

## THE HUMAN DIMENSION OF SUSTAINABLE DEVELOPMENT IN THE PERSPECTIVE OF OCCUPATIONAL SAFETY AND HEALTH<sup>1</sup>

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### ABSTRACT

*The aim of this study is to examine the "Decent Work and Economic Growth" section of the United Nations' (2015) "Agenda 2030: UN Sustainable Development Goals" from the perspective of occupational safety and health. Decent work consists of various dimensions, but this study specifically focuses on the aspect of occupational safety and health. While there are studies in the literature that evaluate sustainable development from the standpoint of occupational safety and health, it is crucial to investigate the topic from a human perspective, taking into account the International Labor Organization's goal of decent work. This is because the core element of working life is the human being, and sustainable development cannot be achieved without a focus on humanity. Therefore, research in this direction underscores the significance of the study. In the analysis of this study, data obtained by the International Labor Organization from various countries on the fundamental indicators of occupational safety and health have been categorized, tabulated, and evaluated, considering the World Bank's country classifications by income groups. In conclusion, there are challenges in accessing accurate data, especially in the field of occupational safety and health worldwide. Furthermore, there is a long way to go in terms of the human dimension of sustainable development resulting from occupational accidents and diseases.*

**Keywords:** Sustainable Development, Decent Work, Occupational Safety and Health.

**JEL Codes:** J01, J81, J83, Q56.

### 1. INTRODUCTION

The primary concern of sustainable development (SD) is people and their quality of life. Therefore, SD is concerned with society because the well-being of individuals is of utmost importance. It views the economy as being centered around the individual and their quality of life, and this is an absolute priority. Additionally, it places importance on the environment because the quality of life for

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every individual is influenced by nature, the environment, and resources (Molamohamadi, Ismail, 2014: 200). The mentioned objectives are in line with the nature of modern occupational safety and health (OSH) understanding. In today's context, OSH is no longer solely evaluated in terms of protecting employees from workplace accidents and occupational diseases. It also has concerns and goals related to society, the economy, and the environment.

Today, studies focusing on the similarities and linkages between OSH and SD are gaining attention. Important commonalities between OSH and SD are discussed. Although the main concern of both policies is human welfare and well-being, this goal is viewed from different perspectives and achieved in different ways. However, these two concepts are interrelated and it is believed that healthy results cannot be achieved without following the same strategy (Molamohamadi, Ismail, 2014: 198). Therefore, the intended goal of the study is to emphasize the humanitarian dimension of the issue by focusing on the relationship between SD and OHS. In doing so, the International Labour Organization's (ILO) goal of decent work will serve as a bridge, and the subject will strive to address sustainability from a humanitarian perspective under the OHS sub-heading.

Although OHS is not directly included in the sub-dimensions of SD, when the content of the goal of "Decent Work and Economic Growth" is examined in more detail, it appears among the sub-headings put forward by the ILO for the purpose of "Decent Work". Eleven statistical criteria have been proposed for the measurement of decent work, which is developed on four basic components: "employment, social protection, workers' rights and social dialogue" (Anker, et al. 2002). Among these criteria, there is a dimension that includes OSH.

In the structure of the study, the first part will initially address the conceptual framework. In the second section, the relationship between SD and OHS will be examined within the environmental, social, and economic contexts. Finally, the study will be completed by evaluating the human dimension of the issue in terms of the sustainability of the development goal in the perspective of OHS based on ILO data.

## **2. CONCEPTUAL FRAMEWORK**

In this section, definitions of SD, OSH, and decent work will be examined.

### **2.1. Sustainable Development**

Defined in a conceptual manner, sustainable development refers to "...progress that fulfills the requirements of the current generation without putting at risk the capacity of future generations to fulfill their own requirements." (WCED, 1987) SD today has become a phenomenon that affects society in many ways with its economic, social and environmental dimensions. Presently, SD demands the simultaneous attainment of four primary global objectives: acknowledging the needs of all for social advancement, efficient safeguarding of the environment, wise utilization of natural resources, and the

sustenance of elevated, consistent levels of economic growth and employment (Zabihi, Habib, & Mirsaeedie, 2012).

In the historical process, the first United Nations Conference on the Human Environment (Stockholm Conference) was held in Stockholm in 1972, where many countries with different socio-economic structures and development levels came together on the subject of "environment" and adopted the UN Declaration on the Human Environment.

The notion of sustainable development was initially outlined in the Brundtland Report, crafted by the World Commission on Environment and Development back in 1987. A crucial moment in the support of a series of principles advocating eco-friendly managerial methods was marked by the United Nations Conference on Environment and Development, commonly referred to as the Rio Conference, held in Rio de Janeiro in 1992. The Millennium Declaration and the Millennium Development Goals, established during the UN Millennium Summit in 2000 with the objective of realization by 2015, have established a global structure for advancement, acknowledged as a mechanism for less developed nations to collaborate with more advanced ones towards a mutual future.

