
How Tax Policy Shapes Climate Resilience in Developing Countries –

A path to fairer solutions

In the face of mounting climate challenges, developing countries are grappling with the dual burdens of environmental degradation and economic inequality. As extreme weather conditions, rising temperatures, and other climate-related impacts become more frequent and severe, these nations find themselves at a crossroads where the role of tax policy is more critical than ever. The question is not just how to fund climate resilience efforts, but how to do so in a way that doesn't disproportionately burden the most vulnerable populations.

Tax policy has long been recognized as a powerful tool for shaping economic and social outcomes. However, in many developing countries, these policies are often regressive, meaning that the tax burden falls disproportionately on low-income individuals. This issue becomes even more pronounced when environmental taxes, such as carbon taxes, are introduced without sufficient safeguards. While these taxes are designed to reduce greenhouse gas emissions, they can inadvertently increase the cost of living for those who are already struggling, pushing them deeper into poverty.

Consider the example of energy taxes. In many developing countries, energy consumption is a significant expense for low-income households. When taxes are levied on fuel or electricity as part of a climate strategy, these households feel the impact most acutely. A study underscores the importance of designing environmental taxes with a clear understanding of the socio-economic realities in these regions. Without careful consideration, such policies risk exacerbating existing inequalities rather than addressing the root causes of environmental degradation¹.

In Africa, countries like Nigeria and Kenya have experimented with environmental taxes, particularly on fuel, to curb carbon emissions. However, these taxes have often been met with public resistance due to their regressive nature. In Nigeria, for instance, the introduction of a fuel tax in 2012 led to widespread protests, as the tax disproportionately affected the poor, who rely heavily on fuel for transportation and cooking². The Nigerian government eventually had to roll back the tax, illustrating the challenges of implementing environmental taxes in contexts where large segments of the population live below the poverty line.

¹ Asen, E. (2021). Environmental Tax Policy in developing countries: A review of the literature. *Journal of Environmental Economics and Management*. <https://www.jstor.org/stable/10.1086/701835>

² Adelabu, N. S. (2012). The political economy of fuel subsidy removal in Nigeria. *The Journal of African Development*, 14(1), 37-57

Similarly, in Latin America, countries such as Mexico and Chile have introduced carbon taxes as part of their climate policies. While these measures are crucial for reducing emissions, they have also raised concerns about their impact on low-income households. In Mexico, the carbon tax introduced in 2014 was designed to target large polluters, but its indirect effects on the cost of electricity and fuel were felt by all consumers, particularly those with lower incomes³. The Mexican government has attempted to mitigate these impacts through targeted subsidies and social programs, but the challenge of balancing environmental goals with social equity remains.

The challenge is further complicated by the narrow tax base in many developing countries. Due to administrative challenges and widespread tax evasion, the burden of taxation often falls on a small portion of the population, typically the middle class and small businesses. Meanwhile, wealthier individuals and large corporations often find ways to avoid paying their fair share. This not only perpetuates inequality but also limits the government's ability to raise the revenue needed to combat climate change.

In South Asia, India provides a notable example of how tax policy can be leveraged to address climate change while attempting to minimize the burden on vulnerable populations. The Indian government has implemented a variety of environmental taxes, including a coal tax and excise duties on petroleum products. These taxes are part of India's broader strategy to transition to a low-carbon economy. However, recognizing the potential regressive impacts, the government has also introduced measures such as targeted cash transfers to low-income households to offset the increased costs of energy⁴. This approach aims to balance the need for climate action with the imperative of protecting the most vulnerable segments of the population.

The impact of climate change on tax revenues is another critical issue that cannot be ignored. Extreme weather events and environmental degradation disrupt economic activities, reducing taxable income and consumption levels. This decline in revenue further constrains the government's ability to invest in climate adaptation and mitigation measures, creating a vicious cycle of vulnerability. A report highlights how countries in Sub-Saharan Africa, heavily dependent on agriculture, have seen a decline in tax revenues due to the adverse effects of climate change on crop yields and livestock⁵.

In Kenya, the agricultural sector, which is a major source of tax revenue, has been severely affected by climate change. Erratic rainfall and prolonged droughts have led to significant drops in agricultural output, reducing the tax base and limiting the government's ability to finance public services and climate adaptation projects⁶. This situation underscores the interconnectedness of tax

³Cramton, P., MacKay, D. J., Ockenfels, A., & Stoft, S. (2017). *Global carbon pricing: The path to climate cooperation*. MIT Press.

⁴Kumar, R., & Viswanathan, B. (2019). Carbon taxes and their impact on the poor: A case study from India. *Energy Policy*, 132, 665-676.

⁵ Overseas Development Institute (ODI). (2018). *Climate change and its impact on tax revenues in Sub-Saharan Africa*. ODI Report. Retrieved from <https://www.odi.org/publications/11050>

⁶ Kogo, B. K., Kumar, L., & Koech, R. (2021). *Climate change and variability in Kenya: A review of impacts on agriculture and food security*. *Environment, Development and Sustainability*, 23(1), 23-43.

policy, economic resilience, and climate change, particularly in regions where agriculture plays a central role in the economy.

Given these challenges, it's clear that a new approach to tax policy is needed—one that not only raises the necessary funds for climate action but also distributes the tax burden more equitably. Progressive tax systems offer a potential solution. By ensuring that higher income groups and large corporations contribute a fair share of taxes, governments can reduce the pressure on low-income populations. This could involve higher taxes on luxury goods, financial transactions, and property, while reducing taxes on necessities like food and energy.

In addition to progressive taxation, targeted subsidies or direct cash transfers can help offset the impact of environmental taxes on vulnerable populations. This approach has been successfully implemented in some regions, providing a model for other developing countries to follow. For example, in South Africa, the government has implemented a social grant system that provides direct financial support to low-income families. This system has been critical in cushioning the impact of recent fuel and energy tax increases, helping to maintain social stability while pursuing environmental goals⁷.

International cooperation is also crucial in addressing the broader systemic issues that exacerbate tax burdens in developing countries. Tax evasion and avoidance by multinational corporations deprive these countries of much-needed revenue. Strengthening global frameworks, such as the OECD's Base Erosion and Profit Shifting (BEPS) initiative, can help ensure that corporations pay taxes where economic activities occur, providing developing countries with a more sustainable revenue base.

Advocacy groups and civil society organizations have a vital role to play in pushing for these changes. By raising awareness and mobilizing public support, they can influence policymakers to adopt more equitable tax policies and hold governments accountable for their implementation. Organizations like the Tax Justice Network and Oxfam have been at the forefront of these efforts, highlighting the link between tax policy, inequality, and climate change.

As developing countries confront the growing threat of climate change, tax policy must be leveraged as a tool for building resilience. However, it must be done in a way that prioritizes equity and social justice. By adopting progressive taxation, implementing targeted subsidies, and strengthening international cooperation, we can ensure that the tax burden does not exacerbate poverty and inequality but instead contributes to a more sustainable and resilient future for all.

In the development sector, where resources are often scarce and the challenges are immense, these changes in tax policy are not just necessary—they are urgent. The path to climate resilience is complex, but with the right policies in place, it is a journey that can be made fairer for everyone involved.

⁷ Fourie, F., & Kemp, A. (2019). The impact of fuel and energy taxes on the poor: Evidence from South Africa. *Energy Policy*, 129, 1024-1032.

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