

**RESEARCH OF OCCUPATIONAL SAFETY PROBLEMS OF WORKERS IN  
AGRICULTURAL INDUSTRIES****RESEARCH OF PROBLEMS OF LABOR PROTECTION OF WORKERS IN  
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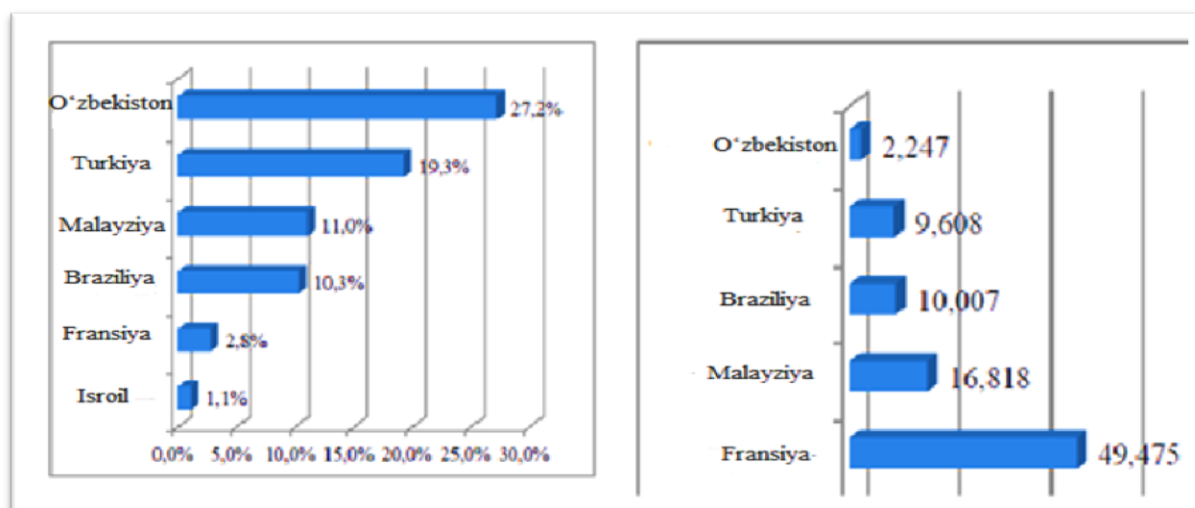
**Annotation:** This article discusses the level of preparedness for labor protection of managers, farmers and other workers in the field of agriculture, a special assessment of jobs, as well as accidents and injuries that occur when growing agricultural products and in the processing industry, determines the causes of injuries and measures to their elimination.

**Key words and phrases:** Agriculture, labor protection, accidents, injuries, damages, agricultural products, processing industry, dangerous factors, harmful factors, chemicals, biological elements, machinery and equipment.

**Relevance of the topic:** Agriculture is one of the most important sectors that determine the standard of living of the country's population, its well-being and food security. Agricultural products are processed in many sectors of the national economy (production of juices, tobacco, coffee, chocolate, fruit drying, etc.). At the same time, many industrial facilities (mechanical engineering, oil and gas, fertilizer production, etc.) work for agriculture. It turns out that hundreds of thousands of engineers and workers are directly or indirectly employed in agriculture.

The agricultural sector occupies a special place in providing employment to the population. The agricultural sector employs 3.7 million of the republic's population, 27.2% of all

employed (Fig. 1).



Picture 1. Share of people employed in Figure-2. Agricultural labor productivity in agriculture, % (2021) USA dollars (2021)

This chart shows that, despite the fact that the employment rate is much higher than in developed countries, economic indicators are at a very low level. This is the modernization of agriculture, labor protection for workers employed in industries, the creation of sufficient conditions for them in the workplace, payment and encouragement for their work, and protection of workers from poisoning by fertilizers and pesticides. used for crops, and the provision of personal protective equipment requires consideration.

In addition, industries also involve thousands of complex heavy machinery, hazardous process equipment, and information and communications technology. Therefore, agriculture is the main sector of the country's economy with a complex system. Man-made accidents in such a situation are inevitable. Also, primary and secondary factors of hazardous natural phenomena (geological, hydrometeorological, environmental, epiphytic) do not leave their influence. In such conditions, various types of accidents, injuries, poisonings and deaths may occur among workers. In addition, there have been cases of poisoning from fertilizers used in agriculture and chemicals used to control pests.

