Is Water a Limiting Factor to Tourism in Desert South Australia?

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Abstract: - This paper explores the perceptions of tourists and tourism-related business operators on the impacts of water scarcity during what was the warmest decade in recorded Australian history. Data derives from qualitative interviews with residents and itinerants from eight settlements in desert South Australia, a region also referred to colloquially as the ‘outback’. The results show an incongruity between the expectations of the travelers who are attracted to the desert regions and their demands for fresh water which are beyond what is sustainable. Despite the chosen desert destination, tourists reported on a strong desire for water in a range of daily activities. Business operators at times expressed their difficulty in meeting the fresh water demands of the travelers, in particular the campervan trade; and their frustration with the high water use of visitors. These results highlight the need for careful planning and on-going investment and infrastructure support in remote desert settlements to ensure that development of the industry is not at the expense of the wellbeing of resident populations.

Key-Words: - Perceptions, arid regions, water scarcity, expectations

1 Introduction

Desert tourism is a growing industry in Australia. [1,2]. ‘Desert’ refers to hyperarid, arid and semi-arid regions. In Australia, where over 70% of the country is regarded as desert, the term is used synonymously with the colloquial term ‘outback’ and refers mainly to arid and semi-arid areas [3,4]. Travelers are drawn to the Australian Outback for the mystique, the rugged terrain, arid landscapes, remoteness, markedly different fauna and flora and unique cultural experiences [4,5]. Outback Australia offers a place where ‘the bush fills the desert and brings it to life. And the infinite shades of red earth, made even redder by the last rays of the sun...The bush, the heat, the emptiness...Australia is a land of opposites, of contrasts’ [Lugaresi, 1998 as cited in 6]. Such is the uniqueness of desert Australia that Tourism Australia uses the phrase ‘there’s nothing like Australia’ as its marketing slogan [7]. The majority of desert tourism is centered on the Red Centre (termed that for its vast expanse of red soils and distinct rock formations) in Central Australia which is also referred to as the Central Outback. The Central Outback encompasses areas around Alice Springs and Uluru. To a lesser extent, but nonetheless important to the economy of the state of South Australia is desert tourism in Outback South Australia [8], the focus of this paper. Semi-arid and arid regions cover over three quarters of the state, with the driest regions in the north merging with the Central Outback.

While both local and foreign tourists are attracted to desert regions, such regions by their very nature tend to have service and resource constraints [1,9,10], in particular limited fresh water can be a concern away from the main Outback towns. Usual constraints on the amount of fresh water available were exacerbated during the protracted drought and warmest decade on record across most of Australia from the late 1990s to early 2010 [11,12]. This led to water restrictions in the majority of Australian cities and severe water shortages in most rural and remote areas [13]. Residents of desert regions know of and live within the resource constraints, as [9, p. 132] state...
people can choose to make any scale of . . . remoteness work if they are prepared to adjust their aspirations’, but conflicts of interests can arise when there is competing demands for resources such as water. [9,14]. It was during this period of water scarcity that this research explored the perceptions of tourists and tourism-related business operators on the impact of the water scarcity.

Although the severe drought was broken by above average rainfall across much of the country [12], the research is pertinent for the future given the climate change predictions for desert regions around the globe [15,16,17,18,19,20]. While arid areas are subject to a greater degree of rainfall variability than other climatic zones [21,22,23,24], generally models predict that rainfall will decline in arid and semi-arid regions. The South Australian Outback is thus one such arid region in the world that is set to experience greater water deficiencies in the future [25,26], with the concomitant impacts on the livelihoods of those dwelling in such regions and on the experiences of travelers wishing to pass through.

2 The Study Area
This paper focuses on a number of small towns in Outback South Australia, namely Angorichina, Beltana, Copley, Iga Warta, Leigh Creek, Lyndhurst, Nepabunna, Parachilna and neighbouring areas (Fig. 1). Parachilna and Angorichina are small settlements that service tourism in the Flinders Ranges National Park and passing trade from the Red Centre to the north. Wilpena Pound in the Flinders Ranges attracts more tourists than the smaller, less resourced locations of Parachilna and Angorichina. The more remote locations of Beltana, Nepabunna, Leigh Creek and Copley service tourists seeking out the more rugged terrain of the Vulkathunha-Gammon Ranges National Park, and Warrawee and Arkaroola conservation sanctuaries, and Indigenous cultural experiences offered at Iga Warta and Nepabunna Aboriginal communities.

