

ASSESSMENT AND IMPLICATIONS OF SDGs: A CASE OF HIMACHAL PRADESH

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Abstract

The world population is tremendously growing and is putting a lot of pressure on our finite resources. Sustainable development is a crucial part of each new worldwide plan; the world has been attempting to set up a more sustainable way and different objectives and targets have been set to accomplish this. The Sustainable Development Goals (SDGs) set norms not only for emerging and agricultural nations, yet additionally for the industrialized countries. Therefore, it is essential to strengthen SDG synergies and reduce compromises across boundaries to achieve the SDGs everywhere. Sustainable development pursues human well-being without expanding ecological limits. It is assumed that the purpose for which sustainable development is enthusiastically defined at the global level must be within the limits of the earth. The research into the causal relationship between human development and SDGs and is achieved in an unsustainable way. There is a need to reorient existing patterns of human development within the capabilities of the Earth's ecosystem, as the SDGs achieved cannot be ecologically justified.

Keywords: SDGs, environment, socio-economic growth

I. Introduction

The 2030 Agenda of United Nations for Sustainable Development includes a common vision of prosperity and peace for the planet. At the center of this

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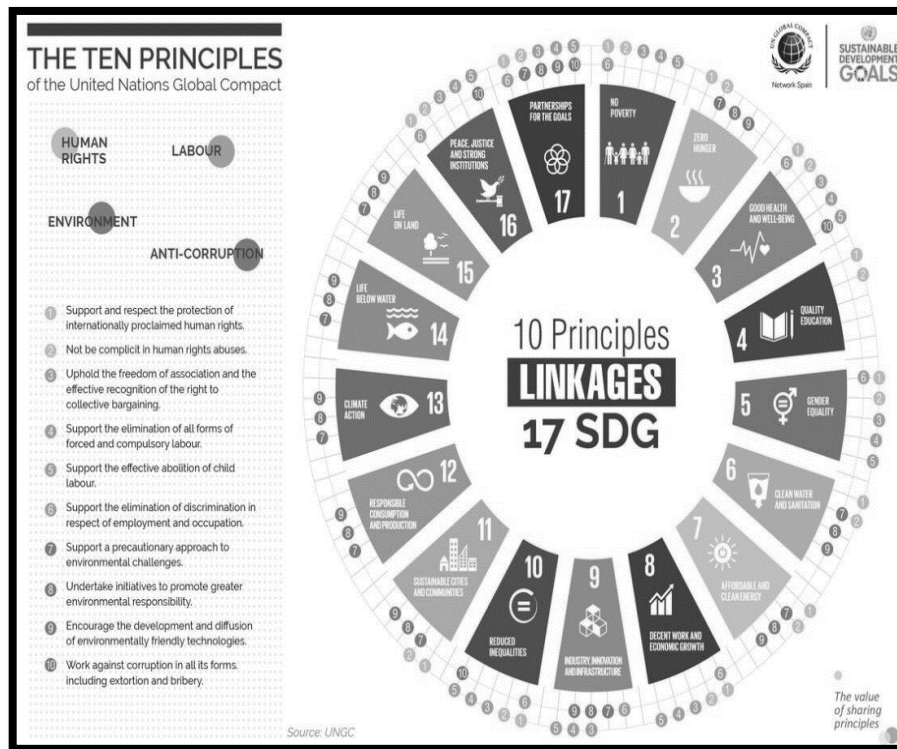
worldwide call are the 17 SDGs that features the human's advancement without the obliteration of the nature (United Nations 1992) (Figure1). United Nations 2030 Agenda affirms the essential standards of sustainability mirroring a future incorporated with economic, societal and environmental values (Stern et al. 1996; UN SDSN 2015; Spaiser et al. 2016). The agenda is a global adoption of worldwide responsibility agreed upon by 193 the UN member states, to accomplish 17 Sustainable Development Goals (SDGs) with their 169 targets (having more than 200 indicators) in the span of 15 years (2015-2030). The 17 SDGs embraced in 2015 covers comprehensive issues identified with socio-economic, technological and environmental development and applicable to the entire nations of the world.