It turns out that all of the above showed how relevant the issue of labor protection and safety analysis is for the agricultural sector.

The purpose of this article is to analyze legislation on labor protection in the field of agriculture for its relevance, to prepare conclusions and proposals based on the analysis.

Based on the purpose of the article, the following tasks are considered:

- analysis of problems of application of labor protection legislation in the field of agriculture;

-analysis of accidents, incidents, injuries, damages and occupational diseases that occurred in the field of agriculture;

-development of proposals for improving the methodology of measures in the field of labor protection in the field of agriculture and other tasks have been identified.

**Main part:** The agricultural sector is vast and is one of the main links in the economic network of the country, as well as the locomotive that pulls the country's industry. Of course, it is important to note the specific features that define the economic, organizational and legal relations for managing such a complex and broad economic system.

1) along with economic laws that govern agricultural industries, there are also natural (biological) laws independent of humans (weather conditions, epidemiological situation, environmental pollution, etc.)

2) this is also significant due to the limited possibility of strict compliance with labor relations and labor legislation in agricultural conditions;

3) agriculture is an environment in which the main production is territorially limited, cannot be replaced by anything and tends to increase productivity only if it is used correctly;

4) uses in agriculture such means as radiation-chemical compounds that are dangerous to living organisms;

5) agricultural production is dispersed over large areas with different natural and climatic conditions;

6) production processes in agriculture and the final results of labor may not coincide;

7) the created product is often an intermediate product and is processed in agriculture;

8) employment in agriculture is seasonal;

9) lack of permanent jobs (jobs) for the majority of those employed in agriculture.

10) the majority of workers working in agriculture have secondary education and do not have sufficient knowledge about the world, which affects compliance with labor laws.

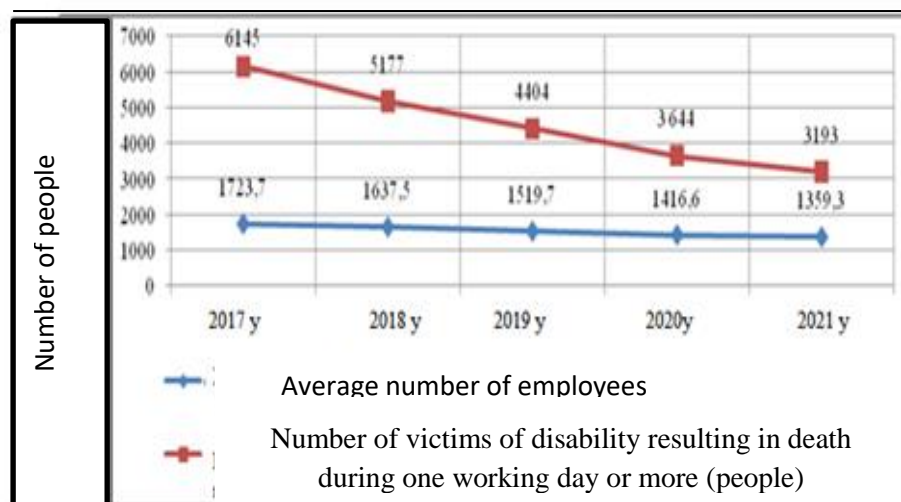
The implementation of the above measures requires legal regulation of labor relations on such grounds in agriculture, the development and application of labor protection rules, and the protection of the rights of workers in this area.

It is known that agriculture is an industry that supplies and processes food to the population. Creation of clusters, terminals, transport and logistics systems to provide the population with food products; statistics from the last 10 years show that the average annual figure is 9...10%. Also, the volume of product exports increases every year. In this regard, our

state has adopted important decrees and decisions, state programs, and their implementation is consistently ensured. In particular, according to the decree of the President of the Republic of Uzbekistan dated March 14, 2019 “On measures to develop agricultural cooperation in the field of fruit and vegetable production” in the Fergana, Andijan and Namangan regions in 2020 and 100 in 2021 throughout the country at the expense of international financial institutions.

