

Sustainable Surf Tourism: A Community Centered Approach in Papua New Guinea

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This research analyzes a strategic approach to managing surf tourism in Papua New Guinea (PNG). Surf tourists travel to often remote destinations for the purpose of riding surfboards, and earlier research suggests the mismanagement of surf tourism in some destinations has resulted in significant deleterious impacts on host communities. The research question in this study addresses how surf tourism can be managed to achieve sustainable host community benefits in the context of a developing country. Primary data came from semistructured interviews and participant observation. The findings demonstrate how sport governing bodies can engage host communities in a collaborative framework for the sustainable utilization of sport tourism resources. The derived knowledge from this research may decrease host communities' reliance on less sustainable commercial activities, and inform policy and practice on sustainable approaches to using sport tourism for community building and poverty alleviation.

Surf travel has a history dating back thousands of years. Indeed, the intercession between surfboard riding and the act of travel can be traced back to the sport's ancient Polynesian roots (Warshaw, 2002). However, in recent decades, unprecedented growth in surfing's global participant base, combined with more accessible travel opportunities, has led to a rapid rise in commercial surf tourism (Buckley, 2002a,b; Ponting, 2009; Warshaw, 2002). This niche sport tourism sector involves, ". . . people travelling to either domestic . . . or international locations . . . who stay at least one night, and where active participation in the sport of surfing is the primary motivation for destination selection" (Dolnicar & Fluker, 2003, p. 234). Earlier academic research (Buckley, 2002a,b; Ponting, 2000, 2009; Ponting, McDonald, & Wearring, 2005) and a number of surf media reports (Baker, 2006, 2007; Barilotti, 2002; Ponting, 2005; Lovett, 2005; George, 2010; Kew, 2010) have demonstrated the deleterious impacts surf tourism can have on host communities in developing countries, where much of the surf tourism industry is centered. Therefore, it is appropriate to address the challenges of sustainability that are posed by surf tourism in the context of a developing country. This paper explores an approach to sustainable surf

tourism in the burgeoning surfing destination of Papua New Guinea (PNG).

With global growth in the sport of surfing estimated at 16% per annum (Buckley, 2002a), overcrowding and associated social problems such as "surf rage" have become manifest in "established" surfing countries such as Australia, Hawaii, the Continental United States, Brazil and Japan (Young, 2000). This overcrowding, combined with the advent of low-cost airlines, specialized surf travel agencies, and online high definition webcams that stream real-time images of surfbreaks around the world, has meant that surfing experiences in remote destinations have become more accessible to a wider cross-section of the community (Dolnicar & Fluker, 2003). Buckley (2002a) argued that the growth of surfing in the developed Western countries has spawned the emergence of a cash rich, time poor participant base that is willing and able to pay for unique surfing experiences in uncrowded, exotic locations.

Therefore, where the requisite environmental elements for surfing align in remote destinations, surf tourism emerges as a potential commercial activity. Buckley (2002a) contended that well-planned surf tourism can provide, ". . . a key to development in the broader nature, eco and adventure tourism sector" (p. 421). Indeed, surf tourism is now well-established in developing countries such as Indonesia, the Maldives, Mexico, and numerous Asian, Central and South American, African, and Pacific Island nations (Ponting, et al. 2005). However, poorly planned surf tourism has been shown to lead to negative social and environmental impacts, often with little or no

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economic benefits reticulating back to host communities (Barilotti, 2002; Buckley, 2002a,b; Hulet, 2006; Ponting, et al. 2005).

With much of the world's commercial surf tourism taking place in remote corners of developing nations, the challenges of sustainability are particularly salient. While surf tourism also presents economic, social and environmental impacts in established surfing destinations (Lazarow, Miller, & Blackwell, 2007), in a developing nation where access to basic services, resources, and infrastructure is limited, these impacts are even more significant. As Ponting et al. (2005) have noted,

. . . surfing tourism has a history as a colonizing activity. Surfers tend to venture into areas previously unvisited by mainstream tourists, opening up new routes and new systems of development - surfing tourism has nudged unprepared destinations down the slippery slope to large scale industrialized tourism and its related issues. (p. 152)

The work by Ponting et al. (2005) is particularly illuminating. They concluded that the predominant surf tourism business model in the Mentawai Islands, Indonesia, which has been widely replicated in other Indo-Pacific nations, is inequitable and essentially, exploitative of host communities. Ponting et al. (2005) posited a framework of three key prerequisites for sustainable surf tourism: (i) movement away from economically neo-liberal approaches to development; (ii) the establishment of formalized, coordinated planning that recognizes the need for limits to growth; and, (iii) systematic attempts to foster cross-cultural understanding where host communities are central in defining their own standards, symbols and ways of representation and interpretation.

Therefore, in the context of the developing nation of PNG, this research employs Ponting et al.'s (2005) framework for sustainable surf tourism to analyze a strategic approach to managing surf tourism. Specifically, the research question addressed is, in the context of a developing nation, how can surf tourism be managed to achieve sustainable host community benefits? In generating a deeper understanding of how best to manage this type of sport tourism, it is appropriate to combine insights from sport tourism, sustainable tourism and sport development, which are explored in the ensuing section.

Theoretical Background

Research into the impacts of sport tourism on host communities is well established (c.f. Barker, 2004; Fredline & Faulkner, 2000; Hritz & Ross, 2010). Moving the research agenda beyond "impact" and into the use of sport tourism as a lever for community development is also growing (Chalip, 2004). Much of the recent research in this area has focused specifically on sport event tourism. For example, Chalip (2001, 2004), Chalip and Leyns (2002), O'Brien (2006, 2007), and O'Brien and Gardiner (2006), addressed how mega and regional sport events

can be leveraged for economic development in host communities; while Chalip (2006) and O'Brien and Chalip (2007, 2008) proposed means for host communities to use sport events for sustainable economic, social and environmental outcomes.

An important exception to the research outlined above is the work of Costa and Chalip (2005), who explored the role of skydiving-related tourism in the revitalization of a rural village in Portugal. They found that an aging local population, a conservative social climate, and exogenously driven tourism planning resulted in the under-utilization of community tourism assets, which in turn, created deficits in community development potentials. Costa and Chalip concluded that, to optimize the role that sport tourism plays in community development, participative strategic planning that focuses on integrating and leveraging community assets is essential. The current research builds on Costa and Chalip's work by empirically exploring this conclusion in the context of sport tourism in a developing country.

The sport tourism sector is a major component of the wider global tourism industry (Buckley, 2006; Hritz & Ross, 2010). However, beyond snowsport and golf tourism, there is a dearth of empirical research on individual products such as surf tourism (Buckley, 2006). Indeed, Buckley (2002a) argued that, "surf tourism has become a social phenomenon of sufficient economic, social and environmental significance to justify academic attention" (p. 406).

Much of the empirical work conducted to date indicates the need to rethink how surf tourism is operationalized and managed. For example, Buckley (2002a,b) reached similar conclusions in the context of surf tourism in Indo-Pacific nations. Thus, studies that examine surf tourism in emerging destinations will deepen current understandings of sustainability in this context, as well as in the wider sport tourism sector. In the following section, the seminal work by Ponting et al. (2005) in which they posited a framework for sustainable surf tourism, is explored with each key prerequisite discussed.