The critical overarching frameworks under Sustainable Development Goals 2030 are the five pillars: People, Prosperity, Planet, Peace and Partnerships included in goals nos. 1-6, 7-11, 12-15, 16 and 17 respectively (Figure 2). The government allocates budget to various industries under these significant classifications to achieve desired goals and to advance the idea of sustainability. However, the panorama of five years in appears to be desolated (Sachs et al. 2019). According to Easterly (2015) SDGs are encyclopaedic and everything at topmost priority, means that nothing is the highest priority. Quantifying and monitoring the impacts of Agenda 2030 requires measuring sustainable development and its associated goals i.e. with brimful of challenges (Bali Swain 2018). However, there is a lack of a systematic way to quantitatively assess the progress in achieving the SDGs at the regional level (above the national level), in particular a systematic method to simultaneously evaluate the regions according to the "One Belt, One Road" (Yizhong 2021).

India, with the world, has entered a "decade of action" for accomplishing the SDGs. COVID-19 is one of the world's biggest crises in recent times spearheading horror of roadblocks (Banks et al.2021; ; van Dam and Webbink, 2020 ; Johns Hopkins University, 2020, Taylor 2019) Each

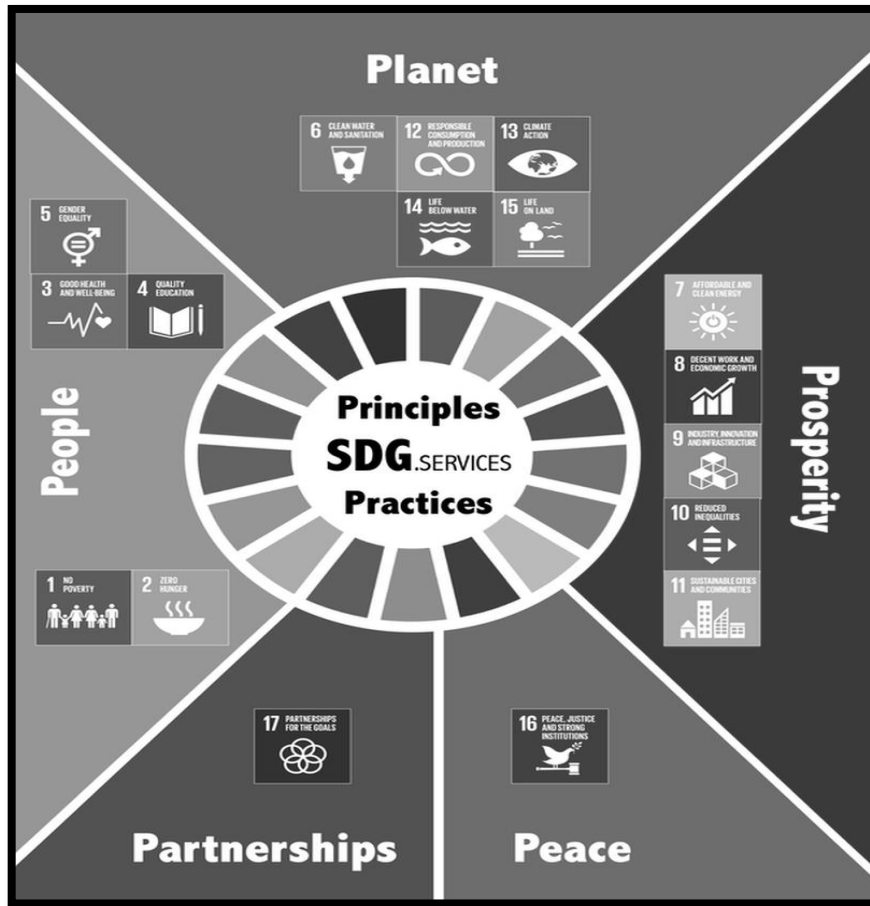
country's response to the pandemic is as strong as possible. Amid, the pandemic country is experiencing rapid change using much of technology and innovation yet the sustainability is the cornerstone of developmental philosophy. The framework developed and designed by NITI Aayog (2018), SDG India Index & Dashboard 3.0 is an important tool to monitor and strengthen SDG activities, to measure the progress at the regional and national level in efforts to achieve the goals. It is also successful as an advocacy tool to spread the message of sustainability and resilience partnerships.

