

LEVEL OF WORKING CONDITIONS IN THE ERA OF GLOBALIZATION ON THE BASIS OF WOODWORKING INDUSTRY IN OPOLE SILESIA

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Abstract

Globalization is wide and complex process, which affects every sphere of human life. This term is mostly associated with finances, market, competitiveness strategies, technology, research and knowledge development, consumption models, way of life, law regulations and vision of standardized world. The main aim of globalization is to eliminate diversified social, economic and political barriers among particular societies and economies as well as to create global socio-economic system. Additionally, the important goal of globalization is creation of concurrent organizational, legal and institutional solutions. One of them is to determine common norms and rules in the field of working conditions (e.g. management norms of occupational safety and health). Ensuring appropriate level of working conditions shall be a priority for all organizations, both new organizations willing to enter the market and those, which already perform, on the market. The aim of the article is to present the contemporary working conditions in the companies located in Opole Province based on woodworking companies.

Key words: globalization, woodworking industry, working conditions, sawmill industry.

Introduction

The process of globalization can be merely described as tightening international correlation among companies, which in effect leads to generating stronger mutual dependencies. Moreover, it is assumed that owing to that process the scope of large concerns' activity is varied. According to that, the dynamic changes occurring in the world would be the outcome of the organizational, technological, social and economic progress, which indicates that globalization process, has a significant effect on creating the image of each company that wishes to function on the international market, become competitive and influence the sustainable socio-economic development.

Nowadays, Polish companies more often realize that their economic activity shall be based not only on strong and transparent relations with their workers, suppliers or investors but also on strong bonds with customers, local community and government administration. It is especially important in certain branches of economy where performing on the market is difficult. One of such branch of economy is the woodworking industry, which is mostly characterized by improper realization of European standards (especially in the field of ensuring working conditions and environment protection policy) not to mention, activities anticipated or desired by the local community.

Solving existing global problems, including those occurring in the field of improper working conditions, needs involvement of all parties –

subjects (e.g. national companies, international concerns, national economies and international integration groups and economic organizations) [3] which influence common activities in economic and social aspect. Improvement of working conditions shall be the fundamental aim of every company that wishes to function according to European standards and be reckoned positively and in consequence achieve good position on the market. Undertaking actions in that particular field is not complicated, although achieving the goal is difficult since the issue of working conditions is not one of priority goals of the company.

The article depicts the quality of working conditions and illustrates their recent level in companies located in Opole Province on the basis of woodworking companies.

1. The characterization of working condition

The term "working conditions" used in the scientific literature as well as in the practice, has not been precisely defined yet. Most authors, in generally, do not precise the term of "working conditions". It is caused – as it may be seemed – by ambiguity of polish term "condition", which means [7]:

- condition on which existence of something is based,
- requirement, demand posted when signing agreement, claim on which something is conditioned,
- set of indispensable features in order to be somebody or something,

- situation in certain field, circumstances in which something is happening, living or existing,
- claim on the basis of which subject undertaking legal action, make something happen or not on the condition of future and unreliable occurrence.

Therefore, the term "condition" may mean the set of indispensable features, necessary or favorable for occurring of certain actions, phenomena, qualities; it shall also stand for circumstances in which certain process occurs. Wider substantial dimension of this term allows taking into account various factors determining human work in describing working conditions. General concept of working conditions, and in particular its humanistic aspect, shall take into consideration the role of interconnection between entity and working groups as well as the relationships between them developing on the ground of material conditions. Therefore, working conditions shall be understood as a general state of relationships. The term working conditions means "the general elements and features of the objective situation in which the company workers realize the company's policy, that determine people, create the atmosphere at work place and in the consequence interact with the behavior and attitude of workers" [2].

In the sociological literature, the classification of working conditions includes a number of various elements of work environment. While analyzing the role of working conditions in interaction with social organization of work, it is assumed that working conditions are: "... totality of material and social elements of company, directly determining the situation of an employee in the process of work and life in the company" [4].

