



## Examining Progress on Sustainable Development Goals Across Regions through an Intertemporal Lens

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### Abstract

The Sustainable Development Goals (SDGs) are the set of global goals adopted by world countries under the common 2030 Agenda for Sustainable Development. The UN 193 signatory countries pledged to a common development agenda to achieve economic prosperity, social uplift, environmental restoration, and better governance. Sustainable development is an essential goal that is intrinsically linked to the survival of the individual, society, environment, countries, nations, and the world. It promises peace, prosperity, people, and planet safety for all. The aim of SDGs is to ensure wellbeing for present and future generations through sustainable consumption of the given endowments. SDGs try to establish a balance between economic growth, environmental protection and social wellbeing. The key principle of sustainable development is the idea that all aspects of human society are interconnected and dependent on the health and vitality of the natural endowments. This research presents an intertemporal analysis of the SDGs index over a 20-year period. The study found that the SDGs index for underdeveloped countries has been rising slowly over time, while developed countries are already in a safe zone where sustainable development is ensured.

**Keywords:** Sustainable development, Prosperity, Governance, 2030 Agenda, Wellbeing

### 1. Introduction

Development is always a need in society. The process of development is intrinsically associated with individuals and the economy as well. The term sustainable development was first used in 1970 and coined by Brundtland Commission in 1987 (Lee, 1991). The commission prepared the following definition of sustainable development:

*"Sustainable development is a transformation process in which the exploitation of resources, direction of investments, orientation of technological development and institutional change are reconciled and reinforces present and future potential, in order to attend to needs and future aspirations (...) it is that which attends to present needs without compromising the possibility of future generations attending their own needs."* Borowy (2013)

The world is seeking development through historical times. The country's development depends upon its natural resources, human capital, physical capital, the use of technology, land and labor, and smart conservation of the ecosystem. The United Nations has come up with a global agenda of sustainable development by SDGs. Sustainable development goals are good initiatives, however philosophical micro foundations hardly exist. Currently, SDG phenomenon is subject to empirical assessment. However, development initiatives which relate to people on their emotions, beliefs, and values are likely to be more sustainable, less costly, and more out reachable.

The concept of development gained renewed attention in 1949, when President Harry S. Truman introduced the term "underdevelopment" to describe nations with poor economic growth (Rist, 2014; Schuurman, 2014). Post-war development studies were dominated by growth theory (Preston, 1996; Knutsson, 2009), which emphasized economic growth, state planning, national resources, and international aid. The UN Decade of Development in the 1960s focused on economic growth, with a target of 5% annual growth in national income for all nations. Although non-economic issues were acknowledged, economic growth was equated with development (Jolly, 2005). In the 1970s, two new theories of development emerged that challenged the conventional wisdom of using the economy as the sole means of development: dependency theory and basic needs theory. Dependency theory argued that underdevelopment is caused by the unequal relationship between developed and developing countries, while basic needs theory focused on meeting the basic needs of all people. Dependency theory had roots in Latin America which was also advocated by Economic Commission of Latin America (Munro, 2023).

In the 1990s, the idea of human development gained traction among economists, sociologists, and development thinkers (Thelwall & Thelwal, 2016). Amartya Sen emphasized development as freedom, including improved living conditions, political freedom, social opportunities, transparency, and security (Sen, 1999). These advancements led to the development of multidimensional indices to measure economic, social, environmental, human, and institutional growth globally.

The idea of these indices is backed by the series of developments in indicators and development indices over time. Dr. Mahbub ul Haq a Pakistani Economist developed Human Development Index (HDI) adopted by the United Nations Development Program (UNDP, 1990) for measuring development among nations. The human development indicators included social factors like life expectancy, literacy rates, years of schooling (mean years), and per capita income. In the year 2000, the United Nations presented a set of fifteen-year development agenda under Millennium Development Goals (MDGs) with measurable eighteen targets and forty-eight indicators. The experts from the United Nations Secretariat and IMF, OECD, and the World Bank, and numerous scholars developed consensus on MDGs and contributed towards its improvement (UNSSC, 2017) and finally adopted by 190 countries. This was a milestone as an apparent consensus on the importance of human development rather than economic development (Rist, 2014). The MDGs had roots to the development ideas from 1980s and 1990s and at the Millennium Summit of the United Nations in 2000 the MDGs were officially adopted. MDGs played a vital role in global partnership and sharing of resources to collectively develop the world as a better place for living however, the effectiveness was not at par due to several reasons (MacFeely, 2020)

A study published by Lomazzi et al. (2014) stated that MDGs were less effective as they did not prioritize the development needs and they lack the approach to comprehensive analysis of the potential effect on the environment, social and economic dimensions. Goal seven addressed the environment, but only partially, neglecting key sustainable development issues. the majority of goals focused on social issues such as hunger, education, maternal and child health, and communicable diseases. Gender equality was addressed in goals three and five, but not in the others. Goal three measured gender equality in education and employment, while goal five addressed maternal mortality and reproductive health. This revealed that the gender issues were not fully understood or integrated (Jones et al., 2008; Waage et al., 2010). Moreover, goal eight also neglected new financing, technology and capacity

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building (Lomazzi et al., 2014). Lack of clear ownership and leadership at the international and national levels affected the MDGs' performance. Accountability in the use of resources allocated for MDGs by governments and other organizations, was another challenge and hindered the progress<sup>3</sup>.

Last but not least, lack of availability of scientifically valid data on MDG especially goals five and six. This deficiency did not allow for adequate measuring of the performance or to be compared with the baseline (Attaran, 2005). The poor reporting system also affected the MDGs' performance, thereby creating a lack of confidence in governments due to false reporting or government-driven reports. However, some of the developing countries managed to plan the investment in education, health, essential infrastructure, and the environment with assessable limited data systems<sup>4</sup>. Lesson learned in the aftermath of MDGs, the importance was given to policy coherence and institutional governance for SDGs.