Within the framework of achieving environmental sustainability in the Millennium Development Goals, the following aspects are included: aligning the principles of SD with national policies and programs, reversing losses in environmental resources, reducing biodiversity loss, and halving the population without sustainable access to clean drinking water. In order to harmonize the follow-up of the results of the Rio Conference and the efforts of countries and relevant stakeholders to achieve the Millennium Development Goals, the "World Summit on Sustainable Development" was held in Johannesburg in 2002. In 2012, the United Nations Conference on Sustainable Development (Rio+20) was organized in Rio de Janeiro. As a result of the Rio+20 Summit, a document titled "The Future We Want" was adopted as a roadmap for development. In continuation of the Millennium Development Goals, the "Agenda 2030: UN Sustainable Development Goals (SDGs)" was adopted in New York in 2015, consisting of 17 goals and 169 sub-goals ([www.mfa.gov.tr](http://www.mfa.gov.tr)). The United Nations' Sustainable Development Goals are visualized in Figure 1 below.

**Figure 1. United Nations Sustainable Development Goals**



Source: <https://turkiye.un.org/tr>.

In the context of the issue, SD first emerged due to environmental concerns, and then started to play an important role in country policies by ensuring both permanent economic growth and efficient use of limited natural resources and by covering social concerns. With the increase in international awareness and the monitoring of concrete indicators, SD is now conceptualized in three dimensions: economic, social and environmental sustainability. Therefore, over time, the definition of SD has evolved into its current form by incorporating the sensitivity of conducting economic, social and environmental activities from a sustainability perspective and protecting the interests of all stakeholders (Harris, 2000: 5-6; Elliot, 2012:20).

## 2.2. Decent Work

The universally set goal of "decent work" by the ILO is used as a general conceptual framework that refers to individuals' rights to work and employment, OSH conditions, social security opportunities, and their rights to express themselves through unions or other representation and participation mechanisms (Işığışık, 2005: 3). Decent work, which entails dignified working conditions where forced labor and child labor are absent, and where a fair wage is earned for the work performed (Palaz, 2005: 480), actually represents the most fundamental expectations of individuals in their working lives.

Labour Conference in 1999, is a concept developed based on four fundamental components. The absence of any one of these components eliminates the characteristic of being "decent work." These components are employment, social protection, workers' rights, and social dialogue (Ghai, 2003: 113; Kapar, 2004: 187). These components are used as key indicators in determining and measuring decent work (Palaz, 2005: 503). Although there is no universally accepted standard measurement method for the concept of "decent work," the ILO has attempted to establish different indicators through reports published in various years. In a report published by the ILO in 2002 titled "Measuring Decent Work

with Statistical Indicators," 11 statistical criteria were proposed. These criteria are as follows (Anker, et al.; 2002):

- i. Employment opportunities*
- ii. Unacceptable work*
- iii. Fair income and productive work*
- iv. Adequate working time*
- v. Employment stability and security*
- vi. Work-life balance*
- vii. Equal opportunities and treatment in employment*
- viii. Occupational safety and health*
- ix. Social security*
- x. Social dialogue and workplace relations*
- xi. The economic and social context of decent work*

Decent work can be statistically measured using certain indicators, and the measurement results are utilized for various purposes. These statistical indicators, also referred to as "performance indicators for decent work," allow the measurement of a country's current performance in decent work during a specific period. Additionally, country comparisons can be made, and the extent to which the objectives in this regard have been achieved within a specific period can be examined. Furthermore, these indicators can also be used to explore the relationships among the elements of decent work (Işığışık, 2005: 89).

### **2.3. Occupational Safety and Health**

There are numerous definitions of the concept in the literature. A comprehensive definition pertaining to occupational health was collaboratively established by the ILO and WHO in 1950. It articulates, "Occupational health strives for the utmost physical, psychological, and social well-being of individuals employed in various occupations. This involves averting work-related health issues among employees, shielding them from potential health-detrimental factors in their workplaces, ensuring that employees are placed and retained in occupational settings compatible with their physiological and psychological capacities, and, in summary, adjusting work to suit the individual and ensuring that each individual is well-suited for their job." (WHO, 2005: 3). Thus, an individual's health is not just physical but a complete state of well-being from both mental and social aspects. In terms of occupational safety, which involves technical measures related to the working environment, the focus is on protecting employees from the technical equipment used in the workplace, identifying risks associated with the equipment used in the workplace, and taking protective measures against them (Başbuğ, 2013). In an integrated definition that encompasses health, safety, and the integration of both, it can be said that OSH represents a holistic approach towards the total well-being of employees in the workplace (Tawiah,

2013). This process referred to as total well-being includes not only physical safety and well-being but also mental and psychosocial well-being. Moreover, from an economic, legal, and ethical perspective, OHS has become a critical issue for businesses to remain competitive in the global market (Molamohamadi, Ismail, 2014: 199; Tawiah, 2013; Leman, 2013). This arises due to the fact that an environment that prioritizes the health and safety of workers not only constitutes a favorable condition from the standpoint of the workforce but also makes a substantial impact on labor efficiency and fosters economic advancement (Heuvel, et al., 2017). Therefore, OHS is now among the factors that determine the quality of working life and contribute to achieving SD.

