

Solidarity levy on premium class air travel: an impact analysis on tourism in selected SIDS and LDC economies

Preliminary results from forthcoming research paper

Authors: Professor Mizan Khan¹, Ayesha Noor² and Ekhtekharul Islam³

Affiliations: ¹LDC Universities Consortium on Climate Change (LUCCC), ²Institute of Governance, BRAC, ³Independent University, Bangladesh.

This paper outlines preliminary findings from a forthcoming study performing an impact analysis on tourism in selected SIDS and LDC economies. The full paper will be presented at the end of COP30.

1. Introduction

This study assesses the potential of a solidarity levy on premium air travel as an equitable and predictable source of climate finance, in particular for Small Island Developing States (SIDS) and Least Developed Countries (LDCs). An analysis covering ten climate-vulnerable countries reveals that a levy on first- and business-class passengers can generate significant and stable revenues for adaptation finance without significantly affecting demand. Comparative analysis highlights the levy's advantages, offering high predictability, strong equity design, and political feasibility with very limited market distortion.

2. Preliminary results

Revenue generation estimates

Assuming levy rates of USD 60 for short-haul flights and USD 90 for long-haul flights on business and first-class tickets, estimated revenues from solidarity levies on premium air travel could substantially narrow adaptation finance gaps in the ten countries analyzed:

Country	Estimated Annual Revenue (USD million)	% of Total Adaptation Financing Need	Total Adaptation Requirement (USD million)
Antigua & Barbuda	26.19	71.18 %	36.9
Fiji	56.86	16.24 %	5 985

Mauritius	229.83	51.30 %	448
Barbados	140.48	448.8 %	140
Kenya	304.43	55.15 %	4 496
Senegal	85.26	6.27 %	1 360
Sierra Leone	19.60	14.21 %	138
Mozambique	2 678.10	8.71 %	30 750
Zambia	70.63	1.41 %	5 000
Colombia	708.84	157.52 %	700

Impacts

- The elasticity analysis shows that adding the levy increases average fares on premium tickets by about 2–8% and only slightly reduces passenger demand. In most countries (e.g., Colombia, Kenya, Mozambique, Zambia), demand falls by less than 3%, while more tourism-dependent, short-haul markets experience somewhat larger declines, around 4–5% in Antigua and Barbuda and about 3% in Barbados. Overall, the levy contributes mainly as a revenue instrument rather than a measure that significantly reduces air travel, especially because economy-class tickets are largely unaffected.
- The study also assesses the Solidarity Levy's potential to offset tourism and economy-wide climate losses. In Fiji, Mozambique, Mauritius, Senegal, and Colombia, revenues from the levy would cover over 100% of tourism-related climate losses, not only compensating for losses but also providing surplus revenues for adaptation efforts. Fiji achieves the highest efficiency, covering more than 250% of losses, followed by Mozambique (≈270%), Senegal (≈215%), and Mauritius (≈200%).

3. Preliminary conclusions

- Current international adaptation finance flows to developing countries stood at just USD 26 billion in 2023, which is barely one-tenth of estimated needs. This gap is particularly acute for SIDS and LDCs. Given slow disbursement cycles and declining donor commitments to traditional mechanisms for adaptation finance, solidarity levies provide an actionable and complementary tool to help close the widening adaptation finance gap faced by these countries.
- Coverage of annual adaptation requirements varies widely, from 0.09% in Mozambique to over 400% in Barbados, indicating strong differentiation based on national economic

size and travel volumes. High-performing countries such as Barbados, Mauritius, and Antigua and Barbuda show coverage ratios exceeding 50%, while larger economies like Kenya, Zambia, and Mozambique display smaller relative gains but meaningful complementary potential.

- Overall, the Solidarity Levy on premium travel proves to be a highly effective adaptation financing tool, especially in small island and coastal economies with strong tourism sectors.