According to Meuleman (2021), public administration and governance for SDGs play a vital role in achieving the 2030 agenda. The reform challenges for SDGs readiness at all levels in the administration were vital and subjected to complexity, volatility, plurality, and uncertainty. The study highlighted the need for effective public administration and governance from a strategy point of view for SDGs implementation through developing comprehensive policy instruments and institutional coherence, multilevel governance for selected policy changes, and meta governance for managing and tackling SDGs tradeoff and synergies. Finally, the study identified the mutual gains approach and common but differentiated governance for the SDGs as key strategies to improve policy coherence for sustainable development.

The Sustainable Development Goals (SDGs) are a set of ambitious goals, targets, and indicators that define the global development agenda and unite the world countries around the shared agenda (Hassani et al., 2021). The key to sustainable development for countries is to achieve a balance between economic growth, social equity, and environmental protection (Sachs et al., 2022). Sustainable development means the development that meets present needs without compromising the needs of the future. For achieving such goals it is necessary to harmonies the economic growth, social inclusion, and environmental protection so that exploitation of the natural resources as the ultimate endowment can be preserved and future generations can be better off without worsening the current state. SDGs were negotiated for a period of two years at the UN and agreed upon by the 193 member states on September 25<sup>th</sup>, 2015. The Sustainable Development Goals (SDGs) offer a comprehensive normative framework for achieving global societal well-being, environmental sustainability, and peaceful coexistence by 2030. The framework consists of 17 goals, 169 targets, and 247 indicators (MacFeely, 2020).

The Sustainable Development Goals (SDGs) evolved from the MDGs (Hassani et al., 2021). While the MDGs were largely successful in developed countries, their non-contextualized and overly broad framework limited their applicability to least developed nations and developing countries. The MDGs, which spanned the period 2000-2015, comprised eight measurable targets encompassing goals such as halving extreme poverty and hunger, reducing child mortality, and promoting gender equality. Progress on the MDGs was uneven across countries, and globally only the targets related to poverty were fully achieved. The SDGs sought to address the shortcomings of the MDGs by creating a more dynamic and inclusive framework. A comparative view of MDGs and SDGs is presented in Figure 1.

The Sustainable Development Goals (SDGs) are structured around five interlinked pillars: People, to eradicate poverty and hunger in all its forms and ensure dignity and equity; Planet, to protect the Earth's natural resources and climate for future generations; Prosperity, to ensure prosperous and fulfilling lives in harmony with nature; Peace, to promote peaceful, just, and inclusive societies; Partnerships, to implement the agenda through a robust global partnership. The 17 SDGs are action-oriented and tailored to national realities and priorities. They strike a balance between the three pillars of sustainable development: economic, social, and environmental ("UN's Sustainable Development Goals - Danone").

The MDG legacy is clear in goals 1 to 6 as they call for action on social issues. This means that economic development should not come at the expense of environmental degradation or social inequality. SDGs obtained universal acceptability and designed with an integrated approach for promoting a transformative agenda of sustainable development within and across countries. It includes conservation and resource management, renewable energy responsible consumption, sustainable agriculture, waste reduction and recycling, social equity and justice, education, awareness and international cooperation. By integrating these principles and practices into policies, decision-making processes, and everyday actions, sustainable development strives to create a world where economic growth can coexist with environmental protection and social well-being. Further to this, the adoption of SDGs by countries has led the government to implement and produce a heterogeneous spread of sustainability practices (Esposito et al., 2021). These results in hybrid organizations that are a mix of public and private partners and stakeholders to provide basic goods and services (Caputo et al., 2021).

The objective of the current study is to visualize the SDGs index of world countries over time to explore the progress of the countries made so far on sustainable development goals. The first section starts with explaining the historical evolution of the term's development and sustainable development. The second section provides the methodology adopted by the current study and the last section presents the results and discussion. In a nutshell, over time the measures of development evolved and went under critical analysis and discussion and then extended to incorporate the missing indicators of development.

Countries have adopted the SDGs framework and aligned their policies, developing new policies and reshaping existing ones in line with Agenda 2030 to enhance their significant contribution to the SDGs (Bebbington and Unerman, 2019). The SDGs index is one of the best outcomes of this research and discussion, providing countries with a tool to measure their performance without compromising the consumption of future generations given the fixed natural endowment. Additionally, it is essential to optimize the positive interactions between SDGs and minimize negative impacts to create co-benefits and reduce trade-offs while addressing the nexus challenge (Zanten and Tulder, 2021). The study is significant in providing a single map that shows the overall SDGs index score for countries, estimated the decades of differences and making it easy to understand similarities and differences in achieving the 2030 Agenda for Sustainable Development.

<sup>3</sup> Anti-Corruption Research Network presented accountability stats in 2013 under the title; Corruption and the MDGs.

<http://corruptionresearchnetwork.org/resources/frontpage-articles/corruption-as-an-obstacle-to-achieving-the-millennium-development-goals>

<sup>4</sup> Anti-Corruption Research Network, (2013). Corruption and the MDGs. <http://corruptionresearchnetwork.org/resources/frontpage-articles/corruption-as-an-obstacle-to-achieving-the-millennium-development-goals>



Figure 1: Comparison of MDGs and SDGs

**2. Data and Methodology**

The current section presents the methodology used by the current study. The study utilized the sustainable development goals index data set acquired from the UN SDGs<sup>5</sup>. The SDGs index quantitatively indicates the achievement of the 17 SDGs. The SDGs index score provides information about the country that where it stands for SDGs. It is the assessment of the country’s overall performance on these goals by giving equal weights to each Goal. The score lies between worse-0 to target score-100. The SDGs index has been published since 2015 and is peer-reviewed (Schmidt-Traub et al., 2017) and statistically audited by the European Commission (Papadimitriou et al., 2019). (“Methodology - Europe Sustainable Development Report 2022”) The current study employs the secondary data of SDGs index score from 2000 to 2022 and measured an aggregated score based on the average performance over the period of five years i.e., a. 2000-2004, b. 2005-2009, c. 2010-2014, d. 2015-2019, e. 2019-2022. It is pertinent to mention that SDGs were adopted in 2015, however the data on some early indicators which were also part of MDGs were available and became part of the sustainable development report (see, Sachs et al., 2022).

