



TAXATION: A CATALYST FOR INDIA'S ENVIRONMENTAL SUSTAINABILITY

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Abstract:

"Global Taxation for a Sustainable Earth: A Collaborative Duty of the People" investigates the inclusive role of individuals and businesses worldwide in shaping environmentally conscious tax policies. Emphasizing the shared responsibility of global citizens, this descriptive research study uses a deductive approach and quantitative methods with secondary data. The research addresses the critical problem of tax evasion by individuals and businesses, leading to inadequate funding allocation in environment-friendly sectors. The primary objective is to identify countries with widespread tax evasion and assess its impact on allocating funds to environmental practices. By examining global taxation dynamics, this research strives to provide insights into effective strategies for promoting responsible taxation. The study recognizes that when people and businesses genuinely contribute their taxes, and there is transparency in the allocation process, funds can be directed toward eco-friendly projects such as renewable energy, conservation efforts, etc. Ultimately, the research aims to contribute valuable knowledge for developing international frameworks that encourage responsible taxation practices and advance sustainability on a global scale.

Keywords: global taxation, tax evasion, sustainable earth, funding allocation, collaborative duty

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Introduction:

India's tax laws have put the country at a pivotal point in the global drive for sustainability. These regulations inhibit India's development in the global sustainability rankings because they are inefficient and lack coordination. The requirement for fiscal reforms is made clear by the tangled connection that exists between tax revenue and environmentally friendly behavior. Compliance with global sustainability objectives and the adoption of cutting-edge policies such as environmental tax laws are essential. By doing

this, India may become more globally competitive while also strengthening its environmental stewardship. India has the capability to lead the global sustainable nation league and create a more environmentally friendly future by skillfully negotiating this crossroads. The goal is to create a sustainable future for future generations, not only taxing the present and future. Ultimately, this study targets to equip policymakers with actionable insights to drive sustainable development and secure a resilient future for India and beyond.

Research Methodology: Research questions: This research addresses the problem: a) Lack of effective tax policies and practices hamper India's ability to improve

its ranking in global sustainability indices. b) Insufficient tax coordination leads to unfair distribution of funds in environmental practices. c) Losing

sustainability competitiveness globally.

Research objectives: The objectives of this research are – a) To study the influence of tax policies and practices on India's performance in global sustainability indices. b) To evaluate the competitiveness of India with the top sustainable countries. c) To analyse the relationship of tax revenue with sustainable practices.

Research hypothesis: The study makes the following hypothesis: Tax revenue % of GDP of India influences the environmental, sustainable, and global competitiveness practices affecting their overall sustainability scores.

Significance: This research plays a vital role by emphasizing how crucial tax laws are in determining how India performs with regard to global sustainability. It highlights how urgently strong fiscal reforms are needed to address problems like inefficient taxes and coordination. India may be with the international sustainability objectives like the G20 2030 Agenda by implementing measures like environmental tax regulations and ethical taxation policies. India's environmental stewardship and worldwide competitiveness are further enhanced by utilizing sustainable decarbonization and digital transformation. All things considered, this study furnishes policymakers with useful information to promote sustainable development and guarantee a resilient future for India and other countries.

Research Methodology: This research is a descriptive study based on quantitative methods with secondary data from official and reputable sources. Our research includes data of indices from 2018 to 2023, like the Sustainable Development Goal Index, Global Sustainability Competitiveness Index, and Environmental Performance Index. We also analyzed tax revenue data from 2018 to 2022 and forecasted it till 2030.

Limitations: The study depends on publicly available

secondary data, and not collected primary data. Furthermore, the availability and accuracy of data on tax revenue in various nations may limit the reach of this reach.

Review of Literature: The study 'Green Tax in India - Its Effectiveness and Challenges' concluded that more public participation and tougher regulations are required for green taxes to be successful in India. Currently, states' incomplete implementation is the reason for the poor pace. (Ajay, 2022) The study 'Enhancing Tax Revenues through Digital Transformation in Developing Asia' promotes tech-driven administration and thoughtfully crafted carbon taxes for sustainable development in India and developing Asia, emphasizing the role that environmental taxes play in reducing climate change. (Sirivunnabood, 2023).