Today, in 55 districts of our republic, clusters specializing in the production of fruits and vegetables operate effectively. These cooperatives and clusters have been joined by agricultural farmers who sell their products on domestic and foreign markets, effectively use land and water resources, and modernize technical equipment. Along with increasing agricultural yields, there is a solution to the problems of labor protection for workers. This ensures a reduction in the dynamics of accidents in agriculture.

According to the State Statistics Service, the number of victims in agricultural organizations over the past five years has decreased by 48.0% (Figure-3). But this indicator is not enough.



Picture 1. Dynamics of reduction in the number of agricultural workers and injuries as a result of accidents

That is why occupational safety management in the agricultural sector is of particular importance. However, if actions in this direction are carried out only unilaterally, sufficient safety of workers in the performance of official duties cannot be achieved: in this case, state bodies, local governments and non-state bodies, employees and employers must comply with applicable laws, standards, rules and requirements .

The high level of injuries and occupational diseases among agricultural workers is associated with the level of exposure to hazardous and harmful factors. They can be divided into the following groups:

- factors related to the operation of machines and mechanisms.
- unfavorable natural and climatic factors.
- the need for contact with fertilizers, pesticides, hazardous chemical and biological compounds used in agriculture;
- the risk of contracting dangerous diseases from contact with unhealthy animals;
- high risk to health or life as a result of bites (bites) of wild animals (insects, rodents, reptiles) in the field;
- high potential risk associated with the need to perform certain work in frequently moving mechanisms;
- compliance with legislation on labor protection and technical safety, therefore, low control in the field of internal order and discipline;
- specificity of agricultural work, including the high degree of severity and intensity of work associated with its seasonality;
- other factors.

In order to minimize the negative impact on the prevention of such injuries and occupational diseases in agriculture, special attention should be paid to the requirements established by law. Of course, in agriculture, as in other areas, general issues of organizing safe work are regulated by the norms of the Labor Code. However, the order of the Ministry of Labor dated October 27, 2020 No. 746 "On approval of labor safety rules in agriculture", which takes into account the specifics of labor for agriculture, is also observed.

Labor protection in agriculture includes the following areas:

- organization of the work process. Compliance with these requirements must be under the employer's control;
- requirements for employees;
- additional requirements for certain types of work.

The employer sets the requirements for organizing the work process. In order to minimize the harm that may be caused to employees under the influence of negative factors, the employer is obliged to make every effort to increase the level of automation and mechanization of work processes, in the presence of hazardous chemical compounds and other threats, to use work methods that exclude direct contact with such threats, or Only specially trained personnel are allowed to work.

Workers who come into contact with machines, chemical compounds and other hazards that pose a danger to their health in connection with the performance of their official duties must be provided with personal and collective protective equipment at the expense of the employer.

The equipment provided by the employer to perform a specific task must be in good condition, and the employer must provide employees with a reasonable combination of work and rest schedules. On its own initiative, the employer may introduce additional standards in the field of labor protection that do not contradict the requirements of current legislation.

Workers are required to comply with labor protection requirements in the agro-industrial complex. In particular, they are responsible for:

- timely completion of training sessions on labor protection in accordance with the schedule approved by the employer;
- fulfillment of job descriptions, including those on labor organization and use of equipment;
- proper use of personal and collective protective equipment by employees;
- inform the immediate superior organization about emergency situations that arise during the work process.

According to a number of foreign researchers, agricultural workers are at greater risk than most workers in other industries. (hard physical labor, increased levels of noise and vibration, unfavorable microclimatic conditions, various chemical and biological substances). Additionally, accidents involving tractors and trailers account for the majority of accidents involving farm animals and field work [4]. But, due to a number of objective and subjective reasons, accidents that often occur are practically not paid attention to the occurrence of accidents, and static reporting is not under strict control, for example, other industries are strictly checked and analyzed.

Among agricultural sectors, the most dangerous industry is livestock and crop production, which recorded 1.7 times more fatal injuries in 2021. Factors causing death and serious bodily injury to workers are:

- absence of obstacles in moving parts of equipment;
- lack of protective equipment or they are not in working order;
- malfunction of machines, mechanisms, tools and devices;
- creation of jobs that do not meet labor protection requirements;
- low level of training and instruction of workers on safe working methods, organization and monitoring of compliance with labor protection requirements and labor discipline;

When cultivating agricultural crops, drivers of agricultural tractors are most often injured, 74.0% of the total number of victims and 16.5% of auxiliary workers (Fig. 4).