Mining and pastoralism form the main sources of income in these regions, with tourism and agriculture less dominant. Clearly much of the activity and income is dependent on natural resources. More recently pastoralists have been diversifying their activities to include tourism-related services to supplement their income. This diversification brings its own challenges and benefits which have been documented by others [27, 10, 28], and are outside of the scope of this paper. Typically temperature variations in the study area are extreme—mean daily temperatures exceed 33°C in summer and are frequently above 40°C, rainfall is low and variable and moisture loss exceeds rainfall inputs [29]. During the study period, however, rainfall was in the lowest 10% of long-term records for the region [30].

Fig. 1: Location of the study area.

3 Methodology
The research employed a qualitative approach based on focus group and person-to-person interviews. Focus groups have the advantage of garnering the perceptions of a larger group of people in a limited timeframe and enable the researchers to capture and seek clarification on any opposing positions as well as the nuanced range of views on the topic under discussion [29, 30]. Five focus groups (of varying sizes up to a maximum of 10 people) and over 20 person-to-person interviews were conducted between February 2003 and August 2008 with business owners and Aboriginal and non-Aboriginal residents in Copley, Iga Warta, Leigh Creek, Lyndhurst and Nepabunna. In addition, a number of foreign and Australian tourists in Angorichina, Beltana, and Parachilna were also interviewed on a person-to-person basis or as the travelling party. While the numbers interviewed in this study are small, the data are considered representative of the outback settlements, most of which are similarly small; for
example, Beltana comprises around 35 residents and Parachilna around 8 residents. Leigh Creek, as a mining support centre, has a greater population (around 630). This paper focuses mainly on data gathered from the tourist-related settlements.

Consistent with qualitative research the interviews were analysed thematically. The dominant themes from the analysis are presented in the results together with a number of quotes from the participants in the study. This paper has arisen out a broader study that examined outback residents’ (pastoralists, business owners, tourist operators, travelers, itinerant residents; of Indigenous, non-Indigenous and foreign origin) perceptions of the impacts of climate change and drought. The details of the broader study are not repeated here; rather this paper focuses specifically on the tourism-related aspect of the study.

The study was conducted with approval from the Flinders University Social and Behavioural Ethics Committee and the Aboriginal Health Council of South Australia.

4 Results

The results to follow are discussed according to the dominant themes that emerged from the data analysis, namely, the desire for water in the arid locations; the impact of water scarcity on tourist-related businesses and the inability to meet the expectations of travelers.

4.1 The desire for water in desert localities

Despite the chosen desert destination tourists reported on a strong desire for water for a range of daily activities such as swimming, in their photography and for personal comfort and hygiene, and expressed disappointment when this was unavailable. Business operators noted a decline in the number of visitors to the region during the drought—a factor many attributed to the lack of water. A simple cause and effect relationship is not easily determined as the period of drought also coincided with higher fuel prices which given the long travel distances between the remote locations will have added to the travel costs. While there may have been multiple influencing factors, comments from the study participants show that the lack of water was a factor limiting their attraction to- or enjoyment of the area:

‘There’s a lot less water around now unfortunately and the area is not as picturesque or as enjoyable…’.

‘...to get the European backpackers—the heat knocks them—the water’s not in the creek anymore so they can’t go swimming’

While tourists are content to drive along dusty roads during the day, when it comes to settling for the night they prefer to camp near a creek where there is water but due to the drought ‘… camping is a bit harsher, it’s not as pretty [now]. In short although people are attracted to the region knowing that it is arid they ‘…don’t want to come to a dry, dusty hole.

4.2 The impact of water scarcity on tourist-related businesses

The declining number of tourists during the drought impacted on the local businesses in a number of ways, these are outlined below. Firstly, through the decline in income: ‘… if the rain doesn’t pick up …our business is going to have a big down turn’.

Secondly, given that tourism-related businesses rely on tourists for their livelihood, they were responding to the drought in ways aimed at attracting and maintaining tourists. These actions however had financial implications that were largely borne by the business owners:

‘we’ve actually been thinking about putting like an 8 person spa in, with a filtration system, just so they can cool down somehow, but its 1,700 litres of water it takes, and I don’t know how much power it takes…’

‘What we’re trying to do is look for things to create more business for ourselves so we can afford to do these things we want to do, but everything is going up but the business isn’t’…

For some businesses they had no alternative but to close when the income accrued from the tourists was less than the cost of the water being used (by busloads of tourists using the toilets and refilling their water bottles) ‘… I’d rather stay shut until the drought breaks, but that’s not fair to expect other operators to think the same way, it’s their bread and butter as well’. In extreme cases businesses have had to close when there was insufficient fresh water available.

