Assessing Pakistan Performance in Millennium Development Goals (MDGs) and Prospects for Sustainable Development Goals (Sdgs): A New Method to Measure SDGs

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ABSTRACT

Economic growth conducted without decrease of the natural assets called sustainable development. The arrangement of 17 SDGs and 169 targets to progress the globe to an improvement track of economic growth, environmental sustainability, and social addition. The aim of the present study is to assess Pakistan performance in MDGs and prospects for SDGs. As to SDGs formed by the United Nations (UN), how to adequately evaluate, assesses, improvement and status of these SDGs in Pakistan was the issue I needed to deal. Depend on earlier period quantitative assessment; the study planned other technical structure for SDGs estimation and secondary data used to collect data from Pakistan. Our study chose 37 indicators collected relevant indicator data from the Pakistan to 2013 until 2020 and SDGs performance were calculated using ratio and percentage method. Pakistan was off track regarding 26% targets of MDGs. Pakistan stayed on track just on 09 indicators, as result on 25 indicators evaluated as off path. Which indicators data was not accessible on the remainder of six goals, this problem a significant issue in conditions of countries predictable result in conference the goals set under SDGs? This evaluation structure introduced in the study can use for evaluating the 8 years performance of worldwide SDGs of Pakistan. According to the assessment, Pakistan SDGs was bad performance, the economic, social and environmental SDGs. This assessment shows that, in terms of economic, social and environmental SDGs performance. Pakistan performed bad among the three divisional SDGs, and was an urgent need of improvement.

Keywords: Sustainable Development Goals, Societal Indicators, Mortality Rates, Education Outcomes, Public Health.

Introduction

The Millennium Development Goals (MDGs), adopted by the United Nations in 2000, represented one of the most significant global development agreements in history. They embodied a collective commitment by the international community to address key challenges—reducing poverty, improving education, promoting gender equality, enhancing health outcomes, and protecting the environment—by the year 2015. As the largest coordinated development framework of its time, the MDGs demonstrated unprecedented international cooperation. For developing countries like Pakistan, the goals offered both an opportunity to align national priorities with global targets and a challenge, given persistent socio-economic inequalities, institutional limitations, and uneven resource distribution. While progress was recorded in areas such as poverty reduction and primary school enrollment, several critical targets—particularly in maternal health, gender parity, and environmental sustainability—remained unmet by the end of the MDG period.

In 2015, the global development agenda transitioned to the Sustainable Development Goals (SDGs), a broader and more

integrated framework comprising 17 goals and 169 targets. Built on the principles of "leaving no one behind" and ensuring sustainability for future generations, the SDGs aim to achieve intergenerational justice by creating conditions that allow both present and future populations to live healthier, more secure, and dignified lives. For Pakistan, the SDGs represent continuity in tackling long-standing development issues and change through more expansive objectives requiring integrated policymaking, robust governance, and inclusive growth strategies.

Measuring progress toward these complex and interconnected goals poses a considerable challenge. Conventional approaches often depend on national averages that overlook regional disparities and fail to reflect ground realities. To address this gap, the present study applies a context-specific method for assessing Pakistan's SDG performance. It draws comparisons between the country's MDG outcomes and its current SDG trajectory, aiming to extract lessons learned, pinpoint areas of persistent weakness, and propose targeted strategies to accelerate progress toward the 2030 targets.

The study operationalizes its analysis using thirty-seven carefully selected indicators linked to thirteen SDGs across three dimensions: economy, society, and environment. The economic dimension comprises five indicators related to SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 17 (Partnerships for the Goals). The social dimension includes eighteen indicators corresponding to SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), and SDG 5 (Gender Equality). The environmental dimension is represented by fourteen indicators associated with SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 11 (Sustainable Cities and Communities), SDG 14 (Life Below Water), and SDG 15 (Life on Land). This structured framework allows for a comprehensive and multidimensional evaluation of Pakistan's development progress.

