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RESEARCH ANALYSIS OF THE WORKING CONDITIONS OF SEASONAL WORKERS IN AGRICULTURE

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Abstract

The article is based on the results of a study aimed at examining the problems of working conditions and influencing factors affecting seasonal workers employed in agriculture. The research was conducted at the "Nuriddin Oltin Dalasi" farm using survey and interview methods among seasonal workers. The analysis of the findings revealed long working hours, insufficient provision of drinking water and personal protective equipment, as well as the negative impact of climatic and chemical factors. To address these issues, recommendations were developed to strengthen occupational safety measures, optimize work and rest schedules, and improve health protection practices.

Keywords

agriculture, seasonal workers, working conditions, occupational safety, environmental factors, pesticides, chemical factors, health protection.

Introduction.

In Uzbekistan, the agricultural sector is one of the main branches of the national economy, and the effective use of labor resources as well as the creation of safe working conditions for employees are recognized as important factors of sustainable development [1]. Agriculture has always been one of the primary production sectors in human history and remains significant today in ensuring food supply and economic stability [2]. Despite the year-by-year development of modern times, technology, and mechanization, human labor remains the main resource in agriculture. Seasonal work arises in response to production demands in different regions and compels workers to migrate seasonally [3].

In the cultivation of agricultural crops, seasonal workers perform active labor more directly than machines. They are engaged in the cultivation and maintenance of cotton, wheat, vegetables, fruit trees, and other types of products [4]. Since the work process of seasonal workers mainly takes place in open field areas, studying and improving their working conditions and developing relevant measures is considered an актуal scientific and practical issue.

Research methodology.

In order to study the working conditions of seasonal workers, a scientific research practice was conducted at the "Nuriddin Oltin Dalasi" farm. This farm has been operating since 2017 and is mainly engaged in the cultivation of cotton, wheat, corn, onions, garlic, potatoes, and other vegetables. At the farm, 4 seasonal workers are officially registered and employed on a contractual basis, while more than 40–45 seasonal workers without official documentation are recruited each season annually.

As a research method, an oral survey in the form of interviews was conducted among seasonal workers. The questionnaire included the following sections: demographic data (age, work experience, level of education), working hours, working conditions, safety, natural and

chemical factors, wages, transport and rest conditions, as well as workers' suggestions for improving working conditions.

Results.

The survey results showed that among the seasonal workers at the "Nuriddin Oltin Dalasi" farm, 85% are women and 15% are men. This indicates that seasonal work at this farm is mainly carried out by women. The analysis of age indicators showed that 15% of workers were aged 18–25, 30% were aged 40–47, and 55% were aged 35–40. Among the workers, those who have been continuously engaged in seasonal work for many years, with 10–15 years of experience, were also recorded and are reflected in Figure 1.

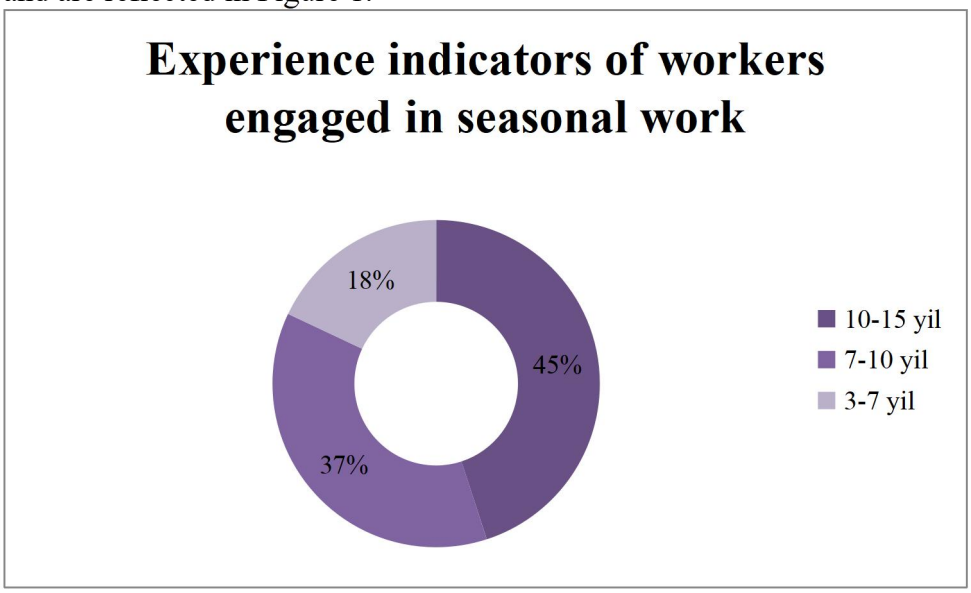

Figure 1. Experience indicators of workers engaged in seasonal work

According to the obtained results, 60% of seasonal workers have secondary education, 35% have primary education, and 5% have higher education, indicating that workers with secondary education constitute the largest share of the seasonal workforce (Figure 2).

