



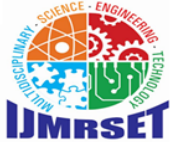
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Role of Direct Tax in Sustainable Development: A Pathway to Economic, Social, and Environment Stability

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ABSTRACT: Direct taxation is necessary for promoting sustainable development through the promotion of economic equity, social welfare, and environmental protection. Governments rely on direct taxes to raise revenue, reduce income inequality, and shape behaviour in line with the Sustainable Development Goals (SDGs).

Progressive taxation, where greater incomes are taxed at higher rates, is important in reducing wealth disparities and promoting fair distribution of resources. Not only does this promote economic equality, but it also generates stable revenue for essential public services like healthcare, education, and infrastructure, hence supporting long-term economic stability.

Socially, direct taxation finances crucial welfare projects such as pensions, unemployment benefits and subsidies that raise living standards and promote social inclusion. It also fosters ethical corporate behaviours; tax credits based on Corporate Social Responsibility (CSR) incentivize companies to practice good ethics, improve welfare for employees, and invest in society.

Environmentally, direct taxation supports sustainability by discouraging harmful industrial activity through carbon taxes and green fees. These taxes punish over-emissions while encouraging investment in clean energy, nudging industries toward cleaner strategies. Sweden and Germany are prime examples of how green tax strategies have brought about massive shifts in energy use and green accountability.

KEYWORDS: Direct Taxation, Sustainable Development, Economic Equity, Environmental Taxation, Fiscal Policy

I. INTRODUCTION

Taxation remains one of the strongest economic instruments that governments can utilize to fuel sustainable development. Direct taxation encompasses tax on income, tax on corporations, and property tax, which are crucial sources of revenue that cater to economic stability, social welfare, and environmental sustainability of a nation. As compared to indirect taxes, direct taxes are levied on individuals and companies according to their profits and incomes, resulting in a progressive and equitable tax system that enhances economic equality. A good direct taxation system helps governments attain sustainable development objectives while guaranteeing economic, social, and environmental problems. Direct taxation is crucial in maintaining economic stability by offering a consistent source of funds for governments.

This income funds vital public goods like infrastructure, healthcare, and education, which are necessary for sustainable economic development. An organized direct tax system minimizes wealth inequality by charging higher rates of taxation on the rich, providing an equitable redistribution of resources. Additionally, corporate tax policies have an impact on business investment choices, promoting prudent economic activities that are in line with sustainability goals. A progressive direct tax system also makes a big contribution to social welfare by making sure that richer people and companies pay a reasonable proportion of their income towards national development. The money raised from direct



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taxes is used to finance social welfare programs such as healthcare, education, pensions, and unemployment benefits. These programs reduce poverty, enhance living standards, and create an inclusive society. In addition, tax incentives to companies with CSR programs promote the involvement of the private sector in social development endeavours, adding to social equity. Direct taxation is also a potent instrument in fostering environmental sustainability. Governments globally employ certain tax measures, like carbon taxes and green levies, to discourage environmentally degrading activities and encourage sustainable activity. By charging industries with more carbon emissions more in taxes and granting tax relief to firms that invest in renewable energy and green technologies, fiscal policies push the economy towards a more sustainable one.

Countries that successfully applied environmental taxation saw declining levels of pollution and rising investments in clean energy technologies. In summary, direct taxation is an important tool for achieving sustainable development. Through making economically stable, encouraging social welfare, and fostering environmental sustainability, a sound tax system assists countries in fulfilling their long-term development objectives. To be effective, governments must continually update tax policies to respond to changing global issues while being fair, efficient, and compliant.

II. REVIEW OF LITERATURE

1. Piketty T. (2019)

Piketty's 2019 work continues his foundational work on inequality by connecting direct taxation with sustainability. Piketty insists on wealth taxes and increases marginal tax rates to reverse increasing income and wealth disparities, destabilizing social life and environmental development. The paper argues that in the absence of equitable taxation, democratic institutions are weakened, and environmental concerns become secondary to the elite's interests. Piketty suggests international cooperation in taxation policy to establish a just and sustainable world. His strategy promotes the application of taxation as a redistributive and investment instrument for sustainable societies.