Research on 'Ethical Taxation' reveals how fair taxes on multinational firms are parallel with Sustainable Development Goals, promoting human rights and poverty alleviation, emphasizing moral taxation's significance for global sustainability and fundamental rights. (University of St Andrews, 2023) The study on 'Tax policy as a catalyst for sustainable decarbonization' demonstrates how tax policies drive decarbonization through incentives, taxes, and regulations, integrating clean energy and reducing emissions for economic benefits in India. (Gupta, 2023). The study on 'Earth stewardship' advocates proactive management of Earth's systems for nature and human well-being to prioritize sustainable behaviors and fair resource allocation for future generations. (Chapin, Weber, & Bennett, 2022)

The study on '2030 Agenda' prioritizes sustainable growth and inclusivity, emphasizing fossil fuel subsidy reviews, clean energy promotion, and gender equality to achieve Sustainable Development Goals through international cooperation. (Elgar & Schlier, 2019) According to a study, "India's G20 agenda," it is

centered on enabling fair energy transitions for poor countries and addressing climate change, with a special emphasis on finance and technology. The launch of the LiFE project encourages environmentally friendly behaviors that are ingrained in Indian customs. (India, n.d.) The study "Sustainable Development Goals and Achievements of India" emphasizes data-driven policymaking, skill development, education, sanitation, poverty eradication, and India's dedication to the SDGs. India's development plan is largely carried out by its states and union territories. (Secretariat)

The Sustainable Development Goals (SDG) Index calculates how good countries are progressing toward reaching the SDGs set through the United Nations. India's SDG score is 63.45 (2022) and ranked 112 by SDGI official website. This index assesses the impact of tax laws on India's performance in terms of global sustainability. The research intends to discover potential for India's sustainable development goal through an examination of ethical taxes and sustainable tax systems. A state's environmental policies are measured with the help of Environmental Performance Index (EPI), which was started through the World Economic Forum. According to EPI Yale, India's score

for 2022 places it 180th with the score of 18.90 out of all countries. This index looks at tax revenue and environmental stewardship in India. The study intends to match India's tax practices with the environmental goals mentioned in the G20 2023 Agenda by examining the influences of sustainability on tax policies. The Global Sustainable Competitiveness Index (GSCI) uses 190 variables from international organizations like the UN, WB, and IMF to assess a nation's sustainability and competitiveness. According to Solability, India placed 121st in 2023 with an SGCI score of 40.2. This index evaluates India's competitiveness in relation to the leading sustainable countries. The research investigates ways to improve India's competitiveness while emphasizing sustainability by examining tax coordination and environmental tax laws. The GSCI, EPI, and SDG Index evaluate sustainability and development. India's rankings show the difficulties it has in achieving these objectives. Environmental and sustainable development projects require the funding of effective taxes (measured as a % of tax income to GDP). (Index, n.d.) (Sachs, Lafortune, & G., 2023) (Yale, 2023)

Data Analysis & Discussion: The following table showcases the comparison of India with the top-scored country in SDI and SCI with their growth % (base year 2018):

Source: Secondary data

Year	Sustainable Development Goal Index				Global Sustainability Competitiveness Index			
	Finland		India		Sweden		India	
	Score	% Growth (base 2018)	Score	% Growth (base 2018)	Score	% Growth (base 2018)	Score	% Growth (base 2018)
2018	85.57	100.00%	60.94	100.00%	61.30	100.00%	39.50	100.00%
2019	86.11	100.63%	62.19	102.05%	60.60	98.86%	39.50	100.00%
2020	86.40	100.97%	62.6	102.72%	62.10	101.31%	42.40	107.34%
2021	86.56	101.16%	62.78	103.02%	61.20	99.84%	40.90	103.54%
2022	86.76	101.39%	63.45	104.12%	60.67	98.97%	39.25	99.37%
2023	87.13	101.82%	64.08	105.14%	59.60	97.23%	40.20	101.77%
2024	87.41	102.15%	64.64	106.06%	60.91	99.36%	40.67	102.96%
2025	87.70	102.48%	65.20	106.99%	60.84	99.26%	40.76	103.19%
2026	87.98	102.81%	65.76	107.91%	60.78	99.15%	40.85	103.42%
2027	88.26	103.14%	66.32	108.83%	60.71	99.04%	40.94	103.65%
2028	88.54	103.48%	66.88	109.75%	60.65	98.93%	41.03	103.87%
2029	88.83	103.81%	67.44	110.67%	60.58	98.83%	41.12	104.10%
2030	89.11	104.14%	68.00	111.59%	60.51	98.72%	41.21	104.33%