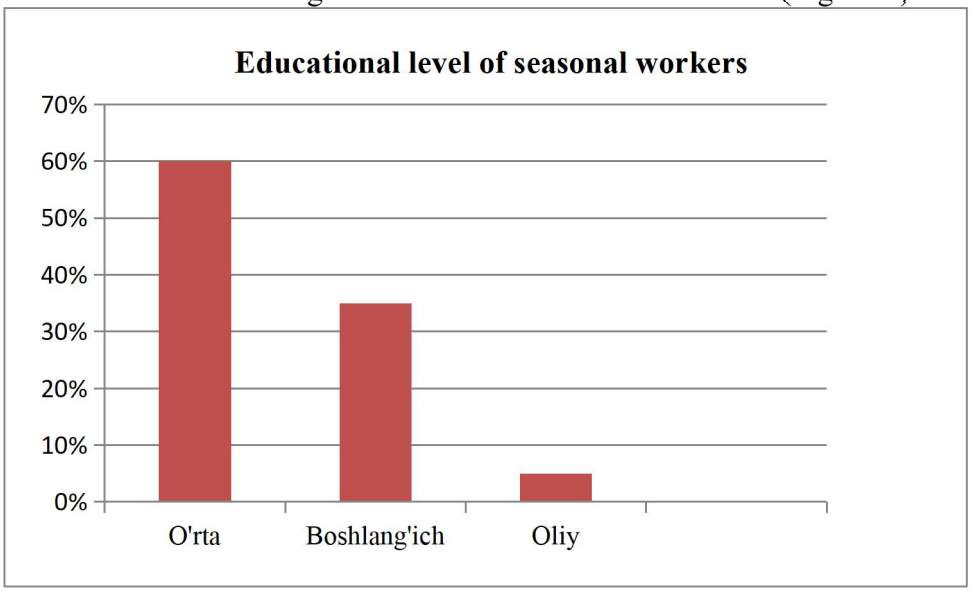

Figure 2. Educational level of seasonal workers

The survey results indicated that the duration of working hours of seasonal workers exceeds labor standards. In particular, 75% of respondents reported working an average of 12 hours per day. Additionally, 20% work 9–10 hours, and 5% follow an 8-hour work schedule

(Figure 3). These indicators show that the majority of seasonal workers operate under long working hours and experience a high workload.

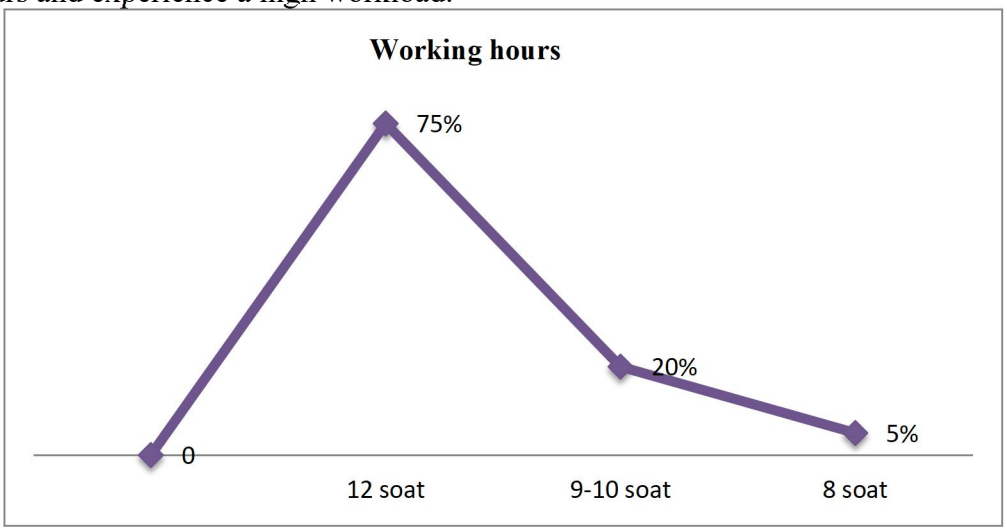

Figure 3. Working hours of seasonal workers

Furthermore, cases of insufficient provision of adequate working conditions were identified. In particular, the level of access to drinking water was found to be very low. According to respondents, especially during the spring–summer seasons, drinking water supply was organized for some workers but not for others. Workers reported that drinking water is mainly provided during lunchtime, and when needed during the day, they are forced to purchase water at their own expense.

Seasonal workers also stated that they are not provided with special protective clothing or personal protective equipment. Problems were also identified regarding occupational safety training: 40% of respondents reported having received some level of safety information, while 60% stated that they had not received any training or instructions. These results indicate significant shortcomings in the occupational safety and health protection system for seasonal workers and confirm that risk factors in the production process are high.

Climatic and natural conditions significantly affect workers' labor conditions. According to seasonal workers, during the summer months the air temperature at the workplace reaches +41 to +45°C at noon, and usually ranges between 36.4–38.6°C. This indicates that they work under extreme heat conditions. During winter and autumn seasons, workers described their working conditions as cold and uncomfortable. Since seasonal workers carry out their activities in open fields, they are directly exposed to various environmental factors. More than half of the workers stated that a dusty environment complicates working conditions, and some emphasized that precipitation also negatively affects their work. The research results show that such climatic and natural factors lead to increased physical fatigue, reduced productivity, and heightened health risks.