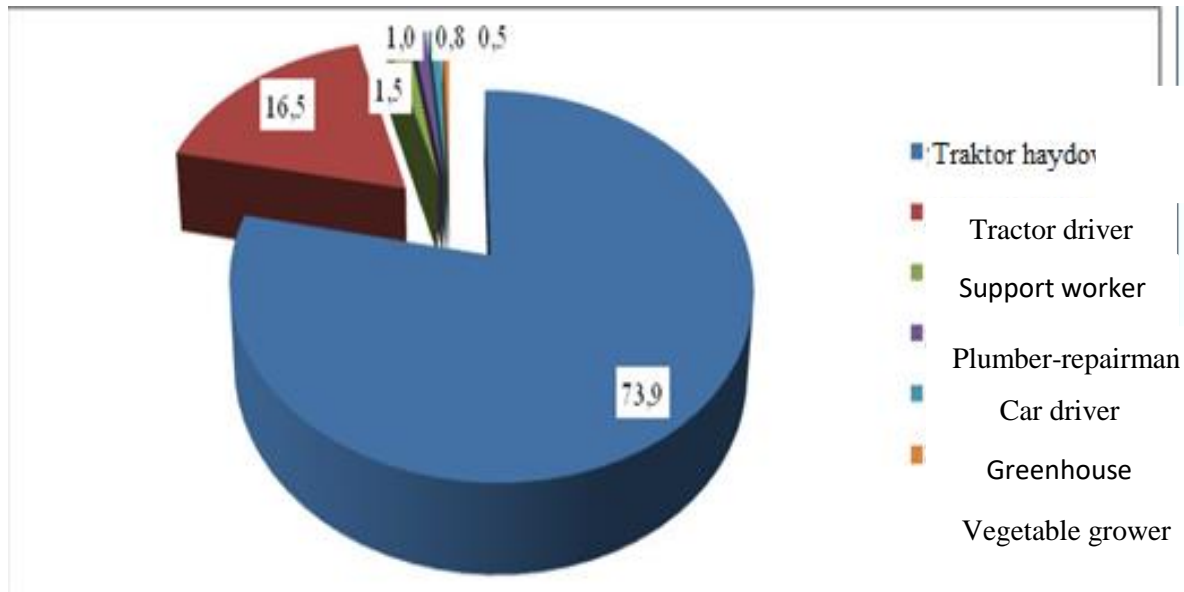


Figure- 3. The most harmful professions in crop production

Reducing the level of injuries and occupational diseases in agriculture is one of the priorities in the field of protecting the life and health of agricultural workers.

Humanity exists because its main activity consists of labor. However, preserving the life, health and ability of workers in the labor process does not happen on its own; this requires the formation of the ability to work in compliance with labor protection and safety regulations.

According to the results of numerous studies of the causes of industrial injuries and acute occupational diseases, all types can be divided into three main groups.

The first group of reasons: related to incorrect actions of the direct performer in a certain labor process.

The second group of reasons: related to improper organization of work;

The third group of reasons: associated with technical, hardware, devices, equipment malfunctions or sudden failure or unstable flow of technological processes.

Chronic occupational diseases - arise as a result of lack of access to safe technological equipment or the fact that it is not economically feasible, and workers do not use personal protective equipment and other safety measures. It is worth noting that there are no man-made accidents that are caused by a person who ultimately gets into one or another accident. Because he “didn’t do something” or “did something wrong.” or is the result of incorrect actions of individual employees.

In addition, we should not forget that safe work includes the physical and psychological preparation of workers to work “by the rules” and perform their functions in accordance with labor protection requirements, with sufficient professional literacy and conscious motivation.

Since it is absolutely impossible to completely eliminate risks using technical and organizational measures, the safety of an employee is often determined only by his behavior. When eliminating and preventing the causes of injuries (psychological and psychophysiological), this is associated with the selection of workers according to their professional qualities, as well as training and retraining of workers, instruction and the formation of their safe behavior. [10] World experience shows that occupational safety and health requirements, first aid training for victims, and most importantly, timely preventive measures are of particular importance.