A Distinct Move Away From Western Business Models and Economically Neo-Liberal Approaches to Development

Ponting and his colleagues concluded that the surf tourism industry in Indonesia's Mentawai Islands did not adequately compensate host communities for the use of their marine resources. Surf tourism in the Mentawais, as in many other parts of the developing world, has traditionally been charter-based where surfers pay to stay aboard vessels while navigating the archipelago's many surf breaks. In this model, surf tourists rarely venture ashore, and simply jump off their charter boat to surf a particular break before returning back to the vessel when finished surfing. Land-based surf camps have typically operated in a similar manner—as enclaves with little meaningful interaction with local host communities (Buckley, 2002a,b).

With limited host community contact, developing the sport of surfing at the host community level is actively discouraged as it may contribute to future crowding issues and thus sully the surf tourism product. Ponting (2009) positioned this active discouragement of local surfing as a deliberate surf tourism industry response to the threat it poses to the imperative of uncrowded surf. He found that, based on the quality and *uncrowded* nature of the surf they provide access to, many surf tourism operators charge five-star prices for three-star accommodation and service. In a recent study, Ponting (2009) quoted a surf magazine editor who explained that on a variety of surf trips, when he wanted to give surfboards to local children who were interested in surfing, the tour operator prevented him from doing so, stating, "if you do that, next time you come back here they'll be out there" (Quoted in Ponting, 2009, p. 260).

Food, beverage and accommodation sales are typically sold as all-inclusive packages on both charter vessels and land-based operations, the majority of which are owned, operated and marketed by Western business interests. Hartmann and Kwauk (2011) contended that such "disconnected" approaches are contrary to the potentials of sport-for-development, and are ineffective because they, "... ignore local practices, local knowledge, the sociocultural and political-economic contexts as well as the needs and desires of communities themselves" (Hartmann & Kwauk, 2011, p. 294). Thus, worse than being ineffectual, with little or no benefits reticulating back to host communities, Ponting and his colleagues (2005) described the surf tourism business model of the Mentawais in the mid-2000s as inequitable and unsustainable. They suggested that,

Unregulated free-market approaches to development in less developed regions place local people as just one relatively powerless stakeholder group amongst many others. As a result, local people are usually the last to benefit from economic development based upon the exploitation of their resources, yet shoulder the bulk of deleterious impacts. (Ponting, et al. 2005, p. 150)

This unregulated approach has evolved in similar guises in other surf tourism destinations around the world (Buckley, 2002a). Thus, an alternative, more strategic approach to surf tourism planning and development is required; one that recognizes host communities as the traditional custodians of surfing resources who should share in the social and economic benefits derived from any commercial exploitation of such resources.

The Need for Formal, Long-Term, Coordinated Planning

Ponting et al. (2005) suggested that a sustainable surf tourism sector should feature formalized, long-term and coordinated planning that, significantly, recognizes the need for limits to growth. This presents a dilemma. On

the one hand, neoliberal notions of commercial success are largely defined by growth and profit through scale economies. However, for surfers, growth brings crowding and associated social problems such as "surf rage" that derive from the limited carrying capacities of surf zones (Young, 2000). Dolnicar and Fluker (2003) posited that crowding in developed surfing destinations is a primary factor in surfers' willingness to, "travel in search of not only the perfect wave, but also the *uncrowded* wave" (Dolnicar & Fluker, 2003, p. 336).

In the surf tourism context, when a new surfing destination is "discovered," it typically features heavily in the surf industry's print and video media. In this way, the global surf media complex creates a discourse of surfing "Wonderland" where,

... would-be surfing tourists dream of falling through the surf media looking glass to find themselves cast in their own adventures in Wonderland. Cushioned adventure, remote, mysterious, exotic, undeveloped, uncrowded perfect waves are the essence of Wonderland that sells magazines, surfwear and surf vacations. (Ponting, et al. 2005, p. 148)

This Wonderland discourse is what attracts surf tourists, and in turn, creates profit for commercial surf tourism operators. However, achieving Western notions of commercial success runs the very real risk of overcrowding. Overcrowding, in turn, risks destroying the very product that is sold to surf tourists—a surfing experience in an exotic, crowd-free destination. For example, one of Ponting's (2009) participants noted that

It really is all that imagery that you've conjured up falling away like broken glass ... it is such a dream to have an uncrowded spot that when something invades that space in their minds that is so perfect - it changes the dynamic totally. ... It's like you had a whole lot of candy there that suddenly you're having to split with a whole lot of other people. (Griff, Surf Tourist quoted in Ponting, 2009, p. 199)

Nonetheless, surf tourism has traditionally been characterized by unregulated, free-market development with unrestricted growth and little or no consultation with host communities. Far from sport acting as a lever for development, this approach led to overcrowding and deleterious economic, social and environmental impacts on host communities (Ponting et al. 2005; Buckley, 2002a,b). Meanwhile, in cases where sport programs have been instigated with the express purpose of promoting community development, Coalter (2010) observed that overreliance on external stakeholders resulted in local issues and needs being ignored, and programs actually working against simple sport development. In the wider sport tourism context, Hritz and Ross (2010) concurred on the importance of planning with host communities. They contended that, "the hospitality of the local community is vital to the tourism industry ... (and) the destination should be developed according to host community needs (p. 121).

Thus, as Ponting, et al. (2005) concluded, sustainable surf tourism planning must actively engage host communities as full partners in a formalized, long-term process.

Systematic Attempts to Foster Cross-Cultural Understanding

Ponting et al. (2005) proposed that the third defining characteristic of sustainable surf tourism is the need to incorporate mechanisms for cross-cultural understanding into policy and planning. Such mechanisms should recognize host communities as central players, and encourage them to define their own involvement in the surf tourism enterprise (Ponting, et al. 2005). This is consistent with the findings of Jurowski and Gursoy (2004), who argued that the readiness of host communities to share local resources with tourists is a critical determinant in the success of sustainable tourism development. Similarly, from a sport development perspective, Lyras and Welty Peachey (2011) contended that by blending sport with cultural enrichment and embracing nontraditional sport management practices, sport initiatives can successfully facilitate social change in targeted communities.

Clearly, such an approach requires mutual trust and open exchanges of information among stakeholders. Along these lines, Cole (2006) posited that the best chance of engaging a host community in tourism development is for tourism agencies to empower the host community with information about tourism—a notion that is traditionally at odds with surf tourism practice (Ponting et al. 2005; Buckley, 2002a,b). Ponting (2009) found a number of reasons why tour operators avoid engagement with local communities. Chief among these was a belief that the local population was ‘primitive’ and incapable of understanding tourism, and furthermore, that host communities were content with their position in life and should be protected from the inevitable cultural decline that would ultimately see local people become bell boys and prostitutes serving the needs of surf tourists. These notions were underscored by a concern that local people may enter the surf tourism market and that the third world charm of the islands may be lost if local people achieved economic development through surf tourism.

