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## **CULTIVATING SECURITY: COMPARATIVE ANALYSIS OF AGRICULTURAL LABOR STANDARDS IN ARGENTINA AND COLOMBIA**

**CULTIVANDO LA SEGURIDAD: ANÁLISIS COMPARATIVO  
DE LAS NORMAS LABORALES AGRÍCOLAS EN ARGENTINA  
Y COLOMBIA**

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## **Cultivating Security: Comparative Analysis of Agricultural Labor Standards in Argentina and Colombia**

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## ABSTRACT

**Introduction:** The main objective is to carry out a bibliographic review. Where we seek to know aspects related to issues that influence the protection of collaborators Argentina and Colombia are two Latin American countries with economies strongly dependent on the agricultural sector, although each faces unique challenges related to sustainability, productivity and safety in agricultural work. In Argentina, agriculture has historically been a fundamental pillar, with production of wheat. However, the country faces challenges in terms of land concentration, sustainability, and job security in the agricultural sector. Argentine rural workers are exposed to what may compromise the safety of workers, agrochemicals and extreme weather conditions. This has generated the need to implement rigorous agricultural safety protocols. On the other hand, Colombia, with its rich agricultural diversity, stands out in wheat production. Despite its success in the international market, the country faces problems of inequality in access to land and challenges related to violence in rural areas. context of the safety of Colombian agricultural workers are also exposed to risks from the use of agrochemicals, extreme agricultural working conditions. Despite legislative progress, effective implementation remains a challenge, especially in areas where ensuring employees understand their rights is prevalent. Both countries, although different in their agricultural contexts and structures, share the challenge of protecting the safety and well-being of employees. Policies must be adapted to better protect agricultural workers, promoting Improving working conditions involves ensuring adequate equipment, continuous training and an environment free of health risks, and addressing the challenges of sustainability and climate change. Argentina and Colombia have great potential in their agricultural sectors, but they need to adopt a comprehensive approach that combines technological innovation, the development of effective public policies and the strengthening of labor security, in order to achieve a more inclusive, sustainable and resilient. **Methodology:** For this research analysis, a bibliographic and documentary review approach is constructed, identifying the main differences between Argentina and Colombia in relation to the agricultural economy. This approach allows us to examine the policies, regulations and working conditions in both countries, with a specific focus on agricultural workers. **Results:** It was concluded that both Argentina and Colombia have current legal regulations to prevent accidents and protect the well-being of agricultural employees, promoting safe work environments for workers in the sector. Both nations have established regulatory frameworks that seek to guarantee and promote a safe and healthy work environment from the use of agrochemicals, heavy machinery and the extreme conditions of the agricultural environment.

