

ANALYTICAL ASSESSMENT OF ACHIEVEMENTS CHALLENGES AND FUTURE DIRECTIONS FOR SUSTAINABLE DEVELOPMENT GOALS IN INDIA

Abstract

The Sustainable Development Goals (SDGs) are part of the country's tradition and heritage. These goals reflect India's development agenda, as Prime Minister Narendra Modi noted at the 2015 UN Sustainable Development Summit. He said, "India's development agenda is reflected in the SDGs." Our national plans are ambitious and purposeful; one-sixth of humanity's sustainable development will affect the world and our beautiful planet. As the world's fastest-growing major economy, India can achieve inclusive and sustainable development. Externally, the government helped create the SDGs and balance economic, social, and environmental sustainability. Internally, it's taken many steps to achieve these goals.

This study presents comparative and progressive data for each of the 17 SDGs based on SDG scores for 2018-19, 2019-20, and 2020-21. This study also analyses year-by-year SDG scores for each of India's 28 states. From these graphs, we can see which states have improved their SDG scores over the last 3 years.

We'll learn at the end of this study which states have improved their SDG scores and how. The detailed graphical presentation will highlight state-wise improvements and identify states that need immediate action to improve their SDG scores. The overall case study will help us understand if each state's measures are sufficient to improve their SDG scores and ensure timely attainment of the 17 SDGs.

Objectives

1. To understand the concept of Sustainable Development Goals (SDG's)
2. To analyse the performance of Indian states in each of the 17 Sustainable Development Goals (SDG's) over a period of 3 years

Keywords: Sustainable Development Goals, SDG's, India, Climate, CoP, growth, country.

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I. INTRODUCTION

The conference of parties (CoP) in Glasgow is a recent highlight. The CoP makes UN climate change decisions. Since 1960, the UN has led environmental protection efforts. In 1972, the UN held the first "Conference on the Human Environment" to raise awareness about this issue. The Earth summit opened the UNFCCC to make environmental protection a mission mode. The UNFCCC limited countries' GHG emissions. First CoP meeting after UNFCCC adoption was held in 1995 to assess progress. 2015's Paris event mainstreamed climate change and sustainable development. On 12 December 2015, the 21st CoP adopted 17 SDGs and 169 targets. This historic event is the Paris Climate Agreement. The agreement aims to limit global temperature rise to 2 degrees Celsius and make best efforts to keep it to 1.5 degrees from pre-industrialization levels. Figure 1 depicts 17 UN SDGs.



Figure 1: SDGs adopted by United Nations

The Paris agreement recognises countries' climate pledges, including plans to reduce emissions after 2020. According to the UN secretary general, there is "no plan B" for environmentalists. Obama said the agreement "gives us the best chance to save our one planet." The history of climate protection will be divided into "before Paris" and "after Paris" sections.

Along with poverty eradication, health, education, and food security and nutrition, the agreement sets economic, social, and environmental goals. It promises peace and inclusion. It shows how the new Goals and targets are interconnected and have many cross-cutting

elements. Social and economic development depend on sustainable management of natural resources. It's a People's Agenda, so its success is assured.

The SDGs are integrated and indivisible, global and universally applicable, and respect national realities, capacities, and levels of development. Aspirational and global targets are set by each government, which takes national circumstances into account. Each government will decide how to incorporate global aspirations into national planning, policies, and strategies. Sustainable development is linked to economic, social, and environmental processes.

CoP-26 boosted these developments. 90% of the world committed to a net carbon zero target; 23 countries agreed to stop financing fossil fuels by 2022; 100 countries committed to end deforestation; carbon accounting systems were finalised; and coal and inefficient fuel subsidies were phased out.

India's response to the climate crisis is key to sustainable development and climate protection. The country must balance energy needs and carbon emissions.

In India, particulate emissions from coal plants cause more than 100,000 premature deaths a year. An August report by the Indian Statistical Institute estimated that this, along with mining and haze impacts, cost 0.9% of the country's GDP.

If the Earth's temperature rises 2 degrees Celsius, India's GDP growth could slow by 6.4 percentage points, among the worst in the world after Southeast Asia and sub-Saharan Africa.

II. SUSTAINABLE DEVELOPMENT GOALS AND INDIA

India is leading the effort to reduce CO₂ emissions and achieve sustainable development goals. At CoP-26, India's PM also announced revised goals. India's revised goals are to achieve Net-zero by 2070, reduce projected CO₂ emissions by 1 billion tonnes by 2030, generate 50% of electricity from green sources, and reduce emissions by 45% compared to 2005 by 2030.

Table 1 presents a summary of SDGs and corresponding national targets of India.

Table 1: A summary of SDGs and corresponding Indian targets

Sl. No	Goal	Details
1	No poverty Purpose: It targets the most vulnerable, increases basic resources and services, and helps conflict- and climate-affected communities	India's target: By 2030, cut by at least half the number of men, women, and children of all ages who live in poverty in all its forms, and make sure that the poor and the most vulnerable are well taken care of. Build the poor and vulnerable people's ability to handle shocks and disasters and make them less vulnerable to extreme weather events and other economic, social, and environmental disasters.

2	<p>Zero hunger purpose: The goal is to ensure that everyone, especially children, has access to healthy food throughout the year and that hunger and malnutrition are eradicated from the world by 2030. To achieve this goal, we must encourage sustainable agriculture, provide adequate resources for small-scale farmers, and ensure that all farmers have access to land, machinery, and markets.</p>	<p>India's target: By 2030, end all types of malnutrition, end hunger, and make sure that everyone, especially the poor and people in vulnerable situations, like babies, have access to safe, nutritious, and enough food all year long.</p> <p>Adopt measures to make sure that food commodity markets and their derivatives work well and to make it easier to get market information, including information on food reserves, in a timely manner. This will help reduce the extreme volatility of food prices.</p>
3	<p>Good health and well-being purpose: Good health is essential to sustainable development, and it considers widening economic and social inequalities, rapid urbanization, threats to the climate and the environment, the continuing burden of HIV and other infectious diseases, and emerging challenges such as non-communicable diseases.</p>	<p>India's target: Reduce by a large amount, by 2030, the number of deaths and illnesses caused by dangerous chemicals and polluted air, water, and soil.</p> <p>Increase health funding and the recruitment, development, training, and retention of health workers in developing countries, especially in the least developed countries and small island developing states.</p> <p>Strengthen the ability of all countries, especially developing countries, to get early warnings, reduce risks, and manage national and global health risks.</p>
4	<p>Quality education purpose: This goal ensures that all girls and boys complete free primary and secondary schooling and to provide equal access to affordable vocational training, to eliminate gender and wealth disparities, and achieve universal access to a quality higher education.</p>	<p>India's target: Make sure that all girls and boys have access to quality early childhood development, care, and pre-primary education by 2030 so that they are ready for primary education.</p> <p>By 2030, there should be a lot more qualified teachers, and international cooperation should be used to help train teachers in developing countries, especially in the least developed and small island developing states.</p>
5	<p>Gender equality purpose: It is of the utmost importance to provide women with equal rights in regards to land and property, sexual and reproductive health, and access to technology and the internet.</p>	<p>India's target: Stop all kinds of unfair treatment of women and girls everywhere. Adopt and improve good policies and laws that can be enforced to promote gender equality and the empowerment of all women and girls at every level.</p>
6	<p>Clean water and sanitation purpose: To make sure everyone has access to safe, affordable drinking water, we need to reach more than 800 million people who don't have basic services and make it easier and safer for more than two billion people to get services.</p>	<p>India's target: By 2030, everyone should be able to get safe drinking water at a price they can afford. Everyone should also be able to get good sanitation and hygiene, and open defecation should stop. Special attention should be paid to the needs of women, girls, and people in vulnerable situations.</p>