The current section presents the results of the study developed using sustainable development report data for world countries on the SDGs index (Sachs et al., 2022). A brief profile of the data is presented in the following tables where the world countries are divided region-wise, income group, and OECD v/s non-OECD countries. A total of 163 countries data is used for the current research divided into five-year time periods starting from the year 2000 and ending in 2022. Figure 2 below shows the region-wise SDGs index performance score for world countries. The Eastern Europe and Central Asia region is a high performing region with a 67.85% performance score followed by 67.34% in Latin America, 63.42% in the Middle East, 60.82% in East and South Asia, and 51.30% in Oceania. On the whole, the African content has less than a 50% performance score on the SDGs index.

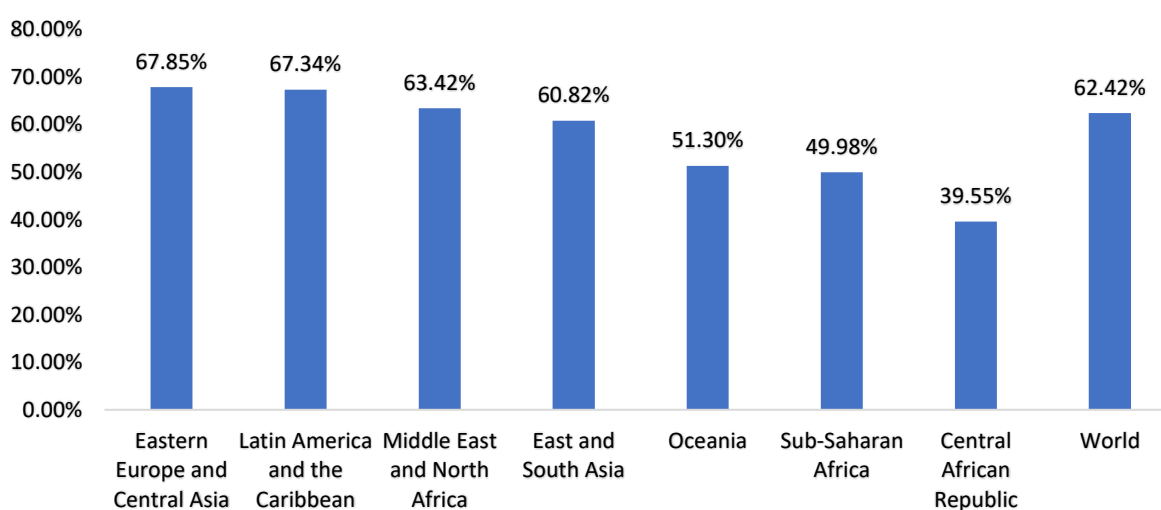


Figure 2: Region Wise SDGs Performance Index Score

<sup>5</sup> The UN SDGs data portal gives access to more than 210 SDGs indicators for the countries across the globe. <https://unstats.un.org/sdgs/dataportal>

Figure 3 depicts the region-wise SDGs index score with a trend line showing an increase in the country’s performance on the SDGs index from 2000-2022. Overall, Figure 3 unveils that the Central African Republic region is a low performing region on the SDGs index over the analysis time of 2000-2022. Eastern Europe, Central Asia, Latin America, and the Caribbean are the high-performing regions of the world, followed by the Middle East and North Africa and East and South Asia, whereas Sub-Saharan Africa has a slightly higher score compared to the Central African Republic region for the years 2000-2022.

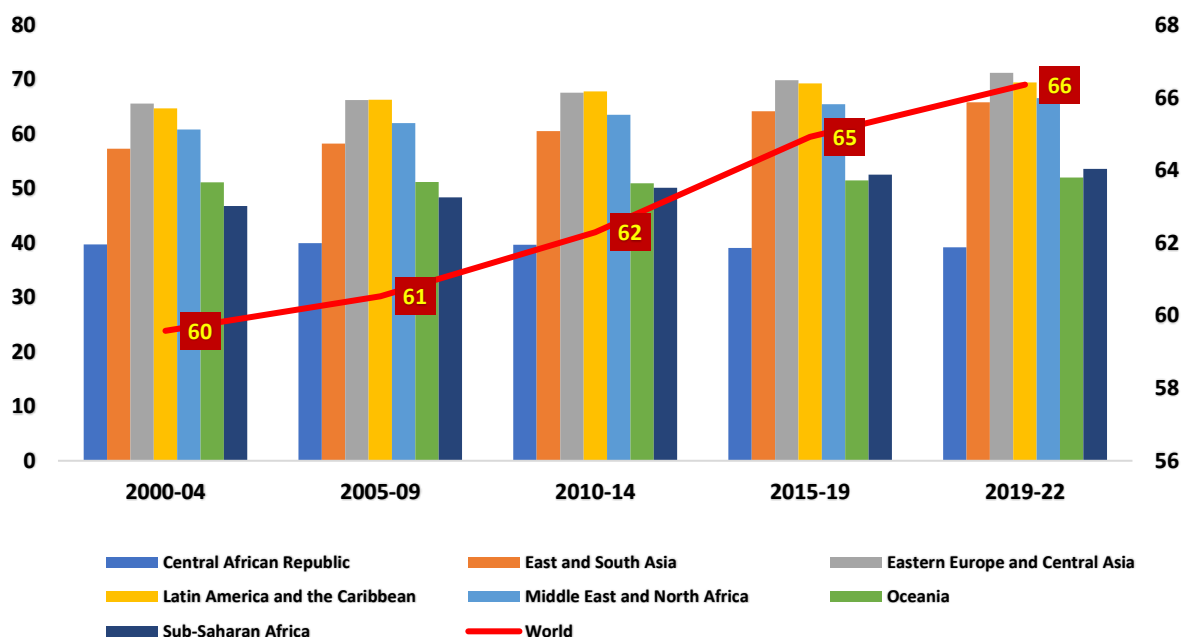


Figure 3: Regional SDGs Performance Score 2000-2022

Figure 4 presents the SDGs performance score of the world countries by income groups. High income countries have higher scores of an average 75%, second by upper middle-income countries with an average score of 67.65%. The low-income countries have less than 50% score on the SDGs performance index as depicted in figure 4 below.