However, a unidirectional information flow can be as problematic as no information at all (Hampton, 2005). In the context of small-scale tourism business development, both Hampton (2005) and Hartmann and Kwauk (2011) demonstrated that host community engagement is best facilitated when planning authorities actively listen to and heed community opinions. This is where the platform for cultural learning and exchange can be created, and where host communities can be recognized as full and willing partners in the enterprise, rather than as “exotic curios” (Ponting et al. 2005, p. 141). The Mentawai Islands’ surf tourism business model of the mid 2000s, as demonstrated by Ponting (2009), relegated host Mentawai communities to frustrated “watchers” of the surf tourism economy, rather than active participants and beneficiaries.

One of the main ways a host community can benefit from sport tourism would be for it to learn and benefit from the focal sport/s (Sparvero & Chalip, 2007). But, as alluded to earlier, developing host community participation in the sport of surfing has traditionally been discouraged in established surf tourism destinations. Thus, it is appropriate at this point to incorporate insight from the literature on sport development. Hylton and Totten (2001) conceived community sport development as a continuum based on the level and type of intervention being exercised. At one end of the continuum they placed ‘top-down,’ externally deterministic interventions, while at the other end are ‘bottom-up,’ internally interactive approaches. Of course, these extremes encompass a plethora of possibilities, but Hylton and Totten (2001) posited that sport development programs typically lean more to one extreme of the continuum. Incorporating Hylton and Totten’s (2001) sport development work with that of Tosun’s (2000) work on tourism development presents some interesting possibilities. For example, Tosun suggested that “bottom-up” participative approaches to tourism development were preferable for enhancing community engagement. This would suggest that Hylton and Totten’s (2001) “internally interactive,” or bottom-up approaches to sport development might also engender more community engagement and favorable results in a sport tourism setting. The current research sheds light on this question.

The three-part framework for sustainable surf tourism proposed by Ponting and his colleagues (2005) is an appropriate tool with which to analyze sustainability and the use of surf tourism as a lever for community building in PNG. And, by using the multiple lenses of sport tourism, sustainable tourism and sport development, new insights are developed that extend our understanding of this growing sector.

Methods

Research Context

Papua New Guinea lies just to the north of Australia, and its economy relies heavily on agriculture and less sustainable activities like mining and logging. Encouraging sustainable commercial activity is particularly salient in PNG where, despite being incredibly resource rich and Australia’s closest neighbor, 40% of the nation’s 6.3 million people live in poverty, and access to quality health care, education, and transport is typically difficult (Australian Government, 2010). However, as a diverse country of over 600 islands, 700 unique and traditional cultures, and abundant marine, forest, and wildlife resources, sport tourism offers a commercially viable alternative for the alleviation of poverty (Wearing & McDonald, 2002).

Indeed, the PNG Tourism Master Plan (2007–2017) identifies particular nature-based tourism resources that predispose PNG to competitive advantages in the niche market of sport tourism. Specifically, the sport tourism products of diving, trekking, sport fishing, surfing,

climbing, canoeing, caving and rafting are identified as being, "critical components of the future development of tourism" in PNG (PNG Tourism Promotion Authority, 2006, p. 26). Interestingly, PNG's surf tourism sector is the only sector in which formalized, community-centered strategies, called Surf Management Plans (SMPs), have been developed to address the challenges of sustainability in each of the country's six designated surf zones. For this reason, the PNG Tourism Promotion Authority commended the SMPs to other PNG tourism sectors as an exemplar of how to, "ensure [tourism] benefits are provided to landowners and host communities" (PNG Tourism Promotion Authority, 2006, p. 60).

The SMPs are a formalized attempt to sustainably manage surf tourism, and are the product of surfing resource owners collaborating with sport and tourism stakeholders to ensure that, "the PNG surf experience remains unique. . . [and] to ensure direct benefits to surf area communities" (Niu Ailan Surfriders Alliance 2008, para 5). The SMPs are administered nationally by the governing body of surfing in PNG, the Surfing Association of PNG (SAPNG), and provincially by regional surf alliances that consist of community representatives, surfing clubs and surf tourism operators. The plans encourage sustainability by using a quota system in each designated surf management area which limits numbers to 15–20 surf tourists per area, per day. A small levy (AU\$10/day) is imposed on each individual surf tourist which is then reticulated back to host communities for use on community development projects such as aid posts, education facilities and development of the sport of surfing at the village level. This approach engages host communities in consultation on the acceptable use of their surfing resources (reefs and coastal environments), and on community development needs that they feel can be addressed through the surf tourism levies.

While modern surfing arrived in PNG during the Second World War when Australian troops stationed in Aitape established a surf club, villagers along the northern coasts of PNG have long used (potentially for thousands of years) different sized planks of timber from the hulls of broken canoes to fashion surfboards similar to the Hawaiian *paipo*, and these communities still perform a precolonial ceremony designed to cause the sea to rise up and provide good quality surf (Ponting, 2004, 2005). And, while small groups of surfers were exploring the East Sepik coast in the 1960s, it was not until the late 1980s that surf tourism began to grow with the discovery of consistent high quality surf around the provincial capital of Vanimo in PNG's northwest (Ponting, 2005). The early 1990s saw, at the invitation of local resource owners, a surf camp established on Nusa Island off the coast of Kavieng, New Ireland; and in 2006, two live-aboard surf charters began operating around the St Mathieu Islands. Coastal youth, building upon preexisting wave riding skills have adapted readily to the new wave riding technology. Surf clubs now exist in Tupira, Vanimo, Sunset, Yako, Central New Ireland, Sero, Kavieng, Warimo, Wewak, Taurama and Bougainville, with discussions progressing on another

one in Ungalik. Surfing tourists also visit Madang and Alotau depending upon the season. In 2005 surfers comprised approximately 10% (1800) of all inbound tourist arrivals to PNG (TRIP_Consultants, 2006).

Data Collection

To recruit participants, purposive and snowball sampling methods were employed. Snowball sampling is used to locate suitable participants in a given research population (Neuman, 2006). The lead researcher made contact with the President of the SAPNG in January of 2009, who agreed to an initial interview, and was subsequently interviewed two more times throughout the course of the investigation in February 2010 and February 2011. At the initial interview, the SAPNG President recommended a respondent from one commercial surf tourism operation in New Ireland Province. This surf camp (Surf Operation A) was selected as an initial data collection site because of the owner's senior positions on the boards of the SAPNG and New Ireland Surfriders' Alliance (NASA), as well as the longevity of the surf camp's operation and associated surfing club establishment. In February 2009, the lead researcher stayed at Surf Operation A for one week. While there, he conducted two semistructured interviews with the owner, as well as other key actors at the surf camp such as the owner's father, who worked as a surf guide; a surf camp employee; a local school teacher; and the Chair of the local education board. Participant observation and incidental conversation with local villagers, surf camp employees and fellow surf tourists also formed useful sources of primary data. The owner of Surf Operation A recommended a further respondent from another surf camp (Surf Operation B).

One year later in February 2010, the lead researcher visited Surf Operation B for four days and conducted a further five interviews. Four interviews were group interviews, and one was an individual interview. Three of the group interviews were conducted with two respondents at a time, and the fourth with four respondents. Interview respondents were two of the three owners of Surf Operation B; two surf camp employees; and two local surfing club members. For the group interview with four respondents, the respondents were: a local surfing club member who was also a Surf Operation B employee; the President of the local surfing club; and two owners of a locally-based surf charter operation (Surf Operation C). The solo interview was with the Secretary of the regional surf alliance. The questions in all interviews followed the same broad schedule, which is elaborated upon in the ensuing paragraphs. Group-based interviews were necessary due to the lead researcher's and respondents' respective time constraints. On this same trip, the lead researcher also visited Surf Operation D for four days where another three individual interviews were conducted with the owner and two local community leaders. Again, actually being on site afforded the lead researcher opportunities for participant observation and incidental discussions with stakeholders.

