answer.

The decision to take up employment in the analyzed company was influenced mainly by the fact of having job in general and the proximity of the plant near the place of residence. Qualifications, education, development opportunities and financial benefits were definitely less important. Based on the information it can be concluded that the respondents did not show too much initiative in search for work. Undoubtedly, the reason for this may be that both plants are located in relatively small towns, where it is harder to find work than in urban areas or more industrialized ones.

In order to perform the job characteristics, there have been made attempts to determine the employee's position in a man - tool or machine – processed material system and work organization manner. Based on these questions, it can be assumed that the respondents work both, using the machinery, as well as using simple and complex tools. Employees work in the single-shift system, with the exception when the orders are higher than planned. Then, additional temporary workers are employed on specific-task contract or mandatory contract

and the staff works on two shifts, which happens on average twice a year. If the degree of difficulty in the use of machinery and equipment is specified, 2/3 of respondents believe that it is negligible (i.e. the service is not complicated, and does not cause problems). Moreover, during the analysis of the surveys, it was noted that the job mainly requires physical effort from the employees being at the same time arduous and monotonous.

Activities in the field of occupational health and safety and their usefulness

In the analyzed company, employees and their supervisors accordingly confirmed that they had been provided with the induction training. Unfortunately, in the field of periodic training, situation is not so clear, because workers opinions do not coincide with the replies of managers, according to whom periodic trainings apply to all employees. Undertaken trainings were usually understandable, but mostly theoretical. While only half of surveyed persons, who underwent periodic trainings regularly, declared that participation in them was not a waste of time, as it allowed keeping up with the latest trends.

Tab. 2 Structure of induction trainings and periodic trainings in the opinion of workers and their supervisors

Type of trainings	workers	supervisors
Introduction training		
yes	100%	100%
no	-	-
Periodic training		
yes	55,5%	100%
no	44,5%	-

source: Own calculations based on surveys

Moreover, based on questions related to activities undertaken in the field of occupational health and safety and their usefulness, it can be also observed that according to most respondents (opinion of all surveyed supervisors and 77.7% of employees) the safety training can contribute to reduce the number of accidents at work. Unfortunately, every third employee confesses to violate health and safety rules. Supervisors noted this difficulty as well, admitting lack of consistent response in this matter. Interestingly, almost all respondents have believed that penalties should be imposed on employees who violate safety regulations, since their lack, as it occurs in this particular company, does not activate anyone to change the behavior. Respondents' opinion on abiding working hours is a positive phenomenon - all respondents answered positively. Unfortunately, in the examined company, health and safety department formally does not operate, which is hardly understood, as it employs almost 50 staff. Probably it derives from the fear of company's owner against the increase of the operational costs.

Accident threats, factors affecting poor quality of working conditions, and use of personal protective equipment

Threats of accidents occurring in the timber industry are the source of the factors affecting the level of working conditions. They arise from reasons both directly and indirectly dependent on the man.

Analyzing the question concerning the reasons of accident risks in the workplace it can be concluded that the respondents mostly agree as to the causes of accident risks in the workplace. The most common answers were:

- negligence and irresponsibility of employees (opinion of 71.1% workers-100% supervisors),

- inefficient machinery and equipment (opinion of 84.4% workers - 100% supervisors),
- overwork of employees (Opinion 60% of workers and supervisors),
- stress and family problems (opinion of 57.7% employees, 40% supervisors).

With regard to non-compliance with health and safety regulations, the respondents had significantly different opinions. All supervisors are unanimous in the fact that the employees break the basic rules of safety, which is reflected, in the number of workplace accidents. However, the same opinion is only shared by 1/3 of the employees. The others believe that violating health and safety rules is insignificant and do not pay that much attention in this matter, as they bear no serious consequence. Other factors (e.g. work in the evening hours, improper pace of work and communication) in the opinion of all respondents play a minor role. It should be noted that the high rate of factors directly attributable to the employees is not contingent upon the size of the company. It consists of many factors, among which one could list fast pace of life and lack of employees professional approach to their duties.