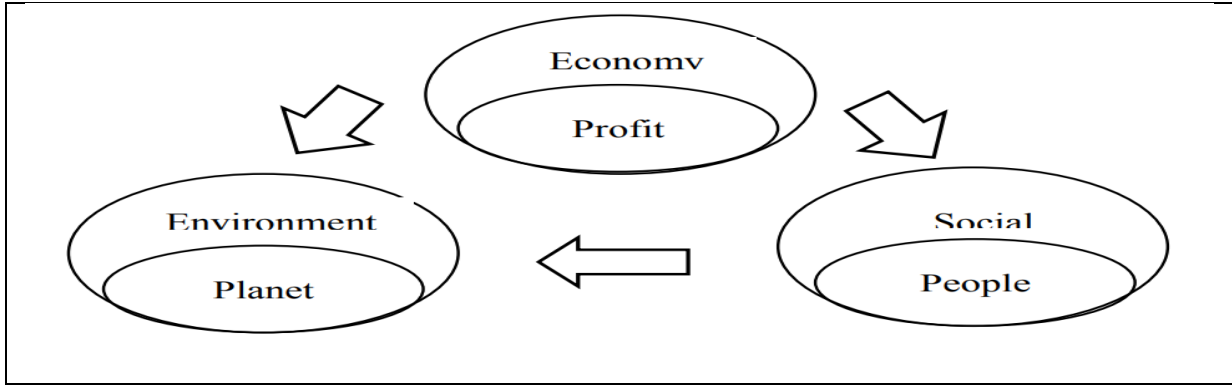
### **3. OCCUPATIONAL SAFETY AND HEALTH IN THE SUSTAINABLE DEVELOPMENT GOAL**

SD and OSH are two contentious concepts that have drawn the interest of numerous researchers in recent times. Presently, it is inconceivable to contemplate sustainable development without taking into account the aspects of the environment, society, the economy, and working environments. However, studies investigating the role of OHS in SD are either fragmented or discussions related to OHS are only superficially considered within specific agendas. Therefore, there hasn't been enough research priority given to the relationship between OHS and SD. (Jilcha, Kitaw, 2017: 373; Tawiah, 2013: 74).

This section aims to present the connections between OHS and SD and focuses on the role of OHS in this context. OHS has fundamental goals that include the protection of workers and ensuring the safety of the workplace and production. While the issue is fundamentally humanitarian, economic considerations are also taken into account. The primary goal is first and foremost the protection of individuals from potential dangers and risks they may encounter in the workplace. However, in today's world, the continuity of productive and high-quality production in businesses has become a significant concern within the realm of OHS. Therefore, the issue, while primarily about human health and safety, has evolved to encompass a comprehensive content that takes into account social, environmental, and economic factors. In this context, modern OHS principles are starting to find a place in businesses' sustainability policies. When we look at the issue broadly, it becomes evident that OHS intersects with the three dimensions of SD (environmental, economic, and social sustainability).

SD focuses on the needs of both current and future generations, with an emphasis on human health and environmental protection. This entails maintaining a productive life and meeting the needs of current and future generations without disregarding their health and requirements. SD is seen as the combination of three interrelated pillars: economic development, social development, and environmental protection (Jilcha, Kitaw, 2017: 37; Garetti, Taisch, 2012; Tawiah, 2013).

**Figure 2. Key Factors of Sustainability**



Source: Ivascu, Artene, Turi, Balan, and Dufour (2019).

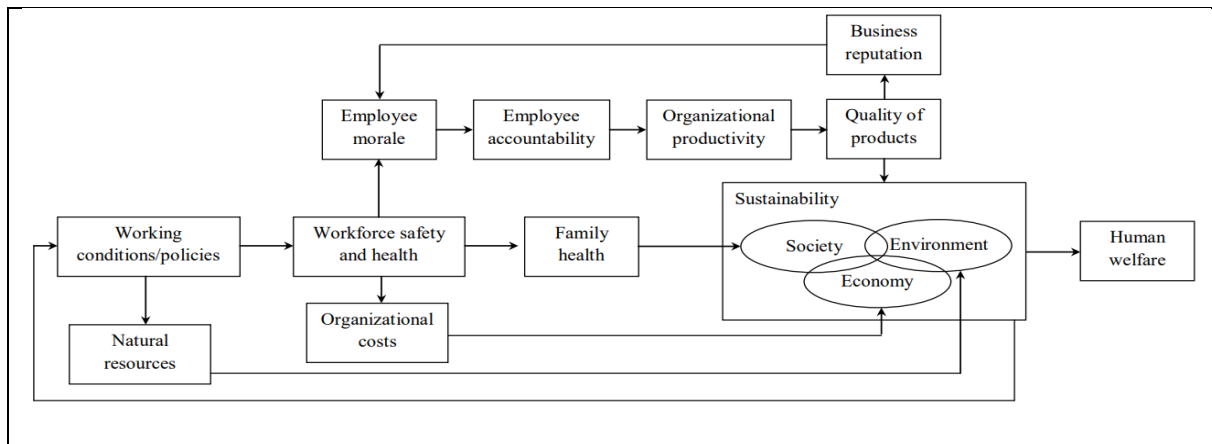
The initial interaction that can be perceived between OHS and sustainability, as seen in Figure 1, involves people, the planet, and profit. These three elements are strongly integrated into the OHS culture. When referring to people, safety, health, and development are discussed. Similarly, when addressing the planet (environment), sustainable economy and environment are implied. The environment is a living space, and the working environment should be comfortable for people. Lastly, when talking about profit (economy), it refers to the expected outcomes and a controlled environment (planet) that results in SD. Therefore, these three fundamental elements contribute to the improvement of OHS and SD (Ivascu, et al.; Boini, Colin, Grzebyk, 2017; Shamsudin, et al., 2014).