Problem Statement

Pakistan's experience with the Millennium Development Goals (MDGs) showed a mix of achievements and shortcomings, with notable progress in some areas but missed targets in health, gender equality, and environmental sustainability. The shift to the Sustainable Development Goals (SDGs) brought a broader and more demanding framework, requiring integrated action across economic, social, and environmental dimensions. However, traditional monitoring approaches often mask regional disparities and fail to capture the complexity of progress. Without a more precise and context-sensitive assessment, Pakistan risks repeating the shortcomings of the MDG era and falling short of its 2030 commitments.

Research Objectives

   1. To evaluate Pakistan's progress during the MDG period and

identify key strengths and weaknesses.

2. To measure current SDG performance using a new framework based on 37 indicators across economic, social, and environmental dimensions.
3. To compare MDG outcomes with SDG trends to extract lessons for improved policy and planning.
4. To propose strategies that can accelerate Pakistan's progress toward achieving the SDGs by 2030.

Literature Review

Pakistan's progress toward the Millennium Development Goals (MDGs) was uneven, with many targets unmet due to slow economic growth, resource limitations, and institutional weaknesses. Challenges such as low primary school enrollment, persistent gender disparities, and inadequate healthcare provision hindered improvements in poverty reduction, maternal health, and child survival rates (Ghauri, 2012; PRDB, n.d.). Transitioning to the Sustainable Development Goals (SDGs), Pakistan endorsed the 2030 Agenda through a unanimous parliamentary resolution in 2016, integrating SDG priorities into its national development frameworks (UNDP, n.d.; Development Asia, 2024). Despite these institutional efforts, the country's overall SDG ranking fell to 137th in 2024, reflecting persistent implementation gaps, political instability, and data limitations (Shafique, 2024; Subohi, 2025).

International evidence highlights that health and survival outcomes remain critical for sustainable development. Bado and Susuman (2019) examined social and economic disparities in under-five mortality in Burkina Faso using four rounds of demographic and health survey data from 1993, 1998, and 2010. Employing awareness estimation, depreciation, and Oaxaca–Blinder decomposition techniques, they found that being the first child or a twin significantly increased the likelihood of death before age five. Such findings underscore the importance of addressing inequality-driven health vulnerabilities within broader development frameworks.

Globally, achieving the SDGs requires systematic evaluation and measurement. Issever Grochová and Litzman (2021) proposed applying Data Envelopment Analysis (DEA) to assess countries' efficiency in meeting SDG targets relative to their capacities. Their results, identifying Finland, Japan, and Iceland as top performers, demonstrate how DEA can provide equitable cross-country comparisons and highlight areas for policy improvement. Applying similar efficiency-based methods in Pakistan could offer more precise benchmarking and guide targeted strategies to accelerate progress toward the SDGs.

Research Methodology

This study employs a quantitative research design to evaluate Pakistan's performance in achieving the Sustainable Development Goals (SDGs) and to compare these results with the country's achievements under the Millennium Development Goals (MDGs).

The approach focuses on numerical data to ensure objectivity, reproducibility, and comparability over time.

Research Design

The analysis follows a descriptive and comparative framework. It first reviews the MDG outcomes using historical data to establish a baseline, and then applies the same indicators—where feasible—within the SDG framework to measure current progress. This dual perspective allows for the identification of trends, improvements, and areas where progress has stalled or reversed.

Data Sources

The study relies entirely on secondary data obtained from reputable and internationally recognized sources. These include the Pakistan Bureau of Statistics (PBS), the Ministry of Planning, Development and Special Initiatives, the World Bank's World Development Indicators (WDI), United Nations Development Programme (UNDP) databases, and relevant SDG progress reports issued by national and international agencies. Where discrepancies exist between data sources, the most recent and methodologically consistent figures are selected to ensure accuracy and comparability.

Indicator Selection

A total of 37 indicators have been selected to represent 13 SDGs. These are grouped into three dimensions:

- **Economic dimension** – 5 indicators from SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure), and SDG 17 (Partnerships for the Goals).
- **Social dimension** – 18 indicators from SDG 1 (No Poverty), SDG 2 (Zero Hunger), SDG 3 (Good Health and Well-being), SDG 4 (Quality Education), and SDG 5 (Gender Equality).
- **Environmental dimension** – 14 indicators from SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 11 (Sustainable Cities and Communities), SDG 14 (Life Below Water), and SDG 15 (Life on Land).

