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### Research Report Can the tourism industry contribute to international adaptation finance?

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Biefing Paper 2/2015

# Can the Tourism Industry Contribute to International Adaptation Finance?

#### Summary

At the UN climate negotiations, developed countries pledged to mobilise US\$ 100 billion of climate finance per year from 2020 onwards to support developing countries in dealing with climate change. Since this money is supposed to come from private sources too - some of which is to be spent on climate change adaptation - this briefing paper explores the potential of the international tourism industry to contribute to adaptation finance, with a focus on Small Island Development States (SIDS). The SIDS is a group of low-lying coastal countries that are particularly susceptible to natural disasters and climate change impacts. Tourism is the main economic sector for most of them. Given the sector's vulnerability to climate change (e.g. rising sea levels or extreme weather events), high levels of investment in adaptation will be needed to maintain the high number of visitors.

A diverse landscape of modalities for funding adaptation through the tourism sector is available, with corresponding limitations and challenges in their implementation. The tourism sector represents a diverse array of businesses. The adaptive capacities of these businesses, their operational scales and customer demands are key determining factors behind the potential to contribute to, or finance, adaptation.

Different options are available on various scales. For example, on a local scale, hotels and resorts can contribute

to adaptation by investing in sea walls, or in water- and energy-efficiency measures. Governments can endorse this through, for instance, building codes and policies for sustainable water and energy use.

On a sub-national or national scale, adaptation funds (i.e. financed by public and private sources) or adaptation taxes could be suitable instruments for involving a range of private actors operating in tourism and generating financial resources. Insurance schemes could help to share in and deal with risks.

Tourism enterprises can contribute to and invest in adaptation in SIDS. Regardless of whether such investments would count as part of the US\$ 100 billion, we recommend governments in SIDS to endorse this. However, in developing such mechanisms to mobilise private financial contributions, it must be considered that tourists and multinational tourism corporations have the highest adaptive capacities. They can simply change destinations if climate impacts are too extreme or if the costs of adaptation make a destination relatively more expensive. The price sensitivities of the industry thus need to be factored in, and taxes or levies should theoretically be applied as uniformly as possible across tourist destinations in different countries in order to prevent travellers from substituting more expensive destinations (where adaptation taxes are adopted) for cheaper ones.

#### Introduction

At the UN climate negotiations, developed countries pledged to mobilise US\$ 100 billion per year from 2020 onwards to support developing countries with mitigation and adaptation to climate change. SIDS and other "most vulnerable" countries were prioritised to receive this funding, which is also supposed to come from private sources. SIDS are defined by those same negotiations as "51 small island developing states that [...] share similar economic and sustainable development challenges including low availability of resources, a small but rapidly growing population, remoteness, susceptibility to natural disasters, excessive dependence on international trade and vulnerability to global developments". In many SIDS, the tourism industry generates a major share of the gross domestic product (e.g. 47.8 per cent in the Maldives, and even 72 per cent in Anguilla) and is considered to be a key development option, since the export sector faces significant constraints such as high transport costs and marketentry barriers (United Nations World Tourism Organization [UNWTO], 2012). However, tourism markets are particularly vulnerable to external shocks, such as the conditions for demand in the developed economies, perceptions of political unrest and violence, or climate change impacts, such as natural disasters. SIDS are likely to be disproportionately affected by climate change impacts, such as sea level rise and an increase in the frequency and intensity of extreme weather events. The impacts of one-time events on visitor numbers can be short-lived, but structural changes can significantly alter the functionality of a destination as a whole. Adaptation to and recovery from these impacts will put a significant financial burden on governments.

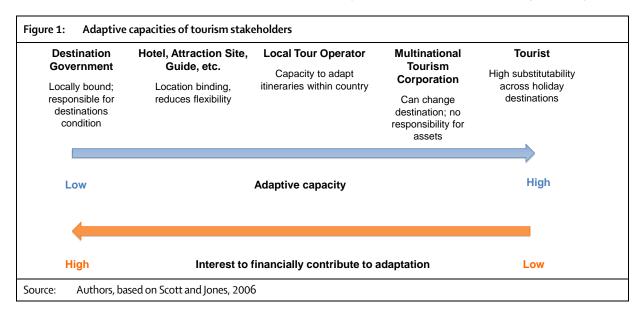
Finally, tourism itself is making a significant and growing contribution to global greenhouse gas emissions, particularly through aviation. All in all, the tourism industry is "a natural candidate" to get involved in adaptation in SIDS. Investments from tourism enterprises of industrialised countries could theoretically even constitute international climate finance. Due to the dependency on destination attributes such as the natural attraction or safety of locations, the sector has a vested interest in adapting to changes in climate that might otherwise disrupt revenues. Conversely, equity issues such as distributional patterns of tourism benefits generated in SIDS, such as leakage rates, should also be considered.