For SD, it is necessary to ensure a healthy and safe working sustainable environment in the workplace, which is seen as a global problem. To achieve this, it is essential to develop OSH environments. The cost of workplace accidents and illnesses is the primary example that needs to be addressed from an economic perspective. In addition to the immeasurable human suffering, deaths and health issues result in significant economic losses for both businesses and societies, including losses in productivity and decreased work capacity. According to the ILO's calculations, approximately 4% of the global gross domestic product is forfeited due to various direct and indirect expenditures linked to OSH. These costs encompass compensation, medical outlays, property destruction, diminished earnings, and retraining. Furthermore, the worldwide expenses associated with occupational safety and health-related diseases are on the rise. It is approximated that each year, 270 million occupational accidents and 160 million workplace illnesses afflict workers. Subpar occupational health and the diminished work capacity of employees can result in economic deficits ranging from 10% to 20% of a nation's gross national product. These changes have particularly inhibiting effects on development, especially in Africa and Asia, and they add to the existing burden on societies, increasing poverty levels (Jilcha, Kitaw, 2017: 372; WHO, 1995; ILO, 2006).

Furthermore, businesses cannot grow sustainably if their OHS practices are inadequate. Conversely, a company with sustainable OHS practices can become competitive and sustainable

(Ivascu, et al.). Today, it is widely accepted that occupational accidents and occupational diseases can have significant effects on business productivity, competitiveness, reputation, individuals, and their families' livelihoods. Furthermore, at the national level, workplace accidents and health issues can constitute an inhumane and economic burden, damage the reputation of businesses, and negatively affect sustainable economic growth (ILO, 2014). Effective management of OHS plays a significant role in the operation of a successful business (WHO, 1994). Research in this direction indicates that OHS in the workplace has an impact on organizational performance, such as productivity and profitability. The nature of the working environment and poor working conditions are associated with lower employee productivity, while the level of OHS development is negatively related to injury rates. Therefore, they suggest that an OHS management system can be seen as a way to reduce injuries and illnesses for all businesses. In other words, unhealthy employees cannot achieve maximum productivity and efficiency in unsafe working environments, leading to financial crises in businesses, which, in turn, create challenging economic conditions for employees and stakeholders, customers, shareholders, and society at large (Molamohamadi, Napsiah, 2014: 200). An organization's SD strategy should be evaluated not only in terms of the increase in the organization's production value but also in terms of economic efficiency, resource utilization, OHS, and environmental protection, among other aspects. Economic efficiency and OHS are inseparable variables (Jilcha, Kitaw, 2017: 373; Chen, 2004).

**Figure 3. The Link Between Occupational Safety and Health and Sustainable Development**



Source: Molamohamadi, Ismail, 2014.

Various social issues related to safety, health, equality, and working conditions pose obstacles to SD. The business world's most explicit social role is to contribute to economic and social development by creating employment opportunities. However, the expectation for businesses to take an active role in social equality, access to healthcare, human rights, workers' rights, and social justice has grown. Every company should consider the quality of life, starting with the working and living conditions of its own employees and extending to the well-being of its customers, the local community, and even future generations (Aras, 2015: 26). Working in safe and healthy conditions enhances employee performance, increases motivation and efficiency, raises work productivity, reduces costs, and consequently improves



product quality while increasing long-term sales and revenue. The quality of products produced by a company affects people's health in society and significantly impacts the environment in which people work and live (Jilcha, Kitaw, 2017; Szirmai, 2005; Garetti, Taisch, 2012). Moreover, employee injuries and property damage not only increase a company's costs but also include medical expenses, operational costs, and compensations to individuals and society. It damages a company's reputation and reduces market share. This, in turn, negatively affects employee morale and motivation and can influence employee effectiveness. Ultimately, without social and economic sustainability, safety and health cannot be managed and guaranteed. Individuals with economic problems cannot be physically and mentally healthy employees in the workplace. Furthermore, societal disarray and discontent can lead to a lack of motivation and impact employee efficiency. The environment can also affect employee health and workplace productivity. This is because a company or organization is a part of the community, and everything that directly or indirectly affects one entity will impact another (Molamohamadi, Ismail, 2014: 200). To achieve SD successfully, policies in the workplace that are sensitive to safety, health, and the environment must be considered.

On the other hand, the environment has become a significant concern for businesses today. Businesses are under pressure to adopt social and environmental responsibilities from various stakeholders. Managers are increasingly sensitive to how their businesses can become more socially responsible, ecologically sustainable, and economically competitive. Therefore, it will require transforming management practices, final products, and process systems of businesses to reduce their impact on the natural environment and incorporate environmental elements into all of the company's strategies. In line with this, many businesses today create and implement environmentally friendly mission statements. Similarly, financial reporting now includes annual environmental reports. The implementation of eco-friendly policies enhances business productivity and thus serves as a source of superior competitive advantage. Moreover, businesses reap several benefits from adopting green policies. These include a tax deduction, various subsidies, increasing brand reputation and visibility, gaining consumer trust, expanding market share and exports, achieving better compliance with regulations, and enhancing innovative capabilities (Gedik 2020; Danso et al., 2020: 3; Amankwah-Amoah et al., 2019: 79; Jugend et al., 2017: 432-433; Yacob et al., 2019: 1; Orlitzky et al., 2011: 3).