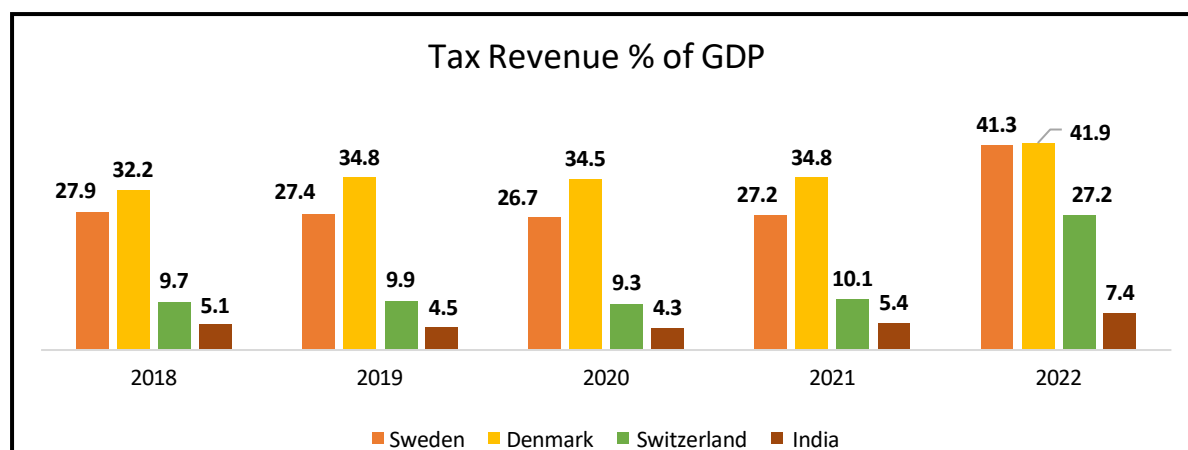
- Finland has the highest score of 86.76 on the SDG index, followed by India, which stands at 63.45 in 2022. India is projected to expand at a faster rate than Sweden; by 2030, Sweden is projected to score 89.11, while India is projected to score 68.00, indicating consistent growth for India.
- India's score is 39.25 in 2022, behind Sweden's top score of 60.67 on the Global Sustainability Competitiveness Index. In contrast to Sweden, which is predicted to grow at a negative pace by 2030, India is predicted to grow consistently, scoring 41.21 compared to Sweden's forecasted declining growth of 60.51.

The following analysis shows the growth of EPI score with respect to Tax revenue % of GDP growth with an assumption of a 1% increase each year from 2023:

Year		TR Growth (Assumed 1% increase each year from 2023)	EPI	EPI Forecasted
2018	A	5.07	30.57	30.57
2019	C	4.46	29.09	29.09
2020	T	4.27	27.60	27.60
2021	U	5.40	23.25	23.25
2022	A	7.40	18.90	18.90
2023	L	7.47	16.93	32.15
2024	F	7.62	15.16	32.79
2025	O	7.85	13.58	33.78
2026	R	8.16	12.16	35.13
2027	E	8.57	10.89	36.89
2028	C	9.08	9.76	39.10
2029	A	9.72	8.74	41.84
2030	S	10.50	7.83	45.18
	T	21.00		90.39

The above analysis predicts that Environmental Performance Index (EPI) will rise positively, assuming a 1% yearly growth in tax revenue. If India's tax revenue reaches the same level as Sweden's (21% of GDP) in 2022, it will achieve an EPI score of 90.39.

The following chart depicts the tax revenue % of GDP of Sweden, Denmark, Switzerland, and India from 2018 to 2022:



From the above graph, in 2022, Sweden (41.3%), Denmark (41.9%), and Switzerland (27.2%) have the highest tax revenue % of GDP as compared to India (7.4%). There exists consistently significant growth in the tax revenue % of GDP of Sweden (27.9%), Denmark (32.2%), and Switzerland (9.7%) whereas India is growing their tax revenue % of GDP at a slower pace (5.1%) from 2018.

The correlation matrix provided below represents the connection between indices: Environmental Performance Index (EPI), Sustainable Development Goal Index (SDG), and Global Sustainability Competitiveness Index (GSCI). The interpretation of the correlation is done below:

H₀: There is no significant relationship between Tax revenue % of GDP with EPI, SDG, and GSCI Indices.

H₁: There is a significant relationship between Tax revenue % of GDP with EPI, SDG, and GSCI Indices.