**Keywords:** agriculture, health safety, work, climate change



# Cultivando La Seguridad: análisis comparativo de las normas laborales agrícolas en Argentina y Colombia

## RESUMEN

**Introducción:** Se tiene como objetivo principal realizar una revisión bibliográfica. Donde se busca conocer aspectos relacionados con temas que influyan en la protección de los colaboradores Argentina y Colombia son dos países de América Latina con economías fuertemente dependientes del sector agrícola, aunque cada uno enfrenta desafíos únicos relacionados con la sostenibilidad, la productividad y la seguridad en el trabajo agrícola. En Argentina, la agricultura ha sido históricamente un pilar fundamental, con una producción de, trigo, Sin embargo, el país se enfrenta a desafíos en términos de concentración de tierras, sostenibilidad, seguridad laboral en el sector agrícola. Los trabajadores rurales argentinos están expuestos a que pueden comprometer la seguridad de los trabajadores, agroquímicos y condiciones climáticas extremas. Esto ha generado la necesidad de Implementar protocolos de seguridad rigurosos agrícola. Por otro lado, Colombia, con su rica diversidad agrícola, se destaca en la producción del trigo. A pesar de su éxito en el mercado internacional, el país enfrenta problemas de desigualdad en el acceso a la tierra y desafíos relacionados con la violencia en zonas rurales. contexto de la seguridad de los trabajadores agrícolas colombianos también están expuestos a riesgos del uso de agroquímicos, agrícola condiciones trabajo extremas. A pesar de los avances legislativos, la implementación efectiva sigue siendo un reto, especialmente en las zonas donde prevalece garantizar que los empleados comprendan sus derechos. Ambos países, aunque diferentes en sus contextos y estructuras agrícolas, comparten el desafío Proteger la seguridad y bienestar de los empleados. Las políticas deben adaptarse para proteger mejor a los trabajadores agrícolas, promoviendo Mejorar las condiciones de trabajo implica garantizar equipos adecuados, una formación continua y un ambiente libre de riesgos para la salud, y enfrentando los desafíos de sostenibilidad y cambio climático. Argentina y Colombia tienen un gran potencial en sus sectores agrícolas, pero necesitan adoptar un enfoque integral que combine la innovación tecnológica, el desarrollo de políticas públicas efectivas y el fortalecimiento de la seguridad laboral, a fin de lograr un sector agrícola más inclusivo, sostenible y resiliente. **Objetivo:** evaluar su impacto y proponer soluciones efectivas para mejorar la seguridad y el bienestar en el entorno laboral comparar dinámicas de agricultura en Argentina y Colombia, con un enfoque en la seguridad y salud en el trabajo, y cómo estas impactan en las economías agrícolas de ambos países. Se busca identificar las características clave de sus sectores agrícolas, innovación y equidad, así como los problemas específicos relacionados la seguridad laboral. Además, se pretende explorar con oportunidades, de protección de seguridad de los trabajadores, para fomentar un desarrollo agrícola más inclusivo, sostenible y adaptado a las realidades cambiantes del contexto global y climático. Al analizar estos aspectos, se pretende identificar buenas prácticas y lecciones que puedan ser aplicadas en ambos países para mejorar las condiciones laborales y garantizar un entorno de trabajo más seguro y saludable en el sector agrícola. **Metodología:** Para este análisis investigación se construye un enfoque de revisión bibliográfica y documental, identificar las principales diferencias Argentina, Colombia en relación a la economía agrícola, Este enfoque permite examinar las políticas, normativas y condiciones laborales en ambos países, con un enfoque específico de los trabajadores agrícolas. **Resultados:** Se pudo concluir, que tanto Argentina, Colombia cuentan con una normatividad legal vigente para prevenir accidentes y proteger el bienestar de los empleados agrícolas, promoviendo ambientes laborales seguros para los trabajadores del sector. Ambas naciones han establecido marcos regulatorios que buscan garantizar y promover un ambiente de trabajo seguro y saludable del uso de agroquímicos, maquinaria pesada y las condiciones extremas del entorno agrícola.

**Palabras Claves:** agricultura, salud seguridad, trabajo, cambios climáticos

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## INTRODUCTION

The International Labor Organization (ILO), through Convention 155 concerning Occupational Safety and Health (1981), establishes international standards to promote safe and healthy working conditions in all sectors, including agriculture. This convention aims to reduce occupational hazards and protect workers' health by advocating effective management of occupational safety through the creation of national occupational health and safety policies. Through this agreement, employers are obliged to identify hazards in the workplace, assess risks and take preventive measures. It also promotes the active participation of workers in identifying risks and implementing safety measures. With the ratification of this convention, countries such as Argentina and Colombia have managed to improve the safety of their workers.

Their labor protection systems, minimizing risks related to agricultural work and promoting continuous safety training.

Law 19,587 obliges employers to ensure safe working conditions, to provide adequate protective equipment, and to conduct regular inspections to identify and mitigate possible occupational hazards. It also establishes the creation of occupational safety and health committees and promotes continuous training of workers on preventive and emergency measures. Ministry, Agriculture, Colombia. Resolution 2495 of 2018. This resolution establishes standards for occupational safety in the Colombian agricultural sector to support the safety of agricultural workers rural areas. The resolution includes guidelines on the identification of specific field hazards, effective disease and accident prevention programs, and the provision of adequate medical services for workers. Through this regulation, the Ministry of Agriculture seeks to improve work strategies in the agricultural sector and promote safer work practices for workers, especially in harvesting activities, machinery handling and exposure to agrochemicals.