From what has been said so far, it is possible to conclude that OHS and SD are highly interrelated and that the adoption of one of these policies requires the appropriate implementation of the other. The essence of OSH and SD lies in representing the existence of a mutual relationship between these two critical concepts. They share the same objectives and address the same issues, namely the consistent well-being and welfare of individuals, which are described from different perspectives and in different terms. Furthermore, the ultimate goal of both policies is to sustain the continuous mental and physical health of individuals. As occupational safety, health, and SD are concerned with the same issues,

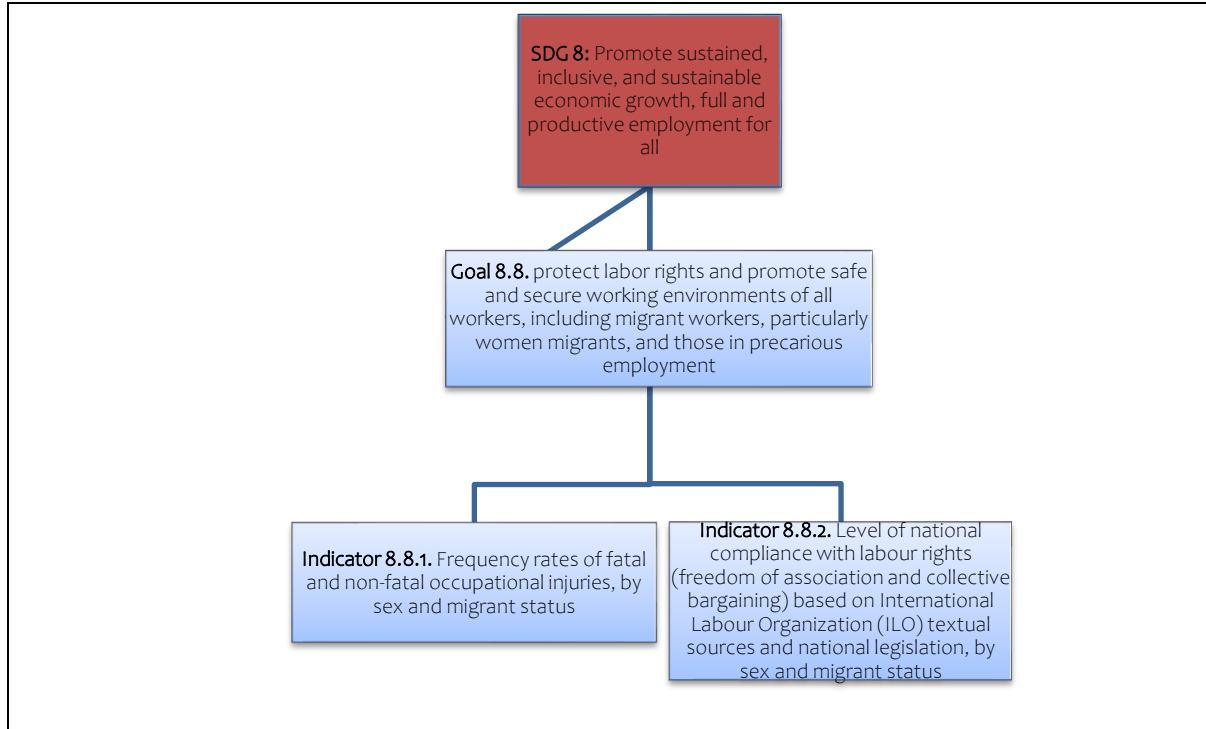
integrating research findings and adopting a shared approach to both concepts is of significant importance.

#### 4. THE HUMAN DIMENSION OF SUSTAINABLE DEVELOPMENT

As mentioned in the previous section, while achieving SD is categorized into three distinct dimensions: economic, environmental, and social, they all share a common denominator, which is "human" (Yalçın, 2021). Furthermore, the Decent Work Agenda, which promotes decent work for all, was integrated into the United Nations' Sustainable Development Goals in 2015. This emphasized the need for effective economic policies to simultaneously promote decent work, becoming one of the key agenda items for the UN. In this context, under the guidance of national and international institutions, efforts have been intensified to evaluate and enhance working conditions from the perspective of decent work (Blustein, Olle, Connors-Kellgren, and Diamonti, 2016; Yücel, İzdeş, 2017). Building upon this foundation, this section of the study will evaluate the emphasis on the humanitarian aspect of SD, focusing on the concept of decent work and its encompassed OSH criteria.

OSH is a vital component of decent work. The physical conditions and mental requirements of the workplace significantly shape the working conditions for employees. Therefore, good work is safe and healthy work. Occupational accidents, injuries, and illnesses incur significant human, social, and economic costs. To prevent these, steps should be taken to ensure that all workplaces are safe and healthy (ILO, 2020).

