

European Practices to Reduce Work Accidents in the Agricultural Sector of Bulgaria

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The new legislative framework aims at improving the working conditions, provision of welfare at work and quality of work, taking into account changes in the workplace and the emergence of new occupational hazards. Purpose of the National Strategy is to reduce accidents by 27% by 2015, it is expected that the implementation of the National Program for 2013 will lead to a 8% decrease in the number of accidents. Achieving this goal is of particular importance given that, although declining in recent years, the number of accidents is still high. An important factor for improving the working conditions of social partnership and expansion of participation in the workplace in the agrarian sector of Bulgaria.

Key words: work accident, workers' rights, social partnership agricultural sector of Bulgaria

1. Introduction

Agriculture forms the 11% -13% of Bulgaria's GDP and has become an important sector of the Bulgarian economy. After the financial crisis of 1996, agriculture was the only sector reported growth (30% in 1997 compared with 1996). This improvement has partly recovered the decline in agricultural production observed between 1989 and 1996, which is estimated at 30%. Agriculture is an important source of employment in Bulgaria, 23% of the active population works in the agricultural sector. Different causes for a decline in agricultural production for the period after the transition period. After the liberalization of prices, farmers are affected by a large increase in producer prices by reducing demand, as well as government intervention aimed at slowing down the increase in consumer prices of staple foods and to ensure food security by limiting exports. Failure to coordinate the process of returning the land to its former owners with the liquidation of state-controlled co-operatives increased the difficulties of transition. The combination of this pressure with the difficulties resulting from land reform gives an explanation for the decline in agricultural production. In addition, the wrong policy conducted during 1995 and 1996 and poor weather conditions led to a shortage of grain in those years with very negative consequences for the agricultural sector and food industry. The decline in production was accompanied by a decline in domestic demand and changes in consumption patterns, mainly from animal products to cereals, due to the overall loss of purchasing power and the high share of food expenditure of total income of the population. In

1997, the agricultural recovery was due mainly to favorable yields and grain harvest this year.

The new legislative framework aims at improving the working conditions, provision of welfare at work and quality of work, taking into account changes in the workplace and the emergence of new occupational hazards. Purpose of the National Strategy is to reduce accidents by 25% by 2013, it is expected that the implementation of the National Program for 2009 will lead to a 8% decrease in the number of accidents. Achieving this goal is of particular importance given that, although declining in recent years, the number of accidents is still high. An important factor for improving the working conditions of social partnership and expansion of participation in the workplace in the agrarian sector. The best legislation is not sufficient to establish a good working conditions, it is only a necessary and important first step. The challenge and the government and the employers and trade unions, is its effective enforcement and compliance. An additional challenge is that many of the established social partnership bodies do not function effectively. This also applies largely to the WCC and WCG in the construction and operation of which there are significant problems.

2. Research and Results on the Topic

2.1. Characteristics of the accident

Occupational accident is any sudden injury to health occurred during and in relation to or in connection with work performed as well as any work performed in the interest of the undertaking

when the cause disability or death. Labour is accident occurred during the usual time for going to and returning from the workplace to the principal place of residence; where the insured worker usually eats during the working day; place to receive remuneration. For each occupational accident victim, his immediate supervisor or witnesses of the accident immediately inform the head of the employer / enterprise user or the authorized official. The majority of the participating members of the WCC study - 67 percent - work in large companies, and third - in the middle.

2.1.1. Land cultivation and crop production

Agricultural land represents about 6.2 mil.hektara (55% of the territory), of which 4.2 mln.hektara is arable and 1.7 mln.hektara permanent pasture. Approximately 15% (700,000 hectares) of agricultural land are neglected and not treated. Most cultures are very sensitive to changes the experience in Bulgarian agriculture and the process of transition impact and leads to Reduce wind some areas or reduction of production levels. As , the production of sugar and wine, fall turns importance to the economy.

2.1.2. Livestock breeding

Since 1989, the livestock sector is undergoing secondary and a sharp drop compared to the crop (a contraction of more than 50% in livestock numbers). At the end of the eighties, livestock was highly concentrated in large state controlled co-operatives and state livestock complexes. The process of liquidation of state-controlled cooperatives and drop natarseneto domestically mark the beginning of the phenomenon of "deleveraging". The consolidation of small farms, which are now the main structures Livestock not offset the effect of the negative trend to reduce the number of animals. The decline in livestock has been persistent and there are no signs of recovery. Pig is the most important unit for the livestock sector, which is still a relative importance of livestock complex and still not privatized, but most are to be privatized in the near future. In the agricultural sector there is no specific guidance for risk assessment. The employer bears all responsibility in case of an accident, but in practice the risk assessment is carried out by consulting firms and service and the provision of occupational

medicine. Training for health and safety in the workplace are organized by training centers approved by the National Agency for vocational education and training, but these courses are usually prepared by professional organizations of employers. International employers - professional organizations. They receive financial support from the Ministry of Labour and Social Policy. There must be a certificate issued employers.