<i>Correlation Analysis</i>	<i>TR (% of GDP)</i>	<i>EPI</i>	<i>SDG</i>	<i>SCI</i>
Tax Revenue (% of GDP)	1			
Environmental Performance Index (EPI)	-0.979871476	1		
Sustainable Development Goal Index (SDG)	0.953661002	-0.99273428	1	
Global Sustainability Competitiveness Index (GSCI)	0.213827176	-0.37225448	0.435706282	1

Source: Secondary data

From the above analysis, we found that there is a significant relationship between Tax revenue % of GDP with EPI, SDG, and GSCI Indices. Therefore, we reject the null hypothesis. EPI exhibits a very high negative correlation with both SDG (-0.993) and Tax Revenue (% of GDP) (-0.979). SDG has a very highly positive correlation to Tax Revenue (% of GDP) (0.954), Furthermore, the connection between GSCI and Tax Revenue (percentage of GDP) is negligible (0.214).

Summary of Findings:

This research delivers complex relationships among tax laws, sustainability rankings, and the distribution of environmental funds in India. It draws attention to the pressing need for efficient tax coordination in order to support sustainability and competitiveness programs.

Ineffective tax policies hinder India's global sustainability ranking: The findings depict that India's tax laws and its reputation for sustainability around the world are closely related. India has economic potential if tax revenue rises, despite the country lagging behind top economies like Finland and Sweden. To support competitiveness and sustainability initiatives, however, quick policy changes are crucial, as seen by the slower growth in tax income. To advance toward a more sustainable future globally, India must close these gaps.

Inequitable Environmental Fund Allocation due to Poor Tax Coordination: Inadequate coordination of taxes worsens the gaps in funding for environmental projects, impeding India's efforts to achieve sustainability. Strong relationships between sustainability indices and tax revenue highlight the necessity of well-thought-out fiscal policies. India's slower rise in tax revenue than other developed countries emphasizes how urgently efficient coordination is needed to provide equitable funding for environmental projects.

Losing sustainability competitiveness globally: India's competitiveness in the global sustainable market is being weakened by inadequate tax coordination. Growth in tax revenue is required, as proved by the positive relationships found between sustainability

indices and taxes. Improving India's reputation requires matching tax laws with environmental objectives. Sustaining India's leadership requires it to close the tax income deficit with developed nations such as Sweden, Denmark, and Switzerland.

Suggestions:

Effective tax policies are critical in determining a country's competitiveness and environmental stewardship in the worldwide pursuit of sustainability. This study remarks on India's obstacles in this area and provides information to close the gaps.

Ineffective tax policies hinder India's global sustainability ranking: India has to reform its tax laws in order to generate more income and distribute funds more fairly, which will improve its standing in the global sustainability index. Working together, stakeholders may identify and execute meaningful reforms. India can boost its global competitiveness and get closer to sustainability by making the most of its economic potential.

Inequitable Environmental Fund Allocation due to Poor Tax Coordination: India needs to improve tax cooperation to address the issue of unequal funding for environmental initiatives. This means investing in transparent tracking systems and enhancing cooperation between tax authorities and environmental agencies. India may more efficiently distribute funding for environmental efforts and achieve its sustainability goals by fostering transparency and streamlining tax systems.

Losing sustainability competitiveness globally: India requires better tax coordination for equitable environmental money allocation in order to increase its competitiveness in sustainability. Increasing revenue growth and coordinating tax policy with environmental goals is crucial. Long-term leadership requires closing the tax income gap with sustainable leaders such as Sweden, Denmark, and Switzerland.

Conclusion:

In conclusion, the study highlights the noteworthy influence of tax legislation and protocols on India's standing in global sustainability indices. The need for substantial fiscal reforms in India is essential, as evidenced by the issues of failing coordination, declining competitiveness, and ineffective tax policies. Enacting environmental tax legislation, improving tax coordination systems, and elevating ethical taxation to the top of policy agendas are all necessary to address these concerns. Furthermore, strengthening India's environmental stewardship and competitiveness internationally requires harnessing efforts like digital transformation and sustainable decarbonization. India needs to work together to align with global sustainability frameworks like the G20 2030 Agenda and promote fair growth in order to meet its sustainability goals and guarantee a resilient future. India can address its financial shortfalls for sustainable programs and make a valuable contribution to global sustainability agendas by giving ethical taxation, tax coordination, and environmental tax policy a top priority.

Hence, it is concluded that taxation acts as a catalyst for India's environmental sustainability. It's time for all of us to join in this noble initiative to make our nation progressive and developed. It's everyone's responsibility to contribute positively in this nation-building mission. This would help to ensure a sustainable and prosperous future for future generations.

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