Assessment of social protection challenges and status for agricultural workers in Kazakhstan

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Abstract. Agriculture plays a key role in the economy of any state. In Kazakhstan, out of a rural population of 7,444,673, there are 3,573,443 economically active individuals. In Kazakhstan, a total of 1,078,720 people are employed in agriculture, forestry, and fisheries. Of these, 478,366 are wage workers, while 600,354 are self-employed. Rural unemployment affects 4.8%. In 2023, individuals working in agriculture in Kazakhstan earned an average monthly wage of 199,536 tenge, placing them second from the bottom in the income rankings. Despite increasing agricultural output, the wages of these workers are concerning. Consequently, their low and erratic social contributions affect the future quality of social protection regarding old age, job loss, and other social risks.

1 Introduction

Agricultural production, a cornerstone of economic activity, serves crucial functions by supplying the populace with food and providing raw materials for various industries. However, agricultural outcomes are subject to a myriad of factors: the interplay of natural and climatic conditions, the condition of natural resources and the environment, advancements in scientific and technical methodologies, and the demographic composition and infrastructure of rural areas [1-4]. Further influencing factors include the labor conditions and remuneration, seasonal nature of agricultural work, and the efficacy of human resource management [5-6].

The evolution of market dynamics profoundly impacts agricultural productivity [7-8]. It positions agriculture as a potentially lucrative sector, especially in light of increasing output volumes. Conversely, critical issues emerge when considering the stagnant low wages of agricultural workers. The consequential migration of economically active individuals from rural to urban areas and the substandard living conditions in villages pose challenges that demand immediate attention.

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These challenges hold significant relevance for Kazakhstan's society, sparking professional interest and debate within the scientific community.

The Republic of Kazakhstan is a socially oriented market economy state, and achieving a high level of social protection for the population is a necessary condition for the full development of both citizens and economic sectors. Agriculture is a strategic sector where more than 30% of rural residents are employed, and providing adequate social guarantees is a vital necessity.

2 Methodology

For data analysis, the methods of indicator analysis, mathematical and statistical processing, and the method of extrapolation were used. Methods of comparison and analogy, systemic causal assessment, and synthesis were utilized in the justification.

With the transition to market relations, the Republic of Kazakhstan has undergone a challenging process of reforming all sectors of the agro-industrial complex, marked by both downturns and improvements. Currently, the agricultural sector in Kazakhstan exhibits stable developmental trends, leading to a consistent increase in the production of fundamental crop and livestock products.

Table 1. Gross output of agricultural products (services) in Kazakhstan, million tenge.

Years	Gross output of agricultural products (services)	including		
		gross crop production	gross livestock production	services in agriculture
1992	924.1	674.1	202.7	47.3
2002	558,742.3	321,466.2	235,925.3	1,350.8
2012	2,393,619.0	1,241,517.0	1,145437.3	6,664.7
2022	9,481,179.8	5,808,259.8	3,658,757.6	14,162.5

Table 1 presents the gross output of agricultural products and services in Kazakhstan over a thirty-year period, clearly indicating significant growth. The rate of agricultural development has been notably high.

3 Results and discussion

Throughout the period of agrarian reforms, alterations occurred in the legal and organizational frameworks of farms. Private ownership of agricultural land was established, and production was reorganized across different categories of farms. These factors have naturally influenced employment and income levels in agricultural production. Incomes have experienced positive shifts across all economic sectors. This is evidenced by the data in Figure 1.