Last, in February of 2011, the lead researcher visited Surf Operation E for seven days and conducted a further six individual interviews with a local clan leader; the local clan leader's wife (who was also a very influential community leader); Surf Operation E's manager; an employee of Surf Operation E; and the local surf club President. The manager of Surf Operation E has also been interviewed subsequently in August 2011 while visiting Australia. In total, over a three-year-period from January 2009 to November 2011, 24 interviews were undertaken with 30 respondents.

The particular surf operations included in the data collection were selected for two main reasons. First, out of the snowballing procedure, particular individuals and their associated locations were recommended by previous respondents as being potentially fruitful lines of inquiry. Second, PNG covers a wide geographic area, and domestic air travel can be prohibitively expensive. Meanwhile, alternative travel infrastructure varies from nonexistent, to impassable, through to downright dangerous. Ultimately, data were collected from five of the country's six established surf tourism operations, four of which (the charter-based operation being the exception) had or were in the process of establishing, affiliated surfing clubs.

In addition to the interview data, the lead researcher also engaged in innumerable informal conversations at each surf operation with local villagers and surfers, surf tourists, employees, and local community leaders (such as, for example, village planning committee members, teachers, and a priest). Thorough field notes were kept in these situations as it was typically not possible to record such communications.

Preceding each interview, a general set of questions and discussion was initiated to establish rapport with respondents. Once rapport was established, questions followed broadly similar paths and were aimed at establishing respondents' views on the introduction of surfing and commercial surf tourism in their respective communities, and PNG generally. For example, after rapport was established, respondents were asked questions like, "Can you explain your thoughts on surfing and surf tourism, and whether these have been welcomed in your community? Could you discuss how involved you feel in decision making regarding surfing and/or surf tourism in your community? What would you say surfing has brought to your community? What are your thoughts on the SAPNG's Surf Management Plan and its aims, objectives, scope, implementation etc? Who are the key stakeholders of surfing here and what do you see as their "stake"?" Obviously, the semistructured nature of the interviews allowed the researcher to augment each interview and probe interesting topics as and when they arose.

Both the individual and group interviews were conducted as far as possible as conversations. Conducting interviews in this way limits the influence of researcher bias on participants and thus, encourages open responses that help to facilitate deeper understanding of complex behavior (Fontana & Frey, 2000). To manage group dynamics in the interviews with more than one

respondent, participants were encouraged to speak freely and interactively at all times. These tactics were aimed at increasing interviewees' levels of comfort and involvement in the interview process (Madriz, 2000).

Secondary data were gathered from surf media products like magazine articles and movies that depicted surfing in PNG; marketing collateral from surf travel agencies; and also the SAPNG website. These secondary data helped to inform interview question formulation and discussion topics with participants, and were helpful in supporting aspects of the primary data.

Data Analysis

Qualitative data were collected from semistructured interviews, participant observation, informal discussions, field notes, and media such as magazines, videos, and the Internet websites of surf governing bodies and surf travel agencies. The lead researcher was involved directly in every interview, with interviews taking between one and three hours. With permission, interviews were audio recorded and transcribed. Following ethical guidelines, transcriptions were stored and coded to protect respondents' anonymity.

Another technique adopted in this study was participant observation. The lead researcher took three trips to PNG over a three-year period for the express purpose of collecting data. The total time spent in PNG was approximately one month with a total of five commercial surf tourism operations visited. The associate researcher has also spent considerable time in PNG as an aid worker, and is extremely familiar with the country and its many cultures. Both researchers are lifelong surfers and have previously been surf tourists to, and researchers in, a number of developing countries. Actually traveling to the surf operations in person afforded the lead researcher opportunities to experience the PNG surf tourism product as a consumer, from receiving marketing collateral from surf travel agencies, through to staying at the respective surf camps and interacting with host communities and fellow surf tourists. This participant observation required the lead researcher to "mobilize his senses" (Neuman, 2006) and to pay attention to as many sources of information as possible to fully comprehend the conditions and situations in which local people interact with surf tourists. Throughout the investigation, a research journal containing field notes made at the conclusion of interviews, discussions, and during participant observation was incorporated into the collection of data. Taken together, these multiple sources of evidence created a "convergent line of enquiry" (Yin, 2003, p. 98).

All data—transcriptions, field notes, and media were content analyzed manually. Content analysis is used in both quantitative and qualitative research (Finn, et al. 2000), and is useful in the analysis of verbal, visual or written communications (Sarantakos, 2005). The data were coded based upon themes derived from Ponting et al.'s (2005) prerequisites for sustainable surf tourism, as outlined in the earlier Theoretical Background section.

Thus, notwithstanding the identification of emergent themes, particular words, phrases, expressions and phenomena were selected and grouped based on their similarities and relevance to the following themes: (i) movement away from economically neo-liberal approaches to development; (ii) the establishment of formalized, coordinated planning that recognizes the need for limits to growth; and, (iii) systematic attempts to foster cross-cultural understanding. However, it is important to allow for a “continuing dialogue” (Hargreaves, 1986) between theory and emerging data. Such an approach avoids constraint to extant theoretical concepts and enables emerging ideas, themes, and issues to be integrated into the analysis. This was indeed the case as sport development emerged as a recurrent theme in the data that was not accounted for by the existing coding scheme.

Limitations

This study was not without limitations. The chief limitation was a linguistic one. Papua New Guinea has hundreds of individual dialects, but the most common language is *Tok Pisin*, or “pigeon English”. The English language is also widely spoken. The language used in all interviews was English. As all of the interviewees were proficient English language speakers, this did not present a problem. In some situations where the lead researcher engaged in informal discussions, the discussants’ level of English language proficiency was occasionally quite low, as was the lead researcher’s ability in *Tok Pisin*. However, through a mixture of good will, efforts on both sides to speak English and *Tok Pisin*, and profuse hand gesturing, communications were typically good with sufficient understanding on both sides.

Findings

The presentation of findings broadly follows Ponting et al.’s three-part framework for sustainable surf tourism; namely, (i) a move away from Western business models; (ii) formal, long-term, coordinated planning; and, (iii) systematic attempts to foster cross-cultural understanding. In addition to these three categories, one additional category, (iv) village-level sport development, emerged from the data and is discussed individually. To avoid the identification of interviewees, aside from the SAPNG President and Board Members, rather than using participants’ names to introduce quotations, they are referred to using their affiliation to one of the five surf tourism operations from which data were collected, which are referred to as Surf Operation A, B, C, D or E.

