



# Climate change adaptation in tourism in the South Pacific – Potential contribution of public–private partnerships

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## ABSTRACT

For tourism stakeholders in the South Pacific, the need to adapt to the negative impacts of climate change is urgent and crucial. Adaptation is costly and puts significant pressure on government resources. Using Samoa as a case study, this research examines if and how public–private partnerships (PPPs) may help the tourism sector in Small Island Developing States and Territories (SIDST) in the South Pacific adapt. Policy-makers and business owners were interviewed. The paper illustrates the different perspectives of the stakeholders, and suggests what can be done to exploit the potential contribution of PPP in adaptation. This research also contributes to the body of literature by demonstrating how existing theories related to PPP can be applied to climate change adaptation.

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## 1. Introduction

Samoa and its neighbouring Pacific Island countries are highly vulnerable to the negative impacts of climate change because the majority of their population and infrastructure are located in low-lying coastal areas (SPREP, 2009). As a United Nation's National Adaptation Programme of Action (NAPA) report indicates, sea level rise and sea temperature change and associated storm surge are the major projected climate change impacts in the region (NAPA, 2005). The consequences of such changes would lead to loss of beaches, inundation, degradation of the coastal ecosystems, damage to critical infrastructure, and the loss of attractiveness of coral due to bleaching (NAPA Task Team, 2005). These impacts are potentially disastrous to tourism, the major economic sector in the region, which is highly dependent on pristine marine resources and coastal infrastructure. In the absence of climate-proof infrastructure and adequate human capacity and economic resources, the adaptive capacity of the region to climate change is generally low (SPREP, 2009). The livelihoods of local businesses and communities are consequently under threat should the destinations frequented by tourists be damaged and lose their attractiveness.

This study investigates if and how public–private partnership (PPP) may help the tourism sector in Small Island Developing States and Territories (SIDST) in the South Pacific adapt to the impacts of climate change. PPP is a relationship based on a shared aspiration between the public sector and one or more partners from the private

and/or voluntary sectors to deliver a publicly agreed outcome and/or public service (adapted from Grimsey & Lewis, 2004). Samoa is used as an exemplar case study to further our understanding of how Pacific Island nations adapt to climate change. Tourism is an expanding sector in Samoa, accounting for 25% of its GDP (CIA, 2012). In 2010, 129,500 travellers visited the islands (SBS, 2011). We chose to explore PPP as a means to climate adaptation because for many years, PPP has been shown to be a vehicle instrumental to economic and national development (Samii, van Wassenhove, & Bhattacharya, 2002). However, the extent to which PPP is employed in climate adaptation is very limited, and even more so in the tourism sector. According to a 2008 OECD report, no existing PPP projects that explicitly provide climate protection could be identified (Fankhauser et al., 2008).

Climate change adaptation is costly. In Samoa alone, the costs of nine immediate and urgent project-based priority activities led by the United Nation's NAPA were US\$7.8 million (Agrawala, Crick, Jette-Nantel, & Tepes, 2008). In the long term, the annual costs of protecting the coastal areas in the Pacific region were estimated to be US\$0.39 to US\$1.08 billion for sea level rise of 8.9 cm to 9.1 cm by 2030 <sup>1</sup>(Nicholls, 2007). Such costs only cover measures for coastal protection (e.g. constructing seawalls, beach nourishment). They do not take into account other adaptation responses such as mangrove rehabilitation to protect coastal ecosystem or climate-proofing existing buildings by elevating them on piles, emergency services or disaster relief (Agrawala et al., 2008). Adaptation will thus put significant pressure on government resources in developing countries, both

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<sup>1</sup> The projected sea level increase under a medium emissions scenario in Samoa is 6 to 14 cm by 2030, and 11 to 30 cm by 2055 (CSIRO, 2011).

financial and administrative. Further challenge is posed by the continuing global economic crisis as aid and investment funding may no longer be offered in the amount and/or on the timeline expected. While PPPs are no panacea, carefully structured partnerships can potentially provide the ability to finance expensive adaptation projects outside the government budget and alleviate the fiscal pressure in developing nations. Given the importance and urgency of adaptation in Pacific Island countries, the significance of tourism to the region, and the paucity of adaptation-related PPP projects, there is a strong need for research that explores the potential benefit of employing PPPs as means to help the tourism sector adapt to climate change. This Samoa case study does not only offer practical recommendations to the relevant government agencies and companies, but also contribute to the body of knowledge by expanding the boundaries of existing PPP and adaptation literature.

## 2. Case study context

### 2.1. Tourism in the South Pacific region

Tourism is the largest export sector for most Pacific Island Countries and offers great opportunity for economic growth, employment and sustainable development (SPTO, 2007). An AusAID, 2008 Pacific Economic Survey stated that several Pacific countries including Fiji, Vanuatu, Palau, Samoa and Cook Islands have shown that they can deliver tourist-led growth, which have all sustained growth of 5% or more over the last few years in tourism arrivals (AusAID, 2008). Despite the global economic crisis, tourists to the South Pacific continued to grow at about 3–4% in 2007, 2008 and 2009. Some destinations in the region were in double-digit growth in 2008, such as Cook Islands, Vanuatu, Samoa, Solomon Islands, and Papua New Guinea (Everitt, 2009).