7	<p>Affordable and clean energy purpose: Investing in solar, wind, and thermal power, making better use of energy, and making sure everyone has energy. It's about building up infrastructure and updating technology so that all countries can get clean energy that works better.</p>	<p>India's target: Make sure that everyone in developing countries has access to affordable, reliable, and modern energy services by 2030. Also, expand infrastructure and update technology so that everyone in developing countries, especially the least developed countries, small island developing states, and land-locked developing countries, can get modern and sustainable energy services.</p>
8	<p>Decent work and economic growth purpose: It promotes growth, productivity, and innovation. Promoting entrepreneurship and job creation to end forced labour, slavery, and human trafficking. All women and men should have full, productive employment by 2030.</p>	<p>India's target: Make sure that everyone in developing countries has access to affordable, reliable, and modern energy services by 2030. Also, expand infrastructure and update technology so that everyone in developing countries, especially the least developed countries, small island developing states, and land-locked developing countries, can get modern and sustainable energy services.</p>
9	<p>Industry, innovation and infrastructure purpose: 90% of the 4 billion people without Internet are from developing countries. Bridging the digital divide is crucial for equal access to information and knowledge, innovation, and entrepreneurship.</p>	<p>India's target: By 2030, improve infrastructure and retool industries to make them more sustainable by making better use of resources and using more clean, environmentally friendly technologies and industrial processes. Each country should act according to its own abilities.</p> <p>Access to information and communication technologies should be made much easier, and everyone in the least developed countries should be able to use the Internet at a price they can afford by 2030.</p>
10	<p>Reduced inequalities purpose: Income inequality needs global solutions. This includes improving regulation and monitoring of financial markets and institutions and encouraging development aid and FDI in regions with the most need. Safe migration and mobility are also key to bridging the gap.</p>	<p>India's target: By 2030, make sure that the bottom 40% of the population's income grows at a faster rate than the national average and stays that way.</p> <p>Encourage official development assistance and financial flows, including foreign direct investment, to States with the most need, especially least developed countries, African countries, small island developing states, and landlocked developing states, in line with their national plans and programmes.</p>
11	<p>Sustainable cities and communities purpose: Making cities sustainable means creating career and business opportunities, safe and affordable housing, and building resilient societies and economies. It involves investment in public transport, creating green public spaces, and improving urban planning and management in participatory and inclusive ways.</p>	<p>India's target: Make sure that everyone has access to decent, safe, and affordable housing and basic services by 2030, and improve slums. Help the least developed countries build safe, long-lasting buildings with local materials, including through financial and technical aid.</p>

12	<p>Responsible consumption and production purpose: Many people in the world don't consume enough to meet their basic needs. Creating more efficient production and supply chains by halving global food waste per capita will create a resource-efficient economy.</p>	<p>India's target: Use all natural resources in a sustainable manner by the year 2030. Reduce food waste by half across all stages of production and distribution, including post-harvest losses. Remove market distortions, such as by restructuring taxation and phasing out harmful subsidies, to reflect the environmental effects of fossil fuels, while taking into account the needs and conditions of developing countries and minimising any negative effects on their development, in order to protect the poor.</p>
13	<p>Climate action purpose: Supporting vulnerable regions will make a contribution to all SDGs. These actions will integrate disaster risk measures, sustainable natural resource management, and human security into national development strategies. We can limit the increase in global mean temperature to two degrees Celsius above pre-industrial levels, aiming at 1.5°C with strong political will, increased investment, and using existing technology</p>	<p>India's target: All countries should improve their ability to deal with natural disasters and climate-related risks. Include steps to deal with climate change in national policies, strategies, and plans. Promote ways to improve planning and management of climate change in the least developed countries and small island developing states, paying special attention to women, young people, and local and marginalised communities.</p>
14	<p>Life below water purpose: Its aim is to sustainably manage and protect marine and coastal ecosystems from pollution, as well as address the impacts of ocean acidification. Enhancing conservation and the sustainable use of ocean-based resources through international law will help mitigate challenges faced by our oceans.</p>	<p>India's target: By 2025, prevent and significantly reduce marine pollution of all kinds, from land-based activities, including marine debris and nutrient pollution</p> <p>By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture, and tourism</p>
15	<p>Life on land purpose: Its aim is to reduce the loss of natural habitats and biodiversity support global food and water security, climate change mitigation and adaptation, and peace and security.</p>	<p>India's target: By 2025, stop and greatly reduce all types of land-based pollution of the ocean, such as marine debris and nutrient pollution.</p> <p>Small Island developing States and least developed countries should get more money from the sustainable use of marine resources by 2030. One way to do this is through the sustainable management of fisheries, aquaculture, and tourism.</p>
16	<p>Peace, justice and strong institutions purpose: The SDGs aim to end conflict and insecurity and reduce all forms of violence. Promoting the rule of law and human rights, reducing illicit arms, and strengthening developing country participation in global governance institutions are key to this process.</p>	<p>India's target: All forms of violence and their resulting death rates should be drastically reduced everywhere. It is time to put an end to all forms of child abuse and exploitation. Provide everyone with a legal identity, including the ability to register their births, by the year 2030, and promote and enforce policies that are free of discrimination in the interest of long-term development.</p>

17	<p>Partnerships for the goals purpose: Its aim is to Promote international trade and helping developing countries increase their exports is all part of achieving a universal rules-based and equitable trading system that is fair and open and benefits all.</p>	<p>India's target: To improve tax and other revenue collection, strengthen domestic resource mobilisation, including through international aid to developing countries. Create and implement investment promotion programmes for the world's poorest nations.</p>
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III. INDIA'S ACHIEVEMENTS ON SDGS, POSSIBLE CONCERNS AND THE ROAD AHEAD

India's commitment to the SDGs is reflected in the Sabka Saath Sabka Vikaas motto (Collective Efforts for Inclusive Growth). The country has developed a robust SDG localization model based on adoption, implementation, and monitoring at the State and district levels.

The USD 150 million India-UN Development Partnership Fund is a way for India to help developing countries meet the goals of the 2030 Agenda. India starts the Decade of Action with a spirit of regional and global partnerships and a promise to "leave no one behind." It does this with confidence because it has dealt with problems before and knows how to do so. India will work with stakeholders in its own country and around the world to speed up efforts for a sustainable future.