These elements determine:

- material work environment – including technical working conditions (machines, facilities, protective clothing etc.) and physio-chemical working conditions (lighting, noise, level of dust, temperature etc.), determines reimbursement of physical strength of worker,
- working time – includes both, examination of duration of working day (length of working day, working breaks etc.)

and intensity of work (rate, speed and distribution of work), therefore includes the time of exposition of worker to material and social elements of working conditions,

- social relations in the company – general human relationships (among workers, as well as in the relation worker-employer) management styles, supplementing workers' education, workflow etc.,
- social activity of company – includes facilities and social premises as well as fringe benefits, so their source is state and type of sanitation and living conditions.

2. The characterization of woodworking industry in Poland

The woodworking industry, apart from its untypical specification caused by various factors, both internal and external (localization, working conditions, obsolete machines and lack of foreign investments), still plays an important role in national economy. Its specific role stems from the fact that, it functions mainly owing to natural, and renewal at the same time, national base of timber (according to Central Statistical Office in Poland, state for the end of 2008, the area of woods was 9066 thousand hectares, it corresponds to forestation 29, which enables to acquire approximately 25-26 millions m³ of timber per year, while sustaining other woods functions not connected with the production). Owing to that, the woodworking industry does not require high demand for energy necessary to process timber. At the same time, this branch of industry has an opportunity for recycling and utilization of timber waste. These elements mainly determine the ecological character of the woodworking industry, which in wider dimension has a significant meaning in the aspect of sustainable development.

Significant impact has also the dynamics of production sale in the industry generally, although there are many factors which influence negatively over the function of this branch of industry, the sale is relatively high (table 1).

Table 1. Dynamic of production sale in the woodworking industry in comparison to the industry in the years 2001-2008 (Previous year = 100%, stable prices)

Specification	2001	2002	2003	2004	2005	2006	2007	2008
Industry in general	95,5	94,7	98,8	100,9	100,1	101,8	104,7	102,8
Processing industry	95,6	94,2	99,3	101,7	100,7	102,5	105,7	103,2
Woodworking industry	91,8	92,4	97,9	107,1	96,9	103,7	107,8	103,2
Furniture industry	96,1	96,4	107,8	110,2	98,3	102,6	105,6	101,3
Chemical industry	93,9	94,8	98,6	101,3	100,0	102,4	100,5	103,9
Metal industry	84,9	89,8	91,8	97,1	99,8	104,1	103,4	99,3

Source: Self-study based on CSO data from years 2001-2009.

Unfortunately, although its significant role, the woodworking industry is still in bad financial condition, and is not able to self-finance its investments and modernization. Moreover, this branch can be characterized by relatively small interest of the foreign capital. Apart from financial problems in the woodworking industry, there have also appeared organizational and technical problems. They stem from number of health threats of workers and improper organization of work (it has significant meaning since most of the employed people works with hazardous machines) from both the employer side and employee. Until recently, it happened that works have been carried out on the obsolete machine park, due to lack of financial means, which mostly do not fulfill required safety norms. Moreover, workers not always pay enough attention to specialist trainings from the field of occupational safety. From 1st May 2004, Poland joined the European Union, which imposes certain occupational norms and standards, the above-mentioned situation has been improved. Unfortunately, these changes are mostly hindered by improper workers activities (according to survey concerning the quality of working conditions carried out in 2004 and 2009 among workers of the woodworking industry it was noted only 11% of growth in systematic usage of individual protection means – nowadays it is noted around 66%). These elements significantly influence the level of working conditions quality.

Among other fundamental, noxious factors that influence worker's health in the work environment, we can distinguish the following [5]:

- above-average noise,
- place of performing work (most of the works is being conducted in the open air and in the non-heated huts),

- wood dust, which may be allergenic,
- insufficient lighting,
- above-average mechanical vibration (caused by e.g. sawing machine can cause crucial pathologic changes in the osteoarticular system and nervous system),
- pathogenic preservative, impregnation and anti-inflammatory agents,
- lack of complete mechanization of work.