Figure1: 17 Sustainable Development Goals (SDGs)



Source: <https://www.sdg.services/principles.html>

Figure 2: The pillars and Frameworks of SDGs



Source: <https://www.sdg.services/principles.html>

2. Literature Review on SDG India: Index and Dashboard 2020-21: Partnership in the Decade of Action"

The index includes 17 SDGs in respect of covering seventy targets out of a total of 169 targets and 115 indicators. The state and Union Territories achievements were recognized according to the ranking they achieved. It is assigned a range from 0 to 100 for marking performance for each indicator. The greater the score, the more closer it is to the final goal (100). None of the states accumulated complete 100 points. State on the score of 0 to 49

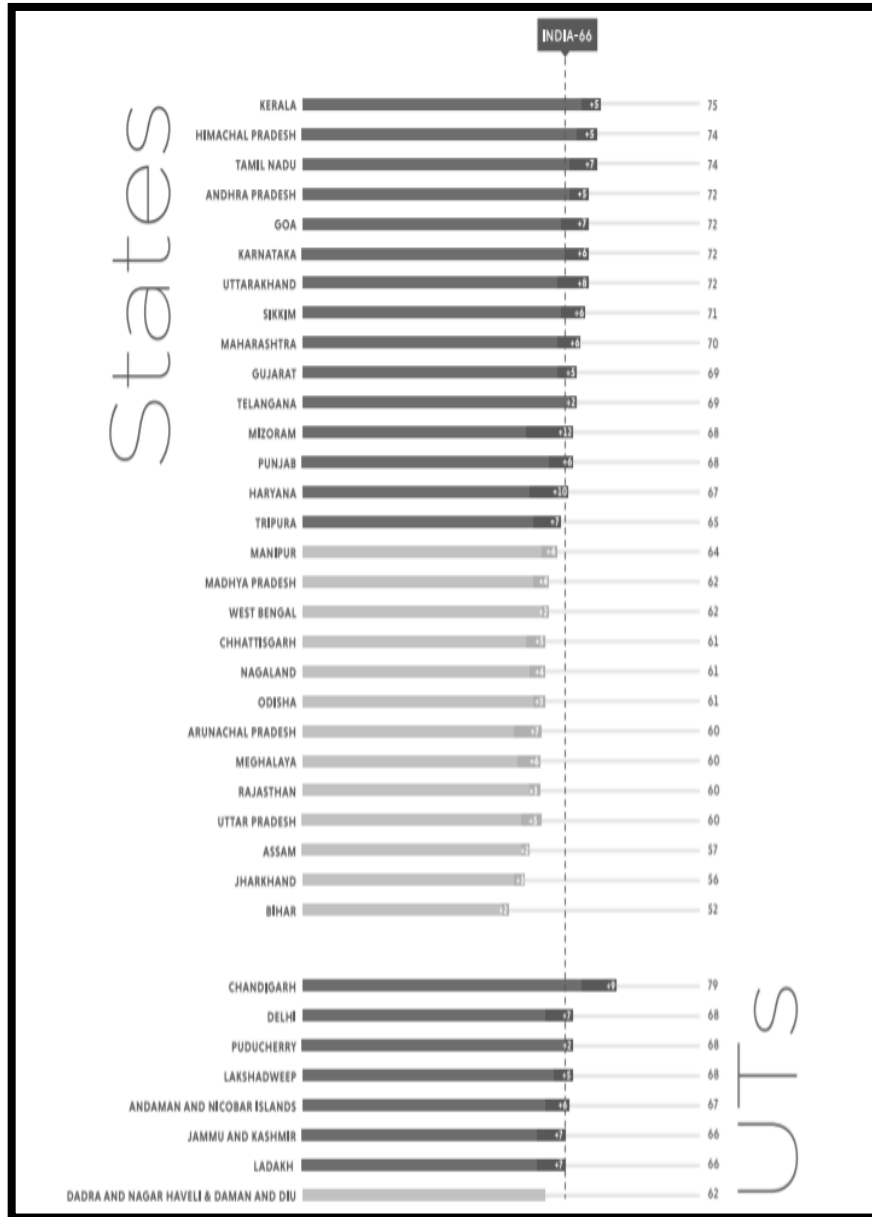
are classified as the “aspirant states”, states which receive a score between 50 to 64 are categorised as “performer states”, a score of 65 to 99 is under the “front runner state category” and score of 100 included as “achiever state” category (Table-1).