A Move Away From Western Business Models

Surf tourism research in several Indo-Pacific island nations has demonstrated that typically, host communities have been excluded from the benefits accruing from surf tourism, yet have borne the brunt of its deleterious

impacts (Buckley, 2002a,b, 2006; Ponting, et al. 2005; Ponting, 2009). In PNG, the data revealed a desire to avoid the inequities endemic to other destinations by approaching surf tourism in a very different manner. Indeed, the SAPNG President indicated the need to avoid what he saw as the mistakes made in how surf tourism has been operationalized in other countries, and to recognize host communities as the traditional custodians of surf tourism resources. He explained that,

I’m glad we’ve had this opportunity to evolve and learn from other countries, from their mistakes That was the decision we made based on our travels that if we’re going to develop PNG surfing with a clean slate, let’s approach it in a slightly unorthodox manner. Let’s make sure we empower the most important people in the equation and that is the traditional custodians of that surfing resource.

The SAPNG’s Surf Management Plans are administered by regional alliances made up of surf area community leaders, commercial surf tourism operators and the surfing clubs in each respective surf zone. The alliance in New Ireland Province, “Nui Ailan Surfriders Alliance” (NASA) was formed to promote the sustainable development of surfing and to administer the Surf Management Plans in the province’s four designated surf zones. The NASA Secretary highlighted the centrality of surf area communities when he stated that,

Sustainability would be the locals remaining happy because, really, if they decide they don’t want anybody surfing their reefs, then bang – it’s over! They have total say over how their resources are used, and that’s exactly as it should be (NASA Secretary).

Before the establishment of any commercial surf tourism venture, the SAPNG President first consults with local communities on their willingness to host surf tourism. The consultation process involves SAPNG representatives traveling to a focal village and meeting with local clan leaders, elders and Village Planning Committees (or VPCs, which are locally elected bodies that are the common mechanism for decision making in regional village communities). Representatives from SAPNG also make public presentations with question and answer sessions at village meetings aimed at explaining the sport of surfing and the nature of surf tourism. Thus, rather than the situation Ponting et al. (2005) found where host communities are relegated to the role of “exotic curios” on the periphery of the surf tourism operation, the SAPNG’s extensive consultation process ensures host communities’ centrality in the process.

Where a community consents to host surf tourism, the SAPNG first helps establish an affiliated surf club to develop the sport of surfing at the village level. This sport development mission is another important way in which the SAPNG’s approach to developing surf tourism deviates from accepted practice in other countries. The SAPNG President explained that,

So, I go into, say, (Surf Area E), and help them set up a surf club and go, "Here are your boards, everyone". We organize some lessons and training and all the kids are happy, running up and down . . . You know, we do the presentation, and the community elders and everyone come up and say, "Yeah, yeah, yeah! Good, good, good! We're with you!" Next thing is the commercial side. How can we create a sustainable and equitable surf tourism operation here with the landowners participating directly and indirectly to generate a sustainable source of income? So we go through the process and help them set up.

In consultation with the respective resource owners and surf clubs, the SAPNG institute a quota system in each surf zone which, dependent on local capacity and infrastructure, as determined by the communities themselves, limits the number of surf tourists per day per zone to a mutually agreed upon number. The limit in most surf zones is 20 visiting surfers per day. Each surf tourist pays two fees which are incorporated into their accommodation packages. The first is a one-off levy to the SAPNG of AUD\$50 (USD\$54) that funds the SAPNG's sport development activities. The second is a daily fee of AUD\$10 (USD\$11) which goes to the respective regional surf alliances. This second fee is reticulated back to the surf areas to fund community development projects identified by host communities themselves, such as, for example, the purchase and/or construction of school educational facilities, water reticulation, and aid posts.

The cross-institutional networks inherent to the regional alliances are complex in that they are made up of not-for-profit surf governance organizations, surfing clubs and community representatives; and community-based for-profit surf tourism operations. Ponting and his colleagues' (2005) work demonstrated that surf tourism has traditionally conformed to Western business models that preclude cooperative behavior among competitors. However, the owner of Surf Operation A explained a very different scenario in the PNG context. He spoke about the level of cooperation required among operators to make the SMPs work for positive outcomes like sport development. He explained that,

All of the surf tourism operators work very closely together. We're all members of the Surf Alliance, along with all of our club members and the resource owners. . . . The fees from the plans go straight back into the communities. We've just funded a new classroom for the elementary school near (a local surf break). But some of the fees go to the development of the sport. So, in the past they've been used to purchase surfboards for Club members to use. They've also paid for things like (our) surf club to make a trip to the National Titles.

The sport development aspect referred to above is significant, and is discussed separately later, but this

collaborative network approach among operators is unique in commercial surf tourism. The operator of Surf Operation B, reflecting on the cooperative mentality among the operators, went so far as to suggest that the notion of competition is irrelevant. As he stated,

The main reason for that level of cooperation is that we're all friends in this industry. No one is competing. We all have slightly different products. And we help each other out, so if (Surf Operation A) is booked out, (the operator there) says 'We're full, but check out (Surf Operation B) down the road or check out one of the boats.' And it works . . . everyone kind of works together.

This collaborative network scenario is a by-product of the SAPNG's strategic approach to actually planning the development of its surf tourism sector in tandem with the sport of surfing in PNG. As demonstrated by the quote above, such planning has engendered a collaborative mentality among stakeholders, which deviates dramatically from accepted practice in other surf tourism destinations. As demonstrated by Buckley (2002a,b) and Ponting, et al. (2005), the traditional surf tourism business model has typically lacked formalized planning and ties to host area communities which, far from collaboration, has resulted in fierce competition among operators, unrestrained growth, overcrowding and largely deleterious impacts on host communities.

The Need for Formal, Long-Term, Coordinated Planning

Ponting et al. (2005) suggested that a sustainable surf tourism sector should feature formalized, long-term and coordinated planning that recognizes the need for limits to growth. Limiting growth is itself a departure from neoliberal approaches to business, and is entirely divorced from surf tourism practices in other destinations. One operator, in highlighting the centrality of limits to growth in PNG's surf management plans, described the nature of exchanges he has had with guests regarding the plans:

And it's not just Indonesia, it's the Philippines, the Maldives, Fiji, Pohnpei Pass, they're all just saturated with people. And really, every guest we've had who's had one of those experiences said that they're never going to do that again. They don't want to arrive at a site in a charter boat, only to be met by five or six other boats and 40-50 people in the water. I mean, you can stay at home on the Gold Coast or wherever you're from and surf with 50 people! (owner, Surf Operation C).

Meanwhile, some surf tourists do not initially understand the logic of the SMPs, but after explanation, come to see their positive effects. One of the owners of Surf Operation C explained one traveling surfer's reaction to the SMPs' quota system:

There was a yacht here last season, and Sully, he was a surfer on the yacht, wanted to surf. But our quota was full at that time and I had to explain to him about the management plan. And at first he was thinking, "Well, why can't I surf here?" But when I explained it all to him, he says, "You know what? I've just come from Pohnpei in the Pacific Islands. There were like 40 guys in the water surfing, and then a plane arrived with another 120 surfers on it. It was, preposterous. There were hundreds of people waiting to surf this one wave." You know, everyone can sit on the Internet now and track waves across the globe.

The owner of Surf Operation B also noted that, without limits to growth, the product gets tarnished, host communities suffer negative consequences, and the entire surf tourism enterprise can be compromised:

So we can avoid these overcrowding problems we've seen in other countries, keep things more the way they are, and the whole industry can be sustainable. If this gets out of control, then you've got nothing to sell, the locals become unhappy, and then what have you got?