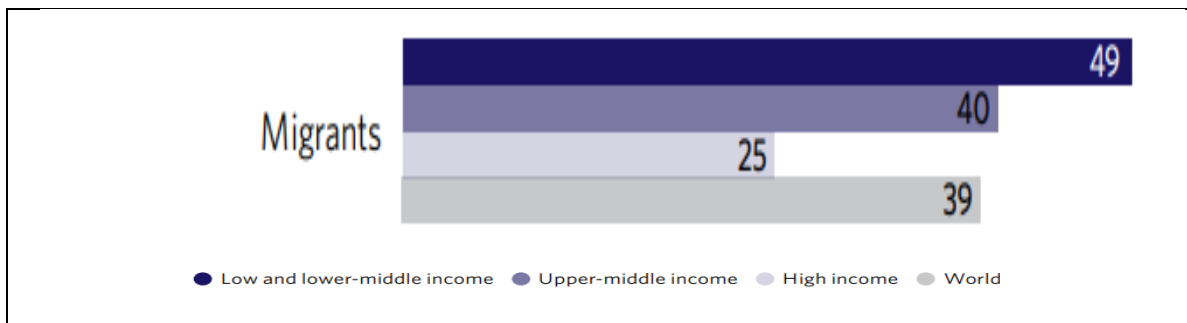
**Figure 4. UN Sustainable Development: Goal 8 and Indicators**



OSH plays a central role in decent work and SD, emphasized in Target 8 of the 2030 Sustainable Development Agenda. The indicators for Target 8 are visually presented in Figure 1. OSH holds such a vital role in promoting dignified employment and sustainable development that Target 8.8, emphasizing decent work and economic progress, addresses safeguarding labor rights and fostering safe and stable work settings for all employees, encompassing migrant workers. The focus extends to women migrants and those engaged in unstable employment, with special attention. This target aims to protect the labor rights of all workers and promote safe working environments. To monitor progress towards this target, the Global Indicator Framework<sup>2</sup> recommends that Indicator 8.8.1 should provide detailed information on the fatal and non-fatal occupational injury rates per 100,000 workers, disaggregated by gender and migrant status. Having separate information on nationals and migrants allows for assessing differences in exposure to work-related risks between these two population groups, determining the need for targeted campaigns or policies (ILO, 2020).

In developed countries, the measurement of decent work benefits from the advantages of data richness and institutionalization. However, there are serious data challenges in developing economies (Yücel, İzdeş, 2017: 10). This situation can be exemplified in the United Nations Sustainable Development Goals Report (UN, 2022), which highlights the difficulties in obtaining data on disadvantaged groups. As shown in Figure 5, the situation of obtaining data on migrants in countries with different income groups is presented proportionally in 2021. In the majority of low and middle-income countries, data on migrants were challenging to obtain in about 49%, and globally, in about 39% of countries. It's essential to consider the impact of the pandemic during that year. However, this picture illustrates how the challenging situation in obtaining accurate information about migrant populations varies by income groups of countries.

**Figure 5. Percentage of Countries Facing Challenges in Collecting Migrant Data by Income Groups (May 2021)**



Source: (UN, 2022: 6).

Of course, this situation doesn't only have negative implications for migrant populations. There are serious challenges in obtaining data from countries worldwide regarding the OSH dimension that is

<sup>2</sup> For detailed information, please refer to: <http://www.surdurulebilirlikalkinma.gov.tr/wp-content/uploads/2021/02/SKA-ve-Gostergeleri-Kapak-Birlestirilmis.pdf>.

sought for decent work. ILO frequently highlights this issue. Despite this, when looking at the ILO's OSH indicators, it is often not possible to reach especially low-income countries. However, measuring decent work is crucial for identifying and improving employment-related issues.

ILO's guide on measuring decent work includes indicators related to OSH. These indicators encompass the rate of fatal occupational injuries, the rate of non-fatal occupational injuries, the time lost due to work-related accidents, and the number of labor inspectors per 10,000 workers (ILO, 2008).

**Table 1. Indicators for Decent Work in a Safe Working Environment**

Indicators	Data Source
Occupational injury rate, fatal	Occupational safety and health insurance Labour inspection
Occupational injury rate, non-fatal	
Time lost due to occupational injuries	
Labour inspection (inspectors per 10,000 employed persons)	

Source: (ILO, 2008).

In this study, we focus on occupational fatal and non-fatal accident rates per 100,000 workers. Table 1 has been created in this context.

**Table 2. Occupational Injuries in Countries by Income Groups (Per 100,000 workers)**

	High-Income Countries	Upper Middle Income Countries	Low Middle Income Countries	Low Income Countries
Occupational injury rate, non-fatal	1,106	1.213	855	707
Occupational injury rate, fatal	2,3	5,3	6,2 <sup>3</sup>	13,8

Source: Compiled from World Bank (DB) and ILOSTAT data.

The data in Table 2 has been listed by considering the World Bank's country classifications<sup>4</sup> by income group, and the averages of occupational injuries occurring in countries in each different income group that could be retrieved from the most recent data<sup>5</sup> provided by the ILO have been calculated. In the low-income countries classification, there is only one country. Burundi is the only low-income country from which the ILO could obtain the most recent data. Detailed lists of other countries in the classifications are provided in the tables below. One of the key challenges in the field of OSH is the difficulty in obtaining field-specific data. Despite doubts about the accuracy and completeness of the data obtained from countries, the numbers in the tables should be considered along with these concerns. Notably, the number of non-fatal occupational injuries is higher in high-income and upper-middle-income countries than in other groups, while the average number of fatal occupational injuries is lower.

<sup>3</sup> Pakistan was not included in the calculation due to its lack of data sharing.

<sup>4</sup>It was accessed from the website <https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html>.

<sup>5</sup> The data is based on information as of July 12, 2023.

It is believed that this is influenced by the fact that high-income countries share their data more accurately. Looking at Table 2, it will be seen that the high-income group has a higher number of countries sharing data compared to other groups. In the high-income group, nearly half of the countries shared up-to-date data, while this ratio decreases as the income group of the countries decreases. Approximately 33% of upper-middle-income countries, about 22% of lower-middle-income countries, and only 4% of low-income countries shared data. This indicates that low-income countries face challenges in sharing data.