Indicators were chosen based on three main criteria: (i) relevance to Pakistan's development context, (ii) data availability over multiple years, and (iii) alignment with global SDG measurement frameworks.

Data Analysis Method

The methodology involves a three-step analytical process:

1. **Standardization of Indicators** – Raw data values are converted into comparable units where necessary, ensuring uniformity across indicators with different measurement scales.
2. **Trend Analysis** – Historical data from the MDG period is compared with current SDG progress to identify patterns of improvement or decline.
3. **Performance Scoring and Ranking** – Indicators are assessed against established national or global targets to assign relative performance scores, enabling cross-dimensional comparison.

Result And Discussion
Table:1. SDG Indicators: Definitions, Direction of Measurement, and Desired Outcomes"

Dimension of the SDG	SDG	Indicators	Updated Tier Classification (byIAEG-SDG Members)	Indicator direction
Society	Goal 1. End poverty in all its forms everywhere	Poverty headcount ratio at $1.90/day percent	I	Inverse
Society	Goa2. Zero hunger	Prevalence of undernourishment percent	I	Inverse
Society		Prevalence of stunting in children under five years of age%	I	Inverse
Society		Prevalence of wasting in children under five years of age percent	I	Inverse
Society		Prevalence of obesity, BMI ≥ thirty percent	I	Inverse
Society		Human Trophic Level	I	Inverse
Society		Cereal yield	II	Forward
Society	Goal 3.Good health and well being	Maternal mortality rate	I	Inverse
Society		Neonatal mortality rate	I	Inverse
Society		Mortality rate, under five per one thousand live births	I	Inverse
Society		Adolescent fertility rate births per one thousand adolescent females aged fifteen - to -nineteen	I	Inverse

Society		New HIV infections per thousand uninfected population	I	Inverse
Society		Percentage of surviving infants who received two WHO recommended vaccines percent	II	Forward
Society		Subjective wellbeing average ladder score worst 0 to 10 best	I	Forward
Society	Goal 4. Quality education	Net primary enrollment rate percentage	I	Forward
Society		Lower secondary completion ratio percentage	I	Forward
Society	Goal 5.Gender equality	Demand for family plan satisfied by modern methods percentage of females aged fifteen to forty nine who are married or in unions	II	Forward
Society		Ratio of female to male mean years of education received percentage	II	Forward
Environmental	Goal 6. Clean water and sanitation	Population using at least basic drinking water services percentage	II	Forward
Environmental		Population using at least essential cleanliness services percentage	II	Forward
Environmental	Goal 7. Affordable and clean energy	Population with access to electricity percentage	I	Forward

Environmental		Population with access to clean fuels and skill for cooking percentage	I	Forward
Environmental		CO2 emission from fuel combustion for electricity and heat per total electricity output MT CO₂	I	Inverse
Economy	Goal 8.Decent work and economic growth	Adults with an account at a bank or other financial institution or with a mobile money service provider percentage of population aged fifteen or over	I	Forward
		Unemployment ratio percentage of total labor force	II	Inverse
Economy	Goal 9. Industry innovation and infrastructure	Scientific and technical journal articles per one thousand population	I	Forward
Economy		Expenditure on research and development parentage of GDP	I	Forward
Environmental	Goal 11. Sustainable cities and communities	Annual mean attentiveness of particulate matter of less than 2.5 microns in diameter (PM2.5)μg/m³	I	Inverse
Environmental		Access to improved water basis, piped percentage of urban population	I	Forward

Environmental		11.3.1:Satisfaction with public transport	II	Forward
Environmental	Goal 14. Life below water	Mean area that is protected in marine sites important to biodiversity percentage	II	Forward
Environmental		Ocean health index: fresh waters score worst 0 to100 best	II	Forward
Environmental	Goal 15. Life on land	15.1.2:Mean area that is protected in terrestrial sites important to biodiversity percent	I	Forward
Environmental	GOAL 17. Partnerships for the goals	15.5.1:Red list index of species survival 0 to 1 BEST	I	Forward
Environmental		Average proportion of fresh water key biodiversity areas covered by protected areas percent	I	Forward
Environmental		Average proportion of terrestrial key biodiversity areas covered by protected areas percent	I	Forward
Economy		Government spending on health and education% of GDP	I	Forward