Analysis of Working Conditions in Agriculture in Colombia. Report of the National Planning Department, 2020. This study conducted by the National Planning Department aims to identify the main challenges and opportunities in improving working conditions in Colombian agriculture. the scarce training in occupational safety and the risks associated with the use of pesticides and heavy machinery. It also highlights the need to strengthen public policies to guarantee the health and safety of farm



workers and the importance of promoting collaboration between authorities, employers and workers to improve labor standards in this sector.

Workplace Safety Law in Argentina, Law 20.744 (Labor Code), 1974. This law regulates working conditions in general, including the agricultural sector. Article 207 establishes that employers must provide safe working conditions and medical services. The law also imposes on agricultural companies the obligation to carry out periodic evaluations of the hazards faced by workers, in addition to ensuring the implementation of the law to prevent occupational accidents, which contributes to reducing risks and increasing productivity and improving the quality of working life in the field. This background shows the evolution of safety and health policies in the agricultural sector in Argentina and Colombia, where various laws and resolutions have been implemented in order to create a safer work environment for agricultural workers. Despite progress, challenges remain, especially in terms of effective implementation of regulations and continuous improvement of working conditions in this key sector of the economy in both countries.

## **METHODOLOGY**

The present study, of a bibliographic and descriptive nature, was carried out through a systematic review of documentary sources from Argentina and Colombia, with a specific focus on agriculture and its impact on the economy of both countries. The methodology consisted of the collection and analysis of a wide variety of documents including laws, regulations, government reports, academic studies and scientific articles. Reliable sources were reviewed, such as the official websites of the governments of Argentina and Colombia, university repositories, databases such as Google Scholar, as well as specialized publications in the field of agriculture and occupational health.

In order to search for information, strategic keywords such as “agriculture”, “occupational health”, “labor conditions”, “workers' welfare”, “occupational safety”, “agricultural sector”, among others, were used. These keywords were essential to guide the search for relevant documents related to labor welfare and safety issues in the agricultural context of both countries.

In order to ensure a broader and more effective coverage, covering both local and international sources, with the objective of guaranteeing a clear and accurate understanding of the information.



This approach made it possible to gather a diverse and exhaustive database, which served for the construction of the comparative analysis between labor and occupational health practices in the agricultural sector in Argentina and Colombia, thus providing a comprehensive view of the progress and challenges in this field.

## **RESULTS AND DISCUSSION**

In this bibliographic study it was possible to determine that, in both Argentina and Colombia, agriculture plays a fundamental role in their economies, being an important source of employment, development and foreign exchange generation. In Argentina, agriculture represents one of the main economic activities, with products such as wheat occupying

In Argentina, agriculture represents one of the main economic activities, with products such as wheat occupying prominent positions in international markets. Argentine agriculture is regulated by various laws and policies, one of the most relevant being the National Seeds and Cultivars Law, which regulates the marketing and protection of seeds in the country. In addition, the Argentine agricultural sector benefits from subsidies, credits and technical assistance through government programs such as the Rural Development Program and the Agroindustrial Plan 2020-2023, which seek to improve the competitiveness and sustainability of agriculture in the country. In Colombia, agriculture also has a crucial importance in the economy, being highlighted globally. The country has a legal framework that regulates agricultural activity, highlighting Law 160 of 1994, promoting job security, supporting small producers, guidelines for the development of rural areas. This law promotes access to land and encourages the development of productive projects in the agricultural sector. In addition, Colombia has implemented Law 1776 of 2016, which establishes measures for the promotion of organic agriculture, favoring the safety productivity of our workers.

Regarding occupational health in the agricultural sector, both countries face similar challenges. In Argentina, workers are exposed in their jobs due to the use of agrochemicals, heavy machinery and extreme weather conditions. Argentina's safety system seeks to protect rural workers by requiring agricultural companies to offer safe conditions and **provide** insurance to cover occupational accidents. However, challenges remain in the implementation of these regulations, especially in remote rural areas.



