

Hygienic Principles and Practical Solutions for Improving Working Conditions in Horticulture and Viticulture

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Annotation: The human factor is the main resource in any industry. Human labor is also crucial in horticulture and viticulture, which are important sectors of agriculture. Labor in these industries is carried out mainly outdoors, with seasonal and intensive work schedules. Especially in the climatic conditions of Uzbekistan - such factors as high temperatures in summer, cold weather in winter, and high workload during agrotechnical activities - directly affect the health and labor productivity of workers.

Keywords: Horticulture, viticulture, agriculture, working conditions, worker, mechanization, automation.

Introduction.

Today, in our country, great attention is paid to the modernization of the agricultural sector, the development of the production and processing of export-oriented fruit and vegetable products. This is leading to the expansion of horticultural and viticultural farms, the creation of new jobs, and an increase in the demand for labor. However, at the same time, the issues of protecting the health of the workforce and creating safe and comfortable working conditions for them remain relevant.

In recent years, Uzbekistan has been implementing a number of legal and organizational reforms in the areas of labor relations, labor protection, and sanitary and hygienic control. In particular,

the Labor Code, laws on labor protection, and documents on state sanitary control are being improved. However, in practice, it is becoming clear that in some areas, especially in horticulture and viticulture, these norms are not fully implemented, employees are not provided with sufficient protective equipment, and workplaces do not fully meet sanitary and hygienic requirements.

Studies show that workers are often forced to work directly with agrochemicals, exposed to direct sunlight, high temperatures and humidity. This limits the body's physiological resources, increases the risk of fatigue, production errors, occupational diseases and other health problems. It also negatively affects their labor productivity, and the psychological and social aspects of the work environment.

The experience of foreign countries shows that in the agricultural sector, special regulations on labor hygiene, protective equipment, technological solutions adapted to the work schedule, and systems for regular monitoring of worker's health have been introduced. This serves to protect the health of workers, reduce injuries and occupational diseases, and increase the quality and quantity of products.

Therefore, in Uzbekistan, it is also important to improve the working environment in the field of horticulture and viticulture, create safe, comfortable and effective working conditions for workers, and organize preventive measures. Horticulture and viticulture are one of the important sectors of agriculture in Uzbekistan. The working conditions of workers working in these sectors directly affect their health, work capacity and work efficiency. Although mechanization and automation are currently being carried out in modern farms, in many cases working conditions do not meet sanitary and hygienic requirements.

The problem of improving working conditions in industry and agriculture is one of the most pressing issues of our time. In particular, in such labor-intensive sectors of agriculture as horticulture and viticulture, the effective functioning of the workforce directly depends on the working environment, compliance with sanitary and hygienic requirements, and the provision of safety measures. In Uzbekistan, great attention is paid to the modernization of the agro-industrial sector, in particular, the development of modern horticultural and viticultural farms. However, the working conditions of workers in this sector are not always the focus of sufficient attention.

Research has shown that work in these industries is often carried out in difficult environmental and physiological conditions. This may include factors such as high temperatures, relative humidity, dusty environments, work with agrochemicals, seasonal work schedules, and long-distance travel. As a result, workers experience fatigue, occupational diseases, and reduced productivity. This negatively affects not only worker health, but also product quality.

Taking into account the above, the main goal of this dissertation is to develop complex hygienic and organizational measures aimed at improving working conditions for workers in modern horticultural and viticultural farms. Scientific research, observations in practice and analysis of foreign experiences were used as a basis for this.

The Sustainable Development Strategy of the Republic of Uzbekistan until 2030 identifies improving working conditions and jobs as one of its priorities. From this perspective, developing specific measures to improve working conditions in the horticulture and viticulture sector is of great practical and scientific importance.

workers in modern horticultural and viticultural farms consists in studying the factors affecting the working conditions, evaluating them and developing effective measures to improve them.

of the research:

Identify the main factors affecting the working environment and working conditions.

Study of sanitary and hygienic factors affecting the health of workers.

Determining existing problems by applying the methods of assessment of the working environment.

Development of comprehensive recommendations for improving working conditions.

Research object:

Modern horticultural and viticultural farms located in Bukhara region.

Scientific news:

Within this study, the factors affecting the health and work ability of workers were first thoroughly studied on the basis of hygienic and sociological research, and scientifically based practical proposals for their elimination were developed.

Practical significance of the study:

If the developed recommendations are implemented, working conditions in horticulture and viticulture farms will improve, workers' health will be protected, and production efficiency will increase.

In the following sections, research methods, obtained results, their analysis, and practical recommendations will be detailed in order to achieve these goals and objectives.

MATERIALS AND METHODS

Research object and field

This study was carried out in modern horticultural and viticultural farms located in Bukhara region. The farms have different topography, climate, and management styles, and served as a comprehensive source of data for the study.

Research methods

1. Sociological research

Anonymous surveys were conducted among workers. These surveys collected information about working conditions, hygienic factors, working hours and rest opportunities, and health status. A total of 120 workers participated.

2. Hygienic assessment

The working environment in farms was evaluated based on the following indicators:

Microclimate (temperature, humidity, wind speed);

The level of solar radiation (using a radiometer);

Concentration of dust and chemicals;

Noise level (in decimeters).

3. Technical assessment

The ergonomics of workplaces, the level of safety of work equipment, the presence and use of protective equipment were studied.

Statistical analysis

The collected data were processed using Microsoft Excel and SPSS. Correlation and regression analyses were conducted to identify the relationships between working conditions and health indicators.

The next section will cover the results and analysis of these studies.

RESULTS

The data collected during the research showed that the working conditions of the workers do not

meet sufficient requirements.

Results of a sociological survey

68% of workers complained of constant fatigue, headaches and lack of concentration.

43% of workers noted that there were no special places for rest.

55% of workers reported that they do not regularly use protective equipment (caps, glasses, masks, etc.).

Hygienic assessment results

Microclimate indicators are 15-20% higher than the norm in 3 farms.

Solar radiation was determined at the level of 1200-1600 W/m² in the summer season, which is much higher than the established hygienic standards.

Dust level in 2 farms border from the amount increase gone.

Technical assessment results

4 farms protection tools enough absence was determined.

Work of equipment security technique to the requirements answer not to give circumstances observed.

Umbrella and rest points only in 2 farms exists .

These results labor environment improvement according to measures the necessity shows. The future in the department their analysis and recommendations will be brought.

DISCUSSION

Taken results modern gardening and viticulture on their farms workers labor conditions row serious to problems owner that it is confirms . Sociological questions workers to your health negative impact showing factors availability , hygienic assessment and labor in the environment unhealthy factors priority showed .

Conclusion.

Microclimate above the norm high to be workers physical fatigue, work of productivity decrease and health of the situation to get worse take The sun is coming. radiation high to the extent to be and your skin redness , hard strength consumption , chronic tired and even hot to their beatings reason to be possible.

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