Note: This table 1. chose 37 indicators. Tier I. Meaning that the indicator is in theory understandable, and has worldwide-accepted method, and data are generally collected for at smallest amount fifty percent of states. Tier II. Meaning the indicator is in theory clear has globally start and method standards, but the data, are not common formed by states. Tier III. Meaning that no globally start method are yet available for the indicator.

Discussion, Assessing and Findings SDGs in Context
Social SDGS Performance
Status And Trend of SDG 1
Interpretation: The **Poverty headcount ratio at $1.90/day percentage** explains the indicator position in 2013 was 6.16%.The indicator position in 2020 was 0.86%. While our target for 2030 is

to achieve 0%. Required rate of change in declining ratio should have been -0.342 from 2013-2030. Total required rate of change in declining ratio 2013-2020 was -2.74. Total actual rate of change in declining ratio from 2013-2020 was -5.3 but are total required rate of change in declining ratio from 2013-2020 was -2.74. Pakistan has achieved more than our required rate and if Pakistan will be remaining on the same track then Pakistan can achieve 2030 target. The **Prevalence of undernourishment percentage** position in 2013 was 21%. The indicator position in 2020 was 20.7%. While our target for 2030 is to achieve 0%. Required rate of change in declining ratio should have been -1.17 from 2013-2030. Total required rate of change in declining ration 2013-2020 was -2.6. Total actual rate of change in declining ratio from 2013-2020 was -0.3 but are total required rate of change in declining ratio from 2013-2020 was -2.6. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

The Prevalence **of stunting in children less than 5 years of age percentage, indicator** position in 2013 was 45.6%%. The indicator position in 2020 was 44.18%. While our target for 2030 is to achieve 0%. Required rate of change in declining ratio should have been -2.53 from 2013-2030. Total required rate of change in declining ratio 2013-2020 was -5.7. Total actual rate of change in declining ratio from 2013-2020 was -1.42 but are total required rate of change in declining ratio from 2013 to 2020 was -5.7. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The **Prevalence of wasting in children under 5 years of age percentage,** position in 2013 was 13.34%. The indicator position in 2020 was 11.68%. While our target for 2030 is to achieve 0%. Required rate of change in declining ratio should have been -0.74 from 20132030. Total required rate of change in declining ratio 2013-2020 was -5.92. Total actual rate of change in declining ratio from 2013-2020 was -1.66 but are total required rate of change in declining ratio from 2013-2020 was -5.92. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The **Prevalence of obesity, BMI ≥ 30%** position in 2020 was 8.1%. While our target for 2030 is to achieve 2.8%. Required rate of change in declining ratio should have been -0.26 from 2013-2030. Total required rate of change in declining ratio 2013-2020 was -0.59. Total actual rate of change in declining ratio from 2013-2020 was -0.6 but are total required rate of change in declining ratio from 2013-2020 was -0.59. Pakistan has achieved more than our required rate and if Pakistan will be remaining on the same track then Pakistan can achieve our 2030 target.

The **Human Trophic Level** Indicator position in 2013 was 2.43%. The indicator position in 2020 was 2.44%. While our target for 2030 is to achieve 2.04% human trophic level percentage.