2. Jayati Ghosh (2021)

In her 2021 study, noted economist Jayati Ghosh examines the structure of direct taxation policies to ensure sustainable and inclusive economic growth, particularly in developing economies. She contends that progressive taxation on income and corporations is necessary to stem structural inequalities and finance public goods like healthcare and education. Further, Ghosh proposes tax systems that integrate gender and environmental justice concerns as core elements of sustainability. Her study identifies the importance of constructing sustainable economies through efficient and equitable collection and allocation of taxes, especially in the post-COVID era, where fiscal strain is high and social welfare needs are high.

3. Kumar, S., & Sinha, D. (2022)

In their 2022 work, Kumar and Sinha examine the success of India's direct tax reforms in facilitating sustainable development. Through their examination, they identify the enhanced compliance and revenue collection resulting from the digitization, simplification, and rationalization of direct tax procedures. The authors also identify the importance of utilizing direct tax revenues in funding sustainable infrastructure, public health, and education. Through their research, they advocate for the incorporation of green taxation principles in direct tax law as a response to climate change. They conclude by noting that direct tax reforms are crucial in building economic resilience and social equity in India's development trajectory.

4. Sharma, P., & Sood, R. (2019).

In their 2019 paper, Sharma and Sood emphasize the Indian tax regime and the role of direct taxation in sustainable growth. They analyse the role of income tax reforms in funding government programs in the areas of education, poverty reduction, and infrastructure. The research concludes that progressive income tax assists in bridging income disparities and calming public welfare. The authors observe that deductions and exemptions under the tax code on environmental issues can significantly contribute to green investments. Their research advocates for policy reforms that bring direct tax instruments closer to the country's sustainable development goals.



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5. Zucman, G. (2019)

Zucman focuses on the question of global wealth inequality and claims that direct taxation schemes, such as wealth and inheritance taxes, play a crucial role in income redistribution and the financing of public goods. He denounces the existence of tax havens and offshoring banks for their ability to reduce the global tax base, thus obstructing efforts to fund sustainable development initiatives. The empirical evidence by Zucman shows that just and transparent direct tax rules are critical to building long-term development. His findings reveal the ecological significance of inequality, as high-net-worth individuals and firms generally have more carbon footprints, meaning that fair taxation may at the same time promote climate goals.

6. Bird, R.M. and Zolt, E.M. (2016)

Bird and Zolt analysed the potential of direct tax tools in developing countries as a tool to reduce inequality and promote sustainable development. They argue that, despite the issues of tax administration, direct taxes, especially progressive income tax, can be useful development tools. Their analysis includes countries in Latin America, Africa, and Asia, pointing out that indirect taxes are used most widely but are regressive in nature. The authors suggest reform in direct taxation systems to make the tax base wider and observance of compliance better, so that financing of sustainable infrastructure and social protection can be made possible. This view is in direct correlation with the economic and social aspects of sustainability.

7. Nordhaus (2019) also emphasizes the use of carbon taxes in combating climate change by deterring environmentally detrimental industrial processes and encouraging cleaner energy sources.

8. Dell'Anno, Lucia, and D'Agostino, Giovanni. (2021)

In their 2021 Dell'Anno and D'Agostino research, the authors consider the inter-linkage among taxation compliance, governance, and sustainability. In their view, direct taxation can be a cornerstone of sustainable development if it is integrated into governance systems with transparency and accountability. Through their empirical test across various countries, they conclude that governments have improved capacities to finance activities in sustainable development where taxpayers' morale and compliance are high. The researchers highlight reforms that should boost taxpayer trust and expand the tax base, especially by embracing the informal sectors. Their research considers the compatibility of social contract theory with the objectives of economic, social, and environmental sustainability.

9. Atkinson, A.B. & Piketty, T. (2017)

In this comprehensive study, Atkinson and Piketty analyse the impact of progressive taxation, especially direct taxes, on income inequality. They point out that the concentration of wealth remains a critical issue that must be resolved to enable sustainable economic development. His results support the view that direct taxes are essential for not only generating government funds, but also for redistributing wealth more equitably, thus increasing social cohesion. They illustrate how countries with higher social spending and direct tax rates have better social outcomes such as access to education and health care. This work highlights non-exclusionary development policies that along with the achievement of SDGs (Sustainable Development Goals) can be enabled through the direct tax system.