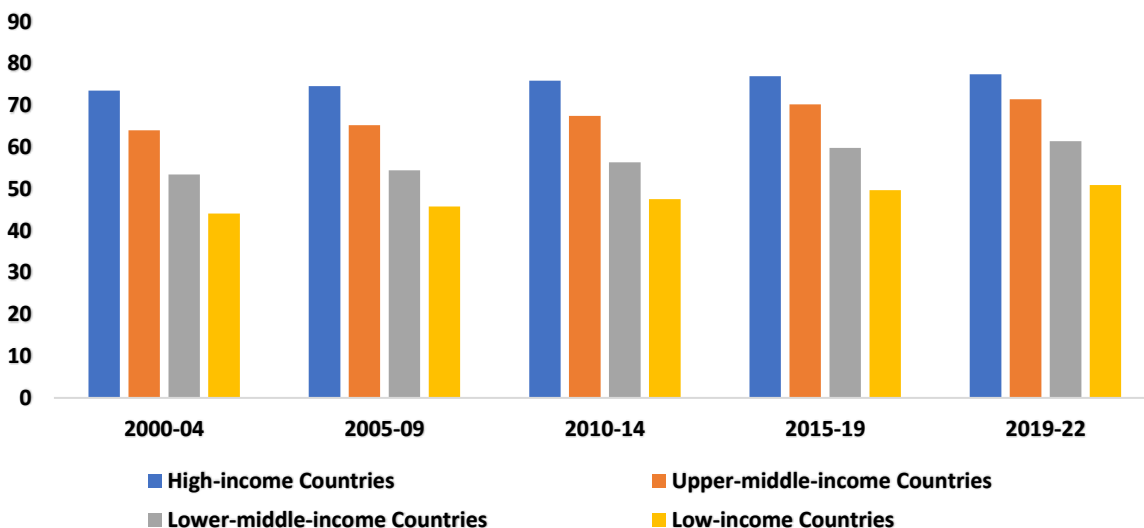


Figure 4: Income Wise Countries & SDGs Performance Score 2000-2022

Figure 5 presents the comparison of OECD countries with non-OECD countries. It has been found that OECD countries are performing better on the SDGs index compared to non-OECD countries. However, the performance on the SDGs index of both regions has increased over time.