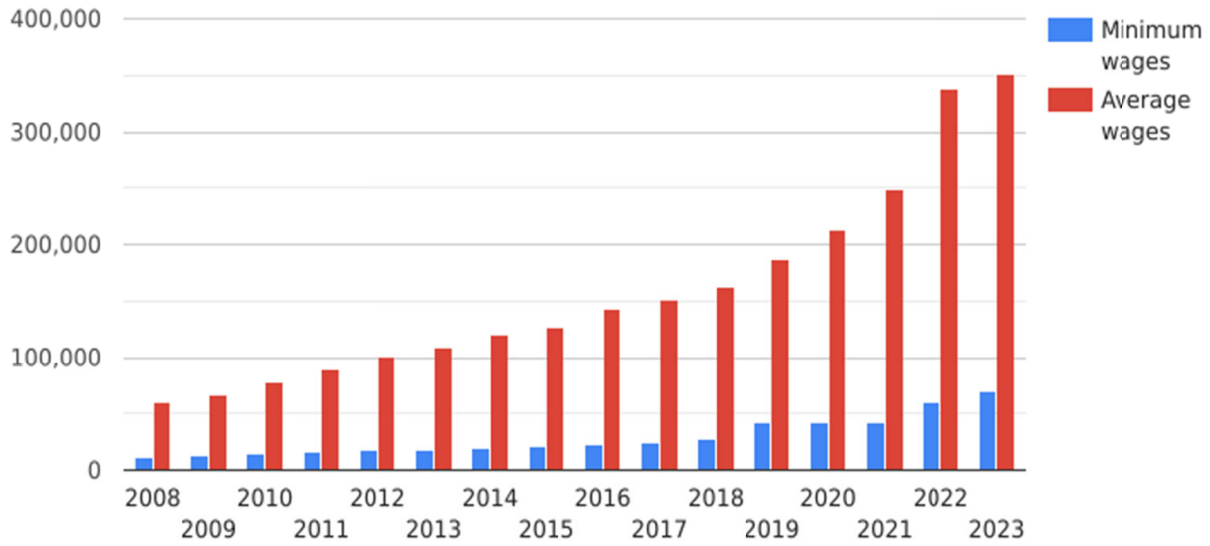

Fig. 1. Minimum and average wages in Kazakhstan, tenge [9].

Consequently, the average monthly salary in 2023 for individuals employed in agriculture and related service sectors was recorded at 199,536 tenge. In this context, the average monthly salary for men was 204,809 tenge, while for women it was 187,064 tenge. For context, a comparative hierarchy of remuneration, from the highest to the lowest, is delineated as follows:

1) Mining and quarrying – 608,722 tenge;
2) Financial and insurance activities – 562,470 tenge;
3) Information and communication – 496,847 tenge;

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21) Crop and livestock production, hunting and provision of services in these areas – 199,651 tenge;

22) Agriculture, forestry and fisheries – 199,420 tenge;

23) Fishing and aquaculture – 135,162 tenge.

The average income levels of agricultural workers, as indicated, rank among the lowest in the country. Within the 23 economic sectors, positions occupied by agricultural workers are relegated to 21st and 22nd place. The particularities and seasonal nature of agricultural work significantly influence these figures [10-11]. Research by scientists K. Bodaukhan and A.K. Dzhusibaliyeva highlight the profound impact of both external and internal migration on the dynamics of rural labor resources [12].

A significant outflow of the population occurs as a result of a complete or partial halt in the development of many forms of management and, as a result, an increase in rural unemployment. State incentives for labor and ensuring adequate incomes are essential for mitigating the regional migration mobility of the rural population. However, turbulence in the socio-economic system is caused not only by economic, but also by non-economic factors, in particular, demographic, environmental, technological factors, military conflicts. In conditions of economic turbulence, entropy increases as a measure of chaoticity and a measure of uncertainty of development in these conditions [13].

Accordingly, demographic dynamics and shifts in the balance of individuals entering and leaving working age significantly influence structural changes in the rural labor market. The issue of rural unemployment remains particularly acute at present.

Challenges in the development of the agricultural sector are prompting the unemployed to migrate to urban areas.

Data from the Bureau of National Statistics of Kazakhstan shows that the rural population constitutes 38.8% of the total. The researches in the range of 10 years (from 2013 to 2023) indicates that, on average, 48% of the total population is economically active. Accordingly, if the rural population, according to the latest statistical data, is fixed at 7,444,673 people, then 3,573,443 people are the labor force living in rural areas. In 2023, for instance, 1,078,720 individuals were engaged in agriculture, forestry, and fishing across the republic, of which 478,366 were wage-employed and 600,354 were self-employed.

This indicates that over 30% of the rural working-age population was involved in agricultural production. Statistical data reveal that, on average, 4.8% of rural inhabitants were unemployed. Taking into consideration the age range, the most affected groups were those aged 55-64 (6.9%) and 35-44 (6.2%). Gender analysis indicates higher vulnerability among women, with an unemployment rate of 7.2% in the agricultural labor market. These figures largely reflect the challenges faced by pre-retirement age men in performing physically demanding labor, as well as the low wages prevalent in the agro-industrial sector during the ages of 35 to 40, a period typically marked by significant financial obligations (housing, vehicle purchases, supporting young and school-aged children, and providing for elderly parents).

Recognizing the agricultural sector's pivotal role in the national economy necessitates prioritizing its social significance [14]. Monitoring of the social and labor environment in rural areas highlights several key focus areas:

- demographic situation;
- issues of formation of the labor market and employment;
- challenges faced by rural youth;
- issues of poverty;
- development of social and engineering infrastructure in rural areas.

Concurrently, as these priority areas are addressed, it is crucial to concentrate on enhancing the social protection of agricultural workers. Social protection is an essential condition for the comprehensive and holistic development of society, which includes those working in agriculture. A socially responsible state ensures social security, provides social assistance, and organizes a system of social insurance for its citizens.

The Republic of Kazakhstan, as a socially oriented market economy, prioritizes achieving a high level of social protection for its citizens as a foundational element for further development. The financial and legal framework for organizing social protection adheres to the 1948 Declaration of Human Rights and Freedoms, incorporates conventions and recommendations from the International Labor Organization, and is supported by the legislative and legal structure of the Republic of Kazakhstan [15-16].