Tab. 3 The structure of factors affecting the quality of working conditions

Question 15	What in your opinion affects the poor quality of working conditions	employees	supervisors
a)	work environment (such as excessive noise, the presence of preservatives)	64,4%	80,0%
b)	work organization	22,2%	100,0%
c)	machinery park	40,0%	100,0%
d)	remuneration	77,7%	60,0%
e)	interpersonal relationships on the line employee - superior	31,1%	80,0%
f)	providing personal protection equipment	44,4%	100,0%
g)	Employees training	17,7%	60,0%

source: Own calculations based on surveys. It was possible to choose more than one answer.

In the opinion of surveyed supervisors the quality of working conditions in general, is determined by all factors identified above and in particular by the proper organization of the workplace, efficient machinery, equipment and tools, and providing employees with personal protection equipment. On the other hand, employees believe that the level of remuneration and work environment are the priority. This may indicate the low awareness of employees in the matter of factors responsible for the quality of working conditions.

Tab. 4 The structure of factors affecting the poor working conditions occurring in the surveyed company

Question 16	What in your opinion affects the poor working conditions in your workplace?	employees	supervisors
a)	work environment (such as excessive noise, the presence of preservatives)	68,8%	80,0%
b)	inaccurate work organization	20,0%	-
c)	machinery park contravening the requirements of safety rules	40,0%	-
d)	too low remuneration	68,8%	20,0%
e)	Inappropriate interpersonal relationships on the line employee - superior	22,2%	-
f)	not providing personal protection equipment	17,7%	20,0%
g)	lack of possibilities for employees training	15,5%	20,0%

source: Own calculations based on surveys. It was possible to choose more than one answer.

Taking into account the responses of supervisors, poor quality of working conditions mainly depends on factors related to the specific work environment in the sawmill industry. Whereas, other factors are at the appropriate level or slightly deviate from the generally accepted standards. The workers' opinions overlap only in relation to work environment issues. In addition, a considerable percentage also believes that their salary is too low and that the machinery and tools, on which they work, do not meet the work safety rules. Other factors, though to a lesser extent, appear as well.

Employer's provision of personal protective equipment and at the same time using it by the employees play an important role, since it reduces significantly the risk of accident at work. Unfortunately, the analysis of the responses clearly indicates that a considerable percentage of respondents is not aware of necessity of using personal protective equipment - every fourth worker pointed "I DO NOT KNOW" answer to the question "Is it necessary to use personal protective equipment at your workplace?". This may indicate a lack of information in this subject provided by the management team or unprofessional approach to the workplace by the workers, who often undergo appropriate training; however, they disregard it and do not pay much attention. This is also confirmed by answers to the questions shown in Table 5. Analyzing them, it can be said that 1/5 of employees have no idea whether the employer provides the necessary personal protective equipment, and every third employee uses them only from time to time. What is even more interesting is the fact that every three out of five supervisors have no idea whether their subordinates work in accordance with applicable health and safety rules. This attitude undoubtedly fosters misconduct of employees. Therefore, it can be concluded that the workers use of personal protective equipment, as well as management awareness in this subject is low, which in turn is reflected in the growth of occupational risk.

Tab. 5 The frequency of applicability of PPE by employees

Does the employer provide adequate personal protective equipment?						
employees			supervisors			
yes	No	Don't know	yes	no	Don't know	
66,6%	11,1%	22,3%	80,0%	20,0%	-	
Do you use personal protective equipment?			Do the employees use personal protective equipment?			
Yes, always	Yes, often	No, never	Yes, always	Yes, often	No, never	Don't know
57,7%	33,3%	9,0%	20,0%	20,0%	-	60,0%

source: Own calculations based on surveys.

Conditions of employment, interpersonal relations

Employment contract type and remuneration issues are strongly influenced by the level of economic working conditions and thus they affect the assessment of working conditions in general. In the analyzed company 3/4 of employees are not satisfied with the type of contracts they have. Fixed-term contracts or contracts for an indefinite time but not full-time are the majority. Even more people are dissatisfied with the amount of their salary, which is slightly higher than the minimum wage. The opinion of supervisors is quite different in this regard. According to them, the employees receive adequate remuneration, consistent with their education level, qualifications and skills.