Required rate of change in declining ratio should have been -0.02 from 2013-2030. Total required rate of change in declining ratio 2013-2020 was -0.04. Total actual rate of change in declining ratio from 20132020 was 0.01 but are total required rate of change in declining ratio from 2013-2020 was -0.04. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

Status And Trend of SDG 3

Interpretation: The **maternal mortality rate,** indicator position in 2013 was 166. The indicator position in 2020 was 157. While our target for 2030 is to achieve 3.04%. Required rate of change in declining ratio should have been -9.05 from 2013-2030. Total required rate of change in declining ratio 2013-2020 was -2.74. Total actual rate of change in declining ratio from 2013-2020 was nine but are total required rate of change in declining ratio from 2013-2020 was -72. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The neonatal **mortality rate the** indicator position in 2013 was 47.2. The indicator position in 2020 was 44.5. While our target for 2030 is to achieve 2.6%. Required rate of change in declining ratio should have been -2.48 from 2013-2030. Total required rate of change in declining ratio 2013-2020 was -5.58. Total actual rate of change in declining ratio from 2013-2020 was -2.7 but are total required rate of change in declining ratio from 2013-2020 was -5.58. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

The **mortality rate, under-5 per 1,000 live births** indicator position in 2013 was 80.5. The indicator position in 2020 was 74.89. While our target for 2030 is to achieve 2.6%. Required rate of change in declining ratio should have been -4.32 from 20132030. Total required rate of change in declining ratio 2013-2020 was -9.7. Total actual rate of change in declining ratio from 2013-2020 was -5.63 but are total required rate of change in declining ratio from 2013-2020 was -9.7. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The **New HIV infections per 1,000 uninfected population** indicator position in 2013 was 0.01. The indicator position in 2020 was 0.83. While our target for 2030 is to achieve 0%. Required rate of change in declining ratio should have been 0.0005from 2013-2030. Total required rate of change in declining ratio 2013-2020 was 0.004. Total actual rate of change in declining ratio from 2013-2020 was 0.82 but are total required rate of change in declining ratio from 2013-2020 was 0.004. Pakistan has achieved more than our required rate and if Pakistan will be remaining on the same track, Pakistan can achieve 2030 target. The Adolescent **fertility rate births per 1,000 adolescent females aged 15 to 19--indicator** position in 2013 was 40.96. The indicator position in 2020 was 39.41. While our target for 2030 is

to achieve 2.5%. Required rate of change in declining ratio should have been -2.13 from 2013-2030. Total required rate of change in declining ratio 2013-2020 was -4.80. Total actual rate of change in declining ratio from 2013-2020 was -1.55 but are total required rate of change in declining ratio from 2013-2020 was -4.80. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The Status **of percentage of surviving infants who received two WHO-recommended vaccines percentage,** indicator position in 2013 was 65.

The indicator position in 2020 was 74. While our target for 2030 is to achieve 100%. Required rate of change in declining ratio should have been 1.94 from 2013-2030. Total required rate of change in declining ratio 2013-2020 was 15.52. Total actual rate of change in declining ratio from 2013-2020 was nine but are total required rate of change in declining ratio from 2013-2020 was 15.52. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The **Status of Subjective well-being average ladder score worst 0-10 best** indicator position in 2013 was 5.42. The indicator position in 2020 was 5.42. While our target for 2030 is to achieve 7.6%. Required rate of change in declining ratio should have been 0.12 from 2013-2030. Total required rate of change in declining ratio 2013-2020 was 0.96. Total actual rate of change in declining ratio from 2013-2020 was 0.008 but are total required rate of change in declining ratio from 2013-2020 was 0.96. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

Status And Trend of SDG 4

Interpretation: The Net **primary enrollment rate percentage,** indicator position in 2013 was 62.13%. The indicator position in 2020 was 76.5%. While our target for 2030 is to achieve 100%. Required rate of change in increasing ratio should have been 2.10 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 16.83. Total actual rate of change in increasing ratio from 2013-2020 was 14.37 but are total required rate of change in increasing ratio from 2013-2020 was 16.83. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The **lower secondary education, completion rate percentage above** table 4.8 explains the indicator position in 2013 was 42.77%. The indicator position in 2020 was 52.45%. While our target for 2030 is to achieve 100%. Required rate of change in increasing ratio should have been 3.18 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 25.43. Total actual rate of change in increasing ratio from 2013-2020 was 9.68 but are total required rate of change in increasing ratio from 2013-2020 was 3.18. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