It was also identified that seasonal workers at the farm, while working with soil and agricultural products, are also engaged with chemical substances (pesticides). According to the survey results, the level of working with pesticides varies among seasonal workers. Specifically, 50% of respondents reported working regularly with pesticides, 40% stated that they perform such work occasionally, and 10% reported not working with pesticides at all (Figure 4). These results indicate that a significant proportion of seasonal workers are directly exposed to chemical substances.

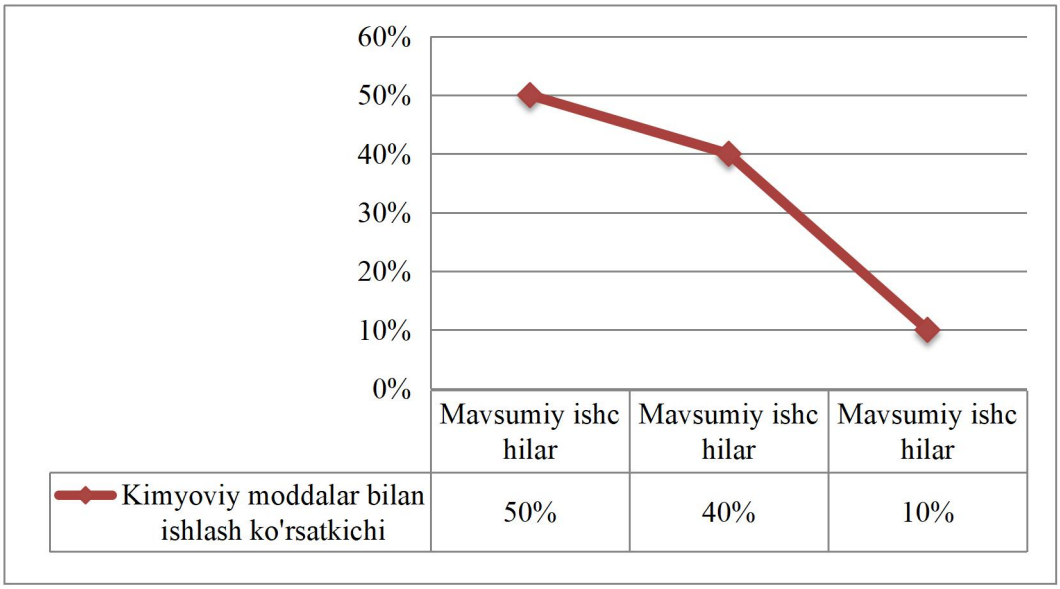

Figure 4. Indicator of working with chemical substances

Discussion.

The analysis of survey results revealed that seasonal workers face several important problems. In particular, inadequate provision of working conditions and safety requirements is one of the main issues. A large proportion of workers have not undergone special occupational safety training and are not fully provided with personal protective equipment. In addition, the long duration of working hours and limited opportunities for rest are pressing issues. Prolonged working hours result in insufficient rest. The lack of adequate breaks during work increases physical fatigue, stress, and psychological strain.According to reports of the International Labour Organization, agriculture is considered one of the most hazardous types of work, and long working hours, unfavorable climatic conditions, and lack of protective equipment negatively affect workers' health [5].

Natural and climatic conditions also negatively impact workers' labor activities. Extremely high temperatures, dusty environments, and working under precipitation pose health risks and reduce productivity. If protective equipment is insufficient during the use of pesticides in agricultural work, it poses risks to workers' health and intensifies the harmful effects of chemical substances, creating serious health hazards. In particular, according to the World Health Organization, working under such conditions increases the risk of respiratory, skin, and nervous system diseases [6].

Socio-economic factors also significantly affect the working conditions of seasonal workers. Insufficient wages, limited access to medical services and transport reduce workers' living standards and negatively affect the stability of their labor activities.In order to eliminate the identified problems, several proposals and measures were developed. In particular, to ensure workers' safety, it is necessary to provide them with personal protective equipment and organize regular occupational safety training. To optimize work and rest schedules, the Ministry of Agriculture of the Republic of Uzbekistan recommended organizing work during the summer months from 6:00 to 10:00 in the morning and from 16:00 to 19:00 in the evening, and temporarily suspending field work during lunchtime starting from May 14–18, 2025 [7].

It is also important to introduce primary medical aid facilities at the farm. To reduce the negative impact of climatic conditions, it is necessary to expand shaded areas and ventilation opportunities, especially during hot seasons, and to regularly supply workers with drinking water.

Conclusion. In conclusion, the research results showed that the working conditions of seasonal workers at the farm are insufficiently developed and various risk factors exist.

Improving occupational safety, healthcare, and rest conditions will contribute to increasing workers' productivity. Implementing these recommendations in practice is important for enhancing the overall efficiency of the farm.

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