Assessing The Regional Impacts of Tourism Expansion In Canada: An Interprovincial Input-Output Approach

Topic: Input-Output Analysis: Regional policies (2)
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Background
Tourism services are a key catalyst for economic growth and social wellbeing, generating jobs, income and improved quality of life. In Canada, the sector contributes about 2% to GDP and 3% to Employment. Its importance was pronounced during the COVID-19 pandemic, which triggered sectoral stagnation and renewed policy focus. Provinces differ in resilience to external shocks due to distinct economic and ecological endowments, creating both opportunities and interdependencies in tourism development. Recent estimates indicate tourism spending exceeded its pre-COVID 2019 peak by 3.3% in 2024, supporting one in ten workers in the Canadian workforce. As the pandemic receded, new challenges emerged in the form of rising accommodation and travel costs, food inflation and the ongoing geopolitical tensions between Canada-USA resulting from â€˜trade wars.â€™
Recently, the Government of Canada announced the â€˜Federal Tourism Growth Strategy 2030â€™ with the aim of i) Increasing tourism GDP contribution by 40%, and ii) Tourism jobs by 85,900. Different provinces will contribute towards the national target, given their capacity of tourist attractiveness. However rapid and poorly regulated tourism growth can intensify energy use and GHG emissions burden, which is detrimental to Canadaâ€™s Net-zero 2050 ambitions.
Research question
i) To investigate the economy-wide, inter-sectoral and inter-provincial impacts of 2030 tourism industry expansion in Canada by developing the unique Inter-Provincial Input Output (IPIO) model.
ii) To estimate and map the total Energy demand and GHG burden across upstream and downstream sectors attributed to the provincial tourism industry supply chain.
Methodology and Data sources
The latest provincial and territorial Supply and Use Tables 2022 published by Statistics Canada will be used to develop the unique IPIO model. The model will integrate five regions â€“ Ontario, Alberta, Quebec and British Columbia which account for 87.9%, 88.7% and 86.7% of national Tourism Demand, GDP and Employment, respectively, while aggregating the remaining six provinces and three territories into one region. Using the Provincial and Territorial Tourism Satellite Accounts (PTTSA) from Statistics Canada, province-wise tourism expenditure is mapped with an IPIO framework. The analysis estimates tourismâ€™s inter-sectoral and inter-provincial impacts on GDP, Output, Employment, Trade and Labour Income, the GHG and energy footprint from tourist activities across Canada, identifying upstream and downstream burdens to inform policies that maximize economic benefits while simultaneously minimizing its environmental impact on the economy.
Novelty of research
â€¢ Canada is one of the few countries in the world which publishes the comprehensive Tourist Satellite Accounts to measure the direct tourism contribution to the economy. To the best of authorsâ€™ knowledge, this is a first systematic attempt of its kind to integrate Canadaâ€™s PTTSAs with the IPIO framework to investigate the economic, energy and environmental impact of tourism sector at the provincial level.
â€¢ The varied impact of Domestic and International Tourist expenditure patterns in different provinces is also captured to estimate their contributions to the 2030 targets.
â€¢ The importance of ensuring sustainability in tourist activities is assessed by measuring the impact of introducing a â€˜Sustainability feeâ€™ on â€˜Recreational and Entertainment servicesâ€™ which is recycled by investing in waste management activities.

Preliminary findings

In 2022, Ontario accounted for the highest share of national Total Output (38.7%), GDP (38.4%) and Employment (37%) to meet tourism demand. Across all four provinces, the top five sectors accounted for 50% of total output: Accommodation services, Passenger air transport, Amusement, recreation & gambling and Groceries. Ontario received the highest interprovincial imports worth CA$5.2 billion to meet its domestic demand. Simultaneously Ontario was also the largest exporter to British Columbia, Alberta and Quebec, accounting for 42.2%, 36.6% and 58.5% of their respective total imports. At the current rate of 6.1% year-on-year growth in tourist expenditure, Canada is on track to achieve the CA$61 billion target by 2030 (Equivalent to 40% increase in tourist contribution to national GDP). However, at the given consumption levels, the direct and indirect energy consumption and GHG emissions between 2022-2030 is also expected to grow by 298,704 Terajoules and 21.9 million Tonnes, respectively at the national level. A 10% â€˜Sustainability feeâ€™ on â€˜Recreational and Entertainment servicesâ€™ is piloted at the provincial level, generating a cumulative CA$6.1 million of incremental tax revenue. The accumulated tax revenue is reinvested in the Waste management, remediation, and support services that generates further CA$9 millions of Total Output in the economy.