The Table 2 below Summarises India's SDG Progress

<p>Sashakt Bharat - Sabal Bharat (Empowered and Resilient India)</p>	<p>In India, 271 million people have been lifted out of poverty as a result of economic growth and increased agency. Inequalities have been reduced, particularly among those who are most susceptible to them, as a result of improvements in areas such as nutrition, child health, education, sanitation, drinking water, electricity, and housing.</p>
<p>Swachh Bharat - Swasth Bharat (Clean and Healthy India)</p>	<p>The Clean India Campaign and the National Nutrition Mission were both successful in lowering India's rates of child and maternal mortality. Ayushman Bharat gives an annual stipend of 7,000 USD to each of India's 100 million families. The fight against COVID-19 is being led by India on a global scale. The nation made a contribution to the SAARC COVID-19 Emergency Fund in the amount of ten million dollars. As part of its response to COVID-19, India has established a health coverage programme for front-line workers, an economic stimulus package worth USD 22.5 billion, and direct cash transfers for those who are the most vulnerable.</p>
<p>Samagra Bharat - Saksham Bharat (Inclusive and Entrepreneurial India)</p>	<p>Contributing to social inclusion are efforts to ensure that everyone has access to adequate nutrition, healthcare, education, and social protection, as well as training in entrepreneurship and employment skills. The poor, including more than 200 million women, have been given access to new avenues of credit, insurance, and Direct Benefit Transfers (DBT) as a result of the financial inclusion brought about by the Jan Dhan-Aadhaar-Mobile (JAM) trinity. This has led to an acceleration in the women's economic empowerment.</p>

Satāt Bharat – Sanātān Bharat (Sustainable India)	India's climate action strategies include the development of clean energy, infrastructure that is resilient to natural disasters, and ecological restoration. India has set a goal to install 450GW of renewable energy and restore 26 million hectares of degraded land by the year 2030. The country has also completed the process of electrifying all of its rural areas, lowered its annual CO2 emissions by 38 million tonnes, and made clean cooking fuel available to 80 million low-income households. Solar power in India is ranked third, followed by wind power in fourth place, and hydropower in fifth place. India was the first country to launch both the International Solar Alliance and the Coalition for Disaster Resilient Infrastructure.
Sampāna Bharat- Samriddh Bharat (Prosperous and Vibrant India)	The young population and thriving business ecosystem of India are driving the country's economic growth. By the year 2025, India wants to have an economy that is worth \$5 trillion, and it plans to do this by investing more in its manufacturing sector, its infrastructure, its investments, its technological innovation, and its entrepreneurial spirit.

IV. FACTS AND FIGURES: STATE-WISE SCORES FOR EACH OF THE 17 SDGS

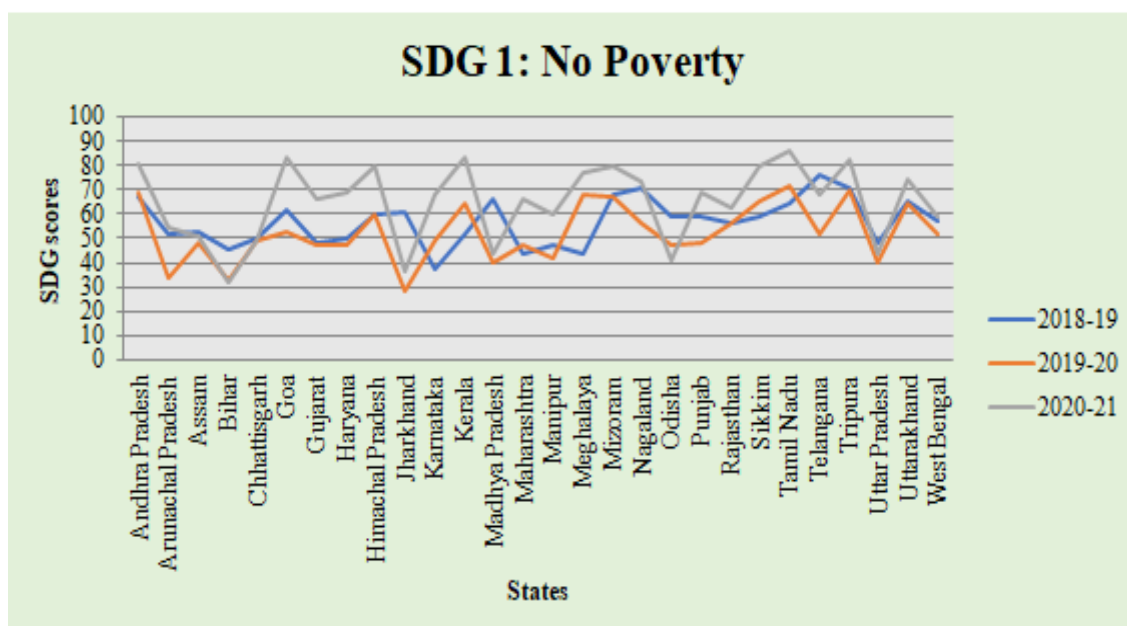


Figure 1: Graph showing state-wise score for SDG no.1, No Poverty

The no poverty score in all the three years was high for the states of Goa, Mizoram, Tamil Nadu and Tripura and states which stand low on the no poverty scores are Jharkhand, Bihar and Uttar Pradesh.

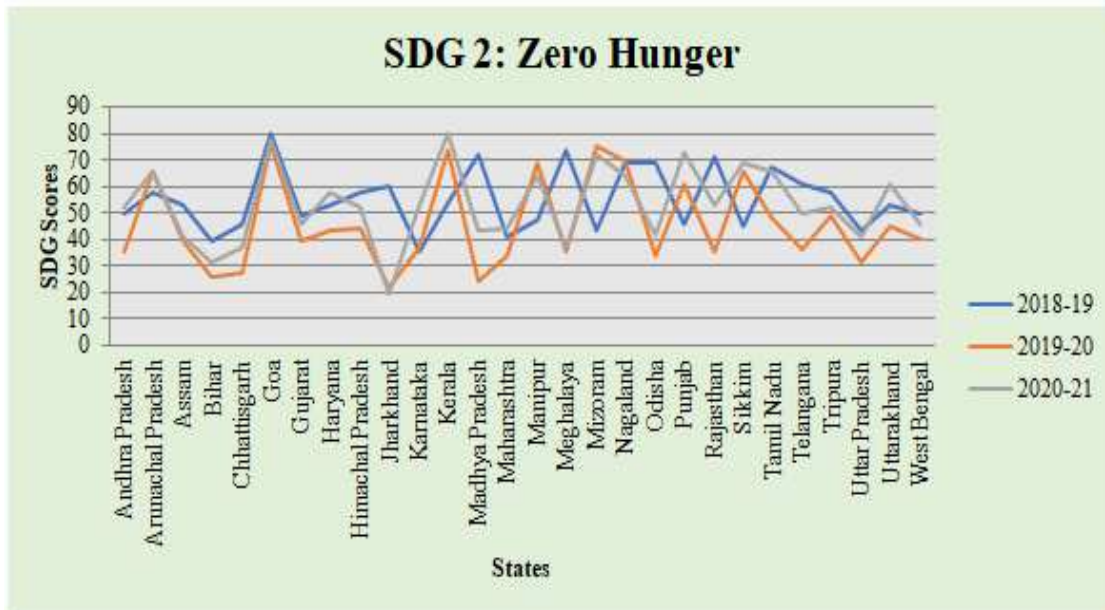


Figure 2: Graph showing state-wise score for SDG no.2, Zero Hunger

The top 3 and bottom 3 States on the zero hunger SDG for the year 2020-21 is Kerala, Goa and Punjab and Jharkhand, Bihar and Chattisgarh respectively and in the year 2019-20 the top 3 and bottom 3 states are Goa, Mizoram, Kerala and Jharkhand, Bihar and Madhya Pradesh respectively. In the year 2018-19 the states of Goa, Meghalaya and Madhya Pradesh and top of the list and Karnataka, Bihar and Maharashtra are with the lowest in the list.