Tab. 6 The structure of satisfaction with signed contract of employment and the amount of received satisfaction

Are you satisfied with the signed contract?	
Yes	no
24,4%	75,6%
Are you satisfied with the remuneration you get?	
Yes	no
17,7%	82,3%
In which group would you place your remuneration?	
1000 – 2000 zł	17,7%
2001 – 3000 zł	75,7%
3001 – 4000 zł	6,6%
Higher than 4000 zł	-

source: Own calculations based on surveys.

The aim of another question was to learn about respondents' opinion in relation to interpersonal relations in their company. Most of the employees and supervisors identified them as positive (almost 67% of employees and 80% supervisors). However, none of the respondents did specify them as excellent. The employees have the divergent opinion concerning the answer, which suggests a very low level of interpersonal relations. Every fifth employee expressed such an opinion, but employers did not notice any irregularities in this regard.

Tab. 7 Overall assessment of working conditions in the opinion of employees and their supervisors

Specification	workers	supervisors
Excellent	-	-
Very good	-	20%
Good	35,5%	80%
Satisfactory	37,9%	-
Bad	26,6%	-

source: Own calculations based on surveys.

The last question in the questionnaire was supposed to assess overall evaluation of the working conditions. By analyzing this information, it can be concluded that the opinion of employees is far from the view of their supervisors, who evaluate it on a high level. It is worrying that as many as a quarter of respondents working physically consider them simply as derogatory and undignified.

SUMMARY

Research allowed to collect relevant information upon which an analysis was made and conclusions were drawn concerning the overall assessment of working conditions in the sawmill industry in rural areas of Opole Voivodeship. Due to the fact that collected information is purely subjective, one could familiarize with the level of awareness of employees and their supervisors on occupational risks and non-compliance with applicable health and safety rules as well as the discrepancies occurring among the respondents. On this basis, one also familiarized itself with the views of the respondents on the general level of working conditions in the analyzed company.

The views expressed in the survey concerning the organizational and technical issues, economic and social conditions of work clearly show that the opinion of employees is significantly different from the supervisors' views. This is also confirmed by summarizing assessment of general working conditions in the company. As opposed to management views,

the employees believe that working conditions are at an unsatisfactory level, thus their quality is poor. In addition, the analysis indicates that workers are not fully aware of the factors determining the quality of work environment, and their often inappropriate behavior reduces the overall quality of working conditions. Unfortunately, as shown in the survey, it happens because of tacit consent of supervisors.

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Streszczenie: *Warunki pracy w przemyśle tartacznym w opinii pracowników i pracodawców na przykładzie średniej wielkości zakładu (studium przypadku).* Branża tartaczna charakteryzuje się stosunkowo dużym ryzykiem zawodowym, które spowodowane jest w głównej mierze trudnymi materialnymi warunkami pracy (m.in. ponadnormatywne zapylenie, przekraczające dopuszczalne normy hałas, kontakt z niebezpiecznymi urządzeniami i maszynami). Dodatkowo w tartaczniactwie często odnotowuje się niewłaściwą organizację pracy, brak pełnego zmechanizowania operacji obróbczych oraz występowanie szkodliwych dla zdrowia środków impregnujących, konserwujących i przeciwpalnych. Przyczyną, z braku odpowiednich środków finansowych, w zakładach przerobu drewna często pracuje się na przestarzałym i wyczerpanym parku maszynowym, co nie pozostaje bez wpływu na ogólną ocenę warunków pracy. Pracowników obróbki drewna wymienia się wśród zawodów charakteryzujących się stosunkowo wysokim stopniem wypadkowości wśród wszystkich działów gospodarki narodowej. W opracowaniu przedstawiono najważniejsze wnioski z przeprowadzonych badań.

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