Therefore, limiting growth is one of the key factors at the core of PNG's approach to sustainably managing surf tourism. The quota system keeps surf tourist numbers at a manageable level for host communities without overstretching resources or negatively impacting upon daily life. Equally, for visiting surfers, the chance to surf crowd free while also experiencing a unique culture contributes to a "truly unforgettable PNG surfing experience" (NASA, 2008, p. 2). Indeed, the aim to distinguish PNG from the crowding, disengagement from local communities, and deleterious consequences common in other destinations is prominent in the following excerpt from the NASA website:

While many international surf destinations rapidly pass through stages of initial discovery and early years of limited exposure and exploitation; all too often the once pristine surf destination quickly becomes over exposed, over exploited and overcrowded. The magic is lost as the resort operators & tour operators quickly take control, resulting in overcrowding and over development with the primary goal becoming profit generation for the operators. (NASA, 2010, ¶2)

In 2007, after an extensive consultative and planning process, the SAPNG produced its first strategic plan, which significantly, was produced with the endorsement and assistance of the World Bank. The mission to empower host communities in this process instigated what the SAPNG calls its "reverse spiral model" (see Figure 1). As the SAPNG President commented:

Those other sectors, and surf tourism in other countries, it's all top-heavy where investment, government policy and everything is top-heavy and comes in and spirals down to ground level where

the landowners are just bystanders – beggars But really, anything below the ground belongs to the State. Anything above the ground belongs to the people – including the reefs. So this is how I came up with this reverse spiral model to bring about an equitable balance where you take that top-heavy spiral, and turn it around and bring it bottom up.

Therefore, the reverse spiral model recognizes host communities' custodial rights over surf tourism resources, and actively engages them on the sustainable use of those resources. As alluded to in the quote above, the term "reverse spiral" refers to stakeholder influence, and portrays the SAPNG's inversion of the typical direction of influence in established surf tourism business models, and equally, in other PNG sport tourism sectors. Thus, rather than power and influence spiraling top down from external stakeholders, in PNG surf tourism, it resides primarily with host communities and their affiliated surfing clubs and regional associations. As depicted in Figure 1, the SAPNG forms a conduit between these remote surf area communities and their national and international external stakeholders.

Systematic Attempts to Foster Cross-Cultural Understanding

Ponting et al.'s (2005) third proposed feature of sustainable surf tourism is the presence of systematic attempts to foster cross-cultural understanding. Indeed, considering the central place of host communities in the SMPs, such mechanisms are integral. From a sport perspective, Papua New Guineans have a long history of wave riding on "splinters"—shards of discarded wood fashioned into planks that are then taken into the surf and ridden prone fashion (Ponting, 2009). Thus, there is a natural fascination and receptivity to the sport, as illustrated in the researcher's field notes:

Our car was pulled over today by an elderly couple who were enthusiastically pointing to the ocean out front of their hamlet and making animated surfing gestures. Our surf guide said they *really* wanted us to surf there. I asked why that was and he said they just love watching people surf. And sure enough, within minutes of us paddling out, there were 15-20 people of all ages hooting, laughing, clapping and whistling after every wave we rode. Then a few of the local kids paddled out to join us and the party just grew. It was really nice.

The scenario described above was repeated at locations around the country. Clearly, there is a connection between the traditional ocean-going Melanesian culture of PNG and that of the modern surf culture. Thus, as a purely physical activity, the sport of surfing has brought benefits to the communities within which it has been introduced, and has done so without threatening traditional cultural mores. As the SAPNG President commented,

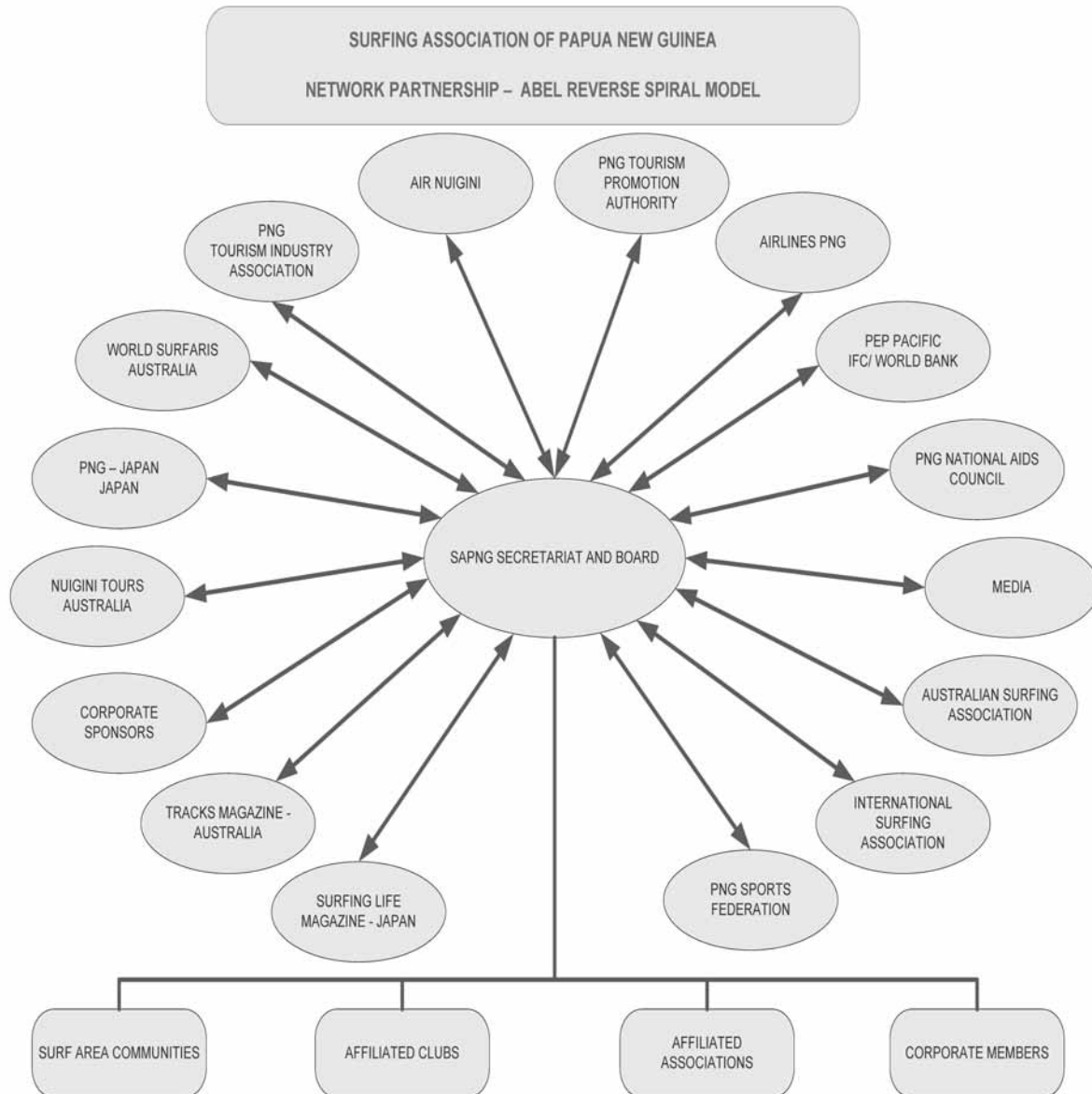


Figure 1 — SAPNG Reverse Spiral Model (SAPNG Strategic Master Plan, 2006)

We have 11 clubs now across the country, representing thousands of people who are in control of their resource by being empowered through the sport of surfing; being driven by surfing for the young kids, and now being in control of the resource without denigrating their way of life, their culture. We're not in any way damaging the environment, nothing. It's a really beautiful blend of culture and tourism and commercial business activity all running in parallel and empowering the people directly and indirectly with an opportunity to participate in the sport and industry.