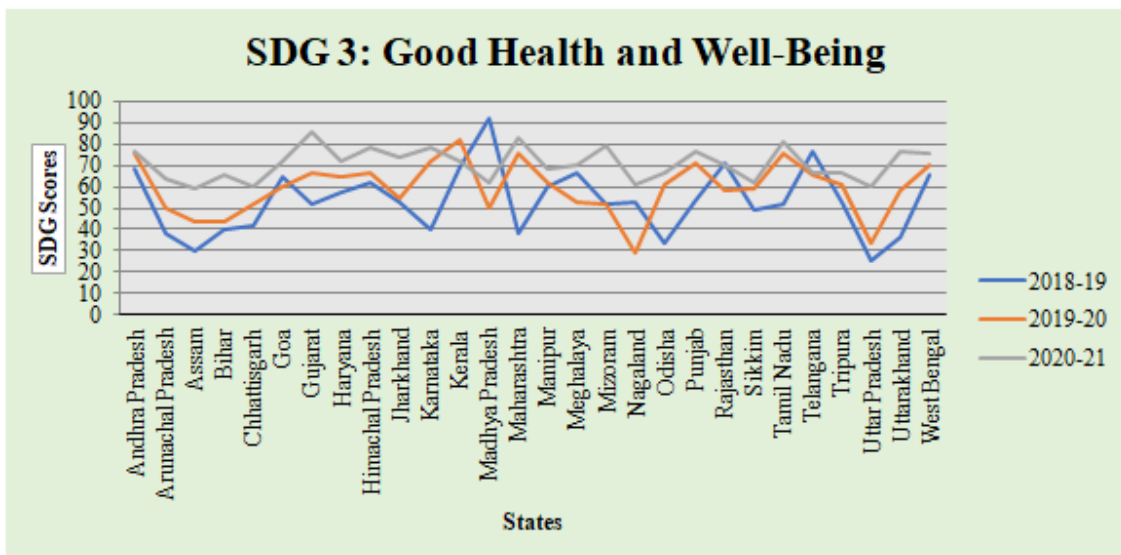


Figure 3: Graph showing state-wise score for SDG no.3, Good Health and Well-Being

In the year 2018-19, the state which has scored highest in terms of good health and well being is Madhya Pradesh with a score of 92/100 and in 2019-20 the highest score state is Kerala with a score of 82 and in the year 2018-19 the highest score is of the state of Gujarat.

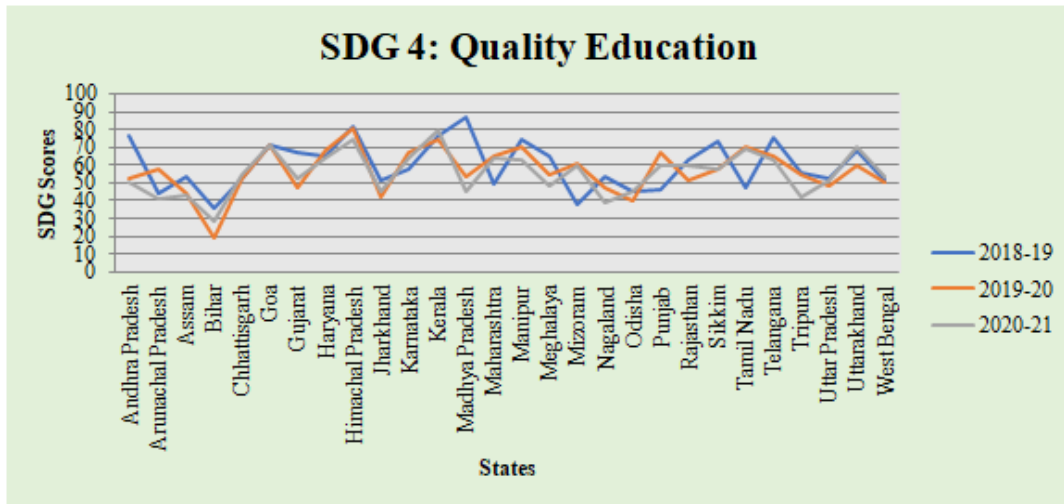


Figure 4: Graph showing state-wise score for SDG no.4, Quality Education

When it comes to quality education at primary and secondary level along with proving vocational training, the states which are best at it across all the years are Kerela, Himachal Pradesh and Goa.

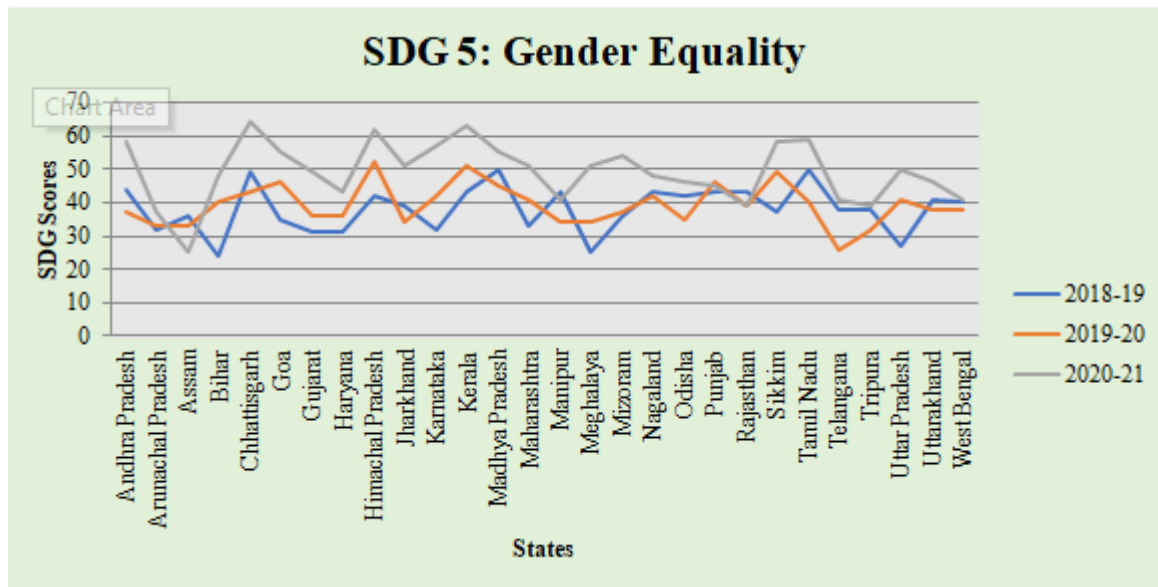


Figure 5: Graph showing state-wise score for SDG no.5, Gender Equality

Gender equality SDG says equal rights to women with respect to education, technology, well being etc. All the states have shown a good progression in the year 2020-21 except the state of Assam. For the year 2019-20, the highest scorer are the states of Himachal Pradesh, Kerela and Sikkim and for the year 2018-19 the highest scorer states are Chattisgarh, Madhya Pradesh and Sikkim.