3. Analysis of the results of a survey conducted within the project "Social Competence for Safety in Agriculture"

Within the project "Social Competence for Safety in Agriculture" were held several meetings. Participation in them have taken almost 600 people. The questionnaire consists of three parts. Part A refers to the age and education of the persons interviewed. The aim of this part was to determine the profile of the target group. Part B consists of closed questions directly related to safety agriculture.

Part A

A total of 600 people completed the questionnaire. Of these, 383 were men and 217 - women. The average age of interviewees was 18-30. 253 respondents with secondary education. The majority of the participants live in rural areas, most inhabited farms than 1 hectare (201 people) and from 2 to 10 hectares (163 people). The main agricultural activity on farms is crop. Skilled workers and immigrants are part of the risk groups. One important group of agricultural workers are low-skilled. In recent years a large number of immigrants working in the agricultural sector as a result of which a problem with the perception of labor habits. Some of these habits relate to the prevention of occupational risks. Moreover - the ten-year period covering the years 1995-2005, the agricultural sector recorded the highest risk of fatal accidents, and remains one of the sectors with the highest number of non-working days.

Part B

The low level of awareness among farmers about the risks in the workplace due to the fact that farmers in their capacity as self-employed persons are not subject to the provisions of the Labour Code. No doubt this is one of the most important reasons for the high percentage of accidents on farms and occupational diseases as a result of

agricultural labor. Due to insufficient safety on the farm, set by the European Federation of Trade Unions in the agriculture sector in their proclamation of better health and safety of agricultural workers need to make the necessary legislative changes to provide farmers rights and

obligations similar to those of other workers outside the agricultural sector.

Most respondents said that determine their knowledge of health and safety on the farm by more than medium high - 48% of respondents. Defined as weak knowledge, 33% of respondents.

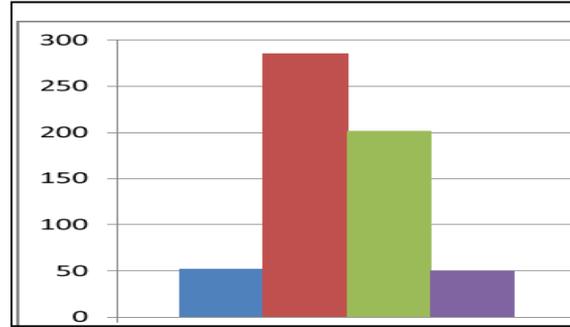


Figure 1. Do you know the requirements for health and safety working conditions in agriculture

Table 1. The requirements for health and safety working conditions in agriculture

The requirements for health and safety in agriculture	Answers
Largely	52
In moderate	285
In lesser extent	201
I have no knowledge of the topic	50

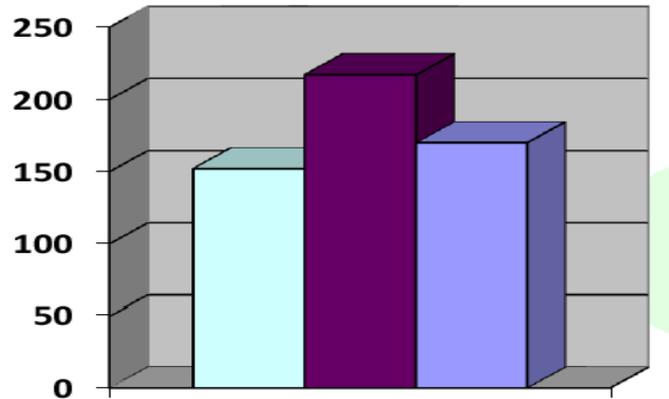


Figure 2. Do you undergone training in safety and health conditions in the farm

Table 2 Training in safety and health conditions in the farm

Training in safety and health conditions in the farm	Answers
Yes	152
No, I do not intend to do it	217
I do not intend to do	170