10. Unterhalter (2019) swore that SDG education goals were more representative in terms of representations, equality and quality throughout all stages of education. Physical infrastructure's function in promoting quality education, thereby achieving SGD 4, particularly in developing nations HEIs can't be over-stressed. Ferguson and Roofe (2020) postulated that HEIs need to help form and drive the SDG 4 agenda by taking part integrally. They established a framework for improving HEIs in delivering outcomes related to SDG 4. This has some challenges. The United Nations (2020) discovered that SDG 4 (quality education) was one of the leading SDGs impacted by COVID-19 pandemic. Most schools were shut, and online learning was less productive and inaccessible due to poor infrastructure, particularly in most developing nations. Aversano et al. (2022) confirmed that HEIs' influence in promoting CSR and sustainability causes has been manifest in a variety of political documents, including the UN Conference on Sustainable Development.

11. Michael Keen & Joel Slemrod (2017)

Keen and Slemrod's 2017 paper discusses the changing role of direct taxation in contemporary economies. Their work identifies how direct tax systems have played a critical role in bridging economic inequalities and funding



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development projects. The authors support progressive income taxes as instruments for redistributing wealth and public investment. Further, they emphasize the environmental potential of taxes through green taxation policies integrated within direct tax systems. By striking a balance between efficiency and equity, the paper places direct tax as a critical element in promoting the economic, social, and environmental pillars of sustainable development.

12. Per Kate and Milionis (2019),

Privately responsible innovative investment and advantageous governmental expenditure can stimulate growth in more advanced technologically developed economies but may further hinder growth in less developed ones. Innovation driven economies relaxing tax wedges may negatively link corporate tax rates and growth in imitative technology focused lagging economies (Kate and Milionis, 2019).

Objectives:

1. To analyse the effects of direct taxation on economic stability and growth.
2. To analyse the contribution of direct taxation to curbing income inequality and social justice.
3. To explore the effects of direct tax policies on environmental sustainability.
4. To evaluate corporate tax incentives and their impact on encouraging sustainable business practices.
5. To offer suggestions for maximizing direct taxation to enable sustainable development goals.

III. RESEARCH METHODOLOGY

Research Design: Types of research

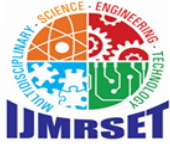
- Quantitative research approach is geared towards quantifying and testing data that is numerical in nature. The approach is suitable for reaching a high number of people within a short period. Surveys and questionnaire method to get data. Data Collection: To collect data on college students' Role of Direct Tax in Sustainable Development, we used a mix of methods

Online Survey: A link to a Google Form was shared with college students.

The survey was created to get their opinions, preferences, and attitudes regarding tax. We got more than 50 responses from students within the target population, giving us a rich data set directly from our target audience.

Demographic Distribution of Respondents

Demographic Factor	Categories	Student (%)	Employees (%)
Gender	Male	60	44
	Female	40	56
Income	Below ₹2.5 lakh	10	15
	₹2.5–5 lakh	30	35
	₹5–10 lakh	50	45
	Above ₹10 lakh	10	5
Education	Undergraduate	7	14
	Graduate	13	19



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	Postgraduate and above	80	67
Age	20–35 years	25	30
	36–50 years	50	45
	Above 50 years	25	25
Service Experience	Below 5 years	20	25
	5-10 years	30	35
	Above 10 years	50	40

IV. HYPOTHESIS TESTING

Chi-Square Test for Independence

Null H₀: There is no strong correlation between tax incentives and SDG efficiency perception.

Alternate H₁: There is a strong correlation between tax incentives and the perception of SDG efficiency.

Contingency Table:

Tax Incentives for Sustainability	Direct Tax Used Efficiently	Direct Tax not Used Efficiently	Neutral	Total
Yes	2	2	3	5
No	11	12	20	43
Total	13	14	23	50

A-Column Total = Economic, Social, Environmental

B-Row Total = Revenue Generated, Redistribution Achieved, Public Welfare Spent

Then we have used Chi-Square Formula to determine the outcome,

To explore whether people's views on tax incentives for sustainability are connected to how efficiently they think direct taxes are used, we ran a Chi-Square test using the data in the table.