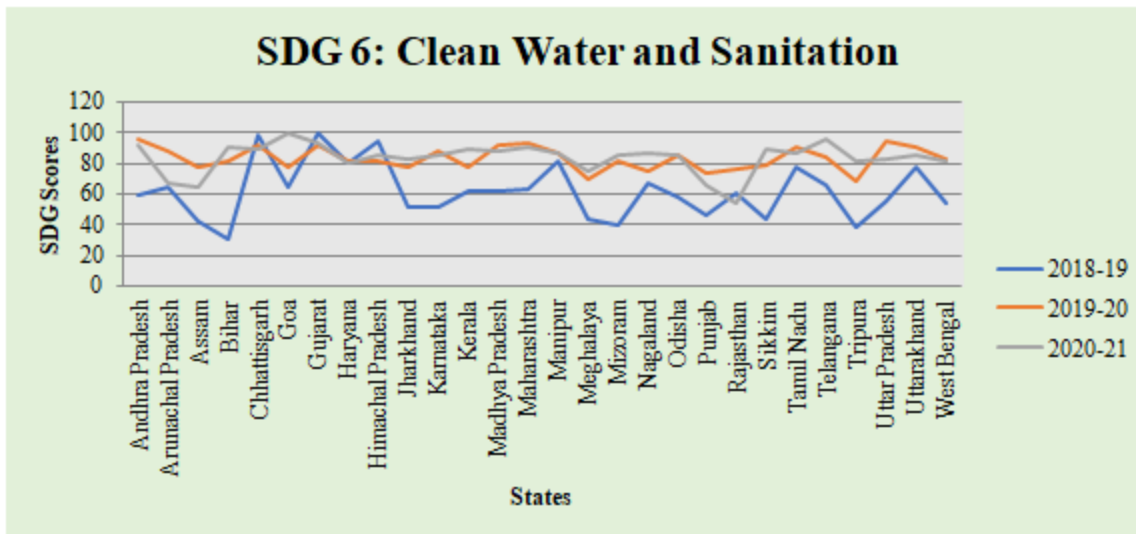


Figure 6: Graph showing state-wise score for SDG no.6, Clean Water Sanitation

With respect to clean water and sanitation all the states have shown a great progress in the year 2019-20 and 2020-21. The state with highest score in 2019-20 are Andhra Pradesh and Uttar Pradesh and lowest score in the same year is of Meghalaya and Tripura. For the year 2020-21 the highest and lowest score states are Goa, Telegana and Assam, Rajasthan respectively. Goa is the only state to achieve the impressive score of 100/100.

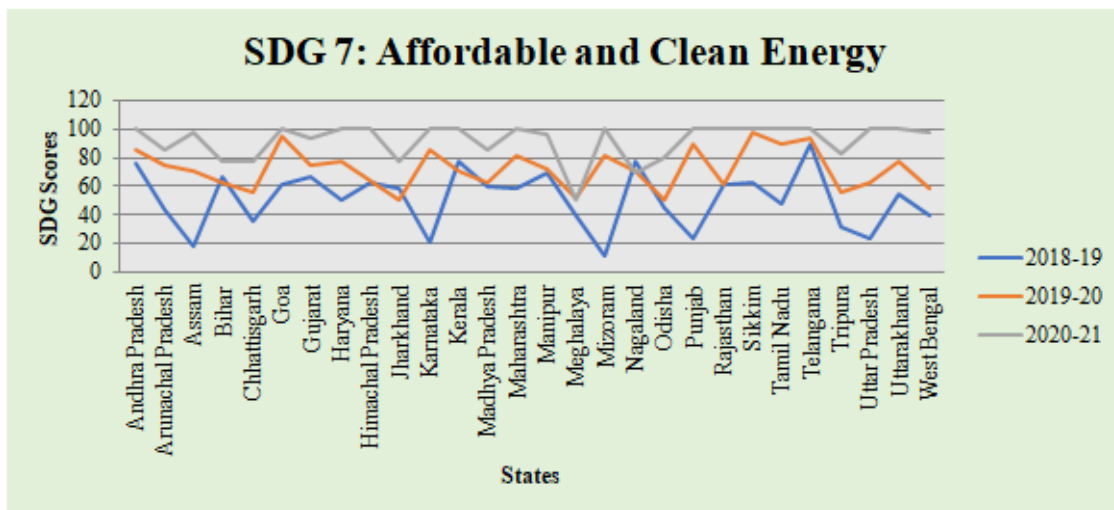


Figure 7: Graph showing state-wise score for SDG no.7, Affordable and CleanEnergy

The Investment in solar, wind and thermal power of all the states scores have increased from 2018-19 to 2020-21. 15 states out of total 28 states have an ideal score of 100 which shows in the year 2020-21 all the states have improved a lot in affordable and clean energy to all.

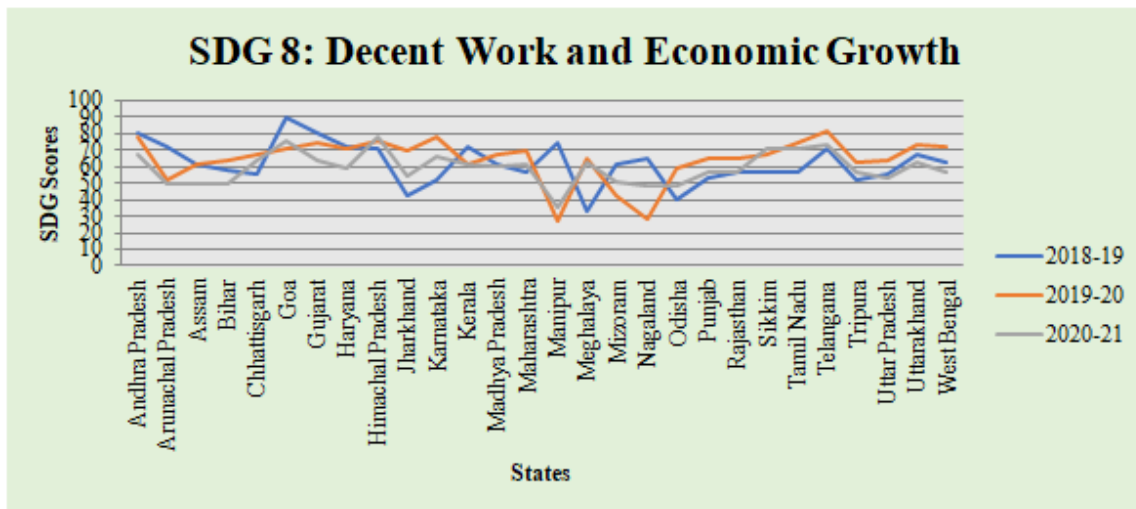


Figure 8: Graph showing state-wise score for SDG no.8, Decent work and Economic Growth

In terms of contributing towards economic growth, Goa has highest score and Meghalaya has the lowest in the year 2018-19. The state Meghalaya and Nagaland are on the lowest and Telangana being highest in the year 2019-20 and the state of Manipur being lowest and Himachal Pradesh being highest in the year 2020-21.