Table1: Categories of SDG Index

S. No.	Score	Category	Number of State/UTs included
1	0 to 49	Aspirant	0
2	50 to 64	Performer	14
3	65 to 99	Front Runner	22
4	100	Achiever	0

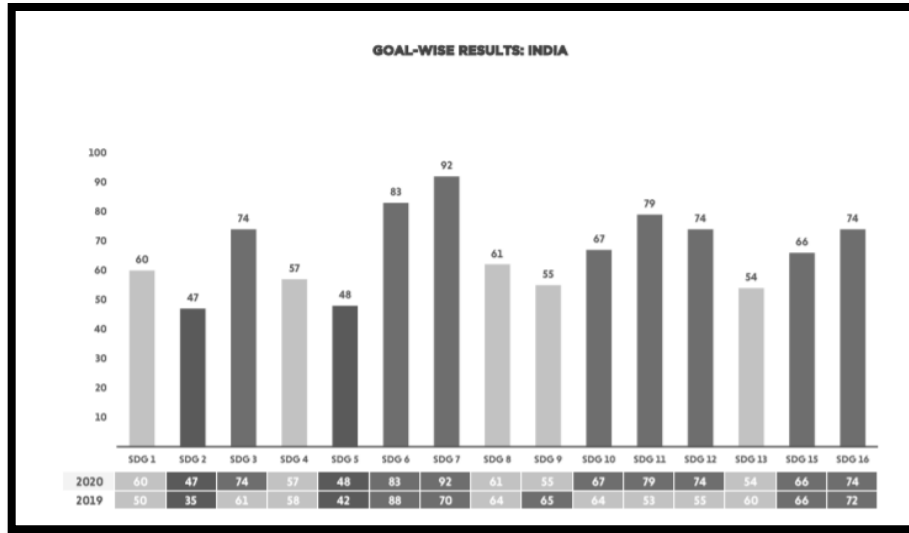
Kerala remains number one with score of 75 points. Chandigarh also maintained top in the UTs with 79 points. Himachal Pradesh and Tamil Nadu taking second place while Goa, Uttarakhand, Andhra Pradesh and Karnataka spotted at finished at fourth (Figure 3 and Figure 4).

Figure3: SDGs performance of India (State and UTs)



Source: SDG India Dashboard 2020-21

Figure 4: Comparison of composite SDGs results in India



Source: SDG India Dashboard 2020-21

India's overall score was 60 in 2019- 20, which improved to 66 in 202-21. This shows that India has headway in its journey to achieve the SDGs. The two goals i.e. Sustainable Development Goal-5 and Sustainable Development Goal-2 requires special attention as the overall score is less than 50. Nine goals are positive driving force Sustainable Development Goal- 3, Sustainable Development Goal- 6, Sustainable Development Goal -7, Sustainable Development Goal-10, Sustainable Development Goal-11, Sustainable Development Goal-12, Sustainable Development Goal -13, Sustainable Development Goal -15, Sustainable Development Goal -16, where India has received a score between 65 and 99.