Social benefits provided to all citizens without consideration of individual social contributions and are funded through the national budget, with allocations also distributed via local budgets. Under the Constitution of Kazakhstan, prior to the complete implementation of the compulsory social health insurance system, social services are financed through state budget expenditures, encompassing both national and local funding. For instance, the 2023 national budget allocated approximately 15,369 million tenge for social protection, assistance to citizens, and enhancements to the social protection infrastructure [17].

The organizational structure of the social insurance system is represented by two socially significant funds that take into account the individual participation of citizens: JSC "State Social Insurance Fund" and JSC "Unified Accumulative Pension Fund".

JSC "State Social Insurance Fund" operates as a non-profit entity, with the state being its sole founder and participant. The Fund manages social contributions, calculates, and disburses benefits under the compulsory social insurance scheme for cases of social risk. It is tasked with implementing compulsory social insurance, facilitated by state involvement, ensuring the proper use and integrity of social payments. Currently, this fund dispenses cash benefits to citizens of the Republic of Kazakhstan upon the occurrence of legally recognized social risks.

Table 2. Data on the amounts of social payments from JSC "State Social Insurance Fund" of Kazakhstan in the period from 2018 to 2023, million tenge [18].

Name of the indicator	Years					
	2018	2019	2020	2021	2022	2023
The total amount of social benefits, including:	189583	19416	257261	338840	440645	750689
on the occasion of disability	12299	13702	23977	26880	30504	38716
on the occasion of the loss of the breadwinner	8705	9502	14712	17657	21264	26826
on the occasion of job loss	3566	4378	15780	16225	19139	49941
in case of loss of income due to pregnancy and childbirth	68991	77455	96361	123624	197855	348200
in the event of income loss due to caring for a child under the age of 1	96021	89127	106431	154453	171882	287005

The data presented in Table 2 show an annual increase in social benefits nationwide, or a rise in social risks, affecting the category of workers under study as well.

Table 3. This includes the occurrence of various types of social risks within the system of JSC "State Social Insurance Fund" from 2020 to 2023 [18].

The name of the indicator	2020		2021		2022		2023	
Total participants of the SSIF, thousand people.	5942.4	100%	6126.0	100%	6441.2	100%	8892.9	100 %
including								
The number of people exposed to social risks, people.	772755	13,0%	792896	12,9%	825213	12,8%	947188	10,6 %
Average proportion over a 4 year period	12,3%							
Of which								
On the occasion of disability (1)	79113	1,3%	83059	1,4%	88151	1,4%	90933	1,0%
Average proportion over a 4 year period (1)	1,27%							
On the occasion of the loss of the breadwinner	42301	0,7%	45037	0,7%	47741	0,7%	52396	0,6%
Average proportion over a 4 year period (2)	0,7%							
In case of job loss (3)	35748	0,6%	47648	0,8%	63869	1,0%	99123	1,1%
Average proportion over a 4 year period (3)	0,87%							
In case of loss of income due to pregnancy and childbirth, with the adoption of a newborn child (children) (4)	180157	3,0%	188056	3,1%	191427	3,0%	203137	2,3%
Average proportion over a 4 year period (4)	2,84%							
in the event of income loss due to caring for a child under the age of 1	435436	7,3%	429096	7,0%	434025	6,7%	501599	5,6%
Average proportion over a 4 year period (5)	6,66%							

Table 3, for illustrative purposes, displays the author's research findings on the average probability of occurrence of legally insured social risks. From the data calculated and presented in Table 3, it is possible to estimate the probability of social risk for individuals employed in the agro-industrial sector. For instance, of the 1,078,720 individuals employed in agriculture, forestry, and fisheries across the republic, approximately 12.3% or 132,683 individuals might be subject to these risks annually.

Similar calculations can be applied to determine the specific probability of each type of social risk. However, a critical focus of professional interest is the level of material compensation available in the event of these social risks for agricultural workers. Since compulsory social insurance aims for universal coverage, the legislative framework dictates that compensation covers only a part of the lost income. Research findings on the levels of compensation across various economic sectors are documented in Tables 4-7. These tables can be utilized to compute the social benefits for those working in the agro-industrial complex.

Table 4. Comparison of social benefits "In case of disability" with the average and minimum salary, % [9, 18].

The time period under study, years	2019	2020	2021	2022	2023
The share of social benefits from the average salary	8,1	8,1	8,7	8	11,7
The share of social benefits from the minimum salary	50,9	50	50,2	35	58,6

Thus, the average monthly salary in 2023 for individuals employed in agriculture and related service sectors amounted to 199,536 tenge. In this context, the average monthly salary for men was 204,809 tenge, while for women it was 187,064 tenge. Accordingly, if a man was exposed to the social risk of "Loss of income due to disability", then the average amount of financial compensation is 23,962 tenge. Certainly, this amount does not suffice to cover even a basic grocery basket. The same can be considered for all the other risks presented below.