Status And Trend Of SDG 5

Interpretation: The **Demand for family planning satisfied by modern methods percentage male is aged 15** indicator position in 2013 was 47%. The indicator position in 2020 was 47.23%. While our target for 2030 is to achieve 100%. Required rate of change in increasing ratio should have been 2.94 from 20132030. Total required rate of change in increasing ratio 2013-2020 was 6.625. Total actual rate of change in increasing ratio from 2013-2020 was 0.23 but are total required rate of change in increasing ratio from 2013-2020 was 6.625. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The Status **of ratio of female to male mean years of education received percentage;** indicator position in 2013 was 56.92%. The indicator position in 2020 was 58.46%. While our target for 2030 is to achieve 100%. Required rate of change in increasing ratio should have been 2.39 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 5.38. Total actual rate of change in increasing ratio from 2013-2020 was 1.54 but are total required rate of change in increasing ratio from 2013-2020 was 5.38. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

The social SDGs performance 13 of 17 SDGs (SDG 10, 12, 13, 16 was expelled) into three components, economy, society and environment. The social SDGs enclosed 18 indicators related to SDG 1, 2 ,3 , 4 , 5 .This study assessing 18 social SDGs indicators from them three indicators are on path, so it can be assessed that Pakistan is unable to meet other 15 social SDGs indicators if Pakistan focused to achieved these indicators it can be successfully achieved.

Economic SDGs Performance

Status Of SDG 8

Interpretation: The Adults **with an account at a bank or other financial institution or with a mobile money-service provider percentage of population aged 15 or over,** indicator position in 2013 was 4.81%. The indicator position in 2020 was 15.25%. While our target for 2030 is to achieve 100 %. Required rate of change in increasing ratio should have been 5.28 from 2013-2030. Total required rate of change in increasing   ratio 2013-2020 was 42.30. Total actual rate of change in increasing ratio from 2013-2020 was 10.44 but are total required rate of change in increasing ratio from 2013-2020 was 42.30. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The **Unemployment rate percentage of total labor force,** indicator position in 2020 was 4.65%. The indicator position in 2030 was 0.5%. While our target for 2030 is to achieve 100 % unemployment rate % of total labor force the indicator actual position in 2013 was 2.95.Required rate of change in decreasing ratio should have been decreased by -0.14 from 2013-

2030. Total required rate of change in decreasing ratio 2013-2020 was -1.09. Total actual rate of change in decreasing ratio from 2013-2020 was 1.54 but are total required rate of change in increasing ratio from 2013-2020 was 1.7. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

Status And Trend of SDG 9

Interpretation: The **Scientific and technical journal articles per 1,000 populations** indicator position in 2013 was 0.04%. The indicator position in 2020 was 0.07%. While our target for 2030 is to achieve 1.2. Required rate of change in increasing ratio should have been 0.06 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 0.51. Total actual rate of change in increasing ratio from 2013-2020 was 0.03 but are total required rate of change in increasing ratio from 2013-2020 was 0.51. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The **Expenditure on research and development percentage of GDP** indicator position in 2013 was 0.24%. The indicator position in 2020 was 0.21%. While our target for 2030 is to achieve 3.7. Required rate of change in increasing ratio should have been 0.19 from 2013 to 2030. Total required rate of change in increasing ratio 2013-2020 was 1.53. Total actual rate of change in increasing ratio from 2013-2020 was -0.03 but are total required rate of change in increasing ratio from 2013-2020 was 1.53. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

Status And Trend SDG 17

Interpretation: The **Government spending on health and education percentage of GDP** indicator position in 2013 was 3.2%. The indicator position in 2020 was 3.81%. While our target for 2030 is to achieve 15 %. Required rate of change in increasing ratio should have been 0.65from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 5.24. Total actual rate of change in increasing ratio from 2013-2020 was 0.61 but are total required rate of change in increasing ratio from 2013-2020 was 5.24. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The SDGs performance 13 of 17 SDGs (SDG 10, 12, 13, 16 was expelled) into three components economy, society and environment, in this study for economic SDGs performance. Particularly, economic component included five indicators related to SDG 8, 9, and 17. This study assessing five economic SDGs indicators, according to this study no indicator is on path, so it can assessed that Pakistan is unable to meet five economic SDGs indicators, if Pakistan focused to achieve these indicators it can be successfully achieved.