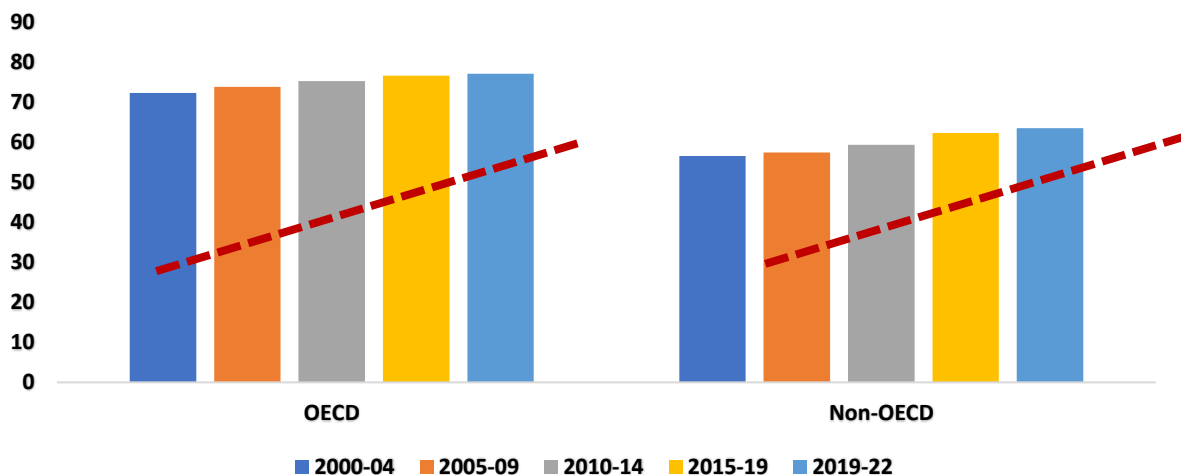


Figure 5: SDGs Performance Score of OECD vs non-OECD Countries

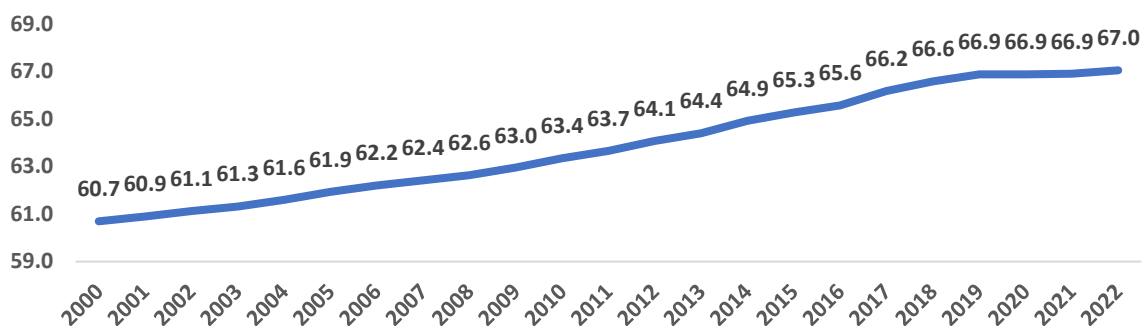


Figure 6: Overall SDGs Performance Index from 2000-2022

Figure 6 depicts the overall trend for world countries since 2000. As mentioned earlier, the index score was available in the SDGs Index Report. The overall trend line shows an increase in the SDGs score over twenty years. The world has made progress on SDGs starting from 60 percent and has reached up to 67 percent in 2022. The rate of change per year is very small over the time period 2000-2020. The significant improvement in SDG scores over the last twenty years can be attributed to a number of factors, including increased global awareness and commitment to sustainable development, concerted efforts from governments, organizations, and individuals, and advancements in technology and innovation. For example, the world has made impressive progress in reducing extreme poverty (SDG 1). According to the World Bank, the global extreme poverty rate decreased from 36% in 1990 to 9.2% in 2021<sup>6</sup>. This improvement can be attributed to a combination of factors, such as targeted poverty reduction programs, increased access to education and healthcare, economic growth in many developing countries, and technological innovations such as mobile banking and microcredit. Additionally, technology and innovation have played a crucial role in achieving other SDGs, such as improving access to clean water and sanitation<sup>7</sup> (SDG 6), reducing child mortality (SDG 3), and combating climate change (SDG 13). For example, the use of drones and satellite imagery has helped to improve water quality monitoring and sanitation management. Mobile health applications have made it easier for people to access healthcare services in remote areas. And renewable energy technologies are helping to reduce greenhouse gas emissions. Furthermore, the increased collaboration and partnerships between different stakeholders have bolstered the progress towards achieving the SDGs. Governments, non-governmental organizations, private sector entities, and communities have worked together to implement sustainable practices, share resources, and exchange knowledge. This collective effort has led to enhanced effectiveness and efficiency in addressing various SDG targets.

It is important to note that while progress has been made, challenges remain in achieving all the SDGs by 2030. However, the improvement in SDG scores is a testament to the growing global commitment to sustainable development and the power of concerted efforts and innovation to achieve positive change.

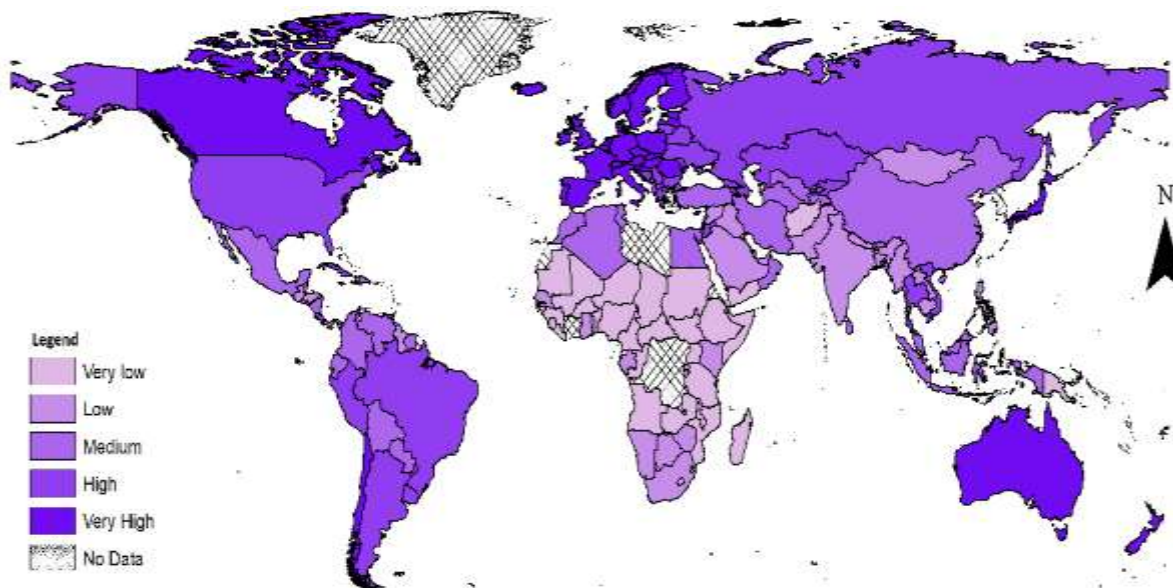
### 3. Results and Discussion

This section provides the intertemporal analysis of the SDGs performance index for world countries. Using average score over a period of 5 years was plotted on the world countries map using ArcMap. Figure 6 below depicted that, the North American region especially Canada, the European region, and Australia is ahead of the rest of the regions in SDGs overall performance, followed by Russia, Brazil, Chile, Ecuador, and Argentina. The countries like China, Arab-African including Algeria and Egypt, in the South-African region, Namibia, Botswana, South Africa, and Zimbabwe, in sub-Saharan Africa Gahan and Gabon, in Arab

<sup>6</sup> World Bank. (2020). Global Extreme Poverty. Retrieved from <https://databank.worldbank.org/reports.aspx?source=extreme-poverty-global>.

<sup>7</sup> United Nations. (2020). Goal 6: Clean Water and Sanitation. Retrieved from <https://www.un.org/sustainabledevelopment/water-and-sanitation/>.

countries, Oman, Kuwait, Saudi Arabia, Jordan, and Asian region Iran, Turkmenistan, Kyrgyzstan, Georgia, Turkey and Bulgaria along with Asian tigers are ahead of the other world countries in overall SDGs performance.



**Figure 6: SDGs Index Score for World Countries**

Figure 7 presents the SDGs index score from year 2000-2019 on the countries overall performance on sustainable development goals. It was observed that the North American states, especially Canada is the only country with a remarkably high SDGs index score since 2000 compared to rest of the region. Alaska, the United States, Cuba, Haiti, Costa Rica, Salvador, and Mexico also sustained significant performance over the same period. In the South American region, Argentina, Brazil, Chile, and Peru are ahead of other South American states. The European region has depicted a constantly higher SDGs index score compared to the rest of the World, followed by Russia, China, Australia, Asian Tigers, and Algeria in the Arab African region. Sub-Saharan and South African regions are constantly performing low on SDGs scores compared to the rest of the world countries. Asian countries scored low to moderate on the SDGs index for the period 2000-2019.