In Poland, similarly like in other European countries, workers of timber processing and cabinet-makers are mentioned among 10 professions with high level of accident rate. The highest accident rate is noted while servicing circular sawing machines, shaping machines and milling machines. Main injuries caused during these accidents are: hand injury, palm injury and injuries of abdominal cavity.

According to National Official Business Register REGON, the number of economic subjects operating in this branch, after the transformation process in the early 90's, has dropped drastically at first and then raised up to 12%, and has been at the same level for several years (in 2008 it was almost 8500 entities). However, the actual number of factories operating in woodworking industry oscillates between 1200 and 1400. Most of them are the small factories, only 15% have been employing more than 49 people, and large concerns are rather unusual.

3. Level of working conditions in the woodworking factories in Opole Province

In Opole Province, there perform a number of small companies from the woodworking industry, although in comparison to other Polish

provinces that number is relatively low. In 2009, the number of companies from that particular branch of industry in Opole Province was

the lowest in the country, though the 13% of all companies in Opole Province are from the woodworking industry.

Table 2. Employment in hazardous conditions in the woodworking industry in Opole Province in the years 2001-2008

Specification	Total	Factors connected with the work environment	Factors connected with work arduousness	Mechanical factors
2001	1893	1194	139	580
2002	1515	918	47	550
2003	1759	975	53	731
2004	1751	990	80	681
2005	1810	1010	90	610
2006	1680	890	78	712
2007	1710	910	97	703
2008	1620	850	80	590

Source: Self-study based on Z-10 reports for the years 1999-2009, Opole Statistical Office.

Table 3. Employment in hazardous conditions in the woodworking industry in Opole Province in the years 2001-2008 (for 1000 employed)

Specification	Total	Factors connected with the work environment	Factors connected with work arduousness	Mechanical factors
2001	795	496	55	244
2002	706	408	16	283
2003	735	419	16	299
2004	740	420	25	295
2005	710	415	20	285
2006	695	395	14	286
2007	705	420	25	260
2008	700	405	21	274
2001	795	496	55	244

Source: Self-study based on Z-10 reports for the years 1993-2005, Opole Statistical Office.

Table 2 and 3 contain data of workers employed in hazardous conditions in total and in specific groups. It can be derived from the analyzed material that the degree of workers' life threat resulting from interaction of noxious factors in the wood working industry, has not been significantly changed and is even now maintained on the high level (on the average 70-85% of workers have been employed in the norms not following the occupational and safety standards). The highest level of hazard derives from the hazardous factors in the work

environment (for 1000 employed workers almost every other worker is under the influence of these factors). High level of health and life threats in the woodworking industry is also generated by the mechanical factors. It is an effect of using obsolete and exploited machines and tools. Due to high prices of modern facilities and machines, the entrepreneurs make use of their obsolete facilities, which is inappropriate for workers and production process. However, the level of life threats caused by factors connected with work arduousness is far lower.

Table 4. The structure of workers exposed to occupational hazard occurring in selected companies from woodworking industry in Opole Province in the years 2001-2008

Number	Selected hazardous factors	Proportional participation of workers expose to a selected factor
1.	Noise	70,0%
2.	Wood dust	39,9%
3.	Extremely low or extremely high temperature	25,9%
4.	Muscle overloading	14,4%

(continued)

5.	Selected chemical substances	8,3%
6.	Mechanical vibrations	7,0%
7.	Forced body position	6,6%

Source: Self-study based on data acquired in occupational safety department of selected companies from the woodworking industry in Opole Province.

The detailed analysis of data from all companies in Opole Silesia has allowed establishing the most important, from the statistical point of view, hazardous factors (table 4.). On the basis of acquired data it can be assumed that the most important hazard in the woodworking industry in Opole Silesia, is the noise, which recursively exceed the permissible norms. Moreover, the second hazard is the wood dust. However, in this case exceeding permissible norms is usually minimal. Although, it does cause great hazard to worker's health (especially hard wood – oak, beech, which has carcinogenic cells). In the surveyed companies, there has been noted also high level of exposure to extremely high or extremely low temperatures. It derives from the specific of this industry, where most of the works is being performed on the outside or in the free-opened room regardless of the season of the year (it concerns mostly the sawmill industry).