Environmental SDGS Performance

Status and trend of SDG 6

Interpretation: The **Population using at least basic drinking water services percentage**, indicator position in 2013 was 90.15%. The indicator position in 2020 was 75.46%. While our target for 2030 is to achieve 100%. Required rate of change in increasing ratio should have been -0.54 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 4.37. Total actual rate of change in increasing ratio from 2013-2020 was -14.69 but are total required rate of change in increasing ratio from 2013-2020 was 4.37. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The Population **using at least basic sanitation services percentage,** indicator position in 2013 was 53.72%. The indicator position in 2020 was 62.34%. While our target for 2030 is to achieve 100%. Required rate of change in increasing ratio should have been 2.57from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 20.56. Total actual rate of change in increasing ratio from 2013-2020 was 8.62 but are total required rate of change in increasing ratio from 2013-2020 was 20.56. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

Status And Trend Of SDG 7

Interpretation: The **Population with access to electricity percentage,** indicator position in 2013 was 55%. The indicator position in 2020 was 72.12%. While our target for 2030 is to achieve 100%. Required rate of change in increasing ratio should have been 2.5 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 20. Total actual rate of change in increasing ratio from 2013-2020 was 17.12 but are total required rate of change in increasing ratio from 2013-2020 was 20. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The Population **with access to clean fuels and technology for cooking percentage** the indicator position in 2013 was 39.47%. The indicator position in 2020 was 43.76%. While our target for 2030 is to achieve 100%. Required rate of change in increasing ratio should have been 3.36 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 26.88. Total actual rate of change in increasing ratio from 2013-2020 was 4.29 but are total required rate of change in increasing ratio from 2013-2020 was 26.88. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The CO_2 **emissions from fuel combustion for electricity and heating per total electricity output MT CO $_2$,** Indicator position in 2013 was 1.32%. The indicator position in 2020 was 1.55%. While our target for 2030 is to achieve 0%. Required rate of change in increasing ratio should have been -0.07 from 2013-2030.

Total required rate of change in increasing ratio 2013 to 2020 was -0.58. Total actual rate of change in increasing ratio from 2013-2020 was 0.23 but are total required rate of change in increasing ratio from 2013-2020 was -0.58. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

Status And Trend Of SDG 11

Interpretation: The Annual **mean concentration of particulate matter of less than 2.5 microns in diameter (PM2.5) µg/m³** indicator position in 2013 was 61.02%. The indicator position in 2020 was 58%. While our target for 2030 is to achieve 6 %. Required rate of change in increasing ratio should have been -3.05 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was -24.45. Total actual rate of change in increasing ratio from 2013-2020 was -3.02 but are total required rate of change in increasing ratio from 2013-2020 was -24.45. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The Access **to improved water source and piped percentage of urban population** indicator position in 2013 was 54.93%. The indicator position in 2020 was 52%. While our target for 2030 is to achieve 100%. Required rate of change in increasing ratio should have been 2.50 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 20.03. Total actual rate of change in increasing ratio from 2013-2020 was -2.93 but are total required rate of change in increasing ratio from 2013 to 2020 was 20.03. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The **satisfaction with public transport percentage** the indicator position in 2013 was 56.6%. The indicator position in 2020 was 60.85%. While our target for 2030 is to achieve 82.6%. Required rate of change in increasing ratio should have been 1.44 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 11.55. Total actual rate of change in increasing ratio from 2013-2020 was 0.98 but are total required rate of change in increasing ratio from 2013-2020 was 11.55. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

Status And Trend of SDG 14

Interpretation: The **Mean area that protected in marine sites important to biodiversity percentage** the indicator position in 2013 was 39.28%. The indicator position in 2020 was 39.28%. While our target for 2030 is to achieve 100 %. Required rate of change in increasing ratio should have been 3.37 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 26.98. Total actual rate of change in increasing ratio from 2013-2020 was zero but are total required rate of change in increasing ratio from 2013-2020 was 26.98. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan

cannot achieve 2030 target. The **Ocean health index: clean waters score worst 0-100 best the** indicator position in 2013 was 43.99%. The indicator position in 2020 was 45.68%. While our target for 2030 is to achieve 100%. Required rate of change in increasing ratio should have been 3.11 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 24.89. Total actual rate of change in increasing ratio from 2013-2020 was 1.69 but are total required rate of change in increasing ratio from 2013-2020 was 24.89. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