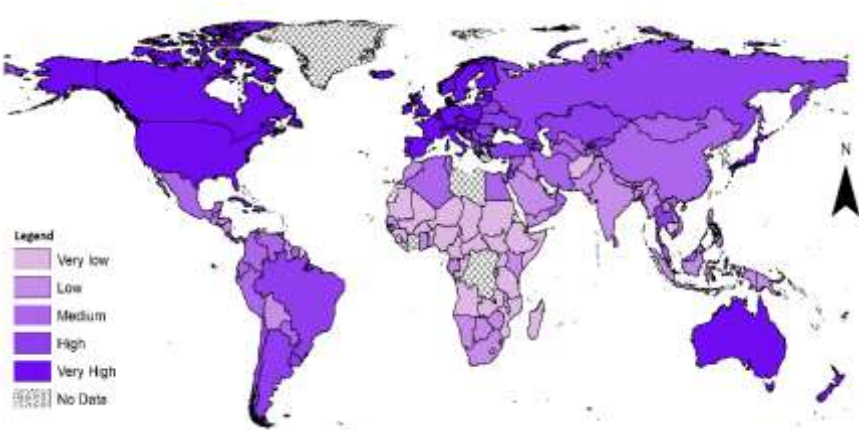
The results in the figure 8 depicted that overall United States, Europe, Russia, Australia, and Japan are standing ahead compared to the rest of the world in their recent most performance index of 2019-2022. It was observed that countries such as Sweden, Denmark, Finland, France, Germany, Norway, Austria, Czech Republic, Netherlands, Estonia, and Japan have more than 80% scores on the SDGs index. Moreover, in Arab countries, Oman, and Saudi Arabia are ahead of the rest of the Arab world. One of the possible reasons is that most of these countries already lies in the category of the world's developed nations due to availability of oil and other abundant natural resources and where the provision of basic services, education, health care systems, social benefits, equality and equity, environmental action, industries, tourism, solid waste management systems, low material footprints, use of renewable energy sources, prevention of discrimination and harassment, peace and justice and policy coherence in the governmental system was highly enacted and must be appraised. On the other hand, these countries also have a higher ecological footprints<sup>8</sup> compared to the rest of the world. The higher score on the SDGs index also implied that these countries adopted and implemented such policies that become aligned with and endorse the UN agenda of sustainable development. This lets us conclude that these nations are on track to achieving the 2030 agenda. Besides the developed world, underdeveloped and developing countries are fostering SDGs, with improvements in the provision of necessities of life including, clean water, sanitation, health services, education, gender equality, employment, and other economic opportunities, and environmental and climate action. These countries are abundant with physical and natural endowment however, a lack of policy coherence and governance mechanisms lags behind the 2030 agenda of sustainable development.

### 3.1. SDGs; Decades of Differences

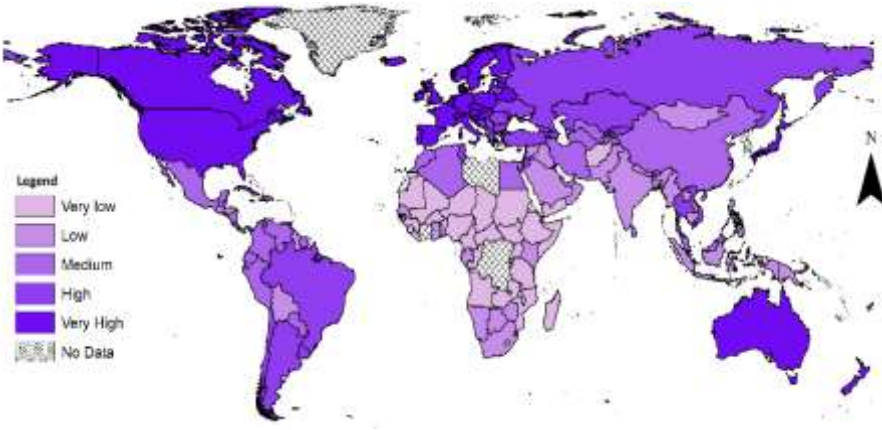
The current section presents the analysis of differences of a country in SDGs performance over time. The maps in figure 9 highlight the progress at the time of SDGs head start and the progress made by the world countries up till year 2022. The analysis revealed that developed countries have minor differences when compared to base year whereas some of the developing nations have made significant progress during the last one and half decade. The base year data is taken from year 2000 as available per SDGs adjusted database. As explained earlier, this data was adjusted based on the data availability of the indicators from socioeconomic surveys till 2008 and the data reported in the indicators used in MDGs. Since 2015 SDGs are fully applicable and most of the nations have adopted the 2030 agenda as National Development Agenda and the data became available on indicators as per SDGs thematic areas and indicators methodology. Therefore, the overall data is adjusted to be included in the world's SDGs status report covering time period from 2000 to present by the United Nations.

<sup>8</sup> This conclusion is based on the data on ecological footprint taken from: <https://worldpopulationreview.com/country-rankings/ecological-footprint-by-country>

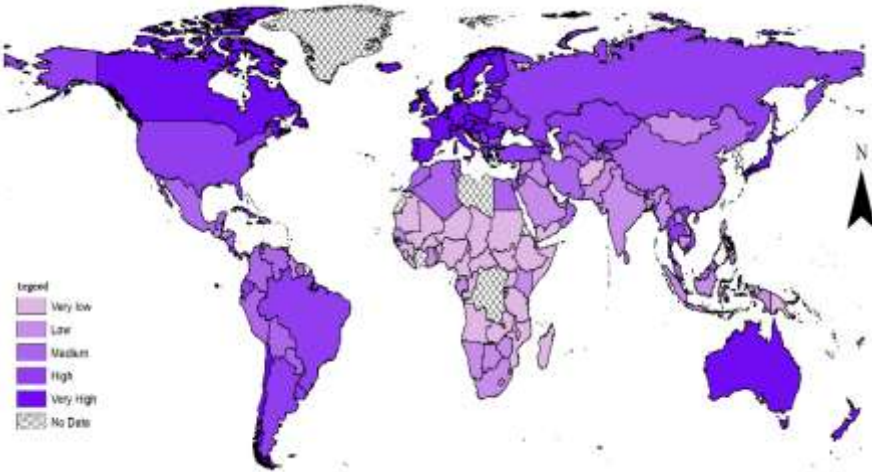
Figure 7: Five-Year Average Scores for SDGs Index from 2000-2019