In agriculture, an analysis of injury cases shows that more than 70% of victims are not trained in labor safety issues and do not receive instruction in labor safety. This is a consequence of the fact that many manufacturers are not united into large clusters, logistics centers, corporations and holdings. Because when registering NS and PP, no inspection and control of labor protection is carried out, and the regulatory authority does not require documents.

As a result of research, labor protection in agricultural entities is left as is, and in general there is a lack of educational literature and research work in this area. It follows that in the future it is necessary to reform the entire agricultural system at the state level.

Research practice shows that many accidents, when seemingly minor injuries are limited to first aid in the initial period, later the injuries become serious and turn into an accident that ends in death.

Today, only accidents resulting in temporary or permanent disability or death are considered in investigative processes. Of the total number of accidents, 2.5% can be investigated by regulatory authorities in accordance with the law, and the remaining 75%, in practice, neither a commission nor an N-1 act is issued, and responsible employees do not take action against the culprit. For this reason, a detailed analysis of accidents in such situations does not allow us to determine and fully evaluate the cause-and-effect relationship in the “professional activity - professional risk” system for its prevention.

All cases related to the death of workers, severe and group injuries are investigated by investigative bodies, although they have a large amount of comprehensive information about the accidents that occurred, the conditions and causes of their occurrence; according to the procedure for investigating, qualified specialists in the field of labor protection accidents do not have the authority to Conducting investigative data to analyze causes, resulting in the data not being fully investigated or made public.



Current forms of statistical reporting make it possible to enter and systematize only the information that is necessary for a complete analysis of the causes and conditions of industrial injuries. Unfortunately, it is not suitable for agricultural conditions.

One way to assess the risk of injury is to evaluate the accidents that have occurred. Of course, no one can guarantee that they will not happen in the future. It is therefore essential that employers responsible for preventing accidents in such workplaces and implementing effective preventative and safety measures have access to sources of information.

In addition, the employer must ensure that the preventive measures taken previously are sufficient to reduce the risks. However, if an accident occurs at work, the employer must analyze the reasons why preventive measures are insufficient to prevent accidents.

Based on the above facts, the following conclusion can be drawn.

In agriculture, the main work on the farm is seasonal, and many jobs are performed with the help of hired labor. From this point of view, farmers, dehkan farms, clusters, logistics, terminals and other entities involved in agriculture do not have a clear state unit, which requires training workers in occupational safety management, familiarization with the guidelines established by law, periodic medical causes a number of problems, such as inspection.

Most of the workers working in agriculture are rural residents, and managers also have secondary education, since until now there have been no higher education courses in agricultural management or occupational health and safety in the agricultural industries. This also applies to the field of labor protection in agriculture.

Another reason for the emergence of the above objective and subjective reasons that affect the provision of labor protection and safety in agriculture is the lack of young people capable of working in agriculture and negative demographic trends. For this reason, the tasks of our government to develop effective mechanisms for youth employment in agriculture and create safe working conditions remain one of the priority areas of the socio-economic development of the republic.

Thus, the main directions for improving labor protection in agriculture are:

- continuous continuation of research work in the field of labor protection of workers in agricultural production and processing industry and improvement of regulatory legal documents;
- intensification of labor assessment in agricultural sectors;
- building employers' knowledge in the field of labor protection by improving the quality and quantity of training for farm managers and specialists on labor protection issues;
- monitoring working conditions and labor protection in agricultural organizations, informing workers about the results of measures to improve working conditions;

- improving the labor safety management system in agricultural production;
- pay attention to labor safety issues by involving scientists from educational institutions and research institutions in organizing research work on the safety of the agrotechnosphere, life safety and labor protection;
- ensure that farm workers are informed about the risks associated with performing work duties, and form a priority attitude towards preserving the life and health of workers in the production process;
- introduction of a database for the study and analysis of accidents that occurred in local governments and state government bodies on the basis of legislative documents and the possibility of creating a “Unified Database” of accidents that occurred in the agriculture of the republic using the “bottom-up” transfer method of this information, predicting a high incidence of accidents.

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