Not all of the responses were negative. For some operators closing for a period was seen as an easier option than battling to meet the resource demands of the tourists: ‘The backpacker business has been good, …it’s nice to have that regular business but also now by not having that through summer, we’re actually thinking it’s a bit of a relief too’. 
4.3 The inability to meet the expectations of travelers

This research has highlighted a key issue that needs to be addressed which is a need to manage the expectations of travelers, regardless of their origin. The unrealistic expectations for water was an issue across the spectrum of travelers from Australians who ‘…have been spoiled, especially city people … they’ve forgotten we live in Australia, where these things [drought and water scarcity] happen’; to the overnight tourists who ‘…are highly indulgent, to think that you can shower, morning and night, travelling in the outback’; to people that ‘are bush camping for five days, all of a sudden they want to come in and pay for a shower or book for one night, so they have a 10 minute shower’, ‘they carry about 20 to 30 litres of water, but then they start wanting water for dishes, for washing, …so we end up supplying them at no cost’.

Campervan travelers have even greater water demands: ‘…they leave Adelaide with no water in their tanks and assume they can get water [500 to 600 litres for the campervan] up here ….’. They simply help themselves to as much water as they need until ‘…there’d be none left’.

‘Some people do ask about washing their cars when its muddy or when there’s insects, grasshoppers about, they’re wanting to use the hose, we just say no, get a bucket of water and clean it up until you get to a car wash or something.’

While some tourists had the attitude that they had paid for their accommodation and thus were entitled to a lengthy shower, for others it appeared to be a lack of awareness of just how dire the water situation was. Some accommodation managers reported on the vigilance of European tourists in minimising their use of electricity, and yet the same conservation ethic often did not extend to water use. Generally, there was a perception among business owners that ‘they use a lot more than they need.’

4.4 Discussion

A conundrum exists in that many of the Outback settlements have developed or diversified in response to the travel industry—they need the tourists to maintain their livelihood—but tourists need or expect certain levels of water-related comfort and resources. If water is not used sustainably, in some localities the industry will shut down, albeit temporarily. To meet the demands of the travelers and to facilitate (or at least not hamper) the growth in desert tourism there has been much support from local and Commonwealth tiers of government in the past [27], and this continues to date.

A number of outback settlements provide public amenities in which the cost of the water used is borne by the local government (the Outback Communities Authority services the vast region). This arrangement takes some of the water-pressures off businesses. Commonwealth Government Community Water Grants have enabled communities to apply for funding to cover infrastructure costs for once-off major projects aimed at sustainable use of water. But, for example, there is still a dire need for more water refill and wastewater deposit depots for campervans. Although the grants led to widespread improvements in the South Australian Outback, there is much more than needs to be done to ensure that water supplies are not a limiting factor to tourism in the future—this will require continued long-term planning, investment and infrastructure support if desert tourism is to be sustainable in Outback South Australia.

Our findings concur with those of others in that because desert tourism relies on natural resources care needs to be taken (by those servicing or managing the industry) to ensure that development of the industry takes into consideration the welfare of resident populations [8,33,34]. While local government authorities or ratepayers carry some of the amenity costs, there is a call for a fairer distribution of such costs and the need for a user-pays system [35].

5 Conclusion

There is an incongruity between the awareness and expectations of desert travelers. On the one hand they are attracted to the desert regions of Australia because it is ‘…a sunburnt country …’, and yet many have expectations that are not sustainable. The modern-day tourist is more sophisticated, consumer-driven with demands for higher levels of service, they want the experiences without the challenges [6, 35], they want luxury and lavishness in the desert. In short, they ‘…like the idea of the wide open spaces and wilderness but find the reality somewhat forbidding’ [6]. The higher resource demands of modern-day tourists in an uncertain climatic future could mean that the environmental carrying capacity in the more remote desert regions of South Australia could be exceeded. There thus a need to better inform both travelers about the realities of water in the more...
remote rugged localities and promote a rustic but sustainable experience.

References:


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