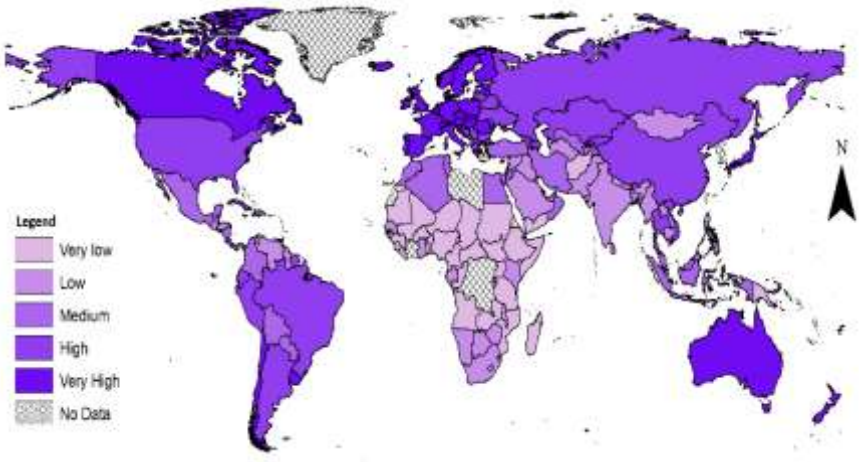
SDGs Score for the Year 2000-2004



SDGs Score for the Year 2005-2009



SDGs Score for the Year 2010-2014



SDGs Score for the Year 2015-2019

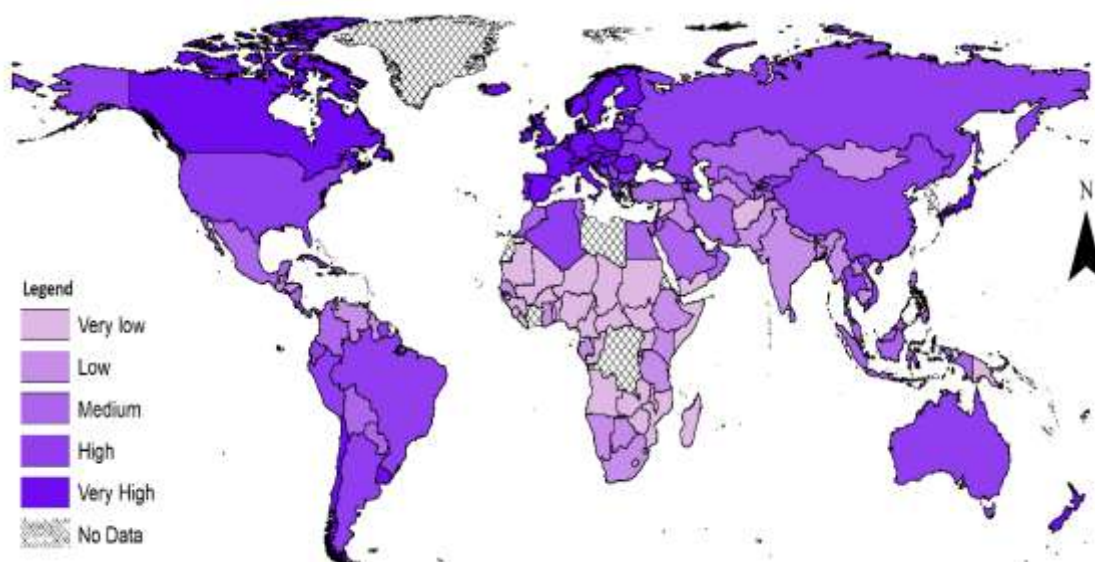
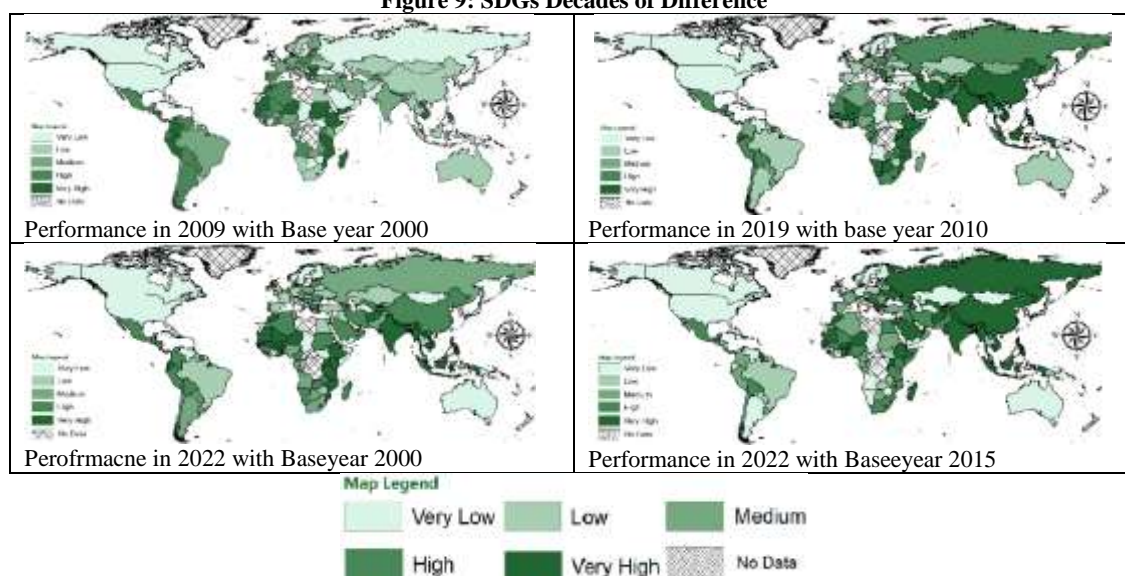