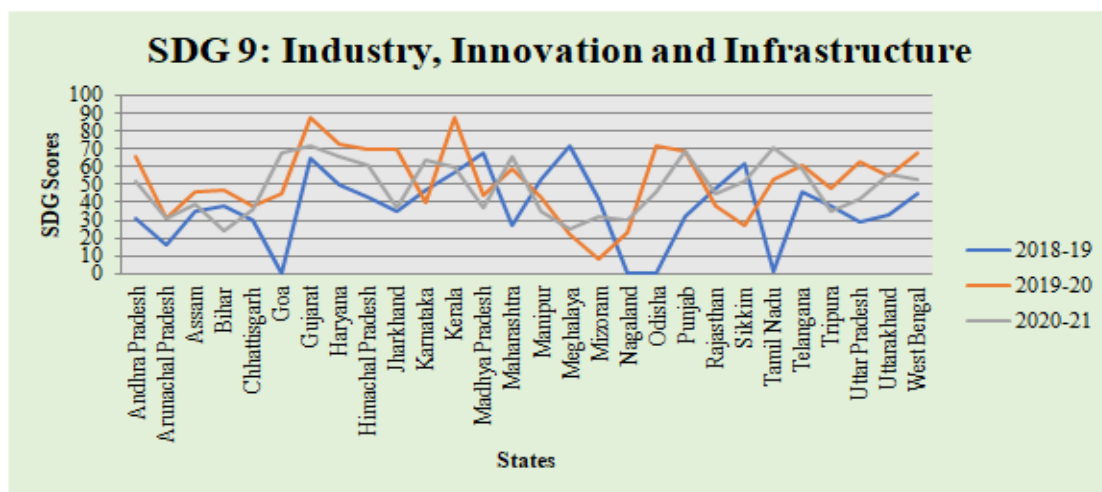


Figure 9: Graph showing state-wise score for SDG no.9, Industry, Innovation and Infrastructure

With respect to industry, innovation, infrastructure for the year 2018-19 many states like Goa, Nagaland, Odisha and Tamil Nadu stands at a zero score but they have shown an improvement in the consecutive years. The state of Gujarat and Kerala is at the highest in the year 2019-20 while Mizoram is at the lowest point in the same year. In comparison to 2020-21, in the year 2019-20 the states have performed better with respect to innovation.

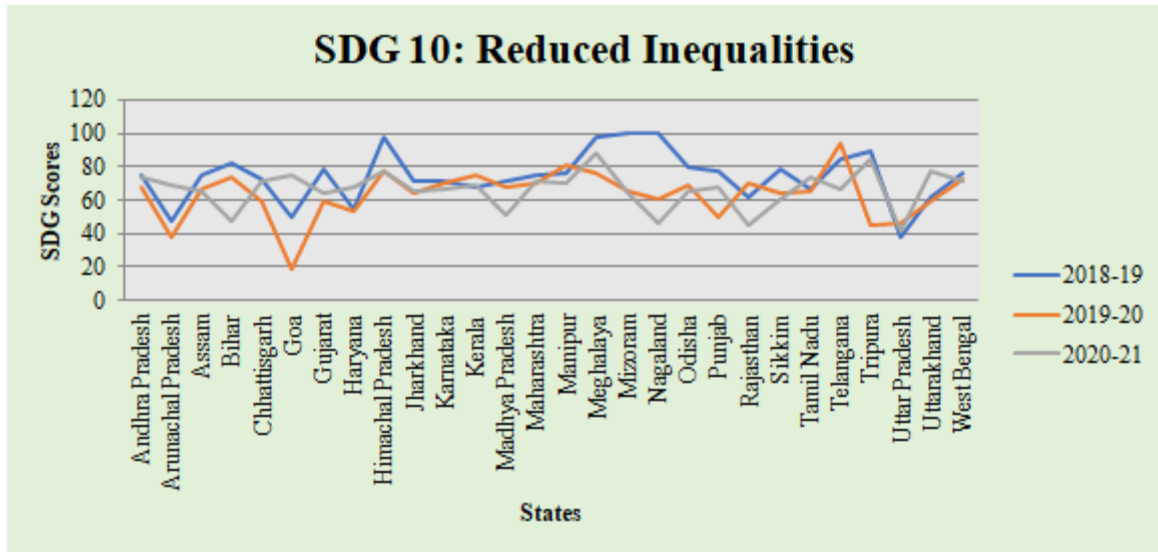


Figure 10: Graph showing state-wise score for SDG no.10, Reduced Inequalities

In the year 2018-19, Mizoram and Nagaland scored a 100/100 for the Reduced Inequalities goal followed by Meghalaya and Himachal Pradesh who scored a 98/100 in the same year. Over the next 2 years the scores of Mizoram and Nagaland have gone down however, Meghalaya has managed to be at the top even in the year 2020-21 with a highest score of the year at 88/100.

Overall the graph tells us that this SDG had a good score throughout the states in 2018-19 but scored poor in the following years where the highest score dropped from 100 in 2018-19 to 94/100 in 2019-20 which further more dropped to 88/100 in 2020-21.

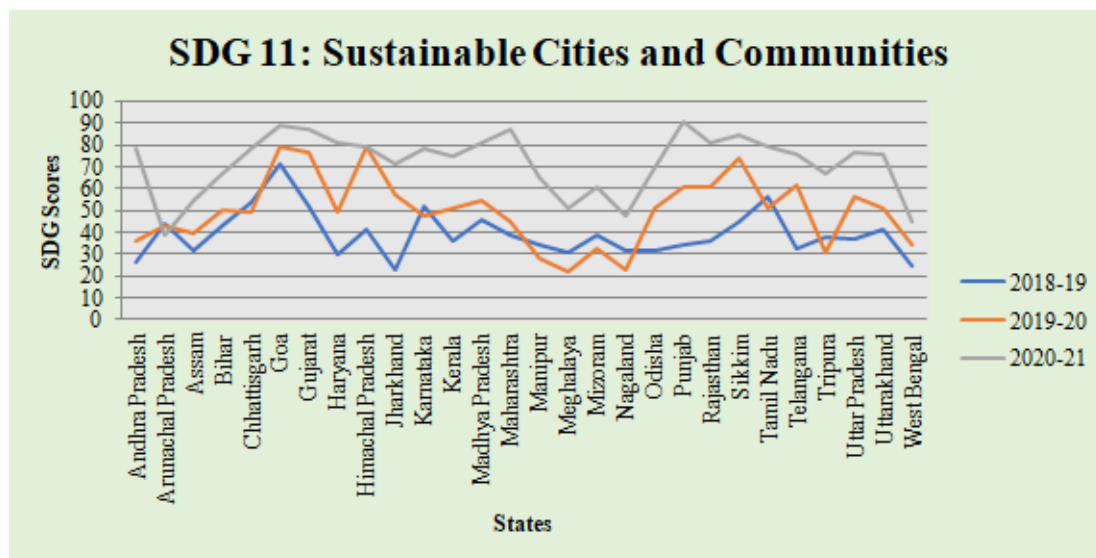


Figure 11: Graph showing state-wise score for SDG no.11, Sustainable Cities and Communities

With respect to Sustainable Cities and Communities, the state of Goa has been the only state to maintain good consistency in their scores. In the year 2018-19 Goa scored the highest with 71/100 followed by 79/100 in 2019-20 and 89/100 in 2020-21 to be the second highest after Punjab. Overall the scores throughout the states have improved from 2018-19 to 2020-21 indicating better measures and maintainance taken up by various states to ensure Sustainable Cities and Communities.

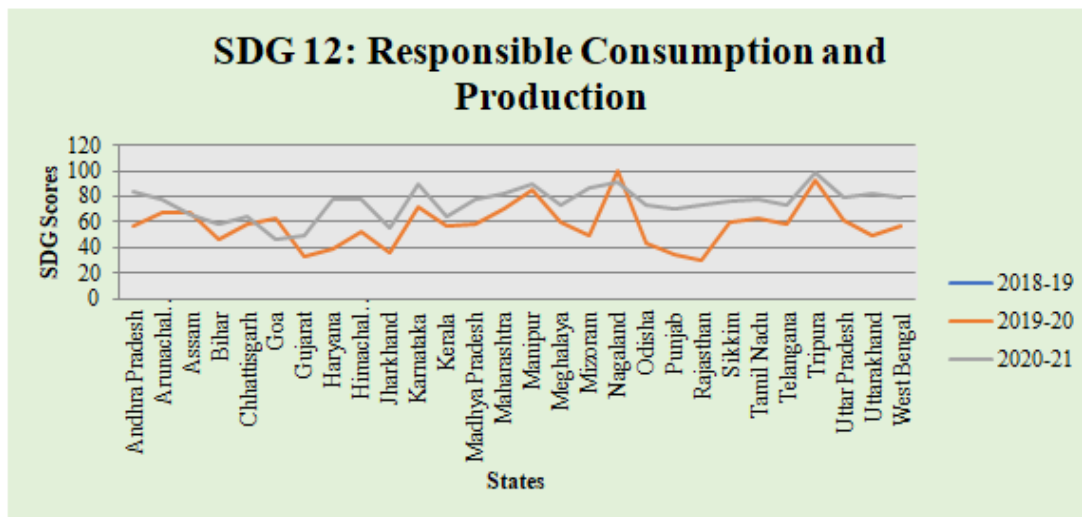


Figure 12: Graph showing state-wise score for SDG no.12, Responsible Consumption and Production

The top 2 states to score highest with respect to Responsible Consumption and Production are Nagaland and Tripura. In 2019-20 Nagaland stood at the top with a score of 100 followed by Tripura at 92 and in the year 2020-21 Tripura stood at the top with a score of 99 followed by Nagaland at 91. In addition to the highest scoring states, it is important to note that almost all the states except for Assam and Goa have improved their scores over the years.

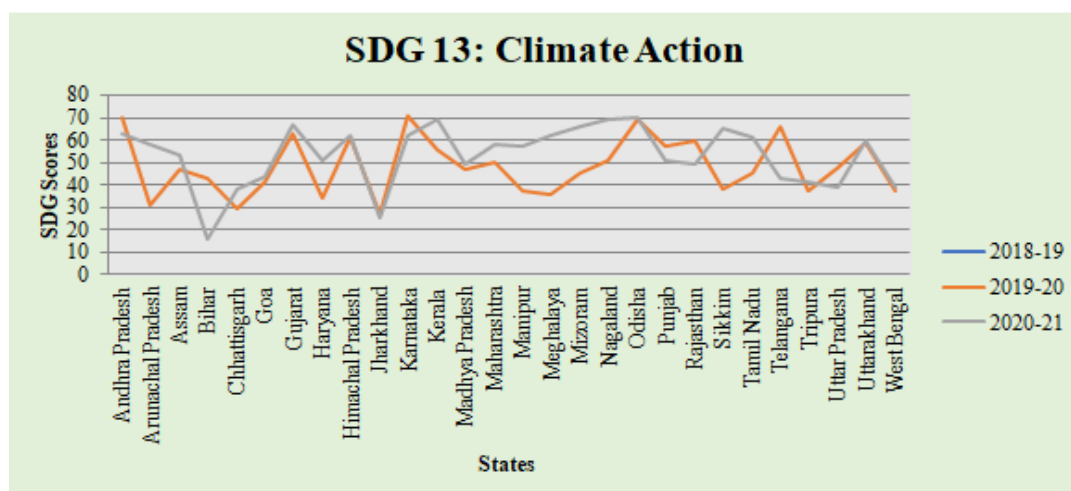


Figure 13: Graph showing state-wise score for SDG no.13, Climate Action

From the above we can see that in the year 2019-20 Karnataka is at the top with a score of 71/100 followed by Andhra Pradesh and Odisha with a respective score of 70 and 69. Out of these 3 states which topped in 2019-20 Odisha showed an improved with a score of 70 however, Karnataka and Andhra Pradesh showed a downward trend with scores falling to 62 and 63 respectively. In addition to this, we can see that the states of Bihar, Chattisgarh, Jharkhand, Uttar Pradesh and West Bengal have scored very poor indicating very poor actions to rectify and improve climate problems.

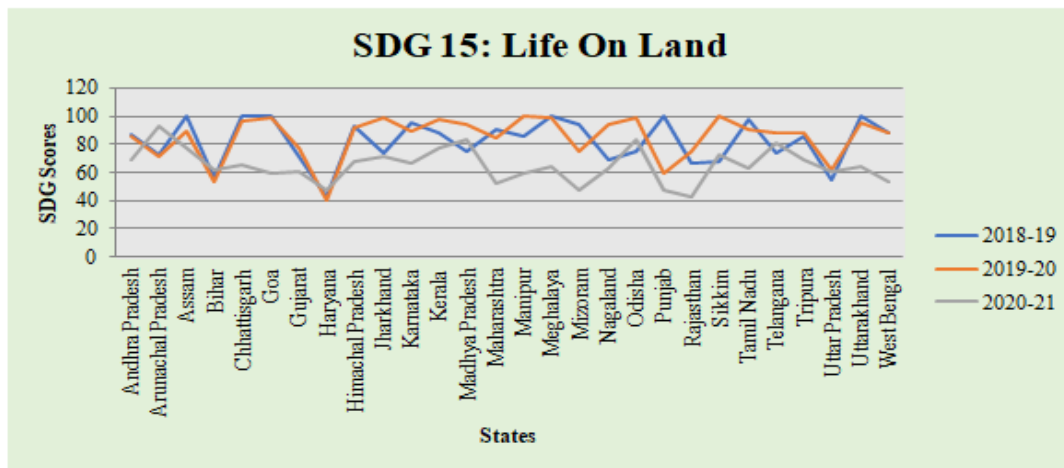


Figure 14: Graph showing state-wise score for SDG no.15, Life on Land

Life on land is one such goal which has been a matter of concern for almost all the states in India. From the above data we can see that Arunachal Pradesh has been the only state that has managed to improve its score from 2018 to 2021 with the highest score of 93/100 in 2020-21. States like Madhya Pradesh, Odisha and Telangana showed improvement from 2018-19 to 2019-20 however, failed to maintain their scores in 2020-21. Overall we can interpret that even though some states managed to improve the situation from 2018-19 to 2019-20, they have not been able to maintain the same in the following years and hence we see a low score for almost all the states in 2020-21.

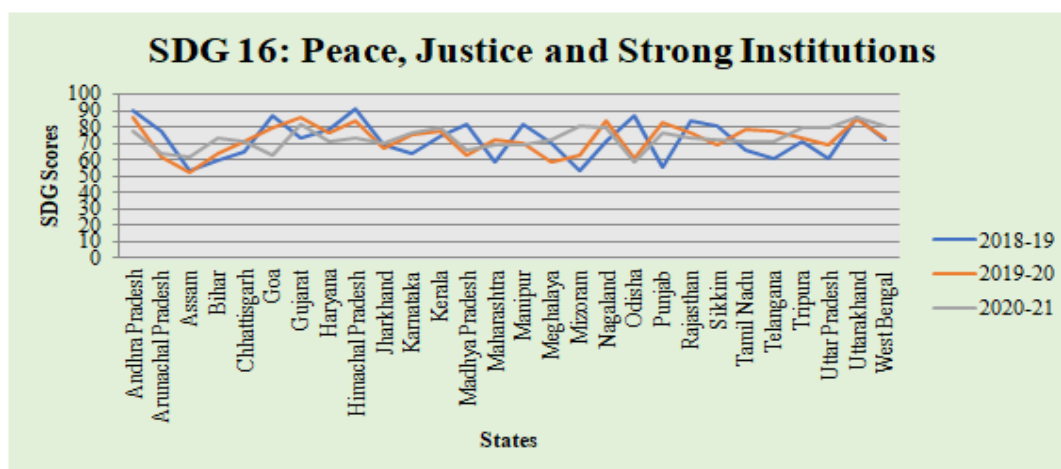


Figure 16: Graph showing state-wise score for SDG no.16, Peace, Justice and Strong Institutions

With respect to Peace, Justice, and Strong Institutions we can see that Uttarakhand has been the only state, which is consistent with a score of 86, 85 and 86 respectively in the 3 years under considerations. States of West Bengal, Gujarat, Tripura and Uttar Pradesh have also shown considerable improvement in their scores over the years. It is also important to notice that the states of Odisha and Goa have shown a drastic fall in their scores from 2018 to 2021. More stringent and effective measures will be required to reduce all forms of violence and work with the governments and communities to end conflict and insecurity.

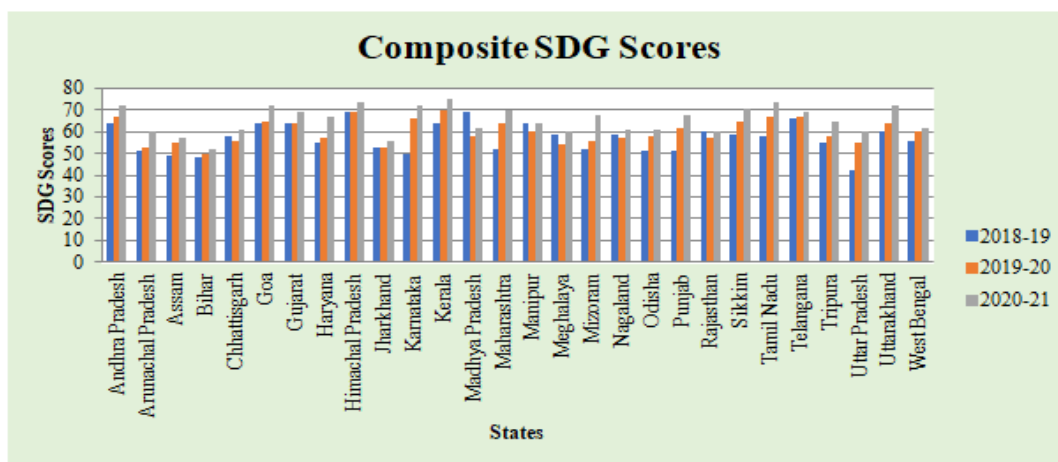


Figure 17: Graph showing composite SDG scores for all 28 states

From the above graph on composite scores, it is very much evident that the all the states have consistently strived to improve their SDG scores by effectively implementing the various goals at their respective state level.

In the year 2018-19 we can see that Madhya Pradesh and Telangana were at the top positions followed by Himachal Pradesh but in the next year 2019-20 it is the state of Kerala which is at the top position followed by Himachal Pradesh. It is overwhelming to notice that these 2 states, Kerala and Himachal Pradesh could successfully maintain their scores and even improve it further in 2020-21 to sustain at the top positions.

From the above analysis and interpretation, we can very well observe that the states which have specifically taken SDG focused initiatives and measures have managed to improve their SDG scores over a period. However, those who have not taken any evident steps to boost the SDGs have not shown any improvement. Hence, to score progressively with respect to achievement of SDGs 2030, each of the 28 states in the country should take specific and focused measures which will not only fetch a better SDG score but will ensure faster and better development of the country. If all the states in India become a bit more mindful about these 17 SDGs, we as a country can surely stand as an example for all the other developing countries around the world.

V. KEY OBSERVATIONS

From the above analysis, we can observe that the smallest state in India, Goa has managed to top majority of the SDGs by scoring the highest scores throughout the tenure under consideration. Be it the goal of no poverty, zero hunger, quality education, clean water and sanitation, economic growth or sustainable cities, and communities, from the graphical representation it is evident that Goa has managed to be at the top with the highest SDG scores. One of the prime reasons for this can be the small population size that the state is regulating and the determined efforts to maintain the state's tourist attraction.

Followed by Goa, it is the state of Kerala which has shown a great improvement towards some SDGs like zero hunger, good health and well-being, quality education at primary and secondary level, gender equality and industry, innovation, infrastructure. One of the most evident reasons for such an improvement in SDG scores is the literacy rate of state. We can say that being the state with highest literacy, the state's population is aware about and understands their sense of responsibility towards attainment of these vital SDGs.

In addition to the above states, a few other states like Mizoram, Tripura, Himachal Pradesh, Meghalaya, Nagaland, Tamil Nadu, Karnataka, Gujrat, Arunachal Pradesh, Andhra Pradesh, and Uttarakhand have also managed to improve their SDG scores to some extent over the period.

Another positive observation is that a 2 of the SDGs namely, Investment in solar, wind and thermal power and Responsible Consumption and Production have shown an overall improvement in the SDG scores of almost all the states during the 3 years under consideration.

While praising the improvements it is equally important to also focus on the states which have consistently shown a poor SDG score during the 3 years under consideration. States like Jharkhand, Bihar, Chattisgarh, Madhya Pradesh, Assam, Rajasthan and West Bengal need a focused approach with some immediate actions and measures to improve their drooping SDG scores as early as possible. If a similar and focused approach is adopted by all the 28 states for all the 17 SDGs, India as a developing country can surely bring in a major impact in the attainment of SDGs and at the same time set an excellent example for the other developing countries around the world.

VI. SUGGESTED QUESTIONS

Question 1: List down the aspirational and global targets set by Indian government to achieve 2030 agenda of Sustainable Development Goals.

Question 2: Identify the states with good performance across the 17 SDG's. Give reasons.

Question 3: Suggest the measures that can be adopted by the states for improving the overall SDG scores of India.

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