While a decade ago tourism in the South Pacific was dominated by Fiji Islands and the two French territories, Tahiti and New Caledonia, tourism is now truly widespread in its economic impact and has led growth in several Pacific Island countries (AusAID, 2009; Everitt, 2009). Tourism exports as a percentage of GDP in 2005 were approximately 65%–70% in Palau, 50% in Cook Islands, 25%–30% in Vanuatu, 20%–25% in Fiji and 15%–20% in Samoa (AusAID, 2009; Harrison, 2010).

As a major economic sector in the Pacific, tourism is important in achieving the Millennium Development Goals (MDGs) for Pacific communities (UNDP, 2006). In Pacific SIDST, the sector is a major employer – for example, it represents 31% of total employment in Fiji and 42.4% in Vanuatu (Harrison, 2010). Tourism export receipts benefit the poor due to the sector's labour intensity, use of low-skilled workers and the opportunities for small and informal business (AusAID, 2009).

### 2.2. The Samoan tourism industry

Samoa, formerly known as Western Samoa, consists of two large islands, Upolu and Savai'i, and eight small islets located halfway between Hawai'i and New Zealand in the Polynesian region of the South Pacific. The country has a population of 193,161 (CIA, 2012). Apia, located on the northern coast of Upolu, is the nation's capital and home to Faleolo International Airport.

The economy of Samoa has traditionally been dependent on development aid, family remittances from overseas, agriculture, and fishing. Tourism, however, is an expanding export sector. Tourist arrivals increased by 57% between year 1998 and 2008, from 77,926 to 122,163. Tourism earnings during the same period grew by 250%, from ST\$115 million to ST\$288 million (approximately US\$51 million to US\$128 million). According to the Samoa Tourism Authority's (STA) Tourism Development Plan 2009–2013, the industry contributes to

approximately 10% of the nation's GDP and direct employment (STA, 2009).

On the demand side, the major source markets for Samoa are New Zealand, American Samoa, and Australia. They account for 80% of arrivals (SBS, 2011). They are mainly leisure tourists and those visiting friends and relatives (VFR) (STA, 2009).

On the supply side, aviation services, accommodation providers and tour operators can be considered the three pillars of the Samoan tourism industry as they provide the fundamental products and services that the market needs.

In the aviation sector, Virgin Samoa (formerly Polynesian Blue), Air New Zealand, and Air Pacific provide regional services between Samoa and Australia, New Zealand, American Samoa and Fiji. Polynesian Airlines also offer regional routes to American Samoa and Fiji.

The accommodation sector in Samoa is characterised by beach fale<sup>2</sup> operators. While they are mostly small scale, family operations, one may argue that fale accommodation is what differentiates Samoa from other tropical island destinations because fales are symbolic to the Samoan lifestyle (*Fa'a Samoa*) and they contribute to the authenticity of the tourist experience. Tourists are often included in traditional events and family celebrations of the village where they stay. Many beach fales also offer communal 'local and traditional' meals and cultural performances such as traditional dance (Hall & Boyd, 2005). In terms of hotels, most are situated in the Apia area. The larger resorts are located on Savai'i.

The third pillar of the Samoan tourism industry is comprised of tour operators. Samoa Scenic Tour and Polynesian Explorer are the two biggest companies. While both provide domestic touring services, Polynesian Explorer also sells regional packages.

Other sectors that play an important role in supporting the tourism industry include tourist activities providers (e.g. dive operators), restaurants, handicraft makers, entertainment providers and local transportation services such as the ferry services between Upolu and Savai'i. Media company, *Jasons Travel Media*, contributes by regularly publishing and widely distributing tourist information brochures about Samoa. Finally, there is the agricultural sector, which does not only support the tourism industry by providing food supplies, but also provides an alternative source of income for many fale operators. This is because most Samoan households have access to plantation where they grow crops for their own consumption and/or for sale. Earnings from the crops can be an additional income (Wong et al., 2010).

## 3. Literature review

### 3.1. Climate change in the South Pacific

Climate change, according to the Intergovernmental Panel on Climate Change (IPCC), refers to "a change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer" (IPCC, 2007a, 2007b:78).

The impacts of climate change on biophysical and human systems will be many and varied. However, with specific regard to the tourism sector, expected climate change impacts can be grouped into four categories; direct impacts, indirect environmental impacts, impacts on tourist mobility as a result of new mitigation policies, and indirect impacts on society (UNWTO et al., 2008). Direct impacts refer to changes in tourism flows due to changes in weather patterns (Hamilton, Maddison, & Tol, 2005), decline of landscape aesthetic, and damage to tourism infrastructure. Indirect environmental impacts are, for example, water shortages, biodiversity loss, and increase in vector-borne diseases. Mitigation policies seeking to reduce greenhouse gas (GHG) emissions, such as carbon taxes on long-haul travel, may have an

<sup>2</sup> Samoan beach hut.

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