We started by figuring out what the distribution of responses *should* look like if there were no real connection between tax incentives and perceptions of tax efficiency. Think of this as asking, "If one thing didn't affect the other, how would we expect people to respond just by chance?"

We then compared those expected numbers to the actual ones in the table. If the actual values were very different from the expected ones, that might suggest a relationship. But if they're pretty close, it could mean any differences are just due to randomness.

In this case, the Chi-Square value we got was 5.65, and the associated p-value was 0.059.

The p-value tells us how likely it is that these results could have happened just by random chance. A value below 0.05 usually means there's something meaningful going on.

Here, the p-value is slightly above 0.05, which means we can't confidently say there's a statistically significant relationship between the use of tax incentives and how efficiently direct taxes are perceived to be used.



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Interpretation:

Although the results show a hint of a possible connection, the evidence isn't strong enough to draw solid conclusions. It's a bit like seeing a pattern but not being quite sure if it's real or just a coincidence. So, while it's interesting and worth looking into, we'd need more data or a larger sample to say for sure whether there's a real link between tax incentives and sustainable development outcomes.

V. FINDINGS AND DISCUSSION

The Chi-Square test produced a Chi-Square value of 5.65 and a p-value of 0.059, which is just slightly above the commonly used threshold of 0.05, it means we cannot confidently claim a statistically significant relationship. This suggests that while there appears to be some potential association between the use of tax incentives for sustainability and how people perceive the efficiency of direct taxation, the result isn't strong enough to rule out random chance.

The results show that direct taxes play an important role in economic redistribution, which lessens wealth inequalities and increases social welfare. Progressive taxation ensures that higher-income groups pay proportionally more, enabling higher public expenditure on sustainable projects. In addition, tax incentives for green investments and renewable energy projects by companies have been effective in promoting environmentally friendly business practices.

Green taxation, through carbon taxes and green incentives for environmentally friendly projects, has played a crucial role in encouraging environmentally friendly business models. Governments across the globe have enforced policies that incentivize firms that are undertaking sustainable development initiatives, including tax refunds for investments in renewable energy and energy-efficient systems. Examples of Nordic nations and the European Union show how successful green taxation has been in cutting carbon emissions while stimulating economic development.

Despite these benefits, weaknesses like tax evasion, ineffective taxation administration, and policy incoherence undermine the efficacy of direct taxation in sustaining development objectives. Multinational companies frequently take advantage of loopholes in tax laws and decrease government revenues that can finance sustainable development initiatives. In response to such weaknesses, governments need to improve enforcement mechanisms, increase transparency, and harmonize taxation policies with sustainable development targets. Adopting electronic taxation techniques and global tax cooperation models can assist in preventing tax evasion and enhancing tax collection.

Policy Recommendations:

- **Improving Tax Compliance:** Strengthening regulatory mechanisms and enforcement procedures to discourage tax evasion and promote compliance
- **Green Taxation Promotion:** Widening carbon taxes and offering tax breaks for investment in renewable energy and sustainable sectors.
- **Progressive Tax Reforms:** Refining tax bands to make high-income individuals pay proportionally more into public coffers, narrowing economic inequality.
- **International Cooperation:** Creating global tax policies to limit multinational tax evasion and aligning fiscal policies with international sustainability norms.
- **Technology Integration:** Using digital tax administration systems to enhance efficiency, transparency, and compliance oversight.

VI. CONCLUSION

Direct taxation is a fundamental tool in achieving sustainable development through economic fairness, social justice, and environmental sustainability. Through the imposition of progressive tax policies and the enforcement of tax compliance, governments can achieve maximum tax collections for investment in sustainable activities. Future tax reforms should focus on enhancing efficiency, reducing tax evasion, and integrating environmental issues into tax systems for wide and sustained sustainability. Moreover, global cooperation and the application of international tax standards can be crucial in making sure that tax policies serve the general sustainability agenda.

The demographic distribution of the respondents amplifies the strength of these insights. With a high concentration of postgraduates (80% students, 67% employees), middle to upper- middle income groups, and seasoned professionals



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(50% students and 40% employees with over 10 years of service), the feedback stems from a well-informed and experienced sample. This enhances the reliability of the observations and supports the call for nuanced, evidence-based tax reforms that address economic, social, and environmental priorities collectively.

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