**Table 3. High-Income Countries**

<b>Countries</b>	<b>Region</b>	<b>Occupational injury rate, non-fatal</b>	<b>Occupational injury rate, fatal</b>
<b>Australia</b>	East Asia & Pacific	899	1,6
<b>Hong Kong SAR, China</b>	East Asia & Pacific	1188	6,8
<b>Japan</b>	East Asia & Pacific	266	1,5
<b>New Caledonia</b>	East Asia & Pacific	6	7
<b>Singapore</b>	East Asia & Pacific	386	1,1
<b>Austria</b>	Europe & Central Asia	1417	2,4
<b>Belgium</b>	Europe & Central Asia	2314	0
<b>Switzerland</b>	Europe & Central Asia	2108	1,1
<b>Cyprus</b>	Europe & Central Asia	420	3,8
<b>Czechia</b>	Europe & Central Asia	745	2,3
<b>Germany</b>	Europe & Central Asia	1505	0,7
<b>Denmark</b>	Europe & Central Asia	2565	1,3
<b>Spain</b>	Europe & Central Asia	2347	1,9
<b>Estonia</b>	Europe & Central Asia	593	2
<b>Finland</b>	Europe & Central Asia	4025	0,7
<b>France</b>	Europe & Central Asia	2931	2,5
<b>United Kingdom</b>	Europe & Central Asia	692	0,8
<b>Greece</b>	Europe & Central Asia	105	0,9
<b>Hungary</b>	Europe & Central Asia	494	1,8
<b>Ireland</b>	Europe & Central Asia	526	1,8
<b>Iceland</b>	Europe & Central Asia	553	1,5
<b>Italy</b>	Europe & Central Asia	1413	3,4
<b>Lithuania</b>	Europe & Central Asia	436	4,3
<b>Luxembourg</b>	Europe & Central Asia	1461	1,7
<b>Latvia</b>	Europe & Central Asia	301	5,1
<b>Netherlands</b>	Europe & Central Asia	997	0,3
<b>Norway</b>	Europe & Central Asia	48	1,1
<b>Portugal</b>	Europe & Central Asia	2260	2,7
<b>Romania</b>	Europe & Central Asia	71	2,6
<b>Slovak Republic</b>	Europe & Central Asia	359	1,5
<b>Sweden</b>	Europe & Central Asia	689	0,8
<b>Barbados</b>	Latin America & Caribbean	388	0,8
<b>Chile</b>	Latin America & Caribbean	3142	3,1
<b>Panama</b>	Latin America & Caribbean	2	0,2
<b>Uruguay</b>	Latin America & Caribbean	2654	3,7

<b>Bahrain</b>	Middle East & North Africa	109	0,6
<b>Israel</b>	Middle East & North Africa	1660	1,4
<b>Malta</b>	Middle East & North Africa	863	3
<b>Qatar</b>	Middle East & North Africa	21	5,9
<b>Canada</b>	North America	1408	5,1
<b>United States</b>	North America	900	5,3
<b>Poland</b>	Europe & Central Asia	453	1,4
<b>Slovenia</b>	Europe & Central Asia	1868	1,9

The countries in Table 3 are mostly located in Europe and Central Asia regions. The first thing that stands out in the table is the significantly low numbers of fatal and non-fatal occupational injuries per 100,000 workers in Panama. This suggests that the data from this country may not be reliable. A similar situation applies to countries like Qatar and New Caledonia.

**Table 4. Upper-Middle-Income Countries**

<b>Country</b>	<b>Region</b>	<b>Occupational injury rate, non-fatal</b>	<b>Occupational injury rate, fatal</b>
<b>Malaysia</b>	East Asia & Pacific	578	3,8
<b>Thailand</b>	East Asia & Pacific	762	5,3
<b>Armenia</b>	Europe & Central Asia	29	4,2
<b>Azerbaijan</b>	Europe & Central Asia	16	3
<b>Bulgaria</b>	Europe & Central Asia	77	3,7
<b>Belarus</b>	Europe & Central Asia	52	2,6
<b>Georgia</b>	Europe & Central Asia	26	2,7
<b>Kazakhstan</b>	Europe & Central Asia	42	4,3
<b>Moldova</b>	Europe & Central Asia	84	4,8
<b>Russian Federation</b>	Europe & Central Asia	102	6
<b>Türkiye</b>	Europe & Central Asia	2459	6,3
<b>Argentina</b>	Latin America & Caribbean	3310	3,2
<b>Belize</b>	Latin America & Caribbean	978	0,9
<b>Brazil</b>	Latin America & Caribbean	1374	7,4
<b>Colombia</b>	Latin America & Caribbean	4	0
<b>Costa Rica</b>	Latin America & Caribbean	9421	9,7
<b>Cuba</b>	Latin America & Caribbean	1017	25
<b>Mauritius</b>	Sub-Saharan Africa	198	0,6
<b>Mexico</b>	Latin America & Caribbean	2529	7,7

As previously mentioned, as the income levels of countries decrease, the rate of data sharing also declines. In the World Bank's upper-middle-income group ranking, only 33% of countries have shared up-to-date data. In this group, Turkey, for example, reports 2,459 non-fatal work-related injuries per 100,000 workers and 6.3% for fatal injuries. However, it's important to note that these figures are based

on data obtained from registered employment, and unreported injuries and fatalities exist. Taking all of this into account, the estimated data's magnitude significantly affects the situation in an unfavorable way. Considering that in 2019, 2 billion people worldwide (60% of global employment) were working in the informal sector (UN, 2022), it is believed that this interpretation would apply to most countries' data in the lists.