A leakage rate describes the money that should be subtracted from tourist expenditures through repatriated profits, wages paid outside the region, and imported goods and services by tourism enterprises. Theoretically, the local benefits of tourism could be neutralised or turn negative for some destinations if the leakage rate is high and the growing burden of adaptation costs are not shared.

In this context, this briefing paper addresses the role that the international tourism sector can play in adaptation and the financing of adaptation in SIDS by analysing several instruments to initiate private engagement in adaptation. The paper is based on a comprehensive literature review and nine expert interviews.

#### Interest of tourism in adaptation

Interest from the tourism industry to engage in adaptation is fundamental for the successful implementation of adaptation measures. Therefore, it is crucial to understand the differences between actors in the tourism industry. Based on the findings of Scott and Jones (2006), we further analysed varying adaptive capacities and the expected levels of interest by tourism stakeholders in adaptation (see Figure 1). The Intergovernmental Panel on Climate Change (IPCC) defines "adaptive capacity" as the "ability [...] to adjust to potential damage, to take advantage of opportunities, or to respond to consequences". Of the different stakeholders involved in the tourism sector, tourists have the highest capacity to adapt, for example to climate extremes, by simply going on holiday somewhere else or at a different time, or by choosing a different type of holiday. Multinational tourism corporations (MNTCs) can also change their operations



to another destination, but it comes with higher transaction costs. Local tour operators and tourism-related enterprises such as hotels, attractions and guides have lower adaptive capacities – although it significantly differs depending on the company size, its location and its specialisation. They have to adapt *in situ* and hence are more exposed. Local governments and public authorities face similar constraints.

Apart from these differing adaptive capacities and interests, tourism enterprises are confronted with a range of uncertainties and investment risks that need to be taken into account. Uncertainties related to climate change impacts and destination-specific factors, such as legal insecurity, political instability and corruption, are considered major barriers to private investments in adaptation, in particular if these have a low returns on investment. SIDS face particularly high risks from external and internal shocks compared to larger countries. The size of the islands limits the ability to diversify the risk among economic sectors or regions, and as they are low-lying, they are particularly affected by sea level rise. Another uncertainty affecting investment patterns of tourism enterprises is the international development of tourism flows.

#### Adaptation measures and instruments

In the context of these motivational factors and uncertainties, instruments that offer rewards for the investor in a shorter time frame, such as water- and energy-use efficiency measures, can be considered more likely to be implemented than more complex and long-term instruments, such as regional funds or adaptation taxes.

It is estimated that climate change will impact the fresh water supply for tourism in all major SIDS regions, including through saltwater intrusion caused by sea level rise. SIDS such as Fiji, Tonga and the Bahamas already import fresh water with tanker ships. Excessive water consumption by tourism enterprises further exacerbates the challenge of fresh water supply. Proactive water management by the tourism sector could thus contribute to adaptation. However, expert interviews showed that hotel owners in some places do not value water, as they are pumping it for free, and that the only way to gain the attention of the management is to argue that pumping water uses energy, which creates costs. Therefore, framing environmental problems through the costs for water and energy is key to generating initial attention, through which further action can be elaborated.

Solid infrastructures such as small seawalls in front of hotels are another common investment by tourism enterprises to adapt to the consequences of a rising sea level. Here, too, risks and costs are key variables.

Given the uncertainties and a common lack of awareness, governments and donor agencies can help to create a suitable framework for action through policies, programmes, training and guidelines.