In Colombia, occupational safety in agriculture is also a major concern. Rural workers in Colombia face risks due to the use of agrochemicals, exposure to climatic factors such as high temperatures and heavy rains, and injuries resulting from the use of agricultural machinery. At the legislative level, the country has a system in place and establishes that all workers must be affiliated to an Occupational Risk Management Company (ARL). This law seeks to protect workers in the agricultural sector from occupational accidents. It was observed that in both countries there are efforts by the private sector and to adapt to the changes that come to have for each worker. In Argentina, some agricultural companies, such as those operating in the sector, have implemented safety management systems for their workers, provide strategies in the and to be carried out to improve in the workplace, the proper use of machinery. However, small and medium-sized farms often lack the resources to implement these safety measures. In Colombia, large agricultural companies, particularly in production, have taken similar measures to ensure the protection and well-being of their workers. These include training programs in occupational safety, the use of personal protective equipment and sustainable agricultural practices. However, in small farms and communities, workers are often exposed to high occupational risks at work, as many of them do not have good working conditions. Regarding the most prevalent risks in the agricultural sector in both countries, it was found that hazards related to agrochemicals are a common concern. In Argentina, exposure to agricultural pesticides and herbicides, generating respiratory diseases, dermatological disorders and fertility problems. In Colombia, agricultural workers are also at risk to the same hazards due to the extensive use of agrochemicals in production. Colombian authorities have begun to implement stricter regulations on the use of these products, but the lack of effective control in the areas remains a major challenge.

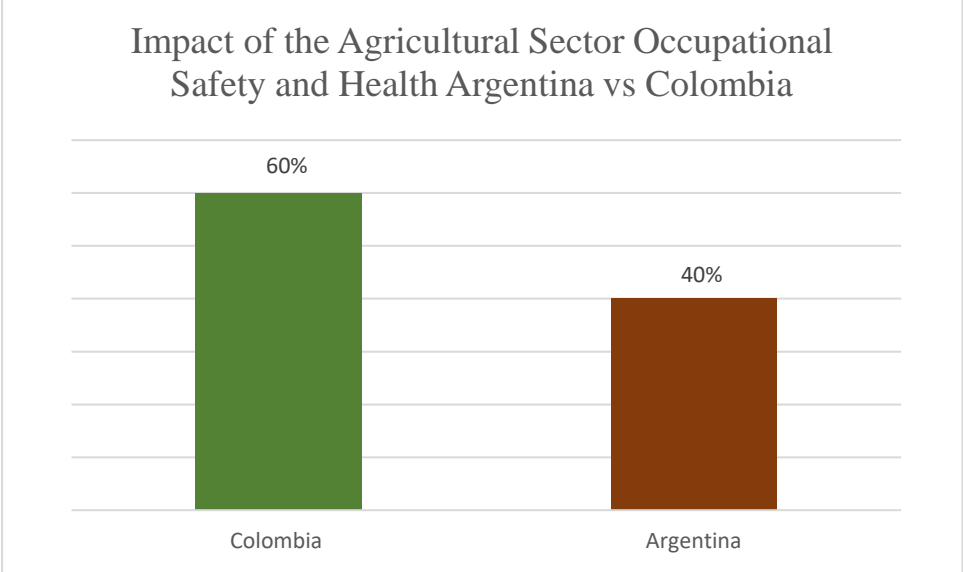
As for physical risks, workers in both Argentina and Colombia are exposed to extreme temperature conditions and long working hours, which increases the risk of physical exhaustion, heat stroke and dehydration. In addition, the use of heavy machinery and work in irregular terrain increases the incidence of accidents, injuries, such as falls, musculoskeletal injuries, and being run over. The incidence of accidents with hand and finger injuries was 70% in Colombia and 30% in Argentina. It is estimated that a large number of workers have suffered hand and finger lesions as a result of their work.