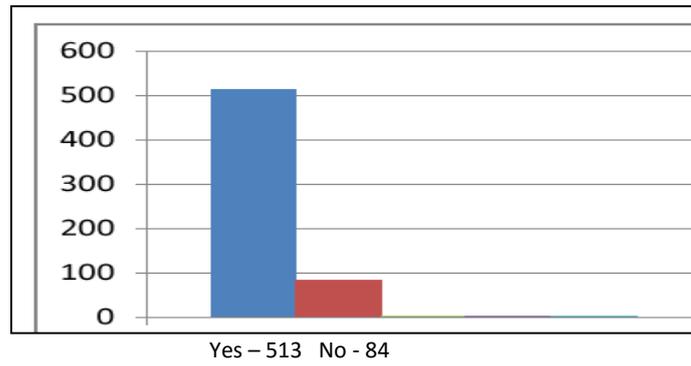


Figure 3: Are you aware of the risks associated with work on the farm

Figure 2 shows the state of learning. According to her, 25% of respondents have received training in health and safety on the farm. 36% were not trained but willing it to happen. 28% unwilling to undergo similar training for various reasons. Data show that the training should be aimed not only at people declaring their wish to participate in this, but also to those who are not interested in this kind of training, but could change their minds.

3.1. Risk description

The identification of risk is based on a careful look at the factors at work that could be hazardous to health. The aim is to assess whether they are adequate preventive measures taken and whether they could be taken additional ones in order to avoid accidents and occupational diseases. Almost 82% of respondents say they know how to recognize the risks associated with work on the farm. To describe the risk must be taken into account all the risks associated with the specific type of work. It should be an evaluation of the

outdoors and indoors. Risk assessment is subjective and therefore one should not trust her blindly.

3.2. Causes of injuries

Most accidents occur due to improper organization of work, mainly as it relates to the improper organization of the workplace, such as poor conditions of transport; incoherence farm and production facilities; lack of adequate access and inappropriate distribution and storage of working materials; incorrectly entering and exiting the farm equipment; non-use of ladders and platforms at work high and improper use of tools. Only 64 respondents indicated as the cause of accidents fall from heights. A large number of accidents are caused by unsecured safety, improper placement of limbs in hazardous areas, poor coordination of collective actions and ignoring instructions work safety. Incidents arise as a result of incorrect rate of work or hurry in the work, and a sudden change in weather conditions.

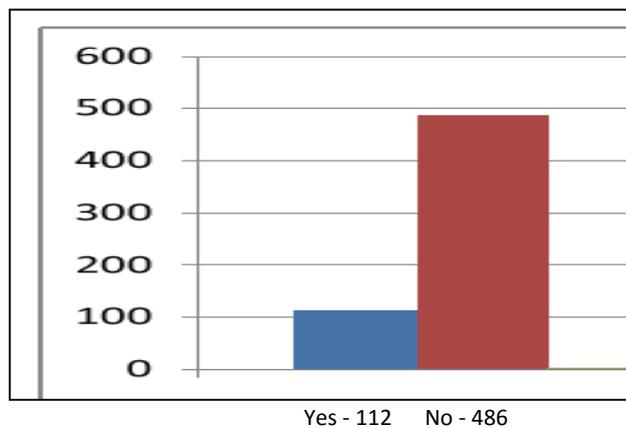


Figure 4. Have you witnessed the accident on the farm

The main reasons for accidents caused by improper cover machinery, inadequate equipment and tools or their absence, failure to provide safe working conditions for farmers and failure to provide clothing, and inadequate protection of machinery when in motion or stationary. In smaller farms where the financial situation is difficult, the main cause of accidents is the old equipment, which should be discarded and which has no protection on. 486 people have indicated this as a major cause of accidents. The main cause of accidents related to animals, improper treatment, animal aggression and their reaction to the unfamiliar environment. Among the causes of incidents indicating the use of unsafe buildings for storage of production. Risks resulting from contact with animals are out of 60 respondents.

3.3. How to prevent accidents - prevention.

74% of respondents said that it is possible accidents on farms can be prevented, while 20.3% are of the opposite opinion. These responses can be attributed to the activities of various institutions working in the field of health and safety at work, providing not only training but also organize training events to improve the general awareness of the dangers in agriculture - competitions, quizzes, exhibitions, demonstrations, conferences, meetings and more. However, it is clear that large awareness campaigns are not sufficiently visible -

respondents say they have not witnessed large-scale campaigns at national or international level. People are reached more easily through actions directly addressed to a specific audience. Specialized training and informal forms of dissemination of information are better means of large-scale television, radio and marketing campaigns.