Tourism enterprises are also likely to invest in risk-sharing and transfer mechanisms, including insurances. They can play a key role for tourism firms by reducing risks from extreme weather and enabling investments in locations where negative impacts cannot be fully prevented. However, the United Nations Framework Convention on Climate Change (UNFCCC) estimated that for countries which are highly exposed to slow-onset climatic processes, such as loss of land due to sea level rise, traditional risktransfer approaches could be unsuitable because two main preconditions for traditional insurance schemes to work are not given: [i] the unpredictability of a specific event, and [ii] the ability to spread risk over time and regions between individuals or entities. The Munich Climate Innovative Insurance, among others, works on alternative insurance schemes that allow weather-index-based (and therefore less bureaucratic) payouts immediately after disasters. This can be particularly helpful in a developing-country context, in which damage investigations take up resources, and their reliability or truthfulness can be questionable. The indexbased schemes could help to reduce such costs significantly. However, in order to make such innovative insurance schemes functional and independent of third-party finance, it will be important to spread risks over longer time periods and across larger regions, such as the Pacific or Caribbean; and to sell a large number of insurance policies.

In conclusion, risk-transfer mechanisms can play an integral part in managing the increasing risks generated by climate change. However, innovative insurance solutions are needed to create cost-efficient insurance products, particularly for SIDS that are exposed to slow-onset hazards. It seems that regional insurance cover schemes could be the most suitable to spread the risk, keep costs low and trace investments.

#### Leveraging adaptation finance from tourism

Apart from these more practical investments in adaptation by the private sector, there are possible instruments to leverage adaptation finance and share the investment burden among stakeholders.

Public private partnerships (PPPs), for example, can be a way to leverage private investments in adaptation. A PPP could, for instance, realise the construction of large-scale sea walls or mangrove plantations to increase resilience against storm surges and sea level rise. The main incentives for initiating PPPs can be mutually beneficial outcomes for public and private stakeholders that combine specific qualities such as know-how to create better results by using the private sector's capacity to innovate, as well as the mobilization of additional funding. In particular for SIDS, which often have limited public budgets, this can be an important motivation to realise integral projects. PPPs could also build trust among tourism enterprises with high adaptive capacities (i.e. those with options to change destination) concerning potential long-term profitability of destinations. International donor organisations could act as "neutral" partners and increase the levels of transparency and trust.

Another, more innovative instrument to foster finance from private and non-private sources can be funds that pool resources for investments into adaptation measures, projects or programmes. Contributions to funds could be made possible on a voluntary or compulsory basis and funds could be set up on all levels: global, regional, national and local. Interviews with sector representatives reveal that involving the tourism industry in financing a regional or global fund would be complex. It would require an international organisation with considerable resources and capacities, as well as political support. However, it would be interesting to conduct further research on how to involve the tourism industry in global adaptation funding. Lessons could be learnt, for example, from ongoing discussions about international air passenger levies for adaptation. Another issue is the ownership of countries or local tourism organisations in this system. Albeit complex, the finance raised from MNTCs could contribute to the US\$ 100 billion target.

Local and national funds are easier to establish and could be initiated, sourced and managed by governments, independent institutions or the tourism sector itself. The money could be raised through a tourism tax (e.g. on transport or hotel stays), integrated into tourist visas or collected through voluntary contributions from tourism organisations. This money could be used to finance adaptation measures that increase resilience of the tourism sector, such as improving or rebuilding infrastructures in a climate-resilient manner. The main advantage of funds, in comparison to adaptation taxes and levies, lies in the possibility of innovative management structures and the assignability of finance. The industry could be represented on the managing board of such a fund, and funds could represent a joint commitment comprised of various parties, thus increasing the awareness and involvement of stakeholders.

A challenge to both local/national and regional/global funds is acceptance by tourism enterprises. During interviews, industry representatives stated that they see climateproofing of public infrastructure, such as bay-walks, primarily as a (local) government responsibility. Also at issue would be the payouts of such funds towards improving private infrastructure, as selection processes would most likely lead to conflicts, and the willingness to pay is probably higher among local tourism enterprises than MNTCs. This means voluntary funds are likely to be ineffective in generating resources unless additional incentives are provided through international aid or public climate finance.

#### Contributing to international climate finance

In the context of international climate finance, the question remains to which degree investments undertaken by the tourism industry, particularly MNTCs, could contribute to the US\$ 100 billion target. Theoretically, some funds invested via innovative adaptation funds, risk-transfer mechanisms and PPPs would be traceable, and thus hold the potential of being assigned to international climate finance if clear and transparent regulations are in place. However, as this policy brief points out, it is highly questionable whether MNTCs, with their high adaptive capacities, will participate in local or national adaptation finance in countries where they organise tourism; and international policy frameworks appear to have a limited ability to enforce such involvement.

#### Literature

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