Just as the sport of surfing has fit neatly within the cultural lives of the communities within which it has

been introduced, the SMPs themselves have a cultural precedent in PNG. Land ownership in many parts of PNG, particularly in regional areas where surf tourism takes place, runs along traditional familial clan lines. In coastal communities, land ownership extends into the water to cover reefs and the undersea terrain. Thus, traditional law dictates that any activities taking place in that environment, commercial or otherwise, require landholder permission. Typically, where commercial activities take place, a "reef fee" is paid to the clan leader that owns the land. Therefore, the SMP model is actually a formalized extension of this traditional land use model, the only difference being that within the SMPs, "reef fees" manifest as the daily AUD10 levy that individual

surf tourists pay on top of their respective accommodation costs. The owner of Surf Operation A commented on the cultural utility of the SMPs:

The Surf Management Plans have been developed and put in place to solve several issues in this country. Reefs here are all owned by the clans. Ownership does not end at the high-water mark as it does in most countries; it includes the reefs where the majority of our surfing takes place. So any time there's a commercial operation, there needs to be benefits going to those owners. So one of the main reasons it was put in place is so that the owners of the reefs can have benefits out of surfing.

In recent decades, one of the staple sources of income for many PNG communities has been logging. However, unscrupulous overseas logging operations have often left widespread environmental damage and little or no economic benefits for host communities. As outlined earlier, the typical surf tourism business model employed in other destinations has been similarly harmful in its impacts on host communities. However, the SAPNG's institutionalized practice of host community engagement has had the opposite effect where surf tourism has emerged as a viable alternative to logging and other less sustainable economic activities. The SAPNG President explained that,

The way I looked at it was, this was a resource that they didn't realize they had. They had the potential to develop, manage, promote, and at the same time, derive a sustainable source of income without denigrating their day-to-day way of life, their culture, or their heritage. . . . This is actually a resource that's sustainable and has to be managed and developed properly so that when we're gone, there's a legacy that's been created to ensure a sustainable source of income for the people. So they now realize that, hey, there's an alternative where we can still go fishing, we can still do our dancing, and our craft and everything, but we can generate a source of income without having to chop down all the trees.

Meanwhile one community leader from Surf Operation D explained the effects of the SAPNG approach and the introduction of surfing to her community. She observed that,

Surfing has sort of brought something to our community rather than taking something away. It's brought a lot to the community in the sense that as the surfers come in, they not only come and surf but they bring in some good ideas that help us grow in a way. And when they come they also give. They give like school materials to the schools. Or they give clothes to our kids or anyone who's there. They donate things. And they also bring in ideas about how they can help our community. We get tradesmen, teachers, and we get doctors. Surfers seem very kind and always willing to help.

Operating according to the culturally appropriate protocols of the SMPs appears to be conducive to the sustainability of surf tourism in PNG. Another interesting way in which this was exemplified was through a discussion with a community leader at Surf Operation A, who was making observations about the PNG dive tourism sector. Dive tourism is another important niche sector in PNG sport tourism, and though it relies on the same reefs and coastal resources as surf tourism, there exists no centralized approach to recognizing host communities' traditional custodianship of these resources. Thus, as the community leader explained, when a particular dive operator attempted to enter the surf tourism sector, he saw no reason to work within the SAPNG's formalized SMP approach. Critically, and to the detriment of his ongoing business, he also ignored local cultural mores. As a community leader from Surf Operation A explained:

Some of the dive operators don't quite understand how things work. We've had one guy who went like, when he wants to meet with the locals, he sends a message to the *mai mai* (the chief), to come to his office for a meeting. Well, from the villagers' point of view, that *mai mai* is much more important than any dive operator! He should be going to the *mai mai's* house, sitting on the ground next to him and talking. You go into the villages, you sit down with them. Show them respect. It's their resources. It's their land.

Village-Level Sport Development

As well as engaging host communities in the commercial process of surf tourism, the SAPNG strategically leverages surf tourism to develop the sport of surfing at the village level. As demonstrated by previous researchers (Buckley, 2002a,b; Ponting et al. 2005), this sport development mandate is vastly different to the approach taken in other surf tourism destinations where encouraging locals to surf has been frowned upon out of a fear of soiling the surf tourism product through overcrowding. In no other country does a surfing sport governing body take such a proactive approach to leveraging the sport's related tourism for sport development. Yet, the SAPNG sees surfing development at the village level as central to its mission and sustainability. Appropriately therefore, the quota system that is a central feature of the SMPs does not apply to local surfers, and only limits the number of visiting surfers in each surf zone. On its website, the SAPNG explains how the levies paid through the SMPs are used to encourage grassroots surfing development:

Both the SAPNG and local affiliated surf clubs will be using these fees for national and local area surfing development programs including but not limited to member equipment needs, national and international competition participation, and club facilities, etc. (SAPNG, 2008, ¶2)

At the village level, the opportunity to learn surfing skills has been taken up enthusiastically. With 11 surf clubs now spread throughout the country, the President of the SAPNG explained the centrality of surfing development to the SAPNG's mission when approaching prospective host communities:

The message I tried to get across is that we surfers are not here to destroy or erode anything, or to take away from your culture or values. If anything, we spend money, we donate, and we're here to develop and promote your area to embrace surfing as a sport, to empower the little kids, and by the same token, to develop surf tourism in partnership with the SAPNG.

However, most of the communities that host surf tourism are extremely isolated, so access to sufficient surfing hardware such as surfboards and legropes has been a stumbling block. The overwhelming majority of equipment supporting the sport's grassroots growth in PNG has come from nonprofit organizations and the donations of visiting surf tourists. Nonetheless, the scarcity of equipment has in itself contributed to the development of a unique surf culture that has infiltrated the daily lives of village children. For example, O'Brien (2011) made the following observation while staying at Surf Operation E:

And because most of the boards are communal, a grommet's* prized possession is a legrope. So it's common to see kids going about their daily chores etc with a legrope wound up tightly around their wrist, so as soon as they're able, they can go grab a board, attach their leggie, and get out there in the line-up. (O'Brien, 2011, p. 65; *the word "grommet" refers to a junior surfer)

Such fundamental shifts in the daily routine of isolated communities inevitably have social impacts. For example, the local Catholic Parish priest at Surf Operation D lamented that, "I always know when the waves are good on Sunday mornings because not many kids come to mass on those days." However, he also commended the positive outcomes surfing has brought such as the children now being too busy surfing to chew betel nut (a major health problem in PNG), or to get involved in gang-related activity. Indeed, surfing has provided a focal point in the lives of youth in these often remote, desperately under-resourced communities. The manager of Surf Operation E observed that,

It's given the local kids a general meeting area to meet up and do things. Once they've been surfing, they might go and play soccer, or touch footy or something out behind the club. So it's a general focal point. It's also opened opportunities for people to improve and to travel. Probably most people would have been to the next town, but very few would have been any further than that.