**Table 5. Low Middle-Income Countries**

Country	Region	Occupational injury rate, non-fatal	Occupational injury rate, fatal
Myanmar	East Asia & Pacific	12	3,2
Mongolia	East Asia & Pacific	20	3
Philippines	East Asia & Pacific	417	9,6
Kyrgyz Republic	Europe & Central Asia	22	4,1
Ukraine	Europe & Central Asia	166	7,6
Uzbekistan	Europe & Central Asia	27	5,8
Nicaragua	Latin America & Caribbean	4891	8
Egypt, Arab Rep.	Middle East & North Africa	670	10,7
Sri Lanka	South Asia	14	0,8
Pakistan	South Asia	2691	-
Zimbabwe	Sub-Saharan Africa	480	9,5

Table 5 shows that when it comes to low-middle-income countries, Pakistan has not shared any data regarding fatal occupational injuries. The average for fatal occupational injuries per 100,000 workers is calculated at 6.2 individuals for the countries in this category. Although it may seem like a relatively low rate, there are concerns about whether the table accurately reflects the actual situation.

Of course, analyzing the number of workplace accidents and occupational diseases in absolute terms is generally difficult and, more importantly, not very informative. This is because it conveys no information beyond the numerical magnitude of the event. Dependent solely on the overall count of lethal or non-lethal incidents, it becomes arduous to grasp the frequency of these occurrences, the level of worker exposure to hazards, and the probability of these incidents repeating in the future (ILO, 2018: 41). However, it is essential to have access to accurate data in the first place. Being deprived of the most fundamental and necessary information in the field of OSH is one of the major obstacles to formulating the required policies and ensuring humane living conditions in the workplace.

Despite technological advancements, the globalization of economies, and the widespread use of artificial intelligence and automation, human capital remains a fundamental factor behind the economic and SDof all countries (Rantanen, Muchiri, Lehtinen, 2020). A safe and healthy working environment forms the foundation of decent work. In this context, having reliable statistics on workplace accidents is crucial for assessing how well workers are protected or exposed to work-related hazards and risks (ILO, 2018: 40). Unfortunately, the field of OSH statistics faces a series of significant challenges, including data availability, quality, timely reporting, coverage, and comparability (ILO, 2020).

Despite these efforts, in some regions around the world, there have been significant endeavors in the field of OSH in recent years. However, workplace accidents and occupational diseases remain highly prevalent. Unfortunately, many workers still face preventable risks in their workplaces. Workplace accidents are still quite common, and many work-related risk factors remain uncontrolled, leading to preventable occupational injuries and illnesses. The shortcomings in OSH come at a significant and unacceptable human cost (ILO, 2020). Such a situation presents challenges to achieving SD. To ensure socio-economic balanced development, it is essential not only to sustain economic growth but also to promote and achieve decent work worldwide.

As the UN also emphasizes, OSH should be a universal right, leaving no one behind. A healthy workforce is a prerequisite for SD and economic growth. Therefore, it is crucial to consider development goals, especially SDG 8, to promote investments in improving healthy working conditions and protecting the health of workers. Governments should establish measures to enhance working conditions and encourage investments in preserving workers' health (ILO, 2019).

## **5. CONCLUSION**

SD has become a crucial issue widely discussed in academic studies on the international stage in recent years. The quest for ensuring global sustainability, encompassing environmental, economic, and social dimensions, has gained universal significance. This is because safeguarding a more habitable world for both the present and future generations has become the most pressing concern for humanity. In this context, the United Nations has set forth SD goals, and "Decent Work and Economic Growth" is among the crucial targets in this effort. The ILO plays a significant role in achieving SD goals in the context of providing decent work for all. In today's labor landscape, ensuring decent work has become more vital than ever. With the growing deficits in decent work, achieving the sustainability of development goals is impossible. After all, human beings are the fundamental element of the workforce, and SD should inherently focus on humanity. At this juncture, OSH issues are particularly important. The approach that prioritizes the protection of workers in the workplace, emphasizing OSH, has found its place among the criteria for decent work.

Based on this, it is evident that OSH are the most crucial criteria among the fundamental factors to consider when addressing the human dimension of SD. In this study, the primary focus is on the indicators related to OSH for all workers, as emphasized in UN Goal 8.8. These indicators are considered as criteria for a decent work environment and are instrumental in assessing the statistics of fatal and non-fatal occupational accidents caused by workplace-related factors. Data has been obtained through the ILO. In order to systematically evaluate countries that share data, tables have been created, taking into account the World Bank's country classifications based on income groups. Consequently, the first issue that needs to be addressed is the existence of challenges in obtaining accurate and comprehensive data for OSH in the workplace. This challenge is more pronounced in low-income countries. On the other



hand, while data sharing in high-income countries is more reliable, there are still certain reservations regarding transparency. Access to reliable data is of paramount importance in understanding the real situation, guiding the formulation of appropriate policies, and ultimately, ensuring a safe and healthy work environment.

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