In surveyed companies, the number of work accidents has dropped twice in the given period (table 6.). However, it does not stems from improvement of working conditions, as it may be seemed, but mostly from the lower

number of workers (in the given period that number fell more than 50%). Unfortunately, despite the fact that overall number of accidents has fallen, the woodworking industry is characterized by high gravity index (i.e. number of days wasted for one accident) which during the analyzed time has risen more than 50%. Alarming phenomenon is also increased number of serious accidents and stagnant level of fatal accidents. In case of frequency index, the significant downfall has been observed. It can be perceived as a positive change. However, the most frequent reason for work accidents is the human factor (more than 50% of all accidents – table5, of which predominant part is caused by inappropriate behavior and activity of workers, e.g. not employing protection facilities). Moreover, a significant number of all accidents are caused by inappropriate organizational and technical factors, which is a reflection of using obsolete machines. Additionally, disadvantageous reflection of work accidents is high level of sick leaves especially those longer ones (more than 29 days), it results in high economic and social costs, borne by particular companies and state.

Table 5. Reasons of work accidents in chosen woodworking companies in Opole Silesia in the years 2001-2008

Specification	2001	2002	2003	2004	2005	2006	2007	2008
Technical factor	14,3%	15,7%	19,9%	21,7%	22,5%	19,2%	18,8%	18,1%
Organizational factor	33,3%	26,6%	23,9%	22,5%	25,9%	25,3%	21,3%	23,2%
Human factor	52,4%	57,7%	56,2%	56,3%	51,6%	55,5%	59,9	58,7%

Source: Self-study based on data acquired in occupational safety department of selected companies from the woodworking industry in the Opole Province.

Table 6. Accident rate in chosen companies from woodworking industry in the years 2001-2008

No	Specification	2001	2002	2003	2004	2005	2006	2007	2008
1.	Total number of accidents	25	31	27	22	20	18	15	10
2.	Number of serious accidents	1	1	2	3	3	4	2	4
3.	Number of fatal accidents	0	0	0	1	1	2	2	1
4.	Sick leave caused by work accidents:								
	From 1 to 3 days	0	0	0	0	0	0	0	0
	From 4 to 28 days	11	20	16	10	7	7	6	6
	More than 28 days	14	11	11	13	14	11	10	12
5.	Mean overall employment	653	642	631	601	597	541	498	333

(continued)

6.	Overall number of days of inability to work caused by work accident	1512	1380	1378	1289	1310	1215	998	834
7.	Number of days waste for one accident /gravity index/	60	45	51	59	66	68	67	83
8.	Frequency index	38	48	43	37	34	33	30	28

Source: Self-study based on data acquired in the surveyed companies.

Conclusion

Ensuring decent working conditions level shall be an integral part of company's policy that wishes to function according to established norms and standards in that field. It is important issue owing to which workers are feeling more secure and can better integrate with company policy and engaged into work, this in result influence their work efficacy. In consequence, companies are positively recognized by the surroundings and have greater chances to achieve success both on national and international markets. Therefore, the issue of ensuring decent working conditions shall be engaged in the company policy and management strategy and at the same time equally treated with other priority aims of the company. It is especially necessary in the aspect of globalization of world economies, which main aim is to eliminate diversifies barriers in various aspect of life.

Unfortunately, in the surveyed branch of economy - woodworking industry, despite of significant technical and organizational progress, in the evaluated period, the level of working conditions was at a low level. This fact undoubtedly has negative influence over functioning on the marker and entering new ones. The above-mentioned situation is frequently the

consequence of poor financial condition of companies from the woodworking industry, bad organization of work or the lack of employee's of employer's commitment

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