Table 5. Comparison of social benefits in the event of loss of a breadwinner with average and minimum wage levels, % [9, 18].

The time period under study, years	2019	2020	2021	2022	2023
The share of social benefits from the average salary,	10,5	9,8	10,3	9,4	11,9
The share of social benefits from the minimum salary,	65,8	60,4	59,4	41,5	59,5

Table 6 Comparison of social benefits in the event of loss of a job with average and minimum wage levels [9, 18].

The time period under study, years	2018	2019	2020	2022	2023
The average amount of social benefits for the specified social risk, tenge	20354	21699	24816	23223	43577
The share of social benefits from the average salary, %;	14.2	14,4	15,3	12,4	20,5
The share of social benefits from the minimum salary, %.	89	88,7	87,7	54,6	103

Table 7. Comparison of social benefits "In the event of income loss due to caring for a child under the age of 1" with the size of the average and minimum salary, % [9, 18].

The time period under study, years	2019	2020	2021	2022	2023
The share of social benefits from the average salary	15,6	17,7	19,9	16,5	15
The share of social benefits from the minimum salary	97,8	109,3	114,4	72,7	75,4

Another key entity within Kazakhstan's compulsory social insurance system, specifically within the compulsory pension insurance sector, is JSC "Unified Accumulative Pension Fund". This organization serves as the sole administrator and operator of all financial and informational flows within the accumulative pension system. The primary objective of JSC "Unified Accumulative Pension Fund" is to provide organizational support to contributors in building their pension savings, enhancing service quality, ensuring accurate recording of pension assets, and promoting a culture of pension savings planning [19].

Pension provision represents one of the forms of social protection for the population of Kazakhstan, including those employed in the agro-industrial complex [20-21]. The contemporary pension system in Kazakhstan comprises three main components: a basic pension, a mandatory pension, and a funded pension.

Basic pensions that are paid from the state budget. Mandatory pensions, which consist of a solidary part (from the state budget). According to Article 205 of the Social Code of the Republic of Kazakhstan, individuals eligible for the state basic pension are those whose age pension payments were scheduled prior to July 1, 2018, and whose service period began on or after January 1, 2016 [22]. In 2023, the minimum basic pension is set at 24,341 tenge. The calculation of the basic pension takes into account the length of service worked out before January 1, 1998, as well as the length of payment of pension contributions to the UAPF after 1998. Additional socially significant periods, such as time spent caring for a child or a disabled person, are also considered. According to Article 206 of the Social Code of the Republic of Kazakhstan from January 1, 2024, the basic state pension payment is assigned if there are 10 or less years of experience in the pension system or its absence [22]. Its size is 65% of the subsistence minimum in 2024 (43,407 tenge). The minimum basic pension in 2024 will be equal to 28,215 tenge, which is also set by the budget for the current year. For each year of experience in the pension system over 10 years, it is planned to increase basic payments by 2%, but not more than 105% of the subsistence minimum established for the financial year: For example, with 15 years of experience, the basic pension will amount to 75% of the subsistence minimum (32,555 tenge). With an experience of 20 years — 85% of the subsistence minimum (36,896 tenge). With 30 years of experience, the limit of 105% established by law for 2024 is reached, which in monetary terms will amount to 45,577 tenge.

When calculating the solidarity part of the pension, the length of service accumulated before January 1, 1998, the average monthly income of the employee, and the size of the monthly calculation index (in 2024 — 3,692 tenge) are considered. The pension will be 60% of the average monthly income if the employee has the required length of service: men are 25 years old, and women are 20 years old. If the length of service is more or less, the pension also changes. In accordance with Article 211 of the Social Code of the Republic of Kazakhstan, the average income can be taken for any 3 consecutive years from January 1, 1995 [22]. In this case, the total income is divided by 36. The maximum average monthly income is capped at 55 monthly calculation indices, which equates to 203,060 tenge in 2024. Consequently, the highest possible pension payment cannot exceed 75% of this average monthly income.

4 Conclusions

In conclusion, the review of social protection for agricultural workers highlights significant issues primarily related to low annual wages and, consequently, insufficient social contributions to social and pension insurance funds. This trend contributes to a decline in the quality of life for workers in this category. To address this issue, comprehensive state support measures are necessary, and it is feasible to implement and enhance corporate pension insurance through the establishment of both state and non-state corporate pension funds. These funds typically operate through corporate pension programs, which generally supplement the legally mandated pension. In many countries, providing a corporate pension is even a legal requirement for employers. Providing a corporate pension in many countries is even a legal requirement for an employer, it is possible that in our reality this may be a solution in providing better social protection at least after reaching retirement age.

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