Daily incidents kill many people, while others are injured. In cases where it is necessary to give first aid of great importance is the behavior of the witnesses. Alarming, very few people are able to provide first aid. Despite these data, 69% of respondents stated that they may have first aid while others said they could not help the victims of accidents on the farm. We need to know that it is possible at one point one of us needs this kind of help, but no one to prove. Still actions Witness accidents limited to call in an ambulance. These actions are also perceived as support and perhaps for that reason the majority of respondents said they know how to provide first aid. Lack of skills prevents appropriate action. Usually the problem is due to the fear of not harm a person. This situation is worrying, and this determines the importance of first aid training. When the witnesses passed training accidents can take lifesaving action. Many respondents stated that a one-day training on the subject will have the desired effect.

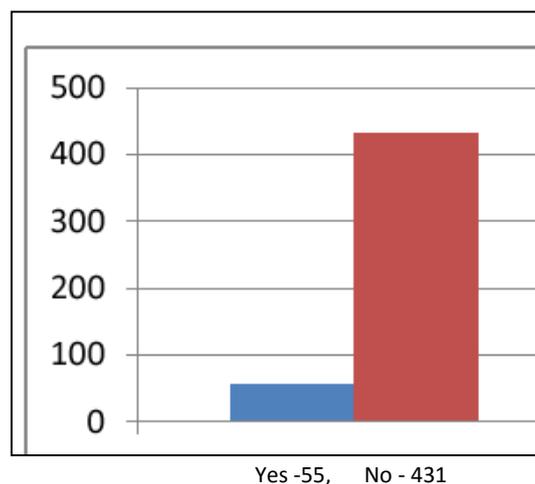
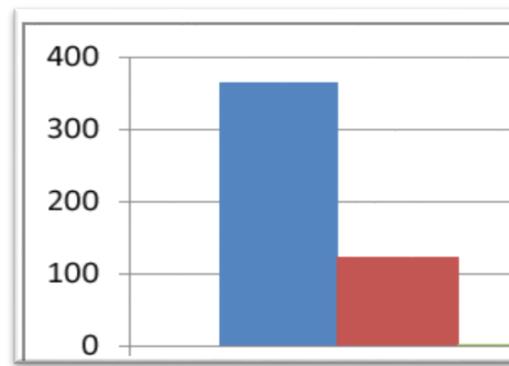
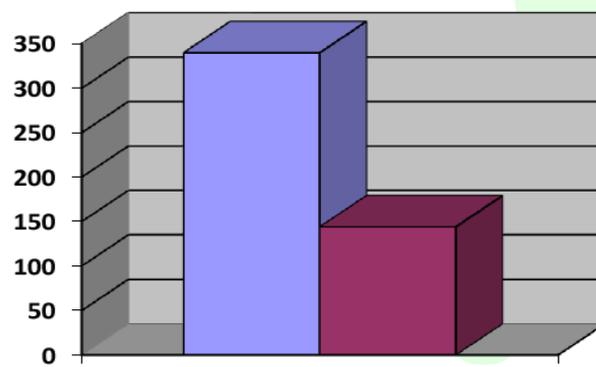


Figure 5. Have we're involved in an accident?



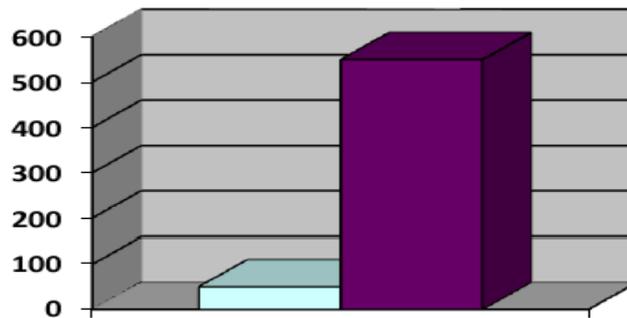
Yes – 364 No - 122

Figure 6. Do you know how to prevent accidents?



Yes – 340 No - 144

Figure 7. Do you know how to do first aid



Yes - 50 No - 549

Figure 8. Does are large-scale information and promotional campaigns dedicated to health and safety?