Status And Trend OF SDG 15

Interpretation: The Mean **area that protected in terrestrial sites important to biodiversity percentage,** indicator position in 2013 was 36.65%. The indicator position in 2020 was 39.66%. While our target for 2030 is to achieve 100%. Required rate of change in increasing ratio should have been 3.52 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 28.15. Total actual rate of change in increasing ratio from 2013-2020 was 0.01 but are total required rate of change in increasing ratio from 2013-2020 was 28.15. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

The red **list index of species survival 0-1 BEST** the indicator position in 2013 was 0.88%. The indicator position in 2020 was 0.84%. While our target for 2030 is to achieve 1%. Required rate of change in increasing ratio should have been 0.006 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 0.05. Total actual rate of change in increasing ratio from 2013-2020 was -0.04 but are total required rate of change in increasing ratio from 2013-2020 was 0.05. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The Average **proportion of freshwater key biodiversity areas covered by protected are percentage the** indicator position in 2013 was 35.9%. The indicator position in 2020 was 39.9%. While our target for 2030 to achieve 100 % the. Required rate of change in increasing ratio should have been 3.56 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was 28.49. Total actual rate of change in increasing ratio from 2013-2020 was zero but are total required rate of change in increasing ratio from 2013-2020 was 28.49. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target. The Average **proportion of terrestrial key biodiversity areas covered by protected are a percentage,** indicator position in 2013 was 34.78%. The indicator position in 2020 was 34.78%. While our target for 2030 is to achieve 100 %. Required rate of change in increasing ratio should have been 3.62 from 2013-2030. Total required rate of change in increasing ratio 2013-2020 was

28.99. Total actual rate of change in increasing ratio from 2013-2020 was zero but are total required rate of change in increasing ratio from 2013-2020 was 28.99. Pakistan has achieved less than our required rate and if Pakistan will be remaining on the same track, Pakistan cannot achieve 2030 target.

The SDGs performance 13 of 17 SDGs (SDG 10, 12, 13, 16 was expelled) into three components economy, society and environment). In this study for the environmental dimension included 13 indicators corresponding to SDG 6, 7, 11 and 14. This study assessing 14 environmental SDGs indicators according to this study no indicator is on path, so it can be assess that Pakistan is unable to meet five environmental SDGs indicators, if Pakistan focused to achieve these indicators it can successfully achieved.

Conclusion

Present study presented analysis structure for the evaluation of SDGs including strategies, for example, SDG execution drifts and further investigation of SDG execution for the bunched 17 SDGs in the 3 components of economy, society and environment. Present study used in Pakistan, as the example region to test whether this methodological system could understand the extensive evolution over the country 8-year execution and patterns for SDGs. For sample region, this evaluation lastly used 37 indicators relating to 13 SDGs in three measurements, for example, economy, society, and environment. In particular, economic measurement enclosed five indicators relating to SDG 8, 9 and 17. The social component connected 18 indicators related to SDG 1, 2, 3, 4 and 5. The environmental measurement enclosed 14 indicators relating to SDG 6, 7, 11, 14 and 15. The assessment discovered that, in terms of economic, social and environmental SDGs performance, Pakistan was the bad condition between the three components SDGs during the years 2013-2020, and was in urgent need of improvement.

If Pakistan is serious to perform well to achieve SDGs, researcher is of the view that level of participation in service delivery, project planning and implementation needs to be informing citizens changes to empower them. Pakistan's policy makers and professional hierarchy must realize that it stands to gain with the rest of society if development is broad-based. This is fact that government which pursues develop hand In hand with active participation has the better chance of improvement. Pakistan has many opportunities left to realize these goals, as community is still cohesive and willing to work with the governments in power.

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