The other five targets (excluding the Sustainable Development Goal- 17 and Sustainable Development Goal-14-lives below the sea, applicable only for nine coastal states), all inclusively scored between 50 and 64, with a room for significant improvement over the next few years. The fastest mover from 2019-20 to 2020-21 is Mizoram. The highest recorded score among all the states and UTs is grabbed by Chandigarh i.e. 79. With the exception of Madhya Pradesh, all Central and South Indian countries are
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well at the forefront of the SDGs. The major northern Indian countries such as UP, Bihar, Chhattisgarh, and Jharkhand couldn't perform up to the mark and are categorized under "performer". The four states in the northeast, namely Meghalaya, Manipur, Nagaland, and Assam, cannot fit into the category of achievers. Eastern states, namely West Bengal (with score of 62) and Orissa (score of 61) remained at the performance stage.

3. Himachal Pradesh and Growth of SDGs

The composite score for Himachal Pradesh state is gone up from score of 69 to 74 as seen in 2019 and 2020 respectively. The target for the state is not far away, of all the states and UTs, the score (74) of Himachal Pradesh is at third position. The state is also reckoned among top achievers for two of the goals, Sustainable Development Goal- 7 and Sustainable Development Goal-8. The recent performance of the state index is shown in Table 2. The relative comparison with previous year is shown in Figure5 below.

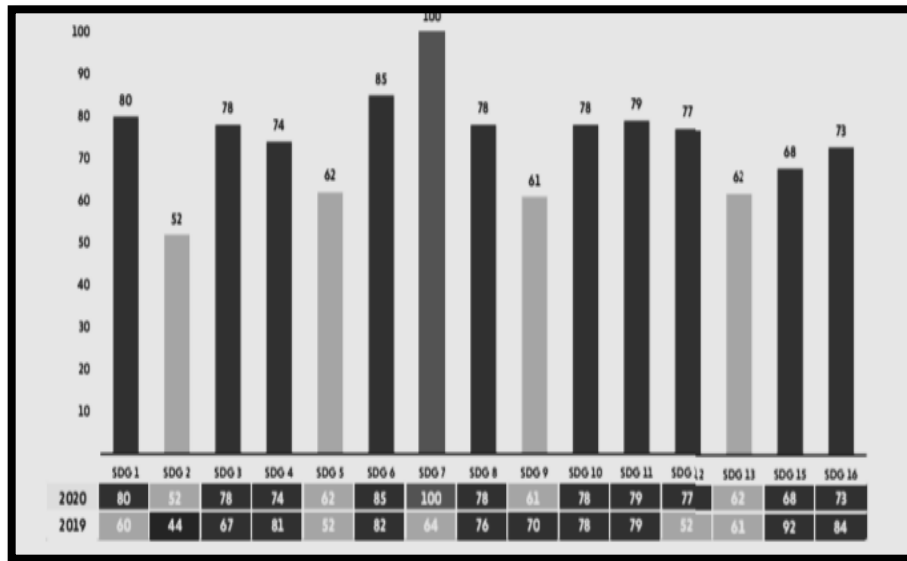
Table-2: Performance of Himachal Pradesh SDG Index 2020-2021

State	SDG7	SDG6	SDG12	SDG16	SDG11	SDG3	SDG10	SDG1
H.P.	100	85	77	73	79	78	78	80

SDG15	SDG8	SDG4	SDG2	SDG13	SDG5	SDG9	Composite SDG
68	78	74	52	62	62	61	74

Source: SDG India Dashboard 2020-21

Figure- 5: Comparison of Himachal Pradesh state SDGs performance (2019 & 2020)



Source: SDG India Dashboard 2020-21

The state performance in terms of the Sustainable Development Goal -2 is having the least score followed by Sustainable Development Goal-9, Sustainable Development Goal-5 and Sustainable Development Goal -13. The number of people living in poverty around the world is vast and all the efforts it is doing to alleviate the problem seem very small .while Himachal Pradesh has been able to break the vicious cycle. The state has taken a leap in Goal 6 (clean water and sanitation) and Sustainable Development Goal -1. The overall performance of the state can be seen from the Figure 6. This does not diminish the reality that health, education, clean water, environment and other indicators like other SDGs can be ignored, but poor people can't think of a life more than get food. Achieving the SDGs can help sections of society that have reached the limits of get out of their misery.