Another important outcome from surfing development at the village level has been the involvement of women and girls in the sport. In PNG, women's access to sport participation and resources has traditionally been limited (AusAID, 2006). However, females now represent around 25% of all club members throughout PNG's 11 surfing clubs (SAPNG President, personal communication, November 14, 2011). One Surf Operation D community leader commented on the changes unfolding in her community as more girls take up the sport. She explained that,

It was a little bit difficult for girls before, because the mothers would demand the daughter's presence to help them with house chores and other things. But I guess the parents are slowly coming to realize that surfing is not only a sport. That it's developing the minds of young children to learn other things and to meet other people. . . . So I think parents are coming to realize that this sport is not only for boys, it's also for girls. And they want the girls to learn something, you know, that the boys are also learning.

The preceding results suggest that the SAPNG's approach to managing surf tourism has resulted in numerous community development outcomes. The ensuing section is a concluding discussion of the overall results of this investigation.

Concluding Discussion

This research has demonstrated an example of how surf tourism can be managed to achieve sustainable benefits for host communities in developing countries. Given that the majority of the world's multimillion dollar surf tourism industry focuses on exploiting resources in remote corners of developing nations (Buckley, 2002a,b), such research is particularly salient. Surf tourism has always had the potential to contribute to host community development (Buckley, 2006), yet to date, research has demonstrated that poor management has led to significant deleterious impacts for hosts (Buckley, 2002a,b; Ponting et al. 2005; Ponting, 2009). The results from this study strongly support Ponting and his colleagues' prerequisites for sustainable surf tourism, but also suggest an important fourth prerequisite, that of sport development at the village level.

These results present a wide divergence from the alternative pathways to surf tourism development noted by previous researchers such as Buckley (2002a,b), Ponting et al. (2005) and Ponting (2009). Indeed, the design of the SAPNG's reverse spiral model is a unique, considered, reaction to the deterritorialization of surf breaks by the global surfing community in places like Indonesia. Here, foreign surfers have employed the discourse of "Wonderland," particularly that surfers are the only ones who really understand waves, and that as a result all waves are part of a global surfers' commons, to rationalize their perceived entitlement to exploit surf resources with or without the

permission and participation of nearby communities (Ponting, 2009). Meanwhile, in the PNG context, notions of resource ownership and the empowerment of traditional resource custodians to make their own decisions about their resources have enabled the implementation of the SAPNG's reverse spiral model. Where many remote Indonesian communities find themselves becoming 'watchers' as surf tourism develops around them (Ponting, 2009), in PNG, communities are active participants and beneficiaries, and are involved in decision making even before commercial surf tourism commences.

This deeper level of involvement by PNG communities in the surf tourism equation has been complemented by their enthusiastic participation in the sport of surfing, which again, is a direct result of the SAPNG's active facilitation of community involvement. As Hylton and Totten (2001) proposed, this "internally interactive," or bottom-up approach to sport development engenders more community engagement in a sport tourism setting. Coalter (2010) echoed this sentiment, and explains how the institution of sport organizations, as demonstrated in the SAPNG's community-based surfing clubs, can profoundly enhance sport as a development tool in emerging economies:

. . . in communities dominated by poverty, lacking a range of welfare services, lacking educational and employment opportunities, having weak civic organizations and where daily life is not yet dominated by consumerism, sport, or more importantly, sporting organizations, can make a much greater impact than in more economically advanced, market based and organizationally complex societies. (Coalter, 2010, p. 309)

Taken together, the presence of commercial surf tourism partnered with the grassroots development of surfing at the village level has produced significant community development outcomes such as additions to local educational and medical infrastructure; upskilling for locals in sport, tourism, and hospitality contexts; healthy living behaviors; and increased opportunities for youth, particularly female, sport participation.

These positive outcomes are directly attributable to the SAPNG's strategic approach to managing surf tourism. Indeed, the SAPNG has employed the requisite structures and processes to facilitate surf tourism development in tandem with the development of the sport at the village level, which has introduced host communities to resources "they didn't know they had." In this sense, this research adds a new dimension to Costa and Chalip's (2005) contention that, to optimize the role of sport tourism in community development, participative strategic planning that focuses on integrating and leveraging community assets is essential.

Meanwhile, Hartmann and Kwauk (2011) argued the need for more research to enhance our understanding of the utility of sport as a development tool. They stated that, ". . . there is very little research on which programs

work (if they work at all), much less an understanding of the mechanisms by which sport would foster development" (Hartmann & Kwauk, 2011, p. 285; parentheses in original). This research addresses Hartmann and Kwauk's concerns. Indeed, sport development and participation—in this case, surfing—seem to accentuate and anchor the community development outcomes from surf tourism in host communities. Surfing participation actively engages host communities in the actual sport, thus granting them greater understanding and ownership of its immediate and potential benefits.

While the SAPNG model addresses many of the surf tourism development issues identified by previous researchers in other parts of the world, it will inexorably face challenges as surf tourism continues to grow in PNG and demand outstrips supply. Inevitably, the PNG industry will be forced to make decisions about increasing SMP quotas versus increasing levies, and very likely, this may be in the context of advances from foreign investors exerting pressure on local operators. Fortunately, the culture of collaboration among PNG operators and stakeholders favorably predisposes them to cope with such challenges. Such collaboration is quite exceptional in global surf tourism. Babiak and Thibault (2009) suggested that this type of commitment to a mutually beneficial and overarching goal is an essential prerequisite for network longevity and success. They stated that, in such networks, "Assumptions, perceptions, and priorities involved in partnerships are different in that organizations must consider themselves to be working for the good of the whole and not for the benefit of their own organization" (Babiak & Thibault, 2009, p. 140). In this sense, the development facilitated through the SAPNG's management of surf tourism is what Hartmann and Kwauk (2011) referred to as "generative" in that it is not something that is, "done *to* or *for* people, but a process that must be undertaken *with* others" (Hartmann & Kwauk, 2011, p. 294). Nonetheless, this tension inherent to successfully managing limits to growth is an issue that must be monitored, and represents an important area for further research.

The findings from this work shed light on how effective sport governance can influence the sustainable utilization of (surf) sport tourism resources to create lasting benefits for host communities. As surfing continues to grow in popularity and the search for the next "Wonderland" continues, the lessons learnt in PNG will become even more prescient for other surf tourism destinations. Indeed, surf tourism is currently being used for regional development in countries as diverse as Philippines, Taiwan, Ivory Coast, Costa Rica, Ireland, India, and China, to name a few. Clearly, further research exploring the nexus between (surf) sport tourism, sustainable community development, and growth/yield management is warranted. The current study's findings also have relevance for additional niche sport tourism sectors, both in PNG and other developing nations reliant on finding a balance between community development

and the custodial ownership of nature-based sport tourism resources. The derived knowledge may, to some extent, decrease host communities' reliance on less sustainable activities such as logging and mining, and in so doing, inform policy and practice on sustainable approaches to using sport and sport tourism for community building and poverty alleviation.

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