Both Argentina and Colombia face significant challenges in protecting the health and safety of workers in agriculture. Despite having legal frameworks to regulate occupational safety, the effective implementation of these regulations varies by region and farm size. Large agricultural enterprises have made progress in implementing health and safety measures, while small farms and more remote rural areas remain vulnerable to occupational hazards. It is crucial that both countries strengthen oversight of existing laws and increase training and resources to improve working conditions in the agricultural sector

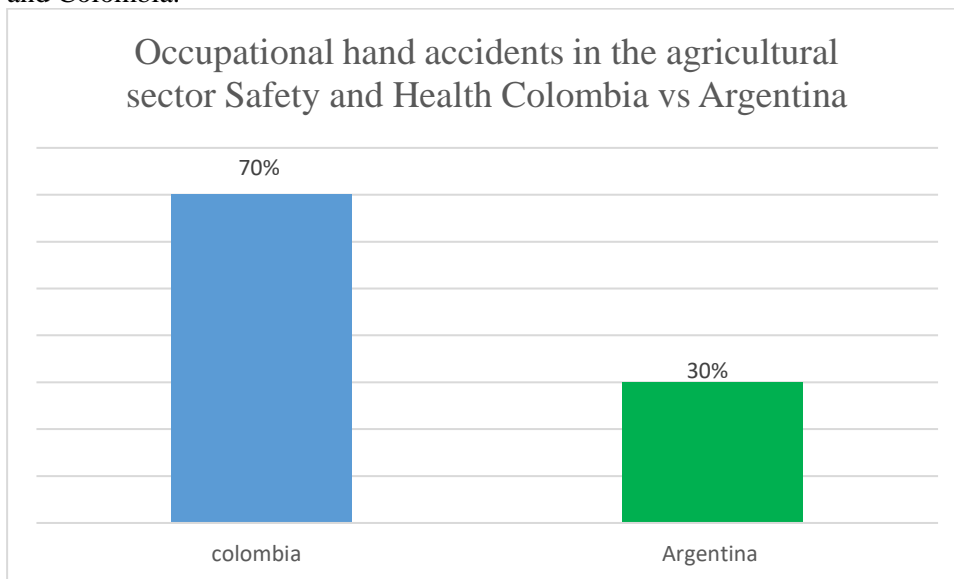
**Figure 1:** Impact of the Agricultural Sector Occupational Health and Safety in Argentina and Colombia.



Fuente: Pabón,H.(2025)

It can be seen in the graph that the agricultural sector in Colombia occupies approximately 60% of the labor informality in the Colombian agricultural sector is very high, which makes it difficult to compile accurate statistics. In Argentina, the lack of resources in rural areas makes it difficult to enforce safety and health regulations effectively. It is estimated that a large proportion of rural workers (around 40% or more) may be working in unregulated or informal conditions, which further complicates the collection of accurate occupational safety data.

**Figure 2:** Occupational accidents in the agricultural sector Occupational Safety and Health in Argentina and Colombia.



Fuente: Pabón,H.(2025)

It is evident in the graph that the % of hand injuries in work accidents in the agricultural sector in Colombia with 70%, Argentina with 30%. It is estimated that a large part of the workers have suffered hand and finger injuries as a result of their work.

## CONCLUSIONS

With this work we were able to identify that both in Argentina and Colombia we were able to show the percentages in each country, and with this we were able to give some indications, Increase the proper use of personal protective equipment (such as gloves, boots, goggles and masks) in 100% of agricultural workers in their jobs in Argentina and Colombia Promoting continuous training and the proper use of personal protective equipment is key to reduce injuries and occupational diseases in the workplace.

Implementation of Mental Health protocols: Establish prevention and mental health care policies, minimizing work-related stress. Organize periodic medical check-ups for workers, focused on the prevention of occupational diseases, with the objective of preventing illnesses for our workers

Optimize ergonomic conditions in agricultural work: Improve ergonomics in cultivation, harvesting and packaging tasks, reducing absenteeism due to musculoskeletal injuries Development of occupational risk monitoring systems: Create technological platforms to continuously monitor working conditions in the field, in order to intervene quickly and reduce occupational accidents and illnesses by 30%.

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