Figure-6: Overall Performance of SDGs in Himachal Pradesh

PERFORMANCE BY SDG	2020		2019		Direction
	2020	2019	2020	2019	
SDG 1: No Poverty					
Population below poverty line (%)	8.06	8.06	-	-	
MP food court ratio (%)	8.10	97.59			
Households covered by health insurance (%)	25.70	25.7	-	-	
MORASA - Employment provided against demand (%)	90.30	91.60	↓	↓	
Beneficiaries under PMBY (%)	85.86				
Households living in katcha houses (%)	0.20	0.20	-	-	
SDG 2: Zero Hunger					
Beneficiaries under MSP (%)	100				
Children under 5 years who are underweight (%)	22.60	22.60	-	-	
Children under 5 years who are stunted (%)	28.40	28.40	-	-	
Pregnant women (15-49 years) who are anaemic (%)	58.40	58.40	-	-	
Adolescents (15-19 years) who are anaemic (%)	18.20				
Rice and wheat produce annually (kg/ha) (2018 - rice wheat and coarse cereals)	1728.76	2260.50			
GMV (constant prices) in agriculture (in Lakhs/crores)	0.00	0.01	↓	↓	
SDG 3: Good Health and Well-being					
Maternal Mortality Ratio (per 1,00,000 live births)	Nil	Nil			
Under-5 mortality rate (per 1,000 live births)	23	38	↑	↑	
Children (0-11 months) fully immunised (%)	86				
Notification rate of Tuberculosis per 1,00,000 population	255	224	↑	↑	
HIV infections per 1,00,000 population	0.02	0.01	↓	↓	
Socio rate (per 1,00,000 population)	8				
Death rate due to road accidents per 1,00,000 population	15.37				
Healthcare deliveries out of the total deliveries reported (%)	92.40	91.3	↑	↑	
Monthly per capita out-of-pocket expenditure on health (%)	14.4				
Physicians, nurses and midwives per 1,00,000 population	68	87	↓	↓	
SDG 4: Quality Education					
ANR in elementary education (class 1-8)	97.82	95.91	↑	↑	
Average annual dropout rate at secondary level (class 9-10)	7.61	7.61	↓	↓	
GER in higher secondary (class 11-12)	81.79				
Class 8 students achieving minimum proficiency level in language and maths (%)	72.8				
GER in higher education (10-25 years)	38.60	38.1	-	-	
Persons with disability (>15 years) having completed secondary education (%)	25.60				
SDG 5: Gender Equality					
GP for higher education (10-23 years)	1.30	1.3	-	-	
Presses (>15 years) who are literate (%)	84.20				
Schools with access to electricity, drinking water (%)	97.59				
Trained teachers at secondary level (class 9-10)	79.55				
Gender parity index at secondary level (class 9-10)	0.9				
SDG 6: Clean Water and Sanitation					
Crimes against women per 1,00,000 female population	42.40	35.7	↓	↓	
Sex ratio at birth	900	918	↑	↑	
Average aspirants received Female to male	0.80	0.74	↑	↑	
Crimes/physical violence by households/relatives (per 1,00,000 women)	6.40				
Electoral women to state legislative assembly (%)	7.35	5.88	↑	↑	
Women in managerial positions in listed companies (per 1,00,000 persons)	222				
Women in managerial positions in listed companies (per 1,00,000 persons)	71.70				