Figure 8: SDGs Scores as of 2019-2022

Figure 9: SDGs Decades of Difference



The performance of countries in the year 2022 is presented in the above graphical matrix (fourth quadrant). This figure 9 depicted that when compared to the head start year of the 2030 agenda of sustainable development countries such as Russia, China, India, Malaysia, Indonesia, Thailand, Myanmar, Tajikistan, Kyrgyzstan, and Uzbekistan, in Arab region UAE, Oman, Arab African such as Algeria, Niger, Burkina Faso and Ghana and countries falling in Southern part of Africa including Ethiopia, South Sudan, Kenya, Malawi, Madagascar and South Africa, in North American region the countries including Mexico, Ecuador, Peru, Chile and Bolivia have made significant improvement in SDGs. This implies that these countries and regions remains successful in the implementation of the 2030 agenda for sustainable development through targeting the identified indicators of SDGs and have made reasonable efforts to ensure peace and prosperity for all. However, this story does not end here as there are several examples of the countries in Scandinavian region that have made significant progress in achieving SDGs (Bie et. al. 2023). For instance, Sweden has consistently ranked high in the SDGs Index, indicating its progress towards achieving the global goals. The country has made substantial advancements across multiple SDGs, including poverty eradication, gender equality, clean energy, quality education, and sustainable cities<sup>9</sup>. Secondly, Norway is another country known for its strong commitment to sustainable development. It has made remarkable progress in areas such as clean energy, innovation, climate action, and reducing inequality<sup>10</sup>. Furthermore, the famous Scandinavian Denmark is often recognized as a global leader in sustainability. The country has excelled in promoting clean energy, sustainable agriculture, high-quality healthcare, and inclusive and equitable societies<sup>11</sup>. Finland has been actively working toward achieving the SDGs and has shown notable progress in areas such as quality education, sustainable cities and communities,

<sup>9</sup> United Nations (2020). The Sustainable Development Report 2020. UN Sustainable Development Solutions Network.

<sup>10</sup> The Global Reporting Initiative, "Sustainable Development Goals: Leading companies and equity funds in Norway." [https://sustainabledevelopment.un.org/content/documents/28233Voluntary\\_National\\_Review\\_2021\\_Norway.pdf](https://sustainabledevelopment.un.org/content/documents/28233Voluntary_National_Review_2021_Norway.pdf)

<sup>11</sup> UNDP, "Denmark's commitment to leaving no one behind and the Sustainable Development Goals." <https://sustainabledevelopment.un.org/content/documents/16013Denmark.pdf>



gender equality, and climate action<sup>12</sup>. These Scandinavian countries took vow to support the developing countries in achieving the 2030 agenda of sustainable development through mobilizing resources and enhancing capacity (Halonen et al., 2017).

Some of the other famous countries including Germany, Canada, Japan, New Zealand, Costa Rica, Bhutan, Uruguay, and Rwanda have demonstrated strong commitment and notable advancements across various SDGs, including poverty reduction, gender equality, clean energy, quality education, sustainable cities, and climate action. However, please note that this list is not exhaustive, and there are other countries making substantial progress as well. For more detailed and up-to-date information, reader may refer to UN reports such as “The Sustainable Development Goals Report” or “The Global SDG Indicators Database”.

On the other hand, overall African region is facing challenges in making significant progress in SDGs. The countries such as Central African Republic, Chad, Democratic Republic of the Congo, Yemen, Liberia, Sierra Leone, Mozambique, Guinea-Bissau, Haiti, Afghanistan, Iraq, Sriya, Kazakhstan, Mongolia, Pakistan, Nepal, and Vietnam often face multiple issues such as poverty, political instability, armed conflict, weak governance, and inadequate infrastructure, which hinder their progress towards the SDGs. It’s important to note that these countries have unique circumstances, and progress in achieving the SDGs can vary across different indicators. Efforts are being made globally to support these countries in overcoming obstacles and improving their development outcomes.

#### 4. Conclusion

Based on the results presented in the previous section, the study concludes that the world has made progress on sustainable development goals through lessons learned in the MDGs era and by overcoming the bottlenecks in developing the understanding of the sustainable development phenomenon. MDGs were specifically designed for developing countries only, whereas SDGs were universally applicable to all people in all countries including both developed and developing countries. A key feature of the SDGs is their focus on means of implementation, including mobilizing financial resources, building national capacity, and utilizing technology, data, and institutions. The SDGs are more realistic in terms that they have based on the country-specific indicators which makes them reliable and vital in the sense that these are more localized in the economy compared to MDGs.

Furthermore, from an index point of view, the American and European Regions along with China, Russia, and Japan have higher SDGs index compared to the rest of the world, followed by Asian tigers and some Arab countries. Lastly, the African continent is one of the most exploited contents among others. Since the beginning, it has performed low on the SDGs index. Most countries are rated as under or least-developed countries with a few exceptions. In this region, the poverty rate is high, people dying out of hunger, least access to basic services like electricity, hygiene, washing, education, social protection, and other developmental aspects are lacking. Moreover, differences in institutional capacities are another reason for the difference among countries on the SDGs index. The lack of evidence-based policymaking is another flaw of the developing countries that hinder the SDGs’ progress. It is pertinent to mention that SDGs are developed for countries to assess their development, progress, and wellbeing using a single holistic measure, to compare across countries based on SDGs index results. The study also concludes that the SDG phenomenon is subject to empirical assessment. However, development initiatives which relate to people on their emotions, beliefs, and values are likely to be more sustainable, less costly, and more out reachable<sup>13</sup>.

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<sup>12</sup> Finnish Innovation Fund Sitra, Finland’s Roadmap to a Circular Economy 2016-2025. <https://www.sitra.fi/en/projects/leading-the-cycle-finnish-road-map-to-a-circular-economy-2016-2025/>

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