Table 3. Which are the most common accidents?

common accidents	Answers	Reasons
Accidents caused by animals	60	Accidents in this group occur mainly during the execution of daily activities such as feeding, milking, cleaning or during the loading of the animals when used for transportation. The reasons for most injuries associated with improper care of animals; poor conditions in which animals are kept; lack of fences; aggressive behavior of some animals; animal responses to unfamiliar surroundings or actions. Accidents with animals occur mostly in small farms, which have outdated equipment and facilities.
Accidents caused by machines	486	This type of accidents occur mostly when using machines and equipment for woodworking, during use of machinery designed to work in the fields and livestock, as well as during the use of hand-held power tools (drills, angle grinders and hand saws). Cause of accidents is the use of outdated equipment and misbehavior farmers neglect of safety rules, wearing loose clothing that can be attached when operating the machine and others. Farmers still use handmade saws that are unsafe.
Accidents caused by work on high	64	Much of the fall in the farms are primarily the result of lack of proper care for the condition of the surface of the courtyards and pathways. After rain and melting snow and unpaved trails yards are slippery and muddy. Falls from height are due to inattention and relocated because of unnecessary items. Farmers could fall and during boarding and disembarking from the stairs of trailers loaded with straw and hay. The reason for these accidents is mainly unsecured cargo and non-use of ladders and platforms for loading and unloading.
Others	12	In this group are referred to responses that can be placed in any of the groups above. These include electric shocks, the escape of material during repairs and others. The reasons for these occurrences are poor maintenance of paths, non-use of protective clothing, misuse of equipment, trailers, vehicles, ignorance of the rules for safe use of electrical appliances and wearing the clothing.

As shown in Figure 8. only 50 of the respondents have come across large information and promotional campaigns. This represents only 8.3% of respondents. 91.5% of respondents have never heard of such campaigns or have not noticed them. One of the largest information and promotion campaigns was the campaign on risk assessment carried out by the European Agency for Safety and Health at Work in Bilbao.

4. Conclusions

The agricultural sector is one of the main sectors of the economy. It boasts a large number of self-employed persons and limited interference of state institutions that ensure the provision of healthy and safe working conditions. However, taking into account the commitment to public health and the desire to improve living conditions and working conditions of people working in private farms are carried out numerous educational, preventive and preventive initiatives. The majority are institutional measures required by legislation and regulations. Important role in play and institutions whose activities are aimed at

protecting public health and the improvement of the technical security measures in agricultural activity. The main institutions mentioned by respondents are: the Agricultural Social Insurance Fund, the State Labour Inspectorate, the Institute of Rural Medicine, Central Institute for Labour Protection, some universities, the International Labor Organization and others. Only 15% know the educational institutions in their area. Almost 85% do not know what are the institutions that provide training for health and safety.

Improper inclusion of children work on farms, giving them work that is not consistent with their abilities, or their work in harmful or hazardous environments have adverse effects on health and overall development of children. The working environment of farmers has many risks to life and health of workers. These risk factors have a much greater impact on children than on adults. Negative effects resulting from agricultural activity in family farms can affect not just on children directly involved in agricultural work, but also on those who are in the area to play or relax. It is therefore important that both parents and children aware of the dangers to life and health in

agricultural work, and parents should have the necessary skills to organize safety at work on the farm and to ensure the safety of children at work, play or rest in farm.

Activities undertaken in this area by different institutions. The above institutions have developed educational and training materials for the prevention of threats to the lives and health of children posed by the life, work, rest and play in the farms. Moreover - have organized activities for children and their parents in the form of training, education programs and competitions to identify risks and ensure safe living conditions for children from farming families. However, only 18% of respondents are aware of these activities. Most respondents do not know whether schools are performing similar activities and trainings. Almost 80% said that such actions are not available or do not know about them. The conclusion that follows from these data is that the measures have not led to satisfactory results due to the lack of coordination of the initiatives of the various institutions that relate to children's safety on farms. Comparing the level of knowledge and awareness of the most common accidents, we can say that there is a stereotype among farmers and people working in agriculture that most accidents happen at work machines. This is true if we consider the amount of fatal accidents. However, according to results of a study conducted by the Agricultural Social Insurance Fund, most accidents happen at work high. It is therefore necessary to

raise awareness about the fact that not only work with machines and carries risks that different types of agricultural work include various hazards. The study showed that it is important to pay attention to safety when operating machinery, but also at work on high. It is important to take into account and first aid. This need stems from the results of the polls. During the study identified was the ultimate target group of the project. The results confirmed the initial assumptions. The target group will comprise farmers engaged in agriculture and self-employed. Could include an additional target group - students in agricultural universities.

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