Operational loan holding gender wise (%)	7.43	7.43	-	-	
SDG 8: Decent Work and Economic Growth					
Rural population getting drinking water within premises through PMS (%)	78.57				
Rural population having improved source of drinking water (per 1,00,000 population)	100	98.1	↑	↑	
SMSG - individual households/linked constructed/ supplied target (%)	100	100	-	-	
SMSG - Districts verified to be ODF (%)	100	100	-	-	
Schools with separate toilet facility for girls (%)	97.87	99.87	↓	↓	
Individuals complying with CPDS waste water treatment consent (%)	88.82	87.87	↑	↑	
Crimes under enhanced against availability (%)	84.78	88.37	↑	↑	
Block/municipalities sewer-emptied (%)	50	50	-	-	
SDG 9: Industry, Innovation and Infrastructure					
Non-waste electricity (%)	100	100	-	-	
LPG-CNG connections against number of households (%)	102.23				
SDG 10: Reduced Inequality					
Class 8 students achieving minimum proficiency level in language and maths (%)	72.8				
GER in higher education (10-25 years)	38.60	38.1	-	-	
Persons with disability (>15 years) having completed secondary education (%)	25.60				
SDG 11: Sustainable Cities and Communities					
Per capita household consumption (kg)	227.80				
Usage of indigenous fuel/air out of total KPA (%)	62.89	61.38	↓	↓	
Households covered with a bank account against target (PMUDY) (Amount)	234	4.89	↑	↑	
Household waste recycled/used to waste generated (2019 - Schedule II hazardous waste)	65.79	0.06			
PMUDY needed to be BMM generated (%)	0.51				
BMM needed to be BMM generated (%)	100				
Get electricity for power per 10 lakh population (MM)	1.25	0.96	↑	↑	
SDG 13: Climate Action					
Losses due to extreme weather events per 1 crore population	471.93	105	↓	↓	
Disaster preparedness score as per Disaster Resilience Index	23				
Share of renewable to total energy mix (including alcohol)	63.96	64.82	↓	↓	
CO ₂ saved from LED bulbs per 1,00,000 population (Tunnes)	121.79	103.98	↑	↑	
CO ₂ rate attributable to air pollution per 1,00,000 population	2391				
SDG 15: Life on Land					
Forest cover (%)	87.72	87.52	↑	↑	
Tree cover (%)	1.68	1.48	↑	↑	
Area covered under afforestation schemes (%)	0.17				
Degraded land over total land area (%)	22.99				
Increase in area of desertification (%)	11.81	11.81	-	-	
Wildlife crime cases (2020 - per 1000 of protected area)	6	11			
2019 - Wildlife number of cases					
SDG 16: Peace, Justice and Strong Institutions					
Matters per 1,00,000 population	1	1.58	↑	↑	
Cognizable crimes against children per 1,00,000 population	24.60	24.48	↓	↓	
Victims of human trafficking per 10 lakh population	2.22	2.28	↓	↓	
Misleading children per 1,00,000 child population	14.19				
Crimes per 1,00,000 population	2.57	2.57	-	-	
Crimes under PCA not stated (per 10 lakh population)	6.47	4	↓	↓	
Bills registered (%)	66.60	68.24	↓	↓	
Population covered under Aadhaar (%)	100	100	↑	↑	

The Goal 2 targets to end all forms of malnutrition and hunger by 2030, enabling all people, specifically children, to consume adequate and nutritive

foods all year round. It includes equality in access to land, markets and technology, promoting sustainable agriculture and supporting smallholders. There exists an need of cooperation on international front to secure investment in innovative technology and technology to increase agricultural productivity. The sustainability goal also focuses on capacity building for climate change adaptive agriculture, doubling agricultural productivity and preserving the genetic diversity of species, plants and domestic animals. The recently published "EATLancet Commission Report" (2019) pointed out that current global food production itself is not sustainable because it is produced in an unsustainable way. Providing a healthy and balanced diet for a growing population is one of the key sustainability challenges for government agencies and policy makers around the world. The Himachal Pradesh state food subsidies 100 percent of beneficiaries were covered under the National Food Security Act 2013 in 2019-20 and 2020-21 (Table 3).

Table 3: State performance on indicators of SDG-2

State	Percentage of beneficiaries covered under National Food Security Act (NFSA),2013	Percentage of children under five years who are underweight	Percentage of children under five years who are stunted	Percentage of pregnant women aged 15-49 years who are anaemic	Percentage of adolescents aged 10-19 years who are anaemic	Rice and wheat produced annually per unit area (Kg/Ha)	Gross Value Added (constant prices) in agriculture per worker (in Lakhs/worker)	SDG 2 Index Score
H.P	100	22.6	28.4	50.4	16.2	1738.76	0.60	52

Source: SDG India Dashboard 2020-21

Another school of thought, must focus on the neglected wild underutilized traditional or orphan crops are of great nutritional, nutritive, industrial, ethnomedical and biocultural importance, such sustainable exploitation directly or indirectly conducive to sustainable development (Hunter et al. 2017; Harouna et al. 2019; Borelli et al., 2020). Sustainable use of wild or neglected plants directly or indirectly contributes to the achievement of several SDGs, including, Sustainable Development Goal -1, Sustainable Development Goal-2 and, Sustainable Development Goal -3 (Hunter et al.,

2017; Singh et al. 2018).The varied uses of multiple species is known to local framers and the scientific community, but the real potential of the majority of those types is unknown. Therefore, this kind of exploration, documentation and bio prospecting is essential for unique means to characterize its versatile merits and optimization of agricultural practices, including appropriate crop improvement programs, which are essential to unleash the true potential of human health and well-being is essential.

A remarkable point mentioned here is that sustainable development goals should not be separable beyond normal development plans. There is a dire need to have an effective control panel to amalgamate various budget programs with SDG indicators.

4. Limitations

There are many observed limitations in the methodology. Firstly, the updated data has not been used for the assessment. Secondly, the evaluation made according to reference data made on the basis of variable time period- like 2019, 2018 and in some cases to 2015 even. The uniformity in data made available by variable states and how to consider some weight to the old data, or need to utilise some adjustment factor used for comparison is not available. India's performance has improved from 60 in 2019 to 66 in 2020, as it excels nationally in terms of clean water and sanitation and clean energy. This is questionable in terms of the marking offered by Sustainable Development Solutions Network (SDSN) team or Niti Aayog.

5. Conclusion

The novel approach requires coordinated measures and integration towards a paradigm shift to achieve sustainable development prgamatically leading to a better joint future for all of us. The world is on a roving track to accomplish the targets of seventeen SDGs by 2030. The crucial need is to emphasise on economic development as it threatens the achievement of

associated social and environmental SDGs. The economy is a collection of broad and diverse economic activities, yet exists manifold individual economic activities in terms of SDGs, whether positive or negative. There is an inherent need to map the link between unique economic activities and patterns of sustainable development. The research in agriculture, industry and manufacturing activities primarily assesses the negative impacts of environmental development simultaneously contributing to socio-economic development. However, this will vary from region to region, taking into account the sustainable development capabilities and constraints of the region. Seeking solutions to improve the impact of sustainable development, the economic activities must be categorized into several distinct governance areas, such as public policy, business policy and innovation. The Public policy is the most demanded, followed by business policy. Such a combination of policies may be particularly necessary to mitigate the negative impact. Several SDGs have the potential to develop SDGs, especially regarding industrialization and infrastructure development, economic productivity, urbanization, transportation, power generation and distribution. However, inconsistencies with other SDGs, primarily related to the environment and health, inevitably occur and are not associated with commonly suspected economic activity.

The COVID-19 pandemic has affected the globalisation and the SDGs have taken a backstage. Thus, future research must recognize these inter linkages and trade-offs in the situation and more strongly address sustainable economic growth, keeping a special attention on the interrelationship between